



**Red Cliffs Conservation Coalition Comments
on the Northern Corridor Draft Environmental Impact Statement
and Related Management Plans**

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The Red Cliffs Conservation Coalition is an informal organization of the following groups:

Advocates for the West
Basin and Range Watch
Back Country Horsemen of America
Center for Biological Diversity
Conservation Lands Foundation
Conserve Southwest Utah
Defenders of Wildlife
Desert Tortoise Council
Friends of the Inyo
Friends of Animals
Great Old Broads for Wilderness
Sierra Club
Southern Utah Wilderness Alliance
The Wilderness Society
Utah Audubon Council
Utah Native Plant Society
Western Watersheds Project
WildEarth Guardians

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1. Introduction

1.1 The Red Cliffs Conservation Coalition Descriptions and Signatories

The Red Cliffs Conservation Coalition is an informal organization of conservation groups representing millions of citizens with a long and deep history of concern for the conservation of public lands in general, National Conservation Lands in particular, and the species that inhabit them, especially those species that have been listed as threatened or endangered via the Endangered Species Act. The Coalition was very active in developing Scoping Comments¹ for this Draft Environmental Impact Statement and related proposals addressed by this public comment period, and its members submitted over 20,000 letters of comment. These organizations are comprised by-in-large of volunteer citizens, many of whom live in Washington County and in Utah. Even those members from other states have a deep connection with the concept of protecting public lands and habitat for species, especially those that are threatened by human activity, and they feel the threat emanating from Washington County to public lands near them and to lands they visit. These lands are owned by them, not exclusively by the residents and elected officials of Washington County. We all have a duty to protect these lands.

Washington County engages non-residents in promoting destructive actions on our public lands, using taxpayer money to do so. Invested citizens from near and far should be able to resist them. The county, in their refusal to engage their own constituents in finding the best solutions for everybody, in their opaque decision-making and obfuscation of facts, invite this reaction.

Each member organization and its interest in protecting Red Cliffs National Conservation Area is described below.

Basin and Range Watch

Basin and Range Watch is a 501(c)(3) non-profit working to conserve the Great Basin and Mojave Desert regions and to educate the public about the diversity of life, culture, and history of the ecosystems and wild lands of the desert.

Back Country Horsemen of America

Utah Back Country Horsemen Southwest Chapter was formed in December 1995 in response to Snow Canyon State Park's indication that equestrian use would be discontinued within the park. Adopting the missions of Back Country Horsemen gave us the backing of the state, Back Country Horsemen of Utah, and Back Country Horsemen of America. We have five specific mission statements that dictate a very narrow focus – keeping trails open for pack and saddle stock – through service work, education on the wise and sustainable use of America's public lands and advocacy in local, state and national levels. We changed our name to Back Country Horsemen of Utah – Southwest Chapter in 2011. We have been involved in advocacy to defend the Red Cliffs National Conservation Area since 2018.

Center for Biological Diversity

The Center for Biological Diversity is a national non-profit organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has over 1.7 million members and on-line activists including approximately 500 members who reside in Utah. The Center's members and staff have visited the federal public lands within the Red Cliffs National Conservation Area and intend to continue to do so for

¹ Red Cliffs Conservation Coalition Scoping Comments

hiking, camping, viewing and studying wildlife, photography, and other vocational and recreational activities. The Center has worked to protect rare species and their habitats found on federal public lands in Utah, including Mojave desert tortoise, Mexican Spotted Owl, northern goshawk, spotted bat, Southwestern willow flycatcher, yellow-billed cuckoo, California condor, Navajo sedge, Colorado pikeminnow, bonytail chub, humpback chub, and razorback sucker and intends to continue to do so. The proposed Northern Corridor Highway could adversely impact some of those species and their habitats.

Conservation Lands Foundation

Conservation Lands Foundation (CLF) is a non-profit organization that promotes environmental conservancy through support of the National Landscape Conservation System (National Conservation Lands) and preservation of the outstanding historic, cultural, and natural resources of those public lands. CLF works to protect, restore, and expand the National Conservation Lands through education, advocacy, and partnerships.

CLF achieves its mission by working with and supporting the Friends Grassroots Network (FGN). The FGN consists of over 60 organizations located in 13 states, to foster and implement a national strategy to promote the protection of the National Conservation Lands. Organizations within the FGN and their members organize and conduct a wide range of conservation-related activities, including clean-up projects, trail maintenance and rebuilding, riverbank and stream restoration, removal of invasive species, closure of illegal roads, water quality monitoring, enhancement of wildlife habitat, and improvement of recreational access. CLF worked with BLM during development of the current Red Cliffs National Conservation Area Resource Management Plan.

Conserve Southwest Utah

Conserve Southwest Utah (CSU) is a grassroots non-profit group of citizens advocating conservation of our natural resources, headquartered in Washington County, Utah. CSU was established in 2006 as Citizens' for Dixie's Future (CDF) after the Washington County Growth and Conservation Act was introduced because of concerns, in large part, that there was a provision for a highway through the Red Cliffs Desert Reserve. This bill was the first official mention of a Northern Corridor in support of private interests that wanted a highway to the Ledges development north of St George. CSU worked tirelessly on revisions to the bill that resulted in the highway being taken out of bill and designation of the Red Cliffs National Conservation Areas in the 2009 Omnibus Public Lands Management Act (OPLMA).

Concurrently, CSU was instrumental in developing, with support of Utah's Congressional Delegation, a set of smart growth principles known as Vision Dixie to guide the growth in Washington County in a way that would also conserve natural and cultural resources. Many CSU members and supporters live near and recreate on public lands in Washington County, Utah. These lands provide unique opportunities for sightseeing, hiking, camping, trail running, mountain biking, appreciation of archaeological resources and natural quiet, journaling, birdwatching, ecosystem research, photography and more. CSU has longstanding involvement with HCP related issues, including attending Habitat Conservation Advisory Committee and Technical Committee meetings, and providing comments at some of those meetings. CSU led testimony and discussions with congressional committees and members of congress in Washington DC at significant expense in time and money related to proposed federal legislation permitting the Northern Corridor Highway, successfully stopping the proposed legislations.

Conserve Southwest Utah's 2,000 members participate in annual stewardship and habitat restoration activities in and adjacent to the Red Cliffs NCA. Our staff and board members provide guided hikes, outreach, education and advocacy training focused on the Red Cliffs NCA to over 2,500 community members, including school children, every year.

Since 2012, Conserve Southwest Utah has partnered with BLM to organize the Southwest Utah National Conservation Lands Friends (SUNCLF) group. SUNCLF functions as Washington County's only boots-on-the-ground volunteer organization dedicated to stewardship of the Red Cliffs and Beaver Dam Wash NCAs. SUNCLF volunteers in the site steward program donate hundreds of hours each year to monitoring archaeological sites on BLM lands in Washington County, including in the Red Cliffs NCA.

Through citizen involvement, CSU has successfully stopped 7 previous attempts by the County to have the highway approved.

Defenders of Wildlife

Defenders of Wildlife (Defenders) is a national non-profit conservation organization that conserves and restores native species and the habitat upon which they depend. Based in Washington, DC, the organization maintains six regional field offices, including one in the Southwest United States. Defenders is deeply involved in public lands management and wildlife conservation, including the protection and recovery of flora and fauna on the mesas and canyonlands of southern Utah. We submit these comments on behalf of more than 1.8 million members and supporters nationwide, including 13,725 members in Utah.

Desert Tortoise Council

The Desert Tortoise Council (Council), comprised of members from throughout the United States, works to achieve its mission statement, which paraphrased, is to protect wild desert tortoises in their native habitats, including tortoises in the Red Cliffs Desert Reserve/NCA (herein, "Reserve"). The Council has proactively opposed the development of the Northern Corridor (NC) in letters dated 5/15/2018 (Desert Tortoise Council 2018a), 8/12/2018 (Desert Tortoise Council 2018b), and 7/4/2019 (Desert Tortoise Council 2019).

Additionally, Board member, Ed LaRue participated in a five-member team visit to Washington, D.C. in September, 2018, where he and others met with eight Members of Congress and/or their staffs to oppose the construction of the highway through the Reserve/NCA. Most recently, on 5/30/2019, LaRue participated in a field trip to the Reserve/NCA and proposed Zone 6 areas with local members of the Shivwits Band of the Paiute Indian Tribe of Utah and Cameron Rognan of Washington County HCP to discuss impacts and mitigation associated with the proposed NC.

Great Old Broads for Wilderness

The Southwest Utah Broadband, the local chapter of the Great Old Broads for Wilderness has been actively involved with the Red Cliffs Desert Reserve/Red Cliffs National Conservation Area since 2015. Many of our members have attended stewardship and habitat restoration projects in Red Cliffs and have been involved with trail monitoring. We worked with partner organizations to support the 2016 Resource Management Plan

Friends of Animals

Friends of Animals (FoA) is a non-profit, international animal advocacy organization, incorporated in the state of New York since 1957. Friends of Animals advocates for the rights of

nonhuman animals, free-living and domestic. Our goal is to free animals from cruelty and institutionalized exploitation around the world. FoA places compassionate conservationism, wildlife and habitat protection and veganism at the core of animal advocacy. Our goal is to free animals from cruelty and institutionalized exploitation around the world. Friends of Animals engages in a variety of advocacy programs in support of these goals, including actions to protect wildlife in Utah. Friends of Animals has nearly 200,000 members worldwide, including many that recreate in the Red Cliffs National Conservation Area and enjoy observing, photographing or studying wildlife in the area.

Friends of the Inyo

Founded in 1986, FOI was originally organized to comment on the Inyo National Forest planning process. Since then, FOI has evolved into its current form working on a broad range of public land issues that impact Inyo and Mono Counties. Our mission is to ensure the public lands of the Eastern Sierra exist in an intact, healthy natural state for people and wildlife through preservation, stewardship, exploration, and education.

Sierra Club - Utah Chapter

The Utah Chapter of the Sierra Club is a grassroots organization striving to protect and enjoy Utah's outdoors and natural landscapes; educate and advocate for the responsible preservation of clean air, water, and habitats; support the development of clean energy to benefit present and future generations; and advance principles of equity, inclusion, and justice throughout our organization and community.

Southern Utah Wilderness Alliance

The Southern Utah Wilderness Alliance (SUWA) has a long-standing interest in the management of Bureau of Land Management (BLM) lands in Utah and regularly participates in the decision-making process for land use plans and site-specific proposals around the state. SUWA members and staff enjoy a myriad of activities on the public lands managed by BLM, including hiking, biking, nature viewing, photography, and quiet contemplation in the solitude offered by wild places. SUWA is particularly interested in decisions that could affect threatened species and lands in the Red Cliffs National Conservation Area.

The Wilderness Society

The Wilderness Society and our members have a deep interest in the protection and management of the RCNCA. The Wilderness Society was heavily involved in the passage of the Omnibus Public Land Management Act of 2009 (OPLMA) and especially engaged in the Washington County Lands section of that Act. It is the position of The Wilderness Society that the negotiations made in that bill and passed into law were a momentous achievement on behalf of conservation and the interests of Washington County, which should be honored as such.

Utah Audubon Council

Utah Audubon Council is comprised of the leadership of the four Utah Audubon organizations affiliated with the National Audubon Society. UAC conducts policy analysis and advocacy on behalf of and in conjunction with Great Salt Lake Audubon, Wasatch Audubon, Bridgerland Audubon, and Red Cliffs Audubon, and their 2,000 members statewide.

Commenting for the scoping process for the Northern Corridor EIS is clearly within the mission of the National Audubon Society and local affiliates, which states "Audubon protects birds and

the places they need, today and tomorrow “, and each of the individual societies in Utah have advocated for the establishment and/or protection of the bird and wildlife habitat within the desert tortoise reserve at various times in the past. Our members recreate and provide research and volunteer on habitat protection and improvement projects within the area that would be impacted by the highway project under consideration, and many live in the community that will be directly affected.

Utah Native Plant Society

The Utah Native Plant Society (UNPS) signs onto this coalition response with respect to issues involving native plants and their ecosystems. UNPS is a 501(c)(3) qualified Utah non-profit organization which was initially incorporated in 1978. UNPS has some 400 members and has had many past and current chapters throughout the state of Utah including in southwestern Utah. UNPS is dedicated to the appreciation, preservation, conservation and responsible use of the native plant and plant communities found in the state of Utah and the Intermountain West. This has included some extensive involvement in rare plant and invasive species issues in Washington County including our having provided research funding for the study of various rare plants found only in Utah in Washington County starting in the 1980's, and later also with respect to their pollinators, and much more. We first in fact engaged the state of Utah in providing some preliminary protections for the Dwarf/Low Bear Poppy (*Arctomecon humilis*), and later worked to obtain critical habitat designations for *Astragalus holmgreniorum* and *Astragalus ampullarioides* and helping to document the occurrence of *Sphaeroclea gieschii* in Utah and getting it on the radar of the Utah Natural Heritage Program and NatureServe and advocating for its protection, along with many others. We have held (and in fact started) rare plant meetings there and have participated and/or helped organized field trips and have frequently commented on agency proposals, not the least of which was the Southern Corridor, and we have even held board meetings in Bloomington, inasmuch as Washington County has the highest native vascular plant biodiversity of any county in Utah. The conservation and study of rare plants (and native plant ecosystems in general) in Washington County is also a frequent topic at our annual rare plant meetings held each year in March. Our rare plant committee ranks the status of all rare plants in the state and therefore a significant amount of attention is paid to species that occur in Washington County and we publish those results in journals, newsletters and via the Utah Rare Plant guide web site that we maintain and coordinate.

Western Watersheds Project

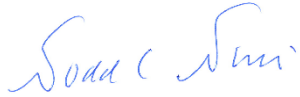
Western Watersheds Project (WWP) is a non-profit organization with more than 9,000 members and supporters. Our mission is to protect and restore western watersheds and wildlife through education, public policy initiatives and legal advocacy. Western Watersheds Project and its staff and members use and enjoy the public lands and their wildlife, cultural and natural resources for health, recreational, scientific, spiritual, educational, aesthetic, and other purposes. WWP has a long history of working to conserve desert tortoises across their range.

WildEarth Guardians

WildEarth Guardians is a non-profit conservation organization dedicated to protecting and restoring the wildlife, wild places, wild rivers, and health of the American West. Guardians has offices in New Mexico, Colorado, Oregon, Washington, Montana, and Arizona. With more than 275,000 members and supporters, Guardians works to keep public lands where they belong: in public hands. It also has an active endangered species protection campaign, with a geographic focus on flora and fauna endemic to the western United States.

Red Cliffs Conservation Coalition Signatures and Contact Information

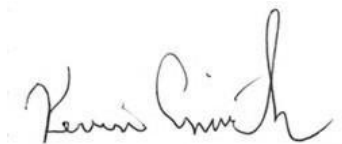
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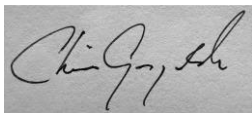
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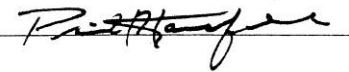
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² The Utah Native Plant Society (UNPS) signs onto this coalition response with respect to issues involving native plants and their ecosystems. UNPS is a 501(c)(3) qualified Utah non-profit organization which was initially incorporated in 1978. UNPS has some 400 members and has had many past and current chapters throughout the state of Utah including in southwestern Utah. UNPS is dedicated to the appreciation, preservation, conservation and responsible use of the native plant and plant communities found in the state of Utah and the Intermountain West. This has included some extensive involvement in rare plant and invasive species issues in Washington County including our having provided research funding for the study of various rare plants found only in Utah in Washington County starting in the 1980's, and later also with respect to their pollinators, and much more. We first in fact engaged the state of Utah in providing some preliminary protections for the Dwarf/Low Bear Poppy (*Arctomecon humilis*), and later worked to obtain critical habitat designations for *Astragalus holmgreniorum* and *Astragalus ampullarioides* and helping to document the occurrence of *Sphaeroclea gerieschii* in Utah and getting it on the radar of the Utah Natural Heritage Program and NatureServe and advocating for its protection, along with many others. We have held (and in fact started) rare plant meetings there and have participated and/or helped organized field trips and have frequently commented on agency proposals, not the least of which was the Southern Corridor, and we have even held board meetings in Bloomington, inasmuch as Washington County has the highest native vascular plant biodiversity of any county in Utah. The conservation and study of rare plants (and native plant ecosystems in general) in Washington County is also a frequent topic at our annual rare plant meetings held each year in March. Our rare plant committee ranks the status of all rare plants in the state and therefore a significant amount of attention is paid to species that occur in Washington County and we publish those results in journals, newsletters and via the Utah Rare Plant guide web site that we maintain and coordinate

1.2 Structure of this Document

This document presents our analysis from two perspectives: (1) to what degree the DEIS addressed our Scoping Comments and (2) issues we have with the assumptions, positions, analysis and conclusions presented in the DEIS and related plans.

The accountability of our Scoping Comments is summarized in [2.3 Scoping Comment Accountability](#) and a detailed accountability to each Comment is contained in [Appendix 1: Detailed Accountability of Scoping Comments](#).

Issues and considerations concerning the DEIS and related plans are presented in two places:

- Major considerations are documented in [2. Major Considerations](#)
- Detailed issues are presented in [3. Issues with the Draft Environmental Impact Statement](#) and [4. Issues with Related Plans](#).

Issues with the DEIS (and related draft plans) are indicated in the document by the word **Issue**, followed by a sequential number assigned within each section for each issue, followed by a description of the issue. The issue's unique identifier is the section number concatenated with the sequential number. The DEIS text eliciting the issue is referenced by section and either page number or copied text. The issue's unique identifier will be used to account for the adequacy for its treatment in the Final EIS.

2. Major Considerations

2.1 Preferred Alternatives and Rationale

This section describes the Red Cliffs Conservation Coalitions preferred alternatives, and explains the rationale for that preference, for:

1. The Northern Corridor
2. The Red Cliffs NCA RMP
3. SGFO RMP
4. HCP

2.1.1 Northern Corridor Preferred Alternatives

Alternatives 5 and/or 6 are our preferred alternatives. Alternative 1, the No Action alternative, *could* be considered a preference since the decision time-frame for the applicant's purpose and need is so distant in the future, and does not mee the "ripeness" criteria.

Alternatives 2-4 are alternative routes for a northern corridor in the Red Cliffs NCA. Alternative 5 recognizes that there already is a northern corridor through the Red Cliffs NCA, Red Hills Parkway, and proposes to enhance it rather than build another, redundant highway through the protected lands. Alternative 6 is truly an alternative *to* the northern corridor. Alternatives 2-5 are mutually exclusive, in that only one can/should be chosen. Alternative 6 is not mutually exclusive to 2-5, in that it could be implemented independently.

The BLM/UDOT/Washington County preferred alternative 3 has been designed to a significant detail, including the development of a UDOT Plan of Development, and involves minimal impact to existing traffic infrastructure since it would be constructed in previously largely undisturbed protected lands. Alternatives 5 and 6, however, involve modifications to existing traffic infrastructure and adjacent properties. The level of design required for traffic modeling of alternative 3 is fairly close to that required for a preliminary design, and the UDOT Plan of Develop adds additional detail to the design. However, the level of design required of alternatives 5 and 6 for traffic modeling is significantly less detailed than what would be considered even a preliminary design level of detail due to the modifications required to existing infrastructure.

Completion of the detail design phase for alternatives 5 and 6 should be done in a process that involves all stakeholders: development and traffic planners, business owners, and citizens. Such a process would result in a design that would enhance St George and balance costs and benefits. Any conclusions other than those within the scope of the DEIS based on interpretations of the conceptual design level of detail are invalid until this detail design process is executed. This would be an opportunity for the community to come together in a future-visioning process, much like that which occurred with Vision Dixie. However, it will take the rejection of alternatives 2-4 in order to enable the community to unite.

No surprise: we prefer alternatives 5 and 6, however with modifications to enhance rather than impact local businesses.

Rationale:

1. Alternatives 5 and 6 can be accomplished without undermining and violating established laws.

Reference the previous “Issues Related to Laws” section.

2. Alternatives 5 and 6 address traffic impacts better than alternatives 2-4.

See DEIS Appendix J, Table 4, Transportation Analysis: 2050 Evening Peak Hour Intersection LOS Results and Table 5, Transportation Analysis: 2050 Evening Peak Hour Travel Time Results, showing alternatives 5 and 6 address traffic better than 2-4.

3. Alternatives 5 and 6 have little to no environmental impact, where alternatives 2-4 have significant environmental impacts

See the DEIS Executive Summary Table ES.5-1, Alternative Comparison by Resource Table, showing alternatives 5 and 6 have no significant environmental impacts, and 2-4 having significant impacts. Our few disputes with those impacts are in the body of our issues in this paper, but all of those disputes widen the gap rather than narrow it.

4. Alternatives 5 and 6 have little recreational, visual, and noise impacts, where alternatives 2-4 have significant recreational impacts.

Again, see the DEIS Executive Summary Table ES.5-1, Alternative Comparison by Resource Table, specifically the Recreation and Visitor Services row. Alternatives 5 and 6 may cause minor adjustments to the access points, but have no impact to anywhere else, and even those impacts could be lessened by preliminary design considerations; visual and noise impacts would be minor. Alternative 2-4 impacts the core of recreation experience, not only by bisecting trails but by introducing a highway, with its major noise, light, and visual impacts.

5. Alternatives 5 and 6 can be designed to have a positive impact on business, accommodating local access with little perturbation, and would have positive impacts on the quality of life, and the human experience with downtown, where alternatives 2-4 would have negative impacts.

There are at least 2 perspectives through which to consider business impacts:

- a. Direct impacts, positive or negative, to businesses affected directly by changes in traffic infrastructure by being forced to sell property or relocate, or getting more or less passing traffic and potential customers, or having better or worse customer access to their business.
- b. Indirect impacts, again positive or negative to businesses engaged in outdoor recreation and tourism, or impacted by the perception of environmental values.

While it is true that alternative 5 has more potential for negative direct impacts than alternatives 2-4, but only if the design is inconsiderate of those impacts. It also has the potential for significant positive direct impacts. See the Suggested Modifications below for concepts that could be considered.

The indirect impacts of alternative 2-4 are negative, in that recreation and tourism in the Red Cliffs NCA will be negatively impacts for a considerable area (several miles) around the highway, from cutting trails; adding noise, light and visual

pollution to the experience; reducing quality of life by disrupting the distant visual appearance of the long vista and the solace it brings; branding Washington County, worse than it already is, as a place that does not value the natural environment.

Conversely, alternatives 5 and 6 have the mirroring positive impacts, as well as the potential, if considerably designed, to greatly improve the downtown St George appearance and experience.

6. Alternatives 5 and 6 can both be implemented, at different future times, if congestion continues to grow.

Dixie Metropolitan Planning Organization (DMPO) models indicate that alternatives 2-4 will at some point fail to address future traffic congestion. Another alternative will have to be implemented anyway. Alternatives 5 and 6 provide the ability to address growing traffic needs, without the damage of alternatives 2-4.

7. Alternatives 5 and 6 put the responsibility for addressing growth and traffic, where it belongs, on local leadership.

Local Washington County governments and the DMPO have known about this projected traffic problem for 30 years or more. Instead of planning growth and transportation solutions within their control, they assumed they could use especially protected lands, protections to which they agreed, to solve their traffic problems, and decided to allow development to pack right up against the Red Cliffs NCA, creating more traffic problems and giving very little space to solve them. This is a self-inflicted wound, and the responsibility for healing it should be placed on the local governments. This was done in spite of local citizens loudly voicing their vision for managed growth that enabled protection of these sensitive, signature lands. Once the alternatives inside the protected lands are denied, good solutions will arise.

8. Wait and see

Alternative 3 (or 2 or 4) is being pushed by local governments now because the only way they see getting it approved is by political influence on a Department of Interior that is friendly to the idea of reducing environmental protections. The traffic congestion projected to be significant in 20+ years may or may not get to the point of needing expensive solutions. The “ripeness” doctrine should have been applied to the Northern Corridor NEPA application’s purpose and need statement. Requesting the Right-of-Way is getting far too out front of the timing of the need. Conditions and technology will dramatically change in the next 20+ years. The inappropriate time crunch presented by a political situation is a poor reason to make a poor decision.

This is basically the rationale for the No Action alternative to be selected at this time.

Suggested Modifications to Alternatives 5 and 6:

Alternative 5 is an elegant solution, merging ideas presented in our scoping comments, but its design is conceptual in nature, detailed to the point required for the DEIS analysis, but not to the

point of enhancing business and customer benefit or minimizing cost. Ideas to explore in the preliminary and detail design phase:

1. Streamlined access to N1000E for businesses to the north of Red Hills Parkway; for example, by connecting Water Works Drive from the west and E350N from the east to N1000E, north of St George Energy and Street Department property. Access for businesses south of Red Hills Parkway is already accomplished by Highland Dr.
2. Consider boring rather than bridging technologies for the grade-separated intersections.
3. Consider tightening the ramps for N1000E to reduce impacts to private properties.
4. There are detailed options to be considered for Pioneer Park and the Desert Garden.

Alternative 6, defined in the DEIS' conceptual design level of detail as required for the DEIs analysis, is also an elegant approach. Most of its benefit is in splitting the traffic between downtown St George and I-15 into 2 routes (St George Blvd and 100S), cutting in half the mess around Red Hills Parkway-N100E-St George Blvd-I15-River Road). It seems that through-put on the 2 one-way streets is of secondary importance. Ideas to explore in the preliminary and detail design phase:

1. Do not remove the center medians or their planters on St George Blvd, but rather consider a mix of traffic movement lanes and parking/shopping/walking/cycling lanes.
2. Evolve this downtown core into an attractive business/shopping/tourist district. St George lacks an attractive core downtown, even though it is beginning to evolve one.

Consider implementing both alternative 5 and 6 in a phased manner, with the alternative 5 taking the traffic load off the key intersections and alternative 6 providing easy access to a much more vibrant downtown.

The other proposals submitted in our scoping comments should not be dismissed out of hand. The DEIS dismissed some for the reason that they were out-of-scope, but this is an invalid argument since a DEIS is supposed to consider any viable alternative, regardless of the agencies' authority to implement it. Others were dismissed on the premise that there would be insufficient benefit. This conclusion cannot be drawn in a bubble, but rather should be explored with stakeholders.

2.1.2 RCNCA RMP Amendment Preferred Alternative

Alternative A, the No Action Alternative, is the best alternative for RCNCA RMP Amendment.

The coalition supports Alternative A for RCNCA RMP Amendment, as this alternative maintains the existing protections for the Red Cliffs NCA under the Omnibus Public Land Management Act of 2009 and the Endangered Species Act of 1973. Only Alternative A maintains the protections that the Congressionally-established resource values and federally-listed species in the Red Cliffs NCA warrant. Alternative A would avoid increased “take” of federally-listed Mojave desert tortoise, and adverse modification of critical habitat based on the construction of the NCH. This alternative would also avoid adverse impacts to NHRP-eligible cultural resources. Alternative A would maintain protections for these resources because it would not allow a one-time exception to LAR-13 Criteria E to grant a ROW in a designated ROW-avoidance area in the RCNCA.

Alternative A would also avoid the weakening of protections for scenery by arbitrarily downgrading the VRM Class from III to IV to accommodate the NCH. Alternative A would retain 6,160 acres in the RCNCA under VRM III management with objectives to retain the existing character of the landscape and only permit management activities that do not dominate the view of the casual observer.

Alternative A would also avoid weakening protections for recreation by arbitrarily downgrading the SRMA Zone from Frontcountry to Rural to accommodate the NCH. Alternative A would retain 14,730 acres of the Red Cliffs NCA as a Frontcountry Zone with management objectives to provide high-quality, sustainable, non-motorized recreation opportunities, while conserving and protecting other resource values of the Red Cliffs NCA.

For features vital to the Red Cliffs NCA’s purposes, Alternative A maintains the appropriate protections. These protections include *not allowing* a 500-foot ROW in designated critical habitat within a National Conservation Area and *not permitting* construction of above and below-ground utilities in the ROW corridor as proposed under Alternatives B and C. The DEIS analysis reveals that RCNCA RMP Amendment Alternatives B and C would result in severe and permanent adverse impacts to the Red Cliffs NCA’s Congressionally-established purposes as discussed in detail elsewhere in these comments. Therefore, Alternative A is the best alternative because it maintains the stronger protections for the Red Cliffs NCA’s objects and values in accordance with the Omnibus Public Land Management Act of 2009 and the Endangered Species Act of 1973.

2.1.3 HCP Preferred Alternative

An Alternative that does not link the NCH to ITP/HCP Renewal is our preference.

The best alternative for HCP/ITP Renewal is one that a) renews and modifies the ITP/HCP to account for new scientific information, MDT population declines, and changed circumstances over the past 25 years, and b) does not accommodate the Northern Corridor Highway (NCH) whether as a Changed Circumstance, a Covered Activity, or by any other means. Unfortunately, the Draft HCP has failed to analyze an alternative that does not conditionally link granting of the NCH ROW to HCP/ITP Renewal, as described in the DEIS:

“2.6.1 Alternative 1 – No Action Alternative

Under Alternative 1, the BLM would deny UDOT’s application for a ROW grant across the Red Cliffs NCA for the Northern Corridor, and the USFWS would deny Washington County’s application for an ITP. The BLM would not amend the RMPs for the Red Cliffs NCA or SGFO. The Northern Corridor would not be constructed, and compliance with the ESA for lawful activities in Washington County that may result in the take of Mojave desert tortoise would be completed through other avenues.”

DEIS at 2-28.

It is incumbent upon FWS to analyze an HCP/ITP alternative that does not link renewal to the granting of the NCH ROW through the Red Cliffs Desert Reserve and NCA. The Endangered Species Act 10(A)(2) requires FWS to issue an ITP only if certain criteria are met, including:

- ii. The applicant will, to the maximum extent practicable, minimize and mitigate the impacts of such taking.
- iv. The taking will not appreciably reduce the likelihood of survival and recovery of the species in the wild.

DEIS analysis shows that the NCH would destroy and adversely modify critical habitat and cause the take of threatened MDT. FWS cannot issue an ITP based on this Draft HCP because it accommodates the NCH as a changed circumstance that would jeopardize the central mitigation feature of the original HCP, the Red Cliffs Desert Reserve, and violate the ESA10(A)(2) criteria listed above. Therefore, FWS must reject this Draft HCP and study a new alternative that issues a new ITP supported by an HCP that does not accommodate the NCH, and does include enhanced conservation measures for the MDT.

2.1.4 SGFO RMP Preferred Alternative

1. Alternative B is the best alternative for SGFO RMP Amendment

A. Alternative B could potentially increase protections for the threatened MDT

Of the choices provided, the coalition supports Alternative B for SGFO RMP Amendment, if implemented independently of a Northern Corridor Highway (NCH) through the Red Cliffs National Conservation Area. However, as discussed elsewhere in these comments, the use in Zone 6 has been intensive, and any management prescriptions must ensure that adequate habitat is provided for MDT. BLM must analyze whether, given the current trend of declining MDT populations, proposed Zone 6 might need to be larger or configured differently to provide the optimal conservation and chances of recovery for MDT. This recommendation advances USFWS 2011 Recovery Plan Objective 3 and Recovery Plan Actions 2.6 and 2.11.

SGFO Amendment Alternative B, if implemented with NCH Alternatives 5 and/or 6 (located outside the Red Cliffs NCA), could potentially increase protections for the threatened Mojave desert tortoise (MDT) on 1,126 of BLM lands not currently managed as part of the Red Bluffs ACEC and 3,225 acres of SITLA lands (pending transfer to federal ownership). Given the steady decline of MDT in the UVRU (discussed elsewhere in these comments), and BLM's obligation to ensure that any action authorized, funded, or carried out is not likely to jeopardize the continued existence of MDT or result in the destruction or adverse modification of MDT critical habitat, BLM must consider providing additional protections to benefit the threatened MDT. *See* 16 U.S.C. § 1536(a)(2); see comments at section [“III. The Draft HCP Fails to Mitigate Take of the MDT to the Maximum Extent Practicable”](#) for additional discussion on how protection and restoration of lands in Zone 6 may benefit the MDT.

B. Alternative B could potentially increase protections for federally-listed plant species

In addition to potentially increasing protection for the MDT, Alternative B would also potentially increase protections for federally-listed plant species on BLM lands, including:

- endangered Dwarf bear-poppy and its critical habitat
- endangered Holmgren (Paradox) milk-vetch and its critical Habitat
- endangered Shivwits milk-vetch and suitable Critical Habitat
- endangered Siler pincushion cactus and suitable habitat

DEIS at 3-28

Threats to endangered plant species that would be potentially reduced with implementation of Alternative B include habitat loss, fragmentation, plant loss because of development, habitat degradation from OHV use, competition from exotic and invasive plant species, increased fire frequencies, trampling from cattle, soil disturbance, and reduced availability of pollinators because of habitat loss, fragmentation, and degradation.

DEIS at 3-18-19.

C. Alternative B could potentially increase protections for BLM-sensitive plant and animal species

Alternative B would also potentially increase protections for 22 BLM-sensitive plant and animal species, including:

Parry sandpaper-plant, Common Chuckwalla, Desert Night Lizard, Gila monster, Sidewinder, Western banded Gecko, Western threadsnake, Zebra-tailed lizard, Burrowing owl, Ferruginous Hawk, Golden eagle, Short-eared owl, Allen's big-eared bat, Free-tailed

bat, Fringed myotis, Kit fox, Spotted bat, Townsend's big-eared bat, Western red bat, Mojave poppy bee, Western Monarch, and Western bumblebee.
DEIS at 3-26, 3-73

The DEIS states at 3-72 that

“SGFO RMP Amendment Alternative B protects special status wildlife habitat by managing proposed Zone 6 as an exclusion area for new ROWs, closing fluid mineral leasing, closing camping, closing all lands to livestock grazing, and closing the area to target shooting.”

The following management changes outlined in Alternative B would potentially benefit federally-listed and BLM-sensitive animal and plant species because they would reduce or end activities that cause adverse modification of critical habitats and lead to take of federally-listed or sensitive species:

- Manage proposed Reserve Zone 6 as an exclusion area for new ROWs (Map 2.5-2). New rights-of-way will be granted in these areas only when required by law or Federal court action.
- Identify all non-Federal lands within Reserve Zone 6 for acquisition through purchase, exchange, or donation. Manage all acquired lands consistent with the prescriptions applied to the remainder of Zone 6.
- Retain all Federal lands within Reserve Zone 6 with no exception.
- Retain all existing proposed withdrawals within Reserve Zone 6.
- Recommend all Federal lands within Zone 6 for withdrawal from locatable mineral exploration and entry (Map 2.5-7).
- Manage acquired lands within Zone 6 as recommended for withdrawal for locatable mineral exploration and entry.
- Manage Reserve Zone 6 as closed for fluid mineral leasing (Map 2.5-9).
- Manage proposed Reserve Zone 6 as closed to fluid mineral exploration, including seismic exploration activities.
- Recommend all lands within proposed Reserve Zone 6 for withdrawal from locatable mineral entry (Map 2.5-12).
- Manage proposed Reserve Zone 6 as closed to mineral material sales (Map 2.5-14).
- Do not authorize native seed harvesting for commercial or non-commercial purposes in proposed Reserve Zone 6.
- Land uses and authorized activities are managed to conserve, protect, and restore habitats to meet the nutritional, metabolic (shade/cover), reproductive, and home range requirements of viable Mojave desert tortoise populations.
- Ecologically intact areas of Mojave desert tortoise habitat are conserved and protected from fragmentation and loss of native vegetation communities through appropriate land use allocations and management actions across BLM programs.
- Ecological integrity of damaged native vegetation communities is restored through appropriate revegetation methods and the control and eradication of noxious weeds and nonnative invasive species.
- Research is supported that increases the knowledge of Mojave desert tortoise life histories and population dynamics in proposed Reserve Zone 6.
- BLM will work collaboratively with local, State, and Federal partners to accomplish the goals and the objectives of the Washington County HCP and its implementation agreement.

- Employ rapid and appropriate suppression responses to minimize fire size and duration in proposed Reserve Zone 6.
- Conserve and protect unburned areas through appropriate fire suppression responses, while prioritizing firefighter and public safety and the protection of private property.
- Use Resource Advisors to guide suppression actions for all fires to help ensure that ecological systems and resource values are conserved and protected to the maximum extent possible.
- Evaluate the use of “backfiring” as a fire suppression tactic in late successional shrublands, including Joshua tree woodlands and blackbrush communities, on a case-by-case basis. Require BLM Field Manager approval prior to employing this tactic.
- Naturally ignited wildfires are not authorized to accomplish a resource objective as there are no fire-adapted vegetative communities present in which fire has historically played an important role in ecosystem function.
- Do not authorize the use of management-ignited (prescriptive) fire in any of the ecological systems for hazard fuel reduction or vegetation type conversions, as these are not fire-adapted communities in which fire has historically played an important role in ecosystem function.
- In proposed Reserve Zone 6, collaborate with the USFWS, UDWR, and appropriate U.S. Department of Agriculture agencies on predator control, if other management actions have not been successful in reducing documented predation levels that have been shown to be measurably impacting the recovery of viable Mojave desert tortoise populations.
- Require the development of target species-specific predator control plans supported by NEPA analyses that identify the purpose of and need for action, designate specific goals to be met, and evaluate the least invasive and most ecologically sensitive methods to accomplish those goals.
- Make all lands within proposed Reserve Zone 6 unavailable for livestock grazing (Map 2.5-17).

DEIS Table 2.5-1.

For detailed discussion of how the activities listed in Table 2.5-1 adversely impact the MDT and other special status species (and how reducing or terminating these activities through SGFO Amendment Alternative B would potentially benefit special status species) see comments at [Section 3.5](#).

Importantly, there is one provision of SGFO Amendment Alternative B that is premature and inappropriate:

Allow the reintroduction, relocation, translocation, and population augmentation of Mojave desert tortoise and other special status species into current or historic habitats in proposed Reserve Zone 6, in coordination with the USFWS, UDWR, and local governments, subject to guidance provided by BLM’s 6840 policy and by existing or future Memorandum of Understanding.

The DEIS notes at 3-49 that “additional years of survey data will be needed to validate Mojave desert tortoise density in proposed Zone 6.” Until damaging uses are ended, habitat restoration occurs, and further research demonstrates that this area could support a long-term, viable population of MDT, translocations to Zone 6 should not be conducted.

D. Alternative B could potentially improve visitor safety and enhance quiet, non-motorized recreation

Finally, SGFO Amendment Alternative B would potentially improve visitor safety and enhance the experience of quiet, non-motorized recreation on BLM lands because of the provisions it includes for managing target shooting, OHV use, competitive motorized events, paintballing, controlling group size, and more. Some of the provisions, such as prohibiting campfires, would benefit recreation by reducing the risk of catastrophic wildfires that would damage the scenic qualities of Zone 6.

The following amendments to the SGFO RMP outlined in Alternative B would improve visitor safety and enhance the experience of non-motorized, quiet recreation:

- Prohibit physical geocaches in proposed Reserve Zone 6.
- Allow virtual geocaches in proposed Reserve Zone 6, provided they are compliant with other zone restrictions. Written approval from the BLM Field Manager would be required prior to the public posting of any virtual geocache placement.
- Prohibit the take-off and landing of powered parachutes, ultralight aircraft, remote-controlled aircraft, and unmanned aerial vehicles in proposed Reserve Zone 6.
- Manage proposed Reserve Zone 6 as closed to camping.
- Prohibit campfires within proposed Reserve Zone 6.
- Manage proposed Reserve Zone 6 as closed to recreational target shooting.
- Do not authorize SRPs for competitive equestrian events in proposed Reserve Zone 6.
- Do not authorize SRPs for competitive motorized events in proposed Reserve Zone 6.
- In collaboration with Washington County, SITLA, and the USFWS, develop an implementation-level recreation area management plan for proposed Reserve Zone 6 within 5 years of approval of the Washington County HCP or prior to construction of the proposed Northern Corridor, whichever occurs first.
- At a minimum, the implementation-level recreation area management plan would address the following:
 - Trails and Trail Amenities
 - In conjunction with the comprehensive travel and transportation plan for the SGFO, develop a network of routes and supporting recreational amenities that minimizes impacts to the Mojave desert tortoise and other Federally listed and candidate species and their habitats, while providing a quality recreation experience.
 - Through the BLM's implementation-level comprehensive travel and transportation plan, existing routes would be designated as open or closed and overall mileage of open routes would be limited to approximately 4 miles of motorized and 35 miles of non-motorized roads and trails.
 - Supporting recreational amenities could include trailheads, information kiosks, ride-overs or step-overs, restrooms, and expanded parking.
 - Rock climbing
Identify areas where climbing could be authorized.
Identify potential climbing restrictions such as group size limits or seasonal closures.
Establish monitoring protocols to identify resource impacts.
 - Boundary Fencing
Identify appropriate locations to construct a minimum of 5 miles of wildlife-friendly boundary fencing on BLM-administered lands to manage dispersed

recreational usage and limit adverse impacts to habitat within proposed Reserve Zone 6.

- Adaptive Management

Establish a monitoring protocol to identify changes related to recreational uses, habitat quantity, and quality for Mojave desert tortoise and impacts to other species including special status plants and biological soil crusts.

Develop a list of trigger points and responsive management actions to address observed conflicts between users and protection of natural resources.

- All pets must be on leash at all times within proposed Reserve Zone 6.
- Prohibit paintball activities of any kind within proposed Reserve Zone 6.
- Require users to pack out all solid human and pet waste.
- Same as SGFO RMP Amendment Alternative A, except travel systems will be managed with an emphasis on improving the sustainability of the travel network in a comprehensive manner to minimize impacts on Mojave desert tortoise, maintain visitor safety, and prevent unauthorized cross-country travel while meeting access needs in proposed Reserve Zone 6. To do so, it may be necessary to improve portions of existing routes, close existing routes, or create new routes that meet user group needs, thereby reducing the potential for pioneering unauthorized routes. Within Zone 6, motorized and non-motorized routes would be limited as identified in the Recreation section. The BLM would work with the USFWS, SITLA, and Washington County to ensure a cohesive transportation system in the area and would make specific route designations through the comprehensive travel and transportation plan. The emphasis of the comprehensive travel and transportation planning will be placed on having a neutral or positive effect on Mojave desert tortoise habitat.

Synergistically, the same provisions that would potentially enhance recreation would also potentially benefit special status species:

“However, proposed Zone 6 currently provides for a high number of recreational enthusiasts, as discussed in Recreation Uses and Related Facilities in Section 3.5.1.1 and in Section 3.15, Recreation and Visitor Services. The impacts from recreational use may include additional roads and trails, degradation of soil and vegetation, and increased raven predation because raven populations may be subsidized by an increase in food left behind by recreationists; by managing the area for conservation purposes, many of these impacts to tortoises may be reduced.”

DEIS at 3-65.

There is an ESA affirmative statutory duty on federal agencies to use their authorities in furtherance of the conservation and recovery of listed species. The intent of these duties is for agencies to take all reasonable and feasible possible actions to help conserve and recover the threatened Mojave desert tortoise, in addition to endangered plant species. Thus, SGFO Amendment Alternative B is the best choice, of the choices offered, for potentially increasing protections for special status species, human safety and recreation in Zone 6.

2.2 Key Legal Issues

Issue 1:

The DEIS Fails to Adequately Examine the Impacts of the NCH on ESA Section 6 Lands.

BLM and the Service acknowledge that UDOT's preferred NCH route (and other alternative routes, too) will impact lands acquired through Section 6 of the ESA. According to the DEIS, the Service cannot approve any action impacting these lands unless and until the Service has accepted from the State of Utah transferred or replacement lands or the Service has waived the executed grant agreements with the State of Utah and accepted payment for the entire acquisition costs of the impacted parcels. DEIS at 3-74. In both cases, the Service is first required to undertake full and comprehensive NEPA analysis prior to approving any action that will impact Section 6 lands. Because the Agencies have failed to identify any alternative lands to off-set and mitigate the impacts of UDOT's preferred ROW route on these Section 6 lands, and further failed to examine the impacts of waiving the Section 6 agreement between the Service and the State of Utah and accepting payment for the destruction of these Section 6 lands, the Agencies' DEIS is inadequate.

In addition to these NEPA issues, BLM is also precluded from issuing a Record of Decision granting a right-of-way for the NCH along the UDOT's proposed route, and the Service is prohibited from issuing a ESA Section 10 incidental take permit, unless and until the Service has accepted transferred or replacement lands or the Service has waived the executed grant agreements with the State of Utah and accepted payment for the entire acquisition costs of the impacted parcels. Issuance of a ROW to UDOT prior to accepting and approving transferred or replacement lands or payment in full will violate the Endangered Species Act.

The Cooperative Endangered Species Conservation Fund (CESCF) (Section 6 of the Endangered Species Act) provides funding to States and Territories for species and habitat conservation actions on non-Federal lands. States and Territories must contribute a minimum non-Federal match of 25% for the estimated program costs of approved projects, or 10% when two or more States or Territories implement a joint project. A State or Territory must currently have or enter into a cooperative agreement with the U.S. Fish and Wildlife Service (Service) to receive grant funds.

Habitat Conservation Plan (HCP) Land Acquisition Grants are a program within the CESCF, which Congress established in fiscal year 1997. This program was designed to reduce conflicts between the conservation of listed species and land uses on specific parcels of land. Under this program, the Service provides grants to States for land acquisitions that are associated with approved HCPs.

The HCP Land Acquisition program has three primary purposes: 1) to fund land acquisitions that complement, but do not replace, private mitigation responsibilities contained in HCPs, 2) to fund land acquisitions that have important benefits for listed, proposed, and candidate species, and 3) to fund land acquisitions that have important benefits for ecosystems that support listed, proposed and candidate species. The Service has established minimum eligibility requirements for funding under the HCP Land Acquisition program. A land acquisition proposal must meet all of the mandatory conditions listed below, including:

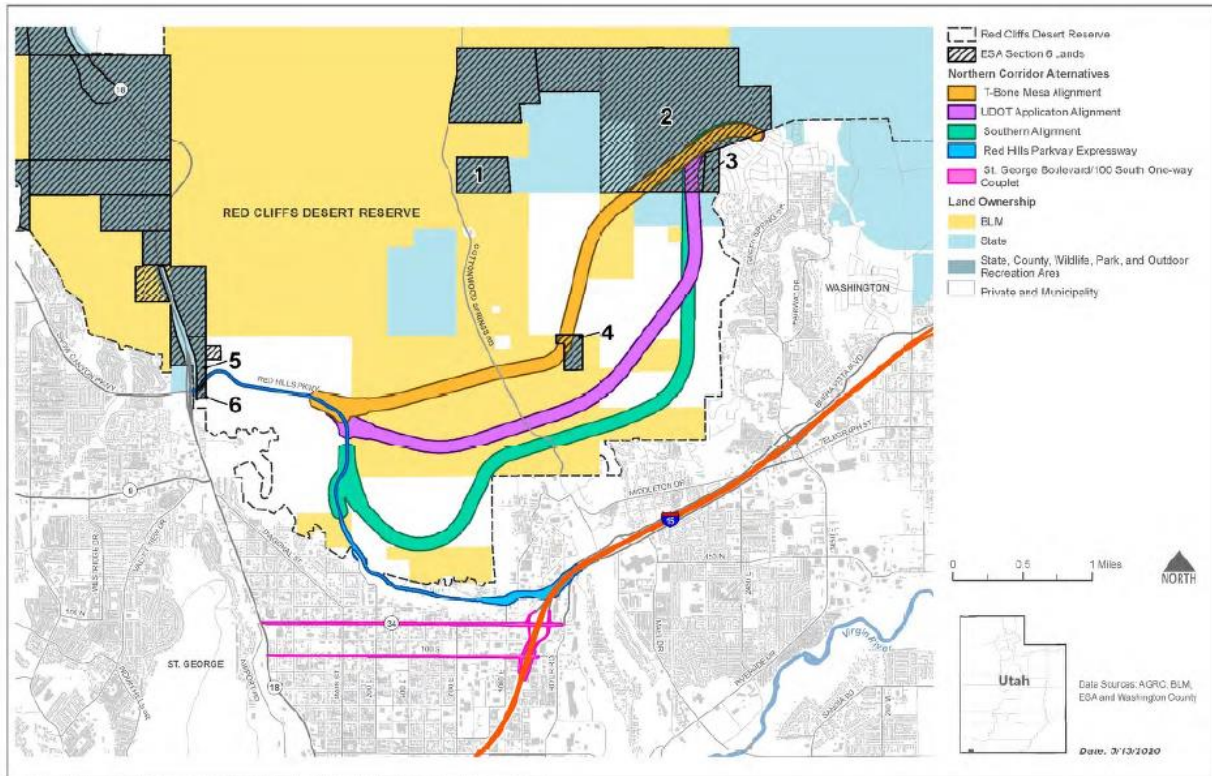
1. The land acquisition complements, but does not replace, private mitigation responsibilities contained in the HCP;
2. The specific parcel(s) to be acquired with the grant money is identified;
3. Habitat must be set aside in perpetuity for the purposes of conservation; and
4. The proposal must state a commitment to funding for, and implementation of, management of the habitat in perpetuity, consistent with the conservation needs of the species.

From 2004-2017, the Utah Division of Wildlife Resources (UDWR) has received \$15,841,725 through the HCP Land Acquisition Grant program to acquire habitat for seven federally-listed species (Mojave desert tortoise, bald eagle, southwestern willow flycatcher, Virgin River chub, woundfin, dwarf bear poppy, and Silar pincushion cactus). More specifically, in 2004, the Service granted UDWR \$4,422,259 to acquire private parcels within the Red Cliffs Desert Reserve created under the Washington County HCP. UDWR considered this acquisition vital to the long-term survival and recovery of the desert tortoise, and UDWR noted that this acquisition will benefit a suite of other species, including the six federally listed species listed above. UDWR noted that its purchase of the parcels will significantly reduce habitat fragmentation in the reserve.

In 2005, UDWR received an additional \$10,000,000 through the HCP Land Acquisition Grant program to acquire lands within the Red Cliffs Desert Reserve. Again, UDWR noted that this acquisition would benefit the MDT and other protected species. In 2013, the Service awarded an additional \$1,419,266 for desert tortoise land acquisition. According to the Service, this acquisition was designed to acquire 1,245 acres of habitat for the desert tortoise in the Red Cliffs Desert Reserve in southwestern Utah, and the Service noted that this acquisition was “essential in preserving the integrity of the reserve as these unburned parcels provide critical refugia for desert tortoises and seed sources for restoration of other areas of the reserve impacted by wildfires due to cheat grass invasions.”

As the DEIS notes, some of these parcels acquired through the HCP Land Acquisition Grant program are within or directly adjacent to the alternative routes for the NCH. DEIS Maps 3.6-1, 3.6-2.

Map 3.6-2. Northern Corridor ESA Section 6 Land Impacts



To be clear, any effort to approve the NCH – through the T-Bone Mesa Alignment, UDOT Application Alignment, or the Southern Alignment – impacting Section 6 conservation lands will be unlawful. First, Utah Division of Wildlife Resources is legally required to adhere to the terms and conditions of the Cooperative Endangered Species Conservation Fund in managing the acquired lands. In 2004 and 2005, when the Service made the \$14,422,259 available to UDWR for acquisition of the portions of Section 6 lands at issue here, the Service required that the acquired “[h]abitat must be set aside in perpetuity for the purposes of conservation.” See Endangered Species Program, Fiscal Year 2004 Cooperative Endangered Species Conservation Fund (Section 6 of the Endangered Species Act) Grant Program, Notice of Availability of Federal Assistance (unpaginated) (located at <https://www.fws.gov/endangered/esa-library/pdf/04rfp.pdf>) (last visited August 27, 2020). See also Endangered Species Program, Fiscal Year 2005 Cooperative Endangered Species Conservation Fund (Section 6 of the Endangered Species Act) Grant Program, Notice of Availability of Federal Assistance (unpaginated) (located at <https://www.fws.gov/endangered/esa-library/pdf/05RFP.pdf>) (last visited August 27, 2020). See also DEIS at 3-75 (noting the parcels affected by the NCH acquired with Section 6 funds without more fully examining the ecological impacts of the NCH on wildlife habitat within these Section 6 lands and that degrading them will be unlawful). Indeed, the Service required UDWR’s proposal “must state a commitment to funding for, and implementation of, management of the habitat in perpetuity, consistent with the conservation needs of the species.” *Id.* Importantly, the DEIS does not provide any references or citations to these UDWR proposals, and BLM and the Service fail to include these agreements in the appendices or otherwise allow public review of these documents. The DEIS similarly fails to include even the most rudimentary information on these parcels, including any enforceable agreements or commitments regarding subsequent management and use of these acquired lands. In the DEIS, BLM and the Service do not cite to, incorporate or provide any information on the executed grant agreements for these acquisitions, *see* DEIS 3-74; the Management Agreements

between UDWR and the Service, *see* 16 U.S.C. § 1535(b); the Cooperative Agreements between the UDWR and the Service, *see* 16 U.S.C. § 1535(c), 50 C.F.R. § 81.3, or the Project Agreement, 50 C.F.R. § 81.1(a)(2). In the absence of these documents – which also appear unavailable through routine internet search engines – the public is foreclosed from fully understanding the enforceable terms and conditions the Service (and UDWR) agreed to in acquiring these lands, and whether or not BLM may even grant a right-of-way to UDOT to construct a highway across the conservation lands. At minimum, it appears that UDWR and the Service agreed that these Section 6 lands will be perpetually managed for the “purposes of conservation,” and BLM’s grant of a right-of-way for a highway across the lands will be arbitrary, capricious, an abuse of discretion, and otherwise not in accordance with law.

In the DEIS, BLM and the Service assert – without citation to any authority whatsoever (i.e., no statute, regulation, caselaw, agency handbook or even manual) – that contrary to the above-noted requirement that these Section 6 lands be managed for conservation in “perpetuity,” the agencies and UDWR are free to ignore these conservation mandates as long as they agree on alternative lands or UDWR repays the United States. DEIS 3-75 (“In the event the terms and conditions for long-term conservation set forth in the grants are not fully complied with, the property acquired through the grant and any property used as a match for these grant funds in subject to transfer, replacement, or repayment to the United States.”).

Yet, even though the DEIS proposes to permit a 4-lane highway through lands acquired for wildlife conservation, the BLM and the Service failed to identify any offsetting lands meeting this requirement, and the agencies provide no analysis or environmental review at all. *Id.* Instead, the agencies completely ignore this analysis (“lands have not been identified and are therefore not included in this analysis”), and claim only “[s]hould transfer or replacement lands(s) be warranted, the [Service] will ensure that the necessary agreements are in place before finalizing these lands acquisitions.” *Id.*

But BLM cannot meet its NEPA obligations in this manner, and BLM needs to discuss and disclose all relevant information to the public regarding offsetting lands to allow the public reasonable ability to examine and respond. At its core, NEPA requires that an agency “will have available, and will carefully consider, detailed information concerning significant environmental impacts” and that “the relevant information will be made available to the larger audience that may also play a role in both the decision-making process and the implementation of that decision.” *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989). “[T]he broad dissemination of information mandated by NEPA permits the public and other government agencies to react to the effects of a proposed action at a meaningful time.” *Marsh v. Or. Nat. Res. Council*, 490 U.S. 360, 371 (1989). Accordingly, CEQ regulations require agencies to “[m]ake diligent efforts to involve the public in preparing and implementing their NEPA procedures,” 40 C.F.R. § 1506.6(a).

In the DEIS, the Agencies have failed to adhere to this standard for public engagement, and have sought to sidestep all engagement whatsoever. *See, e.g.*, DEIS at 3-75 (if transfer or replacement of Section 6 lands is warranted, “the [Service] will ensure that the necessary agreements are in place before finalizing these lands acquisitions.”). On this basis alone, the Agencies’ analysis in the DEIS is inadequate.

Separate and apart from the Agencies’ failure to adequately engage the public, the Agencies have also adopted an unreasonable and arbitrary limit to its analysis examining the indirect impacts of

the NCH on Section 6 lands in the DEIS. For example, the Agencies “assumed” that indirect impacts to MDT from the proposed NCH would be limited to 508 meters from the approved ROW. DEIS at 3-75. The agencies used this limit because it supposedly represents the “annual home range size of an adult MDT.” *Id.* BLM provides no further discussion or analysis supporting this analysis area and notes only that this limit reflects the “short-term indirect effects of noise, vibration, and other construction-related disturbances.”

But BLM never explains why focusing on short-term impacts is appropriate here in examining indirect impacts, especially since NCH will impact far beyond 508 meters. In fact, the DEIS cites studies showing that the magnitude of the road impact zone extends up to 4,250 meters for 4-lane highways (like the NCH), and the zone of impact increased significantly with increasing traffic levels up to fully 4.6 kilometers from the road. DEIS at 3-35. Yet, the DEIS never acknowledges these studies or examines the full impact on Section 6 lands of the direct and indirect impact of UDOT’s preferred route.

Issue 2:

The DEIS will result in Adverse Modification of Critical Habitat for the Mojave Desert Tortoise and Jeopardize the Species.

ESA requires every federal agency to obtain review and clearance for activities that may affect listed species or their habitat. If an activity authorized, funded, or carried out by a federal agency may affect a listed species or its designated critical habitat, that activity cannot go forward until consultation (a biological review of the proposal by FWS or NMFS) ensures that it will not “jeopardize” the species or result in the “destruction or adverse modification” of designated critical habitat. 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14(a). As part of the formal consultation process, the Services must also formulate discretionary conservation recommendations to reduce or minimize the action’s impacts on listed species or critical habitat. 50 C.F.R. § 402.14(g)(6).

Formal consultations culminate with the Services’ issuance of a biological opinion, in which the Services determine whether an action is likely to either jeopardize the survival and recovery of a listed species or destroy or adversely modify a species’ designated critical habitat. 16 U.S.C. § 1536(b); 50 C.F.R. 402.02 (definition of “formal consultation”). If the Services determine that the action is likely to jeopardize the species or adversely modify its critical habitat, the biological opinion must specify reasonable and prudent alternatives that will avoid such jeopardy or adverse modification. 16 U.S.C. § 1536(b); 50 C.F.R. § 402.14(h)(3). If the jeopardy or adverse modification cannot be avoided, however, the agency action may not proceed.

Issue 3:

The Agencies cannot Approve an Alternative that Violates the Purposes behind the LWCF Acquisition.

BLM’s granting of a ROW along the UDOT’s application route, the T-Bone Mesa route or the Southern route will violate the Land and Water Conservation Fund Act and the Administrative Procedure Act. Congress passed the Land and Water Conservation Fund Act (P.L. 88-578) on September 3, 1964, and the LWCF became law on January 1, 1965. The purposes of the LWCF are:

to assist in preserving, developing, and assuring accessibility to all citizens . . . such quality and quantity of outdoor recreation resources as may be available and are necessary and desirable for individual active participation in such recreation and to

strengthen the health and vitality of the citizens of the United States by (1) providing funds for and authorizing Federal assistance to the States in planning, acquisition, and development of needed land and water areas and facilities and (2) providing funds for the Federal acquisition and development of certain lands and other areas.

P.L. 88-578. Thus, the LWCF consists of a state-side and a federal-side acquisition program. The state-side program provides matching grants to the States and local governments for the acquisition and development of public parks, outdoor recreation areas and facilities. 54 U.S.C. 200305. The Secretary of the Interior apportions the appropriation for state grants in accordance with a formula set out in the LWCF Act. 54 U.S.C. §200305(b). Under this formula, a portion of the appropriation is to be divided equally among the states, and the remaining appropriation is to be apportioned based on need, as determined by the Secretary. Acquisitions funded through LWCF state grants must remain in recreation use in perpetuity, unless the Secretary of the Interior approves of the conversion of the land to another use and acceptable replacement lands are substituted. *Id.* at §200305(f)(3).

LWCF's federal-side acquisition program represents the principal source of funds for federal acquisition of land. *Id.* at §200306. The LWCF Act provides that "unless otherwise allotted in the appropriation Act making them available," appropriations from the fund for federal purposes are to be allotted by the President for certain activities. *Id.* at § 200306(a)(1). These activities include land acquisition in recreation areas administered by the Secretary of the Interior for recreational purposes; land acquisition in national park, national forest, and national wildlife refuge system units; and land acquisitions that foster access to federal land for recreational purposes. *Id.* In practice, the appropriations acts specify the federal purposes for which the funds are to be used.

Importantly, lands and interests in lands acquired through LWCF's federal-side acquisition program must remain in Federal ownership, and – unlike the state-side program – lands acquired through the federal-side program may not be converted to other non-recreational and non-conservation uses. *Compare* 54 U.S.C. §200305(f)(3) (explicitly permitting conversion of state-side acquisitions), *with id.* at §200306 (federal-side program).

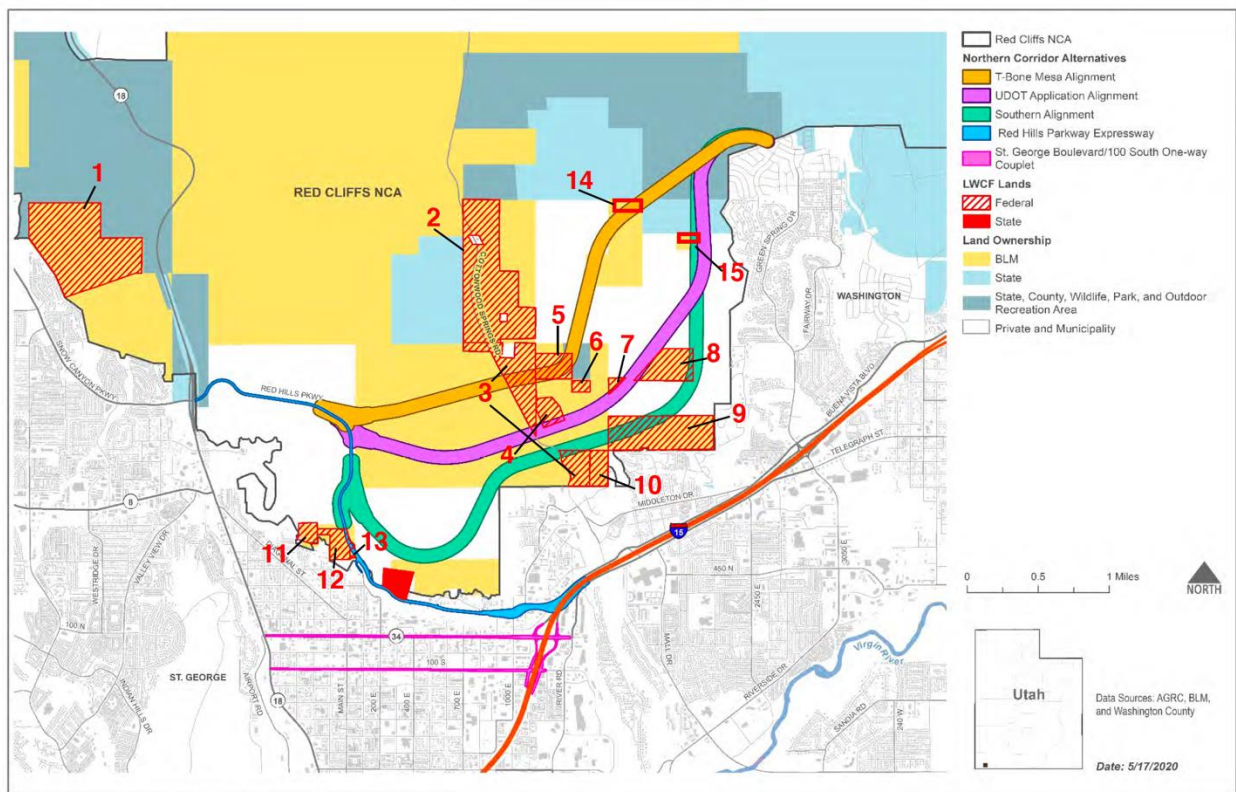
The DEIS identifies a series of lands acquired by BLM through the LWCF federal-side program, including several parcels that will be at least partially converted (to pavement) under the alternatives in the DEIS. DEIS at pp. 3-135-136; Map 3.16-1. Importantly, the Agencies provide no factual background on these acquired lands, and the DEIS is devoid of any agreement, warranty deed, appropriation or acquisition authorization, project description or any other document identifying the purposes behind these acquisitions.

Moreover, the Agencies' map and analysis are incomplete, and there are additional parcels that have been acquired using the LWCF federal-side program that will be directly and indirectly impacted by the NCH. More specifically, as shown by the chart below, since 1997, BLM has acquired no fewer than 15 parcels within the footprint of the NCH, totaling almost 832 acres of public lands. BLM has used \$20,734,622.20 in appropriated funds on these acquisitions. The chart and map below illustrate and provide additional information on these acquisitions.

Parcel # on Annotated Map	BLM Case Record Serial Number (UTU)	Acres	Date Acquired	Price	Acquired From
1	075187	220.2	11/03/1997	\$2,544,056.40	AMSCO Windows
2	075800	213	2/17/1998	\$3,307,071.80	Env'tl Land Tech. (James Doyle)
3	077896	109.7	1/14/1999	\$1,703,188	Env'tl Land Tech. (James Doyle)
4	079246 (conservation easement)	14.52	2/7/2002	\$72,500	City of St. George
5	080504	29.5	9/19/2003	\$695,000	Env'tl Land Tech. (James Doyle)
6	082091	6.61	12/15/2006	\$530,000	Env'tl Land Tech. (James Doyle)
7	094754 (Brennan acq. Phase 3)	4.66	12/13/2019	\$205,040	Brennan Holdings
8	094601 (Brennan acq. Phase 2)	45.46	10/11/2019	\$2,000,000	Brennan Holdings
9	093279 (Brennan acq. Phase 1)	113.64	12/11/2019	\$5,000,000	Brennan Holdings
10	077902	17.37	6/16/1999	\$270,283	Env'tl Land Tech. (James Doyle)
11	080290	0.51	5/27/2003	\$5,300	Terry and Ann Cluff
12	077854	19.1	11/09/1998	\$378,348	Warren and Trina Cox
13	080044	0.15	7/12/2002	\$23,835	John and Pamela Lamb
14	089253	22.4	8/13/2013	\$3,000,000	Trust for Public Land
15	089254	6.25	10/23/2013	\$1,000,000	Trust for Public Land

ANNOTATED MAP OF FEDERAL LWCF-AQUIRED PROPERTIES FROM BLM's DRAFT EIS

Map 3.16-1. Land and Water Conservation Fund Act Lands [Section 6(f) Properties] within the Red Cliffs NCA and Reserve



B-78

Northern Corridor – Highway Right-of-Way, Issuance of an Incidental Take Permit
Draft EIS and Draft RMP Amendments

In the DEIS, the Agencies admit that “construction of the Northern Corridor would directly encroach on a number of parcels the BLM had previously used LWCF to acquire and incorporate into the NCA.” DEIS at 3-136. Under the LWCF Act, however, BLM is prohibited from “encroach[ing]” or converting lands acquired through the LWCF federal-side program to a highway ROW. 54 U.S.C. §200306.

In the DEIS, the Agencies turn the LWCF Act on its head, and claim that only the state-side program has a so-called “anti-conversion requirement.” DEIS at 3-135 – 3-136 (“No [land acquired through the state-side program] may be wholly or partially converted to a use other than public outdoor recreation uses(s) without the approval of the National Park Service. These anti-conversion requirements do not apply to the Federal side of the LWCF.”). Under the Agencies’ reading of the LWCF, the federal land management agencies (BLM, National Park Service, U.S. Forest Service, and the U.S. Fish and Wildlife Service) are free to acquire lands for wildlife habitat, outdoor recreation and other conservation uses using the LWCF federal-side program, and then permit these lands to be used for non-conservation, industrial or commercial uses. This interpretation runs headlong into the purposes of the Land and Water Conservation Fund Act, federal appropriation law, the purposes informing federal acquisition of these particular parcels, and common canons of statutory construction.

First, the stated purposes of the Land and Water Conservation Fund Act are to “to assist in preserving, developing, and assuring accessibility to all citizens of the United States of America of present and future generations and visitors who are lawfully present within the boundaries of the United States of America such quality and quantity of outdoor recreation resources as may be available and are necessary and desirable for individual active participation in such recreation and to strengthen the health and vitality of the citizens of the United States by (1) providing funds for and authorizing Federal assistance to the States in planning, acquisition, and development of needed land and water areas and facilities and (2) providing funds for the Federal acquisition and development of certain lands and other areas. P.L. 88-578 (Sept. 3, 1964).

The only court that has reviewed post-acquisition management of lands acquired using LWCF funding has held the “primary purposes for which the lands were acquired controls not just the initial acquisition of the lands, but the manner of their development post-acquisition. *Gifford Pinchot Task Force v. Perez*, 2014 WL 3019165, *10 (D. Ore. July 3, 2014). According to this court, “any other construction . . . would render the LWCF Act meaningless . . .” *Id.* at 11. In specifically rejected the Forest Service’s argument that the LWCF Act placed no limitations on a federal agency’s management of lands acquired using LWCF funds, the Court noted, “If [the Forest Services’] prevailed on their argument, the subsequent development of land purchased under the LWCF Act could completely undermine the Congressionally stated primary purpose for the purchase of such land, rendering it meaningless. Such an argument is unsupportable.” *Id.* at 12.

When BLM acquires land using funds Congress appropriated to the LWCF, the LWCF’s allowable purposes for a land acquisition become binding on the agency. See 31 U.S.C. § 1301(a) (opening statement of Chapter 13 of the U.S. Code, dealing with appropriations). “Appropriations shall be applied only to the objects for which the appropriations were made except as otherwise provided by law.” *Id.* “31 U.S.C. § 1301 requires that funds be spent for the purpose for which they were appropriated by Congress.” *Dep’t of Soc. Servs. of State of Cal. v. Sullivan*, 904 F.2d 710 (9th Cir. 1990). “Simply stated, 31 U.S.C. § 1301(a) says that public funds may be used only for the purpose for which they were appropriated.” General Accounting Office, *Principles of Federal Appropriations Law* (3rd Ed., 2004), Vol. 1 at 4-6, available at <http://www.gao.gov/assets/210/202437.pdf> (last visited August 31, 2020). Thus, BLM cannot appropriate funds for the acquisition of lands to benefit the conservation of MDT, outdoor recreation and other conservation purposes, and then develop and manage these acquired lands in a manner inconsistent with the initial purpose.

Because BLM failed to provide any assessment or examination of the underlying purposes of these LWCF acquisitions, the undersigned completed an independent review of the purposes behind the specific parcels subject to encroachment by UDOT’s NCH alignment. This assessment shows in each case that the lands were acquired to benefit the Mojave Desert Tortoise, among other conservation purposes. For example, Parcel 8 was acquired in 2019 for \$2 million, the purpose was noted as “code 260,” which means “wildlife,” and in BLM’s own database this parcel was acquired “for Desert Tortoise.” Parcel 7 was also acquired in 2019 (for \$205,040), and BLM noted that this parcel was acquired to protect “wildlife” and, more specifically, “Desert Tortoise.” Similarly, BLM acquired parcels 3 and 15 specifically for the purpose of “threatened and endangered species” (code 073).

BLM's acquisition of a conservation easement on Parcel 4 is, perhaps, the best example of how BLM's post-acquisition management of lands acquired using LWCF funds runs contrary to the purpose and intent of the LWCF Act. On February 7, 2002, BLM used LWCF funds to acquire from the City of St. George a conservation easement covering approximately 14.5 acres of city-owned land. In the easement, both parties recognized that the property possesses open space, wildlife, natural resource and aesthetic values (collectively, 'conservation values') of great importance to [the BLM] and the general public, and are worthy of preservation." In addition, "the purpose of this Easement is to preserve and protect in perpetuity the aesthetic, open space, wildlife, and natural resource values of the Property," and the easement "confine[s] the future use of the Property by [City of St. George] to the preservation of open space, and other uses which are not inconsistent with the purposes of the Easement." The easement specifically "prohibited" the "disturbance or impairment of the open space."

Despite the express limitation on post-acquisition management requiring the agencies "preserve and protect in perpetuity" the conservation values of these lands, and expressly prohibit the "disturbance or impairment of the open space," BLM's preferred alternative would pave this desert tortoise habitat. BLM cannot approve this alternative because it is inconsistent with the specific purpose of the land acquisition.

Finally, Congress has shown a willingness – in limited circumstances and only after an exhaustive process - to exempt state-side acquisitions from subsequent management limitations inconsistent with the underlying purposes of the initial appropriation. Congress has chosen not to apply this exemption to the federal-side of LWCF, however, and BLM is not free to manipulate the LWCF Act to undermine the purposes of the LWCF Act for federal-side acquisitions. Indeed, "where Congress includes particular language in one section of a statute but omits it in another . . . , it is generally presumed that Congress acts intentionally and purposely in the disparate inclusion or exclusion." *Keene Corp. v. United States*, 508 U.S. 200, 208 (1993) (quoting *Russello v. United States*, 464 U.S. 16, 23 (1983)).

For these reasons, BLM may not grant a ROW authorization across any lands that have been acquired using Land and Water Conservation Funds.

Issue 4:

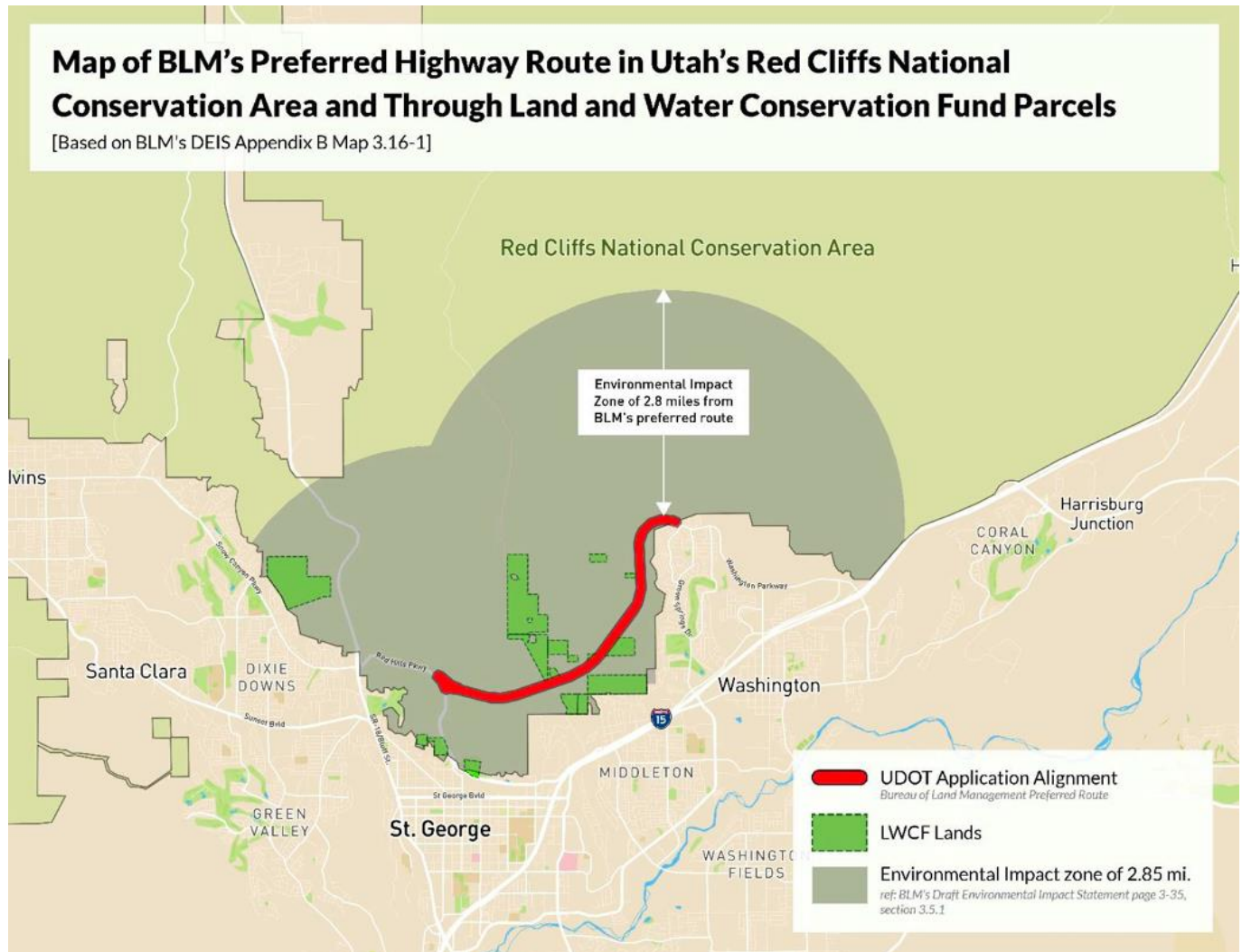
The Agencies Have Failed to Take a Hard Look at The Impacts of the Proposed ROWs on Lands Acquired Using LWCF Funds.

BLM has arbitrarily failed to examine the direct, indirect and cumulative impacts of the proposed ROW alternatives on the purposes for which the lands were acquired. As noted above, BLM has failed to even identify and discuss the purposes informing the acquisition of these lands, forget actually examining the impacts of the NCH on these purposes.

Instead, in its two-sentence analysis, *see* DEIS at 3-136, BLM looks only to the acreage that the NCH would "directly encroach." *Id.* There are two problems with this approach. First, BLM cannot limit its analysis only to direct encroachment, and, instead, BLM needs to fully consider the direct and indirect impacts of constructing the NCH, including the potential impacts on the conservation values for which the lands were acquired. As noted above, these conservation

values include wildlife habitat for MDT and other wildlife, open space, and aesthetic and recreational values.³

BLM also cannot arbitrarily limit its analysis to only the area of direct impact. Instead, BLM needs to identify an appropriate analysis area that captures both direct and indirect impacts of the NCH. This is especially true here since elsewhere in the DEIS, the Agencies acknowledge that road construction is known to adversely impact MDT populations and habitat up to 4.6 kilometers from the edge of the roadway. DEIS at 3-35—3-37. Applying this broader area of impact, as illustrated below, the potential impacts of the NCH extends far beyond the immediate footprint, and NEPA requires BLM to examine these impacts.



The Agencies failure to examine the impacts of the NCH on these lands violates NEPA.

Issue 5:

The Proposed NCH Alternative will Violate OPLMA.

³ Because the Agencies have failed to provide any background data on these LWCF acquisitions, there may be more purposes and conservation values informing the acquisition of the 15 parcels at issue here.

A. BLM must conserve, protect and enhance the Red Cliffs NCA's objects and resource values in accordance with the Congressionally-defined purposes identified through OPLMA of 2009.

The Congressionally-defined purposes of the Red Cliffs NCA requires BLM to “conserve, protect, and enhance for the benefit and enjoyment of present and future generations the ecological, scenic, wildlife, recreational, cultural, historical, natural, educational, and scientific resources of the National Conservation Area”; and to “protect each species that is – located in the National Conservation Area; and listed as a threatened or endangered species on the list of threatened species or the list of endangered species published under Section 4(c)(1) of the Endangered Species Act of 1973 (16 U.S.C. 1533(c)(1)).” 16 U.S.C. § 460www; P.L.111- 11, Title I, Subtitle O, § 1974(a)). *See also* DEIS at 3-141 (“Congress designates NCAs on public lands to conserve, protect, enhance, and manage public lands for the benefit and enjoyment of present and future generations. NCAs offer exceptional scientific, cultural, ecological, historical, and recreational value.”); *id.* at 3-142 (“Land use planning goals, objectives, and management decisions in the Red Cliffs NCA RMP are consistent with the designation purposes, authorized uses, and other direction in OPLMA that relates to this NCA. Regarding authorized uses, OPLMA at Section 1974 (e)(2) specifies that “the Secretary shall only allow uses of the National Conservation Area that the Secretary determines would further a purpose described in subsection (a).” The purposes defined in subsection (a) are listed previously.”).

The Federal Land Policy and Management Act (FLPMA) requires BLM to manage public lands under multiple use principles unless an area has been designated by law for specific uses, in which case BLM must manage the land for those specific uses. 43 U.S.C. § 1732(a). In other words, BLM will manage national conservation areas not under the FLPMA multiple use mandate, but rather under the legislation that established the national conservation areas. This is expressly provided for in FLPMA itself:

The Secretary shall manage the public lands under the principles of multiple use and sustained yield, in accordance with the land use plans developed by him under section 1712 of this title when they are available, *except that where a tract of such public land has been dedicated to specific uses according to any other provisions of law it shall be managed in accordance with such law.*” FLPMA, 43 U.S.C. § 1732(a) (emphasis added).

In the Omnibus Public Land Management Act of 2009, Congress designated the Red Cliffs National Conservation Area (NCA) for the explicit purpose of protecting and preserving identified resources as stated above. Accordingly, the standard approach to multiple use, sustained yield management does not apply to this NCA, and any effort to adopt such a management approach to the detriment of its natural and cultural objects and values would be in violation of OPLMA and the mandates of FLPMA. BLM must manage the NCA for the protection and preservation of its resources, and only allow uses that are not needed for protection of NCA values when those uses do not conflict with the directives of OPLMA. The NCAs are also part of the National Landscape Conservation System (National Conservation Lands), and require different management from other BLM lands. The designation of NCAs, together with the establishment of the National Conservation Lands themselves, represents the cornerstone of a new era in land stewardship, in which BLM focuses on a mission of stewardship to: “conserve, protect, and restore nationally significant landscapes that have outstanding cultural, ecological, and scientific values for the benefit of current and future generations.” 16 U.S.C. § 7202 (2009).

Secretarial Order 3308 speaks to the management of the National Conservation Lands. The Order states in pertinent part that “[T]he BLM shall ensure that the components of the [National Conservation Lands] are managed to protect the values for which they were designated, including, where appropriate, prohibiting uses that are in conflict with those values.” The 15-Year Strategy for the Conservation Lands reinforces this by stating the “conservation, protection, and restoration of the [National Conservation Lands] values are the highest priority in [National Conservation Lands] planning and management, consistent with the designating legislation or presidential proclamation.” National Conservation Lands 15-Year Strategy, at 8. Therefore, the most important aspect of the NCA plans is to ensure that the objects these areas were designated to protect are conserved, protected and restored over the life of the plan. While discretionary uses may be allowed to continue if compatible with that charge, BLM must limit or prohibit such uses if they are in conflict with the values that the areas were designated to protect.

B. BLM is prohibited from siting the NCH ROW within the NCA.

BLM’s own policy requires it to site the NCH ROW outside of the Red Cliffs NCA to protect its resource values and objects, and BLM’s own manual “directs the BLM to analyze the impacts on the NCA’s objects and values to determine consistency of a proposed ROW with the NCA’s objects and values, and directs the BLM to consider protection of the objects and values in the NEPA analysis.” DEIS 3-142, *citing* BLM Manual 6220 – National Monuments, National Conservation Areas, and Similar Designations (BLM 2017b). The DEIS also notes that [s]ite-specific activities in Monuments and NCAs will be managed in a manner that is compatible with the protection of the objects and values for which these areas were designated. Multiple uses may be allowed to the extent they are consistent with the applicable designating authority, other applicable laws, and with the applicable land use plan. DEIS at 3-142, *citing* BLM Manual 6220.

In the DEIS, BLM specifically noted that “[t]hrough the NEPA process, the manager with decision-making authority for a Monument or NCA will evaluate discretionary uses and will analyze whether the impacts of the proposed use in the Monument or NCA or similarly designated area are consistent with the protection of the area’s objects and values. As part of this analysis, the manager will consider the severity, duration, timing, and direct and indirect and cumulative effects of the proposed use. If necessary and appropriate, the BLM may use the land use planning process to consider whether to change discretionary use authorizations.” DEIS at 3-142. These same protections and requirements specifically apply to BLM’s issuance of rights-of-way authorization, and BLM should “through land use planning and project-level processes and decisions, avoid granting new ROWs in Monuments and NCAs and similar designations. In deciding whether to approve ROWs in these components of the National Landscape Conservation System, the BLM shall consider whether ROW proposals are consistent with the authority that designated the component. Subject to applicable law, the BLM shall exercise its discretion to deny ROW applications in Monuments and NCAs and similar designations if they are inconsistent with the component’s designating authority.” DEIS 3-142.

BLM’s own analysis found that Alternatives 5 and 6, located outside of the NCA, are more effective at reducing traffic congestion and travel time than the BLM-preferred and Applicant’s Alternative 3. DEIS at Appendix J Tables 4 and 5. Based on this analysis, Alternatives 5 and 6 better meet the applicant’s purpose and need of “reducing congestion, increasing capacity, and improving east-west mobility on arterial and interstate roadways between State Route 18 (SR 18) and Interstate 15 (I-15) at milepost 13.” DEIS at 1-2.

Alternatives 5 and 6 also cause no direct adverse impacts to the threatened Mojave desert tortoise, and other NCA objects and resource values. DEIS at Appendix J Table 7. Based on this analysis, Alternatives 5 and 6 also better meet the agency's purpose and need because they do not require that BLM violate OPLMA, ESA, and FLPMA.

“In accordance with and taking into account the provisions of OPLMA and Department of Interior policies, the BLM's purpose and need for action is to respond to UDOT's application for a ROW grant under Title V of FLPMA, BLM's ROW regulations, 43 CFR part 2800, and other applicable Federal laws.”

DEIS at 1-2.

BLM must assess ROW impacts on the NCA's objects and values.

“The assessment of impacts on the NCA's objects and values, in accordance with BLM Manual 6220, Section 1.6 (C) (2), is included in other resource sections of this Draft EIS. This includes analysis of the severity, duration, timing, and direct and indirect and cumulative effects of the potential Northern Corridor alternatives and associated amendment to the Red Cliffs NCA RMP.”

DEIS at 3-143.

BLM's own analysis shows that siting the NCH ROW inside the Red Cliffs NCA would cause severe and permanent⁴ adverse impacts to the NCA's ecological, scenic, wildlife, recreational, cultural, historical, natural, educational and scientific values, and to species identified as threatened or endangered under the ESA that live inside the NCA.

C. Zone 6 Fails to Eliminate Impacts to the Red Cliffs NCA's Congressionally-established purposes.

Creation of Zone 6 does note and cannot mitigate impacts to the Red Cliffs NCA's purposes because no portion of Zone 6 occurs in the NCA nor belongs to the National Conservation Lands system. There is no guarantee that any portion of Zone 6 will be managed as a National Conservation Area in the future, because this would require an act of Congress signed by the President. Adverse impacts to the Red Cliffs NCA's purposes cannot be mitigated by 6,800 acres of far removed land under a hodge-podge of state, private, UDOT, BLM, and BLM-ACEC management.

At the root of this issue is the necessary acknowledgement that damage to a National Conservation Area's purposes cannot be mitigated, period. These are one-of-a-kind resources recognized for their regional and national significance:

“The Red Cliffs NCA resources are significant from a regional and national perspective because they afford:

- ...Opportunities for restoration of critical habitats for the threatened Mojave desert tortoise and other at-risk native species of this ecoregion;
- Opportunities for solitude, natural quiet, dark night skies, primitive and unconfined recreation in the Red Mountain and Cottonwood Canyon Wilderness areas, just minutes from the largest cities in Washington County;

⁴ The NCH would exist for many decades, if not a century or more, in the Red Cliffs NCA. Its impacts would essentially be permanent on the landscape. The trend is that, once highways are built, they are either maintained in perpetuity or expanded.

- Opportunities for conservation, protection, restoration, scientific study, public use and interpretation of an array of prehistoric and historic period archaeological sites, documenting the broad span of human history in southwestern Utah (Photo 1-9, Photo 1-10);
- Opportunities for sustainable outdoor recreation on public lands that enhance the quality of life for local residents and visitors and help to sustain the economic health of local communities;
- Opportunities for broad-based scientific, academic, and community partnerships, volunteer programs, youth and veteran training and employment initiatives, developed to enhance public appreciation and citizen stewardship of the NCA resources and values.”

Red Cliffs NCA DRMP at 15-16.

D. BLM cannot issue a ROW before completing a travel management plan.

OPLMA established a staged process for BLM to issue travel management decisions – like the proposed ROW at issue here – and Congress required BLM to first issue a “travel management plan” before issuing individual travel decisions. [P.L. 111-11 Sec. 1977 Washington County comprehensive travel and transportation management plan (b)(2)(A)]. During this travel management planning process, BLM “in consultation with appropriate Federal agencies, State, tribal, and local governmental entities (including the County and St. George City, Utah), and the public, [may] identify 1 or more alternatives for a northern transportation route in the County.” [ibid. (b)(2)(A)]. BLM turns this staged process on its head, however, and argues that it may issue a ROW before completing the travel planning process, arguing “[i]f a ROW is granted and the RMP is also amended, BLM will then be able to fully consider that ROW as a specific northern transportation route (i.e. a Northern Corridor) as part of a future travel management planning process as Congress has instructed in Section 1977 of OPLMA.” DEIS Section at 1-1. But this approach fails to recognize the importance of having a travel management plan in place to guide future development in an area, and BLM never admits that its TMP is years behind schedule. The TMP should have been completed long before UDOT filed its NCH ROW application, and all TMP designations would have been made consistent with the current SGFO and NCA RMP designations and decisions, without the need for any weakening amendments. Those designations could have also reduced some of the 48.4 miles of travel routes thus far inventoried in the BLM portion of Zone 6 (DEIS at 3-148) with no linkage to the NCH.

Instead, BLM has endlessly delayed its preparation of a TMP – perhaps informed by BLM and the County’s desire to permit the NCH before the comprehensive TMP planning process is commenced, and now faces the UDOT NCH ROW application and the convoluted, interconnected DEIS. BLM says it must weaken the NCA RMP and issue UDOT a NCH ROW **before** it can proceed to consider the Northern Corridor as part of a future TMP. This is backwards and the opposite of what Sec. 1977 of OPLMA intended. Once BLM issues the UDOT NCH ROW, it will actually moot out the TMP EA analysis and consideration. BLM will thereby abrogate the OPLMA TMP “identify” requirement by preemptively losing its TMP related discretion through issuance of a binding NCH ROW. After BLM issues the UDOT NCH ROW, there is no way that it could attempt to back-track or consider a “closed” or “limited” NCH route designation in the eventual approved TMP. The NCH would be a premature *fait accompli*.

Issue 6:

Permitting the NCH Will Cause Unnecessary and Undue Degradation of Public Lands.

FLPMA requires that the Secretary in managing the public lands shall take any action necessary to prevent unnecessary or undue degradation of the lands. 43 U.S.C. § 1732(b). BLM regulations in describing ways to prevent unnecessary or undue degradation specifically include “Attaining the stated level of protection or reclamation required by specific laws in areas such as the California Desert Conservation Area, Wild and Scenic Rivers, BLM-administered portions of the National Wilderness System, and BLM-administered National Monuments and National Conservation Areas.” 43 CFR §3809.415. The construction of the NCH is clearly detrimental to the National Conservation Lands System, the Red Cliffs National Conservation Area and its purposes, the Red Cliffs Desert Reserve, the UVRRU, and the MDT, and the DEIS acknowledges that there are feasible non-NCH alternatives. In bifurcating a core MDT area within Red Cliffs NCA and Reserve that is considered integral to the integrity and viability of the UVRRU and thus to the MDT range wide, and in ignoring non-NCH alternatives, the NCH will clearly result in undue and unnecessary degradation on our public lands. Thus, the agencies would violate FLPMA if they were to authorize the ROW and enable the NCH.

FLPMA directs BLM to make it a priority to designate worthy ACEC’s during its RMP planning and implementation. Washington County is seeking mitigation credit for the NCH for some proposed Zone 6 BLM lands within the existing SGFO RMP designated Red Bluff ACEC. Given the documented MDT declines in the UVRRU discussed elsewhere in these comments, BLM should strengthen and/or expand the Red Bluffs ACEC as part of this NEPA process to improve tortoise protection, but without making those improvements conditioned on NCH approval.

Issue 7:

The Draft EIS Does Not Comply with NEPA.

A. BLM and FWS must issue a supplemental draft EIS examining significant new circumstances.

In light of the Turkey Farm Road and Cottonwood Trail Wildfires that burned approximately 14,000 acres inside the Red Cliffs NCA and Red Cliffs Desert Reserve, BLM and FWS must temporarily pause preparation of all required environmental analysis and review under the National Environmental Policy Act, 42 U.S.C. §§ 4321 et seq. (“NEPA”), the Endangered Species Act, 16 U.S.C. §§ 1531 et seq. (“ESA”), the Federal Land Policy and Management Act, 43 U.S.C. §§ 1701 et seq. (“FLPMA”), and the Omnibus Public Land Management Act of 2009, P.L. 111-11, 123 STAT. 991 (March 30, 2009), regarding the Northern Corridor Highway until BLM and FWS assess and examine the full ecological impacts of these fires and complete burned area assessments, BLM adopts Emergency Stabilization/Burned Area Emergency Response (ES/BAER) Plans and a Burned Area Rehabilitation (BAR) Plans, and BLM and FWS prepare and submit for public review and comment a supplemental draft environmental impact statement and habitat conservation plan.

Without a better understanding of the ecological impacts of the Turkey Farm Road and Cottonwood Trail wildfires, together with formalized and adopted plans to protect, remediate and rehabilitate the lands subject to these wildfires, BLM and the

Service cannot adhere to their respective requirements under NEPA, FLPMA, ESA and the Omnibus Public Land Management Act of 2009.

In 2005 and 2006, major wildfires burned 25% of the Red Cliffs NCA and Red Cliffs Desert Reserve. These fires had a population level effect on MDT, impacting reproduction and survival rates. Following the fires, MDT populations in the Reserve declined from 26.1 tortoises/km² in 2005 to 14.2 tortoises/km² in 2009 (Regional Desert Tortoise Monitoring in the Red Cliffs Desert Reserve, 2017, McLuckie et. all). Populations never fully recovered. In 2019, MDT populations had crept up to 17.2 tortoise/km² approximately half of what they were in 2000 at 29.6 tortoises/km². The agencies should expect a similar population level effect following the 2020 wildfires.

Note, too, that it is insufficient as a matter of law to consider this new information only in the final environmental impact statement (EIS), as BLM asserted during its July 21, 2020 public meeting. Deferring the consideration of significant new information – like the impacts of the Turkey Farm Road and Cottonwood Trail wildfires – until the final EIS will unavoidably taint the final product by ignoring key baseline information needed to inform the analysis of the affected environment and environmental consequences, and otherwise limiting consideration of reasonable alternatives and appropriate public engagement.

In these circumstances, NEPA requires an agency to consider significant new circumstances or information regarding the impacts of the Turkey Farm Road and Cottonwood Trail wildfires by preparing a supplemental draft environmental impact statement, and submitting this supplemental draft EIS for public notice and comment. See 40 C.F.R. § 1502.9(c)(1)(ii).

(ii) There are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.

See 40 CFR Section 1508.27 (b)(3) and (b)(9).

§ 1508.27 Significantly.

Significantly as used in NEPA requires considerations of both context and intensity:

(b) Intensity. This refers to the severity of impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. The following should be considered in evaluating intensity:

(3) Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

(9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

A supplemental DEIS must be prepared to add the significant new circumstances and information from massive recent fires to the alternatives analysis, including with respect to new tortoise mortality and habitat loss.

B. The proposed purpose and need is arbitrary and capricious.

The federal purpose and need statement is too narrow, reactive, and deferential and therefore improperly skews the DEIS analysis. While the DEIS distinguishes between the applicant's and

federal agencies' purposes and needs for action, the latter is arbitrarily narrow, reactive, and deferential to UDOT and the county.

“UDOT has applied for a ROW to construct a multi-lane, divided highway on BLM-administered lands within the Red Cliffs NCA and the overlapping Red Cliffs Desert Reserve with the objective of reducing congestion, increasing capacity, and improving east-west mobility on arterial and interstate roadways between SR 18 and I-15 at milepost 13. In accordance with and **taking into account the provisions of OPLMA** and Department of Interior policies, the BLM's purpose and need for action is to respond to UDOT's application for a ROW grant under Title V of FLPMA, BLM's ROW regulations, 43 CFR part 2800, and other applicable Federal laws” (emphasis added).
DEIS at 1-2.

BLM states that it takes into account the provisions of OPLMA, but in “Section 1.3 Purpose and Need for Federal Actions”, BLM fails to discuss its obligation under OPLMA Subtitle O, Section 1974 to:

- (1) to conserve, protect, and enhance for the benefit and enjoyment of present and future generations the ecological, scenic, wildlife, recreational, cultural, historical, natural, educational, and scientific resources of the National Conservation Area; and
- (2) to protect each species that is—
 - (A) located in the National Conservation Area; and
 - (B) listed as a threatened or endangered species on the list of threatened species or the list of endangered species published under section 4(c)(1) of the Endangered Species Act of 1973 ([16 U.S.C. 1533\(c\)\(1\)](#))

Instead, BLM discusses its requirement to identify a northern transportation route in the county.

“In particular, under OPLMA Subtitle O, Section 1977, the BLM is required to develop a comprehensive travel management plan for the land managed by the BLM in Washington County and, in doing so, to “identify one or more alternatives for a northern transportation route” in the county.”

Note that Section 1977 does not say BLM must identify a northern transportation route *inside* the Red Cliffs NCA. BLM must take into account the full provisions of OPLMA, and not just individual sections that support the applicant's purpose and need.

While the FWS purpose and need addresses conservation, it fails to disclose the whole story. The Amended HCP is set up in response to the NCH as a Changed Circumstance, thereby failing to minimize and mitigate the impacts anticipated from the taking.

“The purpose of the USFWS's Federal action of approving an Amended HCP and issuing an ITP is to authorize take of the Mojave desert tortoise incidental to the covered activities proposed by the County, while ensuring conservation of the species by minimizing and mitigating the impacts from the anticipated take to the maximum extent practicable.”

DEIS at 1-3.

The federal purpose and need statement must not only be separate from the applicants, but also framed consistent with the agencies' relevant legal duties and in the public interest. See 43 CFR 46.420.

For example, BLM's DEIS purpose should include serving the NCA's statutory purposes under OPLMA. And BLM and FWS' purpose should include working toward the conservation and recovery of the currently declining threatened Mojave desert tortoises. For example, note ESA 16 USC 1531 (c)(1):

"It is further declared to be the policy of Congress that all Federal departments and agencies shall seek to conserve endangered species and threatened species and shall utilize their authorities in furtherance of the purposes of this chapter."

C. The DEIS failed to examine a reasonable range of alternatives

The DEIS arbitrarily rejects some of the Conserve Southwest Utah Community Transportation Alternatives (CTA) based on a lack of BLM and FWS jurisdiction while carrying forward Alternative 6 which is likewise beyond that jurisdiction. These alternatives might have been added to enhance or complement DEIS alternatives 5 or 6, but were improperly rejected. [See comments at 2.1.](#) If BLM and FWS cannot consider alternatives beyond their legal jurisdiction, how can they then justify carrying forward Alternative 6 as feasible?

"The Widen St. George Boulevard Alternative would widen St. George Boulevard to three lanes in each direction between Bluff Street and River Road (Map 2.7-1). This alternative would have substantially similar effects to many resources as Alternative 6 carried forward in the Draft EIS, but would result in comparatively greater effects to some resources such as socioeconomics because of the need to expand onto more adjoining properties. **In addition, its implementation is remote or speculative since it completely falls outside the jurisdiction of the Federal agencies** and it may not be economically feasible because of the amount of private property that may need to be acquired to accommodate the larger footprint. Therefore, the Widen St. George Boulevard Alternative was eliminated from detailed analysis in the Draft EIS." (emphasis added).

DEIS at 2-32.

Under NEPA, federal agencies are indeed obligated to consider feasible alternatives beyond their jurisdiction so Alternative 6 is appropriate, but the rationale for rejecting the others is not. BLM must consider Increased Use of Mass Transit; Land Use / Growth Regulation; Improvements to Red Hills Parkway between I-15 Exits 8 and 13, including widening to 6 lanes; More Porous I-15; Implement/Plan for Technological Improvements (i.e., traffic management using technology); Long-term Thru-Traffic St. George Bypass; and Industrial Park Re-use. These alternatives are not meant to be implemented all at once, but in stages, just as the proposed NCH would be constructed in stages. BLM must take advantage of this opportunity to evaluate a comprehensive suite of transportation alternatives that serve to meet both the applicant's purpose and need *and* BLM's statutory obligation to protect the Red Cliffs NCA.

D. The no action alternative improperly links BLM continued management with rescission of the HCP.

For federal agencies, the "no action" alternative normally uses the current status quo management as the baseline for analyzing other alternatives. In this DEIS, BLM does so, but FWS instead uses the rescission and absence of any approved HCP:

"Under the No Action Alternative, the USFWS would not grant an ITP to Washington County, and the 1995 Washington County HCP would expire."

DEIS at 3-58

The mixing of these two disparate baselines skews the DEIS analysis. For example, it is difficult for the public to distinguish how the proposed new HCP would change tortoise conservation in contrast to continuation of the current 1995 HCP. The DEIS approach of either the new HCP or no HCP is a false choice as no one advocates for rescission of the HCP. The real question should be: since the current HCP has failed to halt the continuing decline in tortoise numbers and usable habitat acres, how would the new proposed HCP change that status quo and effectively reverse those declines? Despite hundreds of pages, the DEIS does not answer this pivotal question. Without that answer, how can FWS properly determine that the new HCP would not “appreciably reduce” the prospects for tortoise recovery nor that approval of the NCH ROW would not “jeopardize” tortoises and their critical habitats?

E. The DEIS fails to take a “hard look” at the ecological consequences of its proposed action.

The DEIS analysis fails to acknowledge the potential illusory nature of SITLA Zone 6 conservation commitments given SITLA’s dominant fiduciary obligation to maximize economic return for its beneficiaries.

“As land manager and fiduciary of trust land assets **that belong to Utah’s public schools and other state institutions**, the School and Institutional Trust Lands Administration (SITLA) understands that its fiduciary duty includes the responsibility to preserve these resources for the long-term support of trust beneficiaries, primarily Utah’s school children of today and tomorrow. Consistent with this obligation, SITLA is a strong partner in land exchanges and other transactions which preserve sensitive lands, **but remains committed to its primary responsibility of generating revenues for its beneficiaries**”⁵ (emphasis added).

The DEIS ignores the public scoping comments raising concerns and questions about SITLA’s legal ability to make binding, long-term conservation commitments. As the RCDR, NCA, and proposed Zone 6 become increasingly encircled by developments, rising property values and prospects for lucrative development may compel SITLA to renege on at least some of their conservation commitments. SITLA officials may decide to do so, or the beneficiaries may sue to force that result. As such, the DEIS analysis, and BLM and FWS, improperly rely on these SITLA conservation commitments without any acknowledgement of these substantial risks. Until, and if, SITLA lands in proposed Zone 6 are brought into federal ownership, they are owned by the state on behalf of the trust. The slow pace of acquisition of SITLA lands in the Reserve does not suggest that acquisition will occur quickly in Zone 6, leaving these lands vulnerable to increasing development pressures.

When the Reserve was established in 1995, it contained 10,938 SITLA acres. In the last 25 years, less than half of that land has been acquired.

“As of February 2020, approximately 665 acres of private land and 6,432 acres of SITLA land occur within the Reserve and remain to be acquired for long-term management. Future acquisition of the remaining private and SITLA lands in the Reserve will be a responsibility of the BLM under the Amended HCP and Implementation Agreement.”

DEIS at 2-16.

⁵ Trust Lands Stewardship at 1.

If Zone 6 is added to the RCDR, BLM would be responsible for acquiring the remaining 6,432 acres of SITLA lands in the Reserve *in addition* to the bulk of the 3,225 SITLA acres in Zone 6. The County has only agreed to purchase 450 acres.

“Therefore, the County commits to fund the acquisition of approximately 450 acres of SITLA-owned lands within proposed Reserve Zone 6 prior to the start of construction of the Northern Corridor.”

Draft HCP at 132.

Finally, these SITLA lands are damaged as documented on pages 3-37 through 3-40 of the Draft EIS, and until brought into federal ownership, protections and restoration would be limited:

“Prior to being acquired by the BLM, if applicable, protections on SITLA lands would include fencing along the eastern border of the zone and reducing the number of trails within the property.”

DEIS at 3-13.

This is an insufficient level of protection that fails to meet the “conserve, protect, enhance” requirement for MDT in the Red Cliffs NCA which would be devastated by the NCH. Zone 6 cannot be proposed as mitigation for the NCH because the land is damaged and there is no guarantee of permanent protection.

F. The DEIS failed to examine the impacts of the NCH on visual resource and special recreation resource designations.

The DEIS analysis fails to acknowledge that NCH-related NCA Plan amendments for Visual Resource Management (VRM) and Special Recreation Management Area (SRMA) designations may result in arbitrary changes that undermine the purposes for those designations.

Alternative 3 is routed through lands within the NCA with a Visual Resource Inventory (VRI) Class A rating and a VRM Class III rating. As indicated by the Class A scenic quality inventoried in the VRI, the Red Cliffs NCA is:

“a highly scenic area that, for most visitors, typifies the rugged and beautiful American Southwest” with “colorful and diverse topography” that is “reflected in the stunning visual impact of the NCA...The scenic qualities of the NCA are among the reasons that many new residents elected to move the area. The natural character of the NCA landscape contrasts sharply with the highly modified human environment just outside its boundaries; the proximity of this stunning landscape is often used as a selling point by local realtors.”

Red Cliffs NCA Draft RMP at 524.

Land use planning goals, objectives, and management decisions approved in the Resource Management Plan (RMP) for the Red Cliffs NCA must be consistent with the designation purposes, authorized uses, and other direction in OPLMA that relates to this NCA.

Building a highway in the NCA is very inconsistent with the conservation mission outlined in the Red Cliffs NCA Record of Decision and Approved RMP.

Most of the Foreground and Middleground areas in the Red Cliffs NCA, including the area where the NCH is routed, have been designated VRM Class II and the main objective for VRM Class II is to “*Retain the existing character of the landscape. Allow a low level of change that should not attract the attention of a casual observer.*”

BLM must not arbitrarily downgrade the VRM to Class IV to accommodate the NCH. See comments at Section 3.13 Visual Resources.

Likewise, BLM must not arbitrarily downgrade the Special Recreation Management Area around the NCH from Frontcountry to Rural simply to accommodate the highway. This would result in a drastic decrease in recreation quality for visitors.

Currently, this area is managed as a Frontcountry Recreation Management Zone with the following objectives, recreation activities, and experiences:

“High-quality, sustainable, non-motorized recreation opportunities, while conserving and protecting other resource values of the Red Cliffs NCA. Hiking, biking, and horseback riding on easily accessible trails and rock-climbing close to the urban interface. Enjoying a wide variety of recreational opportunities, participating in activities close to town, exercising.”

DEIS at 3-126.

The downgrade to Rural RMZ would result in:

“a 600-foot-wide area along the selected Northern Corridor as part of the Rural RMZ, which allows for operational components such as paved roads where visitors **“can expect a steady stream of highway auto and truck traffic”** (BLM 2016b).”

DEIS at 3-32.

This would cause many adverse impacts to visitors:

“However, a large portion of the alternatives traverse the Frontcountry RMZ, where users would experience a more dramatic change to the recreation setting. Within the Frontcountry RMZ, there would **be a more stark or obvious visual change to the natural setting** as a result of constructing a new, 4-lane, paved road (refer to Section 3.13 for a detailed analysis of visual impacts). **Users would also experience more frequent highway noise** and, with potentially easier access to trails from the new highway, are likely to experience increased contact with people on trails and the ability to hear groups of people on a more constant basis. Depending on the user type, **these changes could be perceived as degrading the user experience**, because recreational users, especially non-motorized users, may expect a more natural desert setting in the Frontcountry RMZ compared to the Rural RMZ.”

DEIS at 3-130.

The Red Cliff NCA functions as a refuge for threatened wildlife, and also for people who seek to experience natural soundscapes, stunning scenery, and high-class recreation in rapidly-growing Washington County. BLM must support its obligation under OPLMA to conserve, protect and enhance recreation and scenery in the Red Cliffs NCA. See comments at Section 3.15 Recreation and Visitor Services for detailed discussion.

G. THE DEIS failed to examine and discuss how the NCH conserves, protects and enhances the values of the NCA.

The DEIS analysis improperly treats the NCA statutory purposes as comparable to other non-NCA issues or resources, and fails to explain how the NCH alternatives would benefit or be consistent with those NCA statutory purposes as required by OPLMA

The DEIS analysis generally lumps many of the NCA’s statutory purposes in with other non-NCA related issues and resources. The scoping comments asking for how the NCH alternatives

would serve or be consistent with the NCA's statutory purposes were ignored. This seems especially egregious for the Mojave desert tortoise because the DEIS acknowledges many significant adverse impacts from the NCH Alternatives. See DEIS comments at [Section 3.5](#) Special Status Wildlife.

The NCA purpose of tortoise conservation is not reconciled with these impacts in the NCA related analysis. This is a fundamental disconnect. Since the DEIS admits significant NCH harm to tortoises in the NCA, and says that tortoise conservation is a NCA purpose, how can BLM properly infer that the NCH alternatives are consistent with that NCA purpose with no exculpatory explanation?

H. The DEIS failed to examine the cumulative impacts of the proposed NCH.

The DEIS fails to examine the cumulative impacts of the proposed NCH route on the resources within the Red Cliffs NCA. The Council on Environmental Quality regulations implementing NEPA define cumulative effects as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such actions.” 40 CFR 1508.7. The DEIS cumulative effects analysis lists many future projects (e.g. Lake Powell Pipeline, Western Corridor, Adventure Park, etc.) that may affect tortoises and other resources without any specific explanation of the likely extent to which those projects would add to the NCH's adverse impacts.

A table of possible future projects, with terse descriptions, fails to constitute an adequate cumulative effects analysis. And this DEIS table does not properly respond to many [scoping comments](#) relating to asking how various other projects may add harmful effects to those caused by the NCH.

For example, the Bureau of Reclamation's Lake Powell Pipeline DEIS describes potential adverse impacts on hundreds of acres of tortoise habitat. Yet the NCH DEIS failed to specifically add that information, whether for NCH-related cumulative effects on the tortoise population in the Upper Virgin River Recovery Unit, or for purposes of the new HCP tortoise incidental take calculations. Additionally, the DEIS failed to address how the LPP may have growth inducing impacts in Washington County that could increase pressure on remaining MDT habitats. BLM and FWS are cooperating agencies on the BOR LPP DEIS, so this relevant tortoise information can and should have been carried over in detail in the NCH DEIS cumulative effects analysis.

Crucially, the DEIS fails to address future actions that will impact designated critical habitat for MDT in the Red Cliffs NCA:

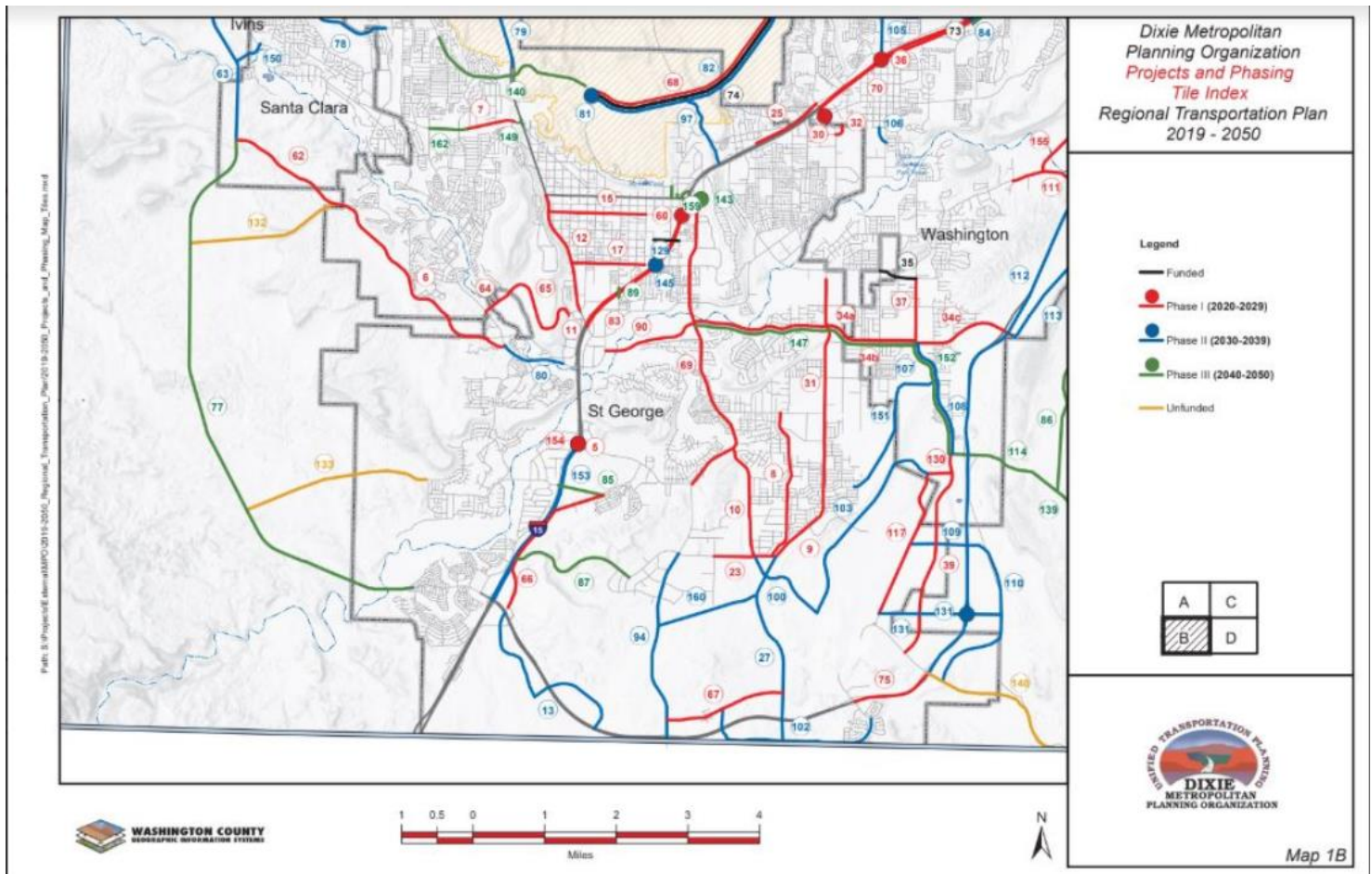
- Co-location of utilities within the NCH ROW. The DEIS discussed increased risk of predation by ravens that perch on power lines but failed to discuss the impacts of blasting and trenching for underground utilities. The DEIS also failed to address future impacts of maintaining the NCH ROW.
- The Babylon Road, a future highway that would cause adverse modification of designated critical habitat in the Red Cliffs NCA. The Babylon Road⁶ would travel through Zone 4 of the Red Cliffs NCA and Red Cliffs Desert Reserve, providing connection between Hurricane and Leeds. This highway would cause adverse impacts to

⁶ Dixie MPO 2019-2050 Regional Transportation Plan, pg. 21

more than 485 translocated desert tortoises that live in Zone 4, jeopardizing the translocation program lauded in the Amended HCP.

The DEIS also fails to address future actions that will impact potential MDT habitat in the proposed Zone 6:

- Extensions of Navajo Dr. and Green Valley Dr. These two highways would travel from east to west across Zone 6. These projects have been recently removed from the Dixie Metropolitan Planning Organization's Regional Transportation Plan (RTP) without explanation. However, they can be found on this map shared in the June 2019 Draft of the RTP: projects 132 and 133.



- The Western Corridor.⁷ The DEIS fails to discuss the Western Corridor at its full length of 7 miles. The road would parallel the western boundary of Zone 6, fragmenting the Red Bluffs ACEC and causing habitat fragmentation and degradation.

⁷ Dixie MPO 2019-2050 Regional Transportation Plan, pp. 16-20.

The 2011 Revised Mojave desert tortoise Recovery Plan lists “The present or threatened destruction, modification, or curtailment of its habitat or range” as an ongoing threat and the primary factor in evaluating whether a listed species needs to be reclassified:

“Since the 1800s, portions of the desert southwest occupied by desert tortoises have been subject to a variety of impacts that cause habitat loss, fragmentation, and degradation, thereby threatening the long-term survival of the species (USFWS 1994a). Some of the most apparent threats are those that result in mortality and permanent habitat loss across large areas, such as urbanization, and those that fragment and degrade habitats, such as proliferation of roads and highways...”

The DEIS fails to adequately address the cumulative effects of future roads and highways on the MDT.

“The incremental cumulative impact of roadway improvements associated with Alternatives 5 and 6 would be negligible, but the loss of habitat with Alternatives 2, 3, and 4 could lead to a **moderate adverse contribution** to the cumulative impacts on special status wildlife” (emphasis added).

The DEIS also fails to address the incremental impact of the NCH to MDT in addition to other *past* actions, including the following:

- The cumulative impacts of past Utility Development Projects in the Red Cliffs NCA. The Draft HCP reveals that 50 acres of critical habitat inside the Reserve have been lost to covered activities in the duration of the 1995 HCP (Draft HCP at 57). However, it does not disclose the amount of MDT take associated with this loss or the indirect impacts that followed.
- The DEIS failed to discuss the cumulative impacts associated with the expansion of Red Hills Parkway.
- The DEIS failed to discuss the cumulative impacts associated with the Washington Parkway Extension.
- The DEIS failed to discuss the cumulative impacts of the development of 5,700 acres of MDT habitat in incidental take areas. The Draft HCP states on pg. 71 that “Covered Activities in the Permit Area have caused the loss of approximately 5,700 acres or 46% of the 12,264 acres of incidental take areas (i.e., areas mapped as occupied habitat) described in the 1995 HCP.”

Cumulative effects analysis in the DEIS failed to address past and future projects that have, or will, adversely impact designated critical habitats, and occupied and potential habitats, in sufficient detail so as to determine the full impact the NCH will have on the viability of MDT in the UVRU. See DEIS Comments at Section 3.28 Cumulative Effects for detailed discussion.

I. The DEIS failed to examine and discuss how allowing a four-lane highway in a ROW avoidance area conserves, protects and enhances the values of the NCA.

In the DEIS, BLM proposed to provide a “one-time exception” to the limitation on rights-of-ways in “avoidance areas” in the Red Cliffs NCA without any analysis, discussion or explanation of how this decision adheres to the “conserve, protect, and enhance” standard in OPLMA. In the Red Cliffs NCA, all “[l]and tenure adjustments are made to assist the conservation, protection, and enhancement of NCA resource values, facilitate management, and reduce administrative

costs,” and all land use authorizations must “further the purposes of conservation, protection, and enhancement of resource values in the NCA.” Red Cliffs NCA ROD at 64.

To meet this requirement, the RMP instructs BLM to designate Right-of-Way (ROW) Avoidance and Exclusion areas in the Red Cliffs NCA. Red Cliffs NCA ROD at 66. Exclusion areas are unavailable for location of ROWs under any conditions, and BLM may permit ROWs in avoidance areas only in very limited circumstances when baseline conservation measures can be met. For example, under LAR-13 Criteria E, BLM is only allowed to grant a ROW in an avoidance area if the following criteria are met:

- “Authorize new ROWs only when the project-specific NEPA analysis indicates that the
- construction and operation of the facility would not result in the take of Federally listed species;
- the adverse modification of designated critical habitats; or adverse effects to National Register of Historic Places (NRHP)-listed or eligible properties, and the following criteria are met:
 - 1- Construction could be accomplished through methods that minimize new surface disturbances and resource impacts.
 - 2- New ROW access roads would not be required for construction, operation, and maintenance.
 - 3- Existing ROW access roads would not be permanently widened or upgraded for construction, operation, and maintenance; temporary enlargements or modifications to existing access routes needed during construction would be rehabilitated immediately after construction is complete.
 - 4-Construction, operations, and maintenance would not require off-road travel by motorized vehicles. Designated ROW Corridor: 20 acres”

Red Cliffs NCA ROD at 66. In the RMP, BLM designated the area where the NCH will be routed as a ROW avoidance area. Yet, the DEIS contains no analysis, discussion or assessment of the impacts of the NCH on conserving, protecting and enhancing the NCA resource values, and further[ing] the purposes of conservation, protection, and enhancement of resource values in the NCA.” Red Cliffs NCA ROD at 64.

On the contrary, the DEIS conservatively estimates that the NCH ROW would cause the take of 20 threatened MDT and indirectly impact 185 more; destroy 287 acres and adversely impact at least 2,652 acres of designated critical habitat⁸; and cause adverse effects to 8 National Register of Historic Places-eligible cultural and historic properties. Additionally, the size of the ROW at 287 acres is 267 acres larger than Criteria E allows. DEIS at 3-59, 3-62, and 3-119.

In considering a one-time exception to LAR-13 Criteria E, BLM admits that it is complicit in take of Federally listed species; adverse modification of designated critical habitats; and adverse effects to National Register of Historic Places (NRHP)-listed or eligible properties in the Red Cliffs NCA. If BLM grants this “one-time exception,” BLM will fail to conserve, protect and

⁸ The DEIS estimates of indirect impacts are incorrect due to use of inappropriately small analysis area for indirect impacts. See comments at section 3.5.

enhance the Congressionally-established purposes of the Red Cliffs NCA and will violate OPLMA.

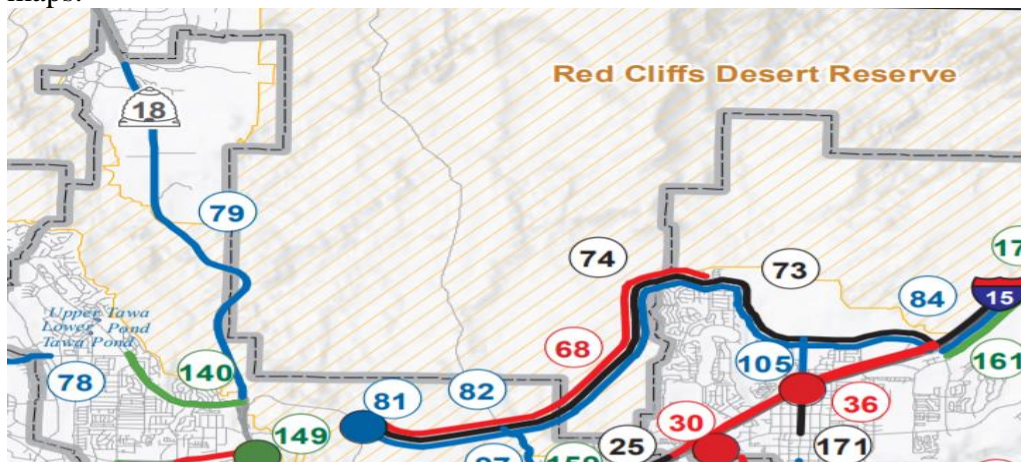
J. BLM cannot segment its NEPA review.

The DEIS fails to address the pre-decisional bias associated with the Washington Parkway Extension (WPE). In Table 1.5-2. “Issues Dismissed from Detailed Analysis,” BLM erroneously states that the Washington Parkway Extension is not connected to the proposed NCH:

“The issue or concern is whether the Northern Corridor has been improperly segmented from the previously approved extension of the Washington Parkway. The Washington Parkway project from North Green Spring Drive to I-15 is an action taken by UDOT and the laws under which such actions were taken are described in the Categorical Exclusion for the project (UDOT 2019a) approved on August 26, 2019, and other documents in the UDOT project records (Federal Register 2019). The previously approved Washington Parkway has independent utility from the proposed Northern Corridor and is addressed under cumulative impacts as a separate reasonably foreseeable future action.”

DEIS at 1-7.

This project should have been evaluated as a connected action to the NCH because its purpose is to link to the NCH as documented in the Dixie MPO’s 2019-2050 Regional Transportation Plan maps:



See projects 73 and 84, phases 1 and 2 of the proposed Northern Corridor Highway which show the WPE clearly linked to the proposed Northern Corridor Highway.

Additionally, see the Washington City Transportation Master Plan⁹ which lists 3 phases of the Washington Parkway Extension and states that this road will provide a regional bypass from Washington City to western portions of Washington County:

⁹ Washington City Transportation Master Plan, page 32

19. **Washington Parkway from MP 13 Interchange to Western City Limit, Phase 1**
Project Need: This project will construct a two-lane roadway from the MP 13 Interchange to the northwest and western city limits. This road will eventually link-up with Red Hills Parkway in northern St. George, thereby providing a regional bypass from Washington City to St. George, Santa Clara, Ivins, and Snow Canyon. Access to the developing residential areas in the northern part of Washington City will also be provided. This route will likely reduce traffic demand on I-15, as well as on St. George Boulevard and Bluff Street in St. George. This phase will build a portion of the raised center median.
20. **Washington Parkway from MP 13 Interchange to Western City Limit, Phase 2**
Project Need: This project will add to the construction of Project #20 by building four lanes and the remainder of the median.
21. **Washington Parkway from MP 13 Interchange to Western City Limit, Phase 3**
Project Need: This project will add to the construction of Project #20 by building two more lanes for a total of 6 lanes.

Given these admissions linking the WPE to the NCH, it seems obvious that these projects are connected actions and cumulative actions under 40 CFR Section 1508.25 (a)(1) and (2), and therefore should have been analyzed together through one comprehensive NEPA process.

However, the WPE was approved under a Categorical Exclusion in late summer 2019 and construction was completed in summer 2020 before NEPA for NCH was completed. This introduced a large amount of pre-decisional bias into the selection of alternatives for the NCH and may have influenced BLM's preferred alternative for the NCH as one that travels through the Red Cliffs NCA.

K. BLM failed to disclose all relevant information to the public in violation of NEPA.

NEPA requires an agency to "insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA." 40 C.F.R. § 1500.1(b). To fulfill NEPA's public disclosure requirements, the agency must provide to the public "the underlying environmental data" from which the Forest Service develops its opinions and arrives at its decisions. *See Idaho Sporting Cong. v. Thomas*, 137 F.3d 1146, 1150 (9th Cir.1998), *overruled on other grounds by Lands Council v. McNair*, 537 F.3d 981 (9th Cir.2008) (*en banc*).

The DEIS fails this most basic NEPA requirement, and the DEIS references - but fails to provide public access to - many critical documents, including the Resource Equivalency Analysis and Spatial Support Model. In the DEIS, BLM and the Service note:

"The USFWS is considering existing modeling approaches for the Mojave desert tortoise including a spatial decision support model used to evaluate impacts and conservation measures of proposed land use activities. Another possible tool to aid in this analysis is a resource equivalency analysis. This model evaluates the biological values over time including both the losses from the project and the gains from proposed conservation measures. USFWS is considering these and other approaches to evaluate both the potential impacts to the Reserve, impacts to

the tortoise and its habitat, and the conservation value of the proposed conservation measures.”

DEIS at 3-57. Although the DEIS cites this model, it never provided this model to the public or otherwise allowed public access to independently examine and evaluate it. An agency may incorporate publicly available data underlying the EIS by reference, but only if the agency cites the source, briefly describes the content, and only if the source “is reasonably available for inspection by potentially interested persons within the time allowed for comment.” 40 C.F.R. § 1502.21; 40 C.F.R. § 1502.24 (requiring the agency to “make explicit reference by footnote to the scientific and other sources relied upon for conclusions in the [EIS]”).

The DEIS also failed to provide the public with studies necessary to evaluate the environmental cost of the NCH against the possible mitigation value of Zone 6. FWS routinely provides spatial decision support models and resource equivalency analyses in draft HCP documents open to public comment. These studies help the public understand the amount of mitigation that might be required to compensate for projects that damage federally-listed species and their critical habitats. These are standard analyses for projects that have major ecological consequences. Members of the undersigned organizations requested these documents on or around August 20, 2020, but BLM failed to respond.

The DEIS similarly fails to include even the most rudimentary information on the so-called ESA Section 6 parcels, including any enforceable agreements or commitments regarding subsequent management and use of these acquired lands. In the DEIS, BLM and the Service do not cite to, incorporate or provide any information on the executed grant agreements for these acquisitions, see DEIS 3-74; the Management Agreements between UDWR and the Service, see 16 U.S.C. § 1535(b); the Cooperative Agreements between the UDWR and the Service, see 16 U.S.C § 1535(c), 50 C.F.R. § 81.3, or the Project Agreement, 50 C.F.R. § 81.1(a)(2). In the absence of these documents – which also appear unavailable through routine internet search engines – the public is foreclosed from understanding the full impact of the alternatives on these Section 6 lands.

The DEIS similarly fails to include basic information on the lands acquired through the LWCF that will be impacted by the NCH, including any project files, transaction or cases files, acquisition documents, LWCF funding proposals, or project funding requests.

L. The DEIS arbitrarily fails to provide any reasoned explanation why Alternative 3 is the “preferred” alternative.

Where federal agencies decide to identify a “preferred alternative” in a DEIS, they must provide an explanation for this decision to support public understanding. The DEIS fails to provide any explanation, however. This omission may confuse the public and tend to indicate that there may be improper agency pre-decisional bias.

CEQ NEPA instruct the agency to “[i]dentify the agency's preferred alternative or alternatives, if one or more exists, in the draft statement and identify such alternative in the final statement unless another law prohibits the expression of such a preference. 50 C.F.R. §1502.14(e). Though the regulations do not specify that an agency must provide an explanation for the preferred alternative selected, other sources define the preferred alternative as follows:

“the alternative the BLM believes would reasonably accomplish the purpose and need for the proposed action **while fulfilling its statutory mission and responsibilities**, giving

consideration to economic, environmental, technical and other factors. This alternative may or may not be the same as the BLM's or the proponent's proposed action" (emphasis added).

BLM NEPA Handbook H-1790-1 at 133.

"The "agency's preferred alternative" is the alternative **which the agency believes would fulfill its statutory mission and responsibilities**, giving consideration to economic, environmental, technical and other factors. The concept of the "agency's preferred alternative" is different from the "environmentally preferable alternative," although in some cases one alternative may be both. See Question 6 below. **It is identified so that agencies and the public can understand the lead agency's orientation**" (emphasis added).

CEQ's Forty Most Asked Questions Concerning CEQ's NEPA Regulations, March 23, 1981.

The Omnibus Public Land Management Act of 2009 tasks BLM with conserving, protecting and enhancing the Congressionally-established purposes of the Red Cliffs NCA. By choosing an alternative that adversely impacts designated critical habitat, federally-threatened species and NHRP-eligible cultural resources, BLM appears to be showing that its orientation is not on meeting its statutory responsibilities.

Furthermore, BLM's own analysis shows that Alternatives 5 and 6, located outside of the Red Cliffs NCA, reduce traffic congestion better than the BLM-preferred Alternative 3, and cause little to no damage to the Red Cliffs NCA's purposes, including protection of federally-listed species. (DEIS at 16, 17 and 20 in Appendix J).

The Red Cliffs NCA Record of Decision instructs BLM to consider ROW authorization only under certain conditions, including only when "required for local, essential community service and when no siting alternative exists outside the NCA." ROD at 66.:

Despite these requirements to openly and objectively discuss, examine and explain how the proposed alternative meets the substantive and procedural obligations under NEPA, FLPMA, OPLMA and other requirements, BLM provided no explanation whatsoever of why it has chosen the preferred alternative.

The FEIS should optimize the design and carry forward the Red Hills Parkway Expressway and One-way Couplet Alternatives; revisit and implement Vision Dixie (Community Transportation Alternative 6) in order to avoid additional self-inflicted growth and related traffic problems; properly consider the other CSU alternatives in future planning; and disclose a cost-benefit analysis of the alternatives. For detailed comments on optimizing the design of Alternatives 5 and 6, see comments [at section 2.1 Suggested Modifications to Alternatives 5 and 6](#).

2.3 Scoping Comment Accountability

The following table summarizes the accounting of our scoping comments to the DEIS by topic area. [Appendix 1: Detailed Accountability of Scoping Comments](#) addresses each scoping comment, explaining which were adequately addressed in the DEIS, which were not adequately addressed, which were not addressed at all, and which could not be determined to be addressed.

Scoping Topic	Number of Scoping Comments	Number Adequately Addressed	Number Inadequately Addressed	Number Not Addressed
DEIS				
General				
Legal	15	1		14
Miscellaneous	3	2		1
Construction Methods	6	6		
1. Purpose & Need	11			11
2. Alternatives	13		3	10
3. Environmental Consequences				
3.2 Native Veg Communities	14	1	2	11
3.3 Special Status Plants	11	1	2	8
3.4 General Wildlife	5			5
3.5 Special Status Wildlife	21		10	11
3.7 Paleontology	3			3
3.8 Geology	2			2
3.11 Water Resources	4	1	2	1
3.12 Air Quality/Climate	8		4	4
3.13 Visual Resources	6	1		5
3.14 Cultural Resources	9	1	2	6
3.15 Recreation	33			33
3.17 BLM Trans/Travel	2		1	1
3.18 NCA	8	2	3	3
3.20 BLM Lands & Realty	17	1		16
3.21 Livestock Grazing	7	1	4	2
3.22 Fire and Fuels	1			1
3.23 Noise	7		3	4
3.26 Socioeconomics	12			12
3.28 Cumulative Effects	1			1
4. Consultation & Coordination	2	1		1
SGFO RMP - Zone 6	14		6	8
HCP	122	8	69	45
Total	357	27	111	219
Percent of total		8%	31%	61%

Issue

1. The DEIS and DHCP should describe how each scoping comment was addressed and why.

2.4 Applicability of the Council on Environmental Quality Rule Change

Issue

1. **The new CEQ Final Rule should not be applied to this NEPA process.**

On July 16, 2020, the Council on Environmental Quality issued a Final Rule amending its NEPA regulations, found at 40 C.F.R. Parts 1500-1508. See Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act, 85 Fed. Reg. 43304 (July 16, 2020) (“CEQ Final Rule”). While the CEQ Final Rule, which becomes effective September 15, 2020, makes a number of revisions and clarifications to regulations applicable to the Northern Corridor EIS process, it does not, nor can it, change the substantive statutory duties and obligations required of BLM and USFWS under NEPA. Furthermore, to the extent that the CEQ Final Rule “updates, modernizes, and clarifies” CEQ’s NEPA regulations in a legally defensible manner, it does so consistently with the wealth of case law and federal agency experience developed over the past fifty years, including the cases and guidance cited herein. BLM and USFWS have no legal obligation to apply the CEQ Final Rule to projects initiated prior to the Rule’s effective date, which itself is subject to considerable criticism and potential challenge, if applied to the Northern Corridor. To the extent that BLM and FWS apply the CEQ Final Rule, and interpret the CEQ Final Rule to alter longstanding standards by which this Project has been assessed up to this late stage, after a decade of consideration in various forms and production of a DEIS under existing regulatory standards, it could, in our opinion, invite significant risk of judicial review on procedural grounds. Despite these new regulations, BLM and the Service are free to continue to apply the prior regulations which were in place at the commencement of this administrative process.

2.5 Objection to the ITP, based on the ESA and Draft HCP

Issue

1. We register an Objection Pursuant to 50 CFR Section 17.22 (E) to Flawed Washington County Incidental Take Permit Application with Inadequate Draft Habitat Conservation Plan TE036719

The ESA regulations provide for formal objections to applications for Incidental Take Permits (ITP). Pursuant to 50 CFR Section 17.22 (e), objection to permit issuance:

- (1) In regard to any notice of a permit application published in the FEDERAL REGISTER, any interested party that objects to the issuance of a permit, in whole or in part, may, during the comment period specified in the notice, request notification of the final action to be taken on the application. A separate written request shall be made for each permit application. Such a request shall specify the Service's permit application number and state the reasons why that party believes the applicant does not meet the issuance criteria contained in §§ 13.21 and 17.22 of this subchapter or other reasons why the permit should not be issued.
- (2) If the Service decides to issue a permit contrary to objections received pursuant to paragraph (c)(1) of this section, then the Service shall, at least ten days prior to issuance of the permit, make reasonable efforts to contact by telephone or other expedient means, any party who has made a request pursuant to paragraph (c)(1) of this section and inform that party of the issuance of the permit. However, the Service may reduce the time period or dispense with such notice if it determines that time is of the essence and that delay in issuance of the permit would: (i) Harm the specimen or population involved; or (ii) unduly hinder the actions authorized under the permit.
- (3) The Service will notify any party filing an objection and request for notice under paragraph (c)(1) of this section of the final action taken on the application, in writing. If the Service has reduced or dispensed with the notice period referred to in paragraph (c)(2) of this section, it will include its reasons therefore in such written notice.

Following please find our formal objection to the application of Washington County for a new, revised, renewed, or amended ITP under the inadequate draft Habitat Conservation Plan (HCP) that the county provided with its ITP application. This ITP application and draft HCP are included within the overall NEPA DEIS analysis relating to the proposed Northern Corridor Highway (NCH). Our objection is based on the many legal, factual, and logical grounds described in much greater detail elsewhere in these comments. As such, we hereby incorporate by reference our comments in their entirety for this objection, including those comments located in [2.2 Key Legal Issues](#); [3.5 Special Status Wildlife](#); [4.1 Comments on Draft Amended Washington County Habitat Conservation Plan \(HCP\)](#)

In addition, we highlight and summarize some basic components of our objection below. The county's ITP application and draft HCP (collectively, "draft HCP") is flawed, and is inadequate, for the following reasons:

- 1) The draft HCP arbitrarily fails to include the NCH as a "covered action," even though the NCH is reasonably foreseeable, will result in the "take" of MDT, and because NCH meets the standards of "covered action" under the ESA statute, regulations, handbooks and manuals;

- (2) The draft HCP does not address, analyze, or include in their calculations the massive recent fires in the Red Cliffs Desert Reserve (RCDR) and Red Cliffs NCA and the county-admitted significant associated MDT mortality and habitat loss;
- 3) The draft HCP does not have adequate NEPA analysis because the DEIS fails to address the “significant new circumstances or information” from the massive fires and associated MDT mortality and habitat loss and no Supplemental DEIS is planned at this time to provide the required NEPA analysis;
- 4) The draft HCP falsely claims that past HCP implementation has been successful despite a 41 percent decline of MDT in the RCDR and a 24 percent decline of MDT in the UVRU;
- 5) The draft HCP does not demonstrate how it would specifically comply with the ESA Section 10(a)(2) requirements for ITP approval;
- 6) The draft HCP does not minimize and mitigate the take of MDT to the maximum extent practicable, including because it improperly conditions many necessary MDT conservation measures on approval of the NCH, and similarly conditions or undermines some proposed MDT conservation measures with equivocal terms like “may” or “voluntarily commit”;
- 7) The draft HCP does not commit to adequate funding, because Washington County has failed to spend a now surplus of about \$7,000,000 in the county HCP fund despite increasing MDT threats and ongoing MDT population declines, while the county has lavishly spent to promote controversial projects (like the NCH and Lake Powell Pipeline) that would cause additional MDT mortality and habitat loss;
- 8) The draft HCP does not demonstrate how its proposed conservation measures can stop or even slow the continuing MDT declines thereby failing to prevent an appreciable reduction in the prospects for MDT conservation and recovery in the RCDR and UVRU;
- 9) The draft HCP does not demonstrate how the foreseeable amount of MDT incidental take would be fully offset by the proposed conservation measures;
- 10) The draft HCP does not analyze or assess the risks associated with relying on SITLA to support and implement MDT conservation measures when SITLA’s primary legal obligation is to maximize revenue for its beneficiaries, and a SITLA representative acknowledged that SITLA “could walk at any time” on its HCP commitments if lucrative development opportunities arise;
- 11) The draft HCP does not acknowledge that it improperly relies on BLM MDT conservation measures, and thereby improperly seeks mitigation credit for actions beyond its jurisdiction or control;
- 12) The draft HCP attempts to improperly use the proposed NCH and associated mitigation as a “changed circumstance,” and fails to explain why only the NCH qualifies when the county supports the Lake Powell Pipeline, Adventure Park, Western Corridor, and other proposed projects that would harm MDT and their habitats;
- 13) The draft HCP only considers future MDT down listing as a foreseeable “changed circumstance” while omitting potential future MDT up listing from “threatened” to “endangered” given the dramatic range wide MDT population declines; and the draft HCP fails to identify any additional conservation measures associated with additional changed circumstances;
- 14) The draft HCP cannot reasonably carry forward any so-called “unused authorized incidental take” from the original HCP, while simultaneously proposing to

- significantly harm RCDR Zone 3 MDT that that original HCP determined were the “core” of the RCDR as the HCP’s primary conservation measure;
- 15) The draft HCP cannot rely upon and tier to the dated NEPA analysis and Biological Opinion from the original HCP to justify its current application, especially because of substantial new and relevant MDT related scientific information obtained over the intervening quarter-century, and the significant MDT population declines during that time period;
 - 16) The draft HCP also cannot reasonably carry forward the original HCP’s No Surprises benefits, especially because the NCH’s “changed circumstance” surprise would fundamentally undermine the RCDR’s integrity under that original HCP;
 - 17) The draft HCP will improperly cause “adverse modification” of MDT designated critical habitat without adequate mitigation, which is particularly problematic here when feasible NCH alternatives exist outside of the RCDR and MDT critical habitats (DEIS Alternatives 5 and 6);
 - 18) The draft HCP fails to address public concerns that the county has a clear pattern of favoring development projects that are harmful to MDT, and completely dominates HCP administration by stacking the HCAC and TC with members who always support the county’s pro-development positions;
 - 19) The draft HCP improperly conditions placement of long overdue Cottonwood Road (aka Turkey Farm Road) culverts needed for Zone 3 MDT movements on approval of the NCH even though these culverts can and should be independently implemented;
 - 20) The draft HCP improperly uses a habitat surrogate instead of defining expected levels of MDT “take,” The draft HCP fails to provide “the causal link between the surrogate and take of the listed species,” and the draft HCP fails to adequately explain “why it is not practical to express the amount or extent of anticipated take or to monitor take-related impacts in terms of individuals of the listed species,” especially since the Service and others have extensively monitored for MDT in the past;
 - 21) The proposed habitat surrogate is not reliable or consistent with previous MDT data, and that recognizes that (like with the “discovery” of Zone 6 MDT) the lack of survey data for large areas of potential habitat on non-federal lands makes application of this metric highly speculative over those areas;
 - 22) The draft HCP fails to quantify “take” of MDT, and fails to identify and adopt an appropriate and measurable incidental take “trigger” requiring re-consultation;
 - 23) The draft HCP improperly fails to consider implementing any seasonal or permanent closure on public use (administrative use would continue) of the popular Cottonwood Road (aka Turkey Farm Road) that bisects RCDR Zone 3 and where use of this road is linked to several devastating fires, including the recent one that burned about 12,000 acres of RCDR MDT habitat;
 - 24) The draft HCP improperly fails to commit to any consistent mowing of highway rights of way in MDT habitat despite the clear threat posed by dried cheatgrass and other plants in these rights of way, and the potential benefit that such mowing would provide in terms of reducing the risk of future road-related fires spreading into MDT habitat (both massive recent fires were connected to road uses);
 - 25) The draft HCP improperly allows competitive events in Zone 6 even though these are not allowed in the other RCDR zones, and fails to adequately consider the direct, indirect and cumulative adverse impacts of these events on MDT;
 - 26) The draft HCP ignores potential genetic connections or cumulative effects on potential, un-surveyed MDT populations and habitats on nearby BLM Arizona Strip and Arizona State lands immediately south of the county and state lines (because

- MDT biology does not recognize state or other jurisdictional boundary lines on maps); and
- 27) The draft HCP fails to adequately analyze the cumulative adverse impacts on MDT from many proposed or foreseeable projects, and relies on an inadequate DEIS that, among other things, likewise fails to adequately analyze such MDT related cumulative impacts.

For purposes of this objection, Tom Butine and Sarah Thomas of Conserve Southwest Utah are the coalition's contacts to receive any required notifications.

tom@conserveswu.org
sarah@conserveswu.org

2.6 Objection to Washington County Misuse of Resources and Misinformation

Issue

1. We register an objection to the mis-use of taxpayer-funded resources to promote a preference with a biased narrative and to promulgate mis-information related to it.

1. From August 2020 Washington County E-News, “Washington County has been talking about a Northern Corridor”¹⁰

“The reserve land was set aside by the federal government to protect the endangered Mojave Desert Tortoise and its habitat. However, when the designation was made Congress included a provision that would allow for a future road to be built through the reserve.”

Issue

1. This is false. [OPLMA](#)¹¹ states, per section 1977, Washington County Comprehensive Travel and Transportation Management Plan, subsection b.2.A, on page 99: “In developing the travel management plan, the Secretary shall in consultation with appropriate Federal agencies, state, tribal, and local governmental entities (including the County and St. George City, Utah), and the public, identify 1 or more alternatives for a northern transportation route in the County”. (underlining added.)

It does not promise or allow a highway, and it certainly does not promise one in the NCA. It only says it will identify alternatives in the county, and implies that it allows for their study. Studies of a highway in the NCA were done as part of the Resource Management Plan, and a highway in the NCA way denied as not being compliant with the law.

“Transportation engineers have been adamant for nearly 30 years that the road, which would connect Interstate 15 to State Route 18 via Washington Parkway and Red Hills Parkway, must be built.”

Issue

2. DMPO has stated that a road through the NCA was required because no other solutions would work. They rejected CSU alternatives, stated they would not provide the required relief, and then refused to share the modeling that indicated that statement was true. The DEIS shows that the statement is not true in that alternatives 5 and 6, which were based on the CSU alternatives, are superior in relieving traffic congestion.

¹⁰ August 2020 Washington County E-News on the Northern Corridor, “Washington County has been talking about a Northern Corridor”

¹¹ <https://www.govinfo.gov/content/pkg/BILLS-111hr146enr/pdf/BILLS-111hr146enr.pdf>

“Biologist and Red Cliffs Desert Reserve Administrator, Cameron Rognan, estimates that between 20-40 desert tortoises living in the path of Northern Corridor will have their regular routines disrupted by the construction of the road.”

Issue

- 3. This statement ignores the scientific fact (DEIS Vol 3 page 3-35) that tortoise impacts can extend 4.6 km beyond the ROW.**

“Further, the County is proposing to expand the Reserve to include an additional 6,800 acres in exchange for the 250-acre road, protecting 300 tortoises from possible future development.”

Issue

- 4. It is untrue that the county is proposing to protect this area from future development. Roadways are planned to bisect this area (per DMPO 2020-2050 plan), and there is no certainty that SITLA land can be protected. Furthermore, as evidenced by this very DEIS, county promises to protect land can easily be rescinded.**

“Washington County will work with the BLM to expand the reserve by 6,835 acres. Again, this will more than make up for the 250 acres of reserve the Northern Corridor may impact.”

Issue

- 5. It is a false statement that the NC “may impact” 250 acres. The science indicates that approximately 12,000 acres would be impacted. (See [comments in Section 3.5](#) at “The DEIS fails to take a hard look at the impacts to MDT” for discussion.)**

- 2. From a Washington County Republican Email Bulletin, date 9/3/2020, “Join the Fight for the Northern Corridor!”, requested by the Washington County Attorney ¹²**

Issue

- 6. The county appears to be communicating with only a subset of its constituents. All constituents should receive the same messages and have an opportunity to question them.**

“Have you tried to drive through the intersection of Green Springs Drive and Telegraph Street in Washington lately? At busy times, that is what experts call a “failed intersection”: an intersection you must wait through multiple lights to get through. Without the proposed Northern Corridor, at least 69 intersections within Washington County will be in the same state by the year 2040 (many will reach that point much sooner).”

Issue

- 7. The definition used in the letter is incorrect and misleading. A failed intersection is one in which more traffic queues into the intersection than exits it in a certain amount of time, at some specific time of year and time of day. It is not, as the statement implies, a permanent condition; in fact, the duration may be short.**
- 8. It is untrue that intersections will fail without the Northern Corridor. It is true that some intersections will fail at certain times for certain duration if no**

¹² Washington County Republican Party Message on the Northern Corridor, dated 9/3/2020, “Join the Fight for the Northern Corridor!”

solutions are implemented. There are alternatives to the Northern Corridor that are superior solutions. Some people just don't like them, for invalid reasons. The alternatives have really only been designed to the "concept" level, as required in order to model. Detail design options could remove concerns. They just need a discussion, which the county refuses.

"Against all odds, the Corridor is within our grasp!"

Issue

- 9. The county is hardly the underdog, when almost all of the elected officials in the state, including the congressional delegation and the Department of Interior want something to happen.**

"Be aware that liberal environmentalist organizations have mobilized and are urging their non-Washington-County-resident members to submit comments against the Northern Corridor. This means that only a HUGE outpouring of support from locals in favor of the Northern Corridor will help officials in Washington D.C. see that the public is IN FAVOR of the Northern Corridor!"

Issue

- 10. The environmental laws undercut by the Northern Corridor effect all Americans. Should they not be able to have an input? The public lands belong to them, after all. The Northern Corridor proponents have engaged many people outside of Washington County to achieve its approval; certainly turn-about must be fair play. The County has chosen to make this issue a national one, and have refused to resolve it locally.**
- 11. It is inappropriate for the county to use public funds to develop and maintain a website that serves, hand in glove, the Washington County Republican Party's Northern Corridor promotion efforts. NEPA is supposed to be conducted by government entities in a neutral manner. But the county is clearly trying to undercut the public's investment in the NEPA documents through simultaneously working with the Republican party to use public funds to generate support for the Northern Corridor.**
- 12. The county is orchestrating this improper county-Republican coordination. The proposed Northern Corridor has been highly controversial for many years, and many county residents share strong concerns about and opposition to it. A simple Google "Northern Corridor Red Cliffs" web search should yield some of the many local published letters to the editor and opinion pieces against the Northern Corridor. County officials are therefore failing to represent the concerns of many of their constituents, and many of those paying the county taxes. The county is not a private entity that is free to spend their money to promote the Northern Corridor. Public funds should not be used for such "lobbying" on a controversial issue, especially during the NEPA review process.**

"You have until September 10, 2020 to submit a comment, so take the time RIGHT NOW to click on the link below to quickly and easily submit a comment in favor of this necessary road: <https://www.washco.utah.gov/forms/signup/northern-corridor/>"

Issue

- 13. This statement is a disservice to the community, implying that the NEPA process is a vote, with no indication that comments must be substantive.**
- 14. This appears to direct people to a publicly-funded website to make a biased submittal.**

“As you submit a comment, remember that the Bureau of Land Management (currently run by conservative Trump appointees) has agreed to adopt Washington County's recommended route -- the U.S. Fish and Wildlife is the opposition in this instance.”

Issue

- 15. We have no indication that the statement about the agencies' disagreement is correct.**
- 16. The communication admits that if not for political influence- in what is supposed to be a science and fact-based process- undermining laws, the NC would be rejected, which is of course true.**
- 17. It is clear that there is improper political influence on a NEPA process that is supposed to be fact-based and unbiased. The fact that the DEIS states a preference for the County/UDOT alternative inside the NCA, when there are clearly superior alternatives outside the NCA, while stating no rationale, is an indication of this improper influence, and undermining of NEPA.**

3. From Sept 8, 2020 Washington County E-News, “4 myths about the Northern Corridor”¹³

“In the past, most comments have been submitted by people outside of Utah. Local voices need to be heard!”

Issue

- 18. This misrepresents the fact that the vast majority of comments from Washington County in the past have been against the Northern Corridor**

“As the public comment period for the Northern Corridor continues, we have seen some statements come to surface that simply are not true. As county leaders, it's not only our responsibility to develop forward-thinking solutions, but to also remain transparent and keep our citizens accurately informed.”

Issue

- 19. We have offered many times to have fact-finding sessions with the county, and they have refused. The county has been anything but transparent, withholding information requests, refusing communications, and denying solutions proven viable by the DEIS.**

“Myth #1: Dig first, think later: The Northern Corridor is a hasty solution.

If over 20 years of discussion is considered hasty, then maybe. The topic of the Northern Corridor has been around for more than two decades. At least one decade ago, intense research from local transportation planners predicted that the Washington County traffic systems will begin failing by 2025. Because of this calculated prediction, the route provision was promised to Washington County in 2009 but has since been held up by controversy. Our county leaders have spent countless hours further researching, preparing and negotiating the most balanced solution for our future. The Northern Corridor is without a doubt the best approach to prepare us for inevitable population growth, protect our lands and conservation efforts and provide a better quality of life for future

¹³ Sept 8 2020 Washington County E-News on the Northern Corridor, “4 myths about the Northern Corridor”

generations. Without it, traffic modeling shows, Washington County residents can expect to add 300,000 hours per year onto their commutes.” (underlining added)

Issue

20. We know of no one who has stated this myth. We agreed that the pursuit of the Northern Corridor has been persistent over many years. The hasty part is the NEPA process.

21. Again, it is untrue that the Northern Corridor was promised in 2009 (OPLMA¹⁴).

Per section 1977. Washington County Comprehensive Travel and Transportation Management Plan, subsection b.2.A, on page 99:” In developing the travel management plan, the Secretary shall in consultation with appropriate Federal agencies, state, tribal, and local governmental entities (including the County and St. George City, Utah), and the public, identify 1 or more alternatives for a northern transportation route in the County”. (underlining added.) It does not promise a highway, and it certainly does not promise one in the NCA. It only says it will identify alternatives in the county.

22. The 300,000 hours added to residents’ commute times is misleading propaganda. The county will have 300,000 residents, at least, by the time some intersections fail at certain times on certain days of the year. That means the average resident will spend an extra hour per year, or less than 10 seconds per day. Yes, this is an overly simplified calculation, intended to show the bias in the county’s communication.

“Myth #2: The Northern Corridor is a gateway to future development.

Development along the Northern Corridor is prohibited. We will repeat ourselves just to be clear: DEVELOPMENT ALONG THE NORTHERN CORRIDOR IS PROHIBITED. The Northern Corridor is a bypass for traffic, that is all. In fact, our proposal limits development in other parts of Washington County currently in danger of being developed! Nearly half of the 7,000 acres in Zone 6, the area west of Bloomington, is owned by SITLA (State Institutional Trust Lands).”

Issue

23. There are no provisions in place to prohibit development along a northern corridor route in the NCA if that route provides access to private inholding, which the preferred route does. The county has proven by this NEPA application that it is not bound by any previous agreements.

24. SITLA is under no obligation to protect their lands in Zone 6. To the contrary, they are obligated to make money off their lands. Washington County or the BLM could purchase the land, but it would be expensive, there is not an adequate budget defined for it, and even if it were to be purchased, this NEPA application proves that the county will not be bound by any agreement not to develop it.

“Myth #3: The Northern Corridor threatens Pioneer Park and the Dixie Rock.

¹⁴ <https://www.govinfo.gov/content/pkg/BILLS-111hr146enr/pdf/BILLS-111hr146enr.pdf>

The Northern Corridor absolutely would not harm Pioneer Park or our Dixie Rock. In fact, one of the proposed alternatives WOULD require the removal of Dixie Rock, which we do not and will not support.”

Issue

25. We know on no such myth.

26. It is untrue that any of the “outside the NCA” alternatives would require the removal of Dixie Rock. (See description in DEIS appendix J, section 4).

“Myth #4: The Northern Corridor will harm the Mojave Desert Tortoise.

The Mojave Desert Tortoise is a beloved staple in Washington County. We would never consider a plan that would compromise their existence. We predict 20-50 tortoises may need to be MOVED out of the path of the roadway, which our specialists would do with extreme care. While the Northern Corridor would run through a small part of the Reserve, the 7,000 acres of Zone 6 will provide new protected territory for the tortoises that will experience less recreational traffic and better protect their existence in the long run. The biggest threat the tortoises have right now is wildfire. The Northern Corridor could also act as a firebreak that would ideally stop a fire and reduce its impact on the tortoise. “

Issue

27. The destruction of habitat in the ROW is only a small part of the harm. Impacts extend to 4.6km on either side of the ROW (DEIS Vol 3 page 3-35). Continually addressing only the construction zone is misleading. If a highway were to be built next to your home, even though your home was not destroyed in the construction process, would you say you had no impact? Indirect effects impact tortoise mortality.

28. The concept that roads are good for fire management is untrue. Humans cause 80% of the fires, with a large portion caused by humans using roads. Roads are not firebreaks, as has been proven many times, even locally in the Turkey Farm Road and Cottonwood Trail fires this year.

“We have remained fully transparent throughout this process in order to ensure our citizens are basing their decisions on facts. Washington County has one of the fastest growing populations in the nation. We need to proactively think about future generations and how we can preserve our beautiful county and quality of life. Support the Northern Corridor. Leave your comment TODAY. “

Issue

29. The county has not been transparent, as evidenced by the walls erected to prevent information access and their refusal to engage their constituents in open discussion with fact-checking.

4. From Sept 9. 2020 E-News, “Washington County Community Highlights!”¹⁵

“We know we have been talking about the Northern Corridor a lot, but this road is critical infrastructure to Southern Utah's future. The public comment period has been open since June and closes September 10th. Few Washington County residents have submitted comments, but special interest groups from out of state have mobilized. They have submitted hundreds of comments opposing a project that will not affect them. Washington County voices need to be

¹⁵ [Sept 9. 2020 E-News, “Washington County Community Highlights!”](#)

heard! We have made commenting convenient and easy. Just head to: www.washco.utah.gov/northern-corridor or click the link below.”

Issue

- 30. **It is untrue that special interest groups from out of state have mobilized. We have mobilized citizens of Washington County and Utah, and the environmental protection groups to which they belong, to engage in the only communication the county with allow. They are mobilized because this project will affect them.**
- 31. **Again, using a taxpayer supported public website to promote a position that has significant constituent opposition, while not allowing equal access to those opposing.**

“Thorough studies show the "preferred alternative" route (supported by Washington County and the Bureau of Land Management) as the only viable solution to our current and future traffic congestion problems. Without the Northern Corridor, Washington County residents will experience a 300,000-hour per year increase in commute times. The last thing we want is for Washington County's air quality to become like the Wasatch Front. By keeping cars moving, we reduce carbon emissions, preserve our air, and protect our health. We believe we have developed a smart and balanced solution that will protect the quality of life for both the Mojave Desert Tortoise and Washington County residents.”

Issue

- 32. **It is untrue that to state the county’s preferred alternative is the only viable solution, as proven in the DEIS (appendix J, section 4).**
- 33. **Alternatives outside the NCA also “reduce carbon emissions, preserve our air, and protect our health”, while providing superior traffic movement and causing none of the environmental impacts.**
- 34. **The DEIS differs with the county’s opinion that their preferred solution protects the tortoise (see DEIS Executive Summary table ES 5-1). The DEIS offers no explanation for the preference.**

2.7 Endorsement of the Desert Tortoise Council's Comments

We collaborate closely with the Desert Tortoise Council (DTC) and proposed actions that undermine protections for the tortoise. The DTC has participated in and signed onto this document produced collaboratively by the Red Cliffs Conservation Coalition. The Coalition hereby endorses and incorporates by reference the comments¹⁶ submitted by the Desert Tortoise Council on the DEIS and related documents. The DTC is a science-based organization dedicated to assuring the survival of viable populations of the desert tortoises throughout their historical range. MDT experts sit on their board of directors. More about the DTC can be found at <https://deserttortoise.org/about/>.”

2.8 Request for Change Tracking in Final EIS

We anticipate that there will be significant but subtle changes in the DEIS as you create the final version. There will only be a short period of time for the coalition to find and review those changes. To help us find them, we request that a version of the Final EIS be made available that clearly identifies changes from the draft to the final (i.e. tracked changes) so that we can concentrate our review. Otherwise it will be extremely difficult to review the Final EIS. The coalition believes that this is a reasonable request given the attempts by the agencies to prevent public participation by scheduling short and overlapping public comment periods for scoping on the Lake Powell Pipeline and Northern Corridor Highway during the busy holiday season; by again scheduling overlapping public comment periods for Lake Powell Pipeline and Northern Corridor Highway DEIS; by providing an unreasonably short amount of time to review 1,200 pages of Northern Corridor Highway DEIS documents on 4 interrelated federal actions and 3 major plan amendments; by failing to pause the process in the middle of a global COVID-19 pandemic that limited public participation; and by failing to pause the process after severe wildfires burned nearly 25% of the Red Cliffs NCA.

¹⁶ The Desert Tortoise Council's Comments on the Draft Environmental Impact Statement and Draft Habitat Conservation Plan Amendments addressing actions related to the Northern Corridor Highway in Washington County, Utah

3. Issues with the Draft Environmental Impact Statement

DEIS Chapter 1 - Purpose and Need for Action

1.1 Introduction

“OPLMA Subtitle O, Section 1977 also directs the Secretary to develop a comprehensive travel management plan for the land managed by the BLM in Washington County and, in accordance with the Federal Land Policy and Management Act of 1976 (FLPMA) (43 USC 1701 *et seq.*), “in developing the travel management plan, the Secretary shall—(A) in consultation with appropriate Federal agencies, State, tribal, and local governmental entities (including Washington County and St. George City, Utah), and the public, identify one or more alternatives for a northern transportation route in the County.””

Responding to UDOT’s ROW application also furthers the Department of the Interior’s policy goals, as stated in the Strategic Plan for Fiscal Years 2018-2022, to “enhance conservation stewardship whereby all levels of government and private landowners work cooperatively together in an atmosphere of mutual respect to achieve shared natural resource management goals across landscapes” and to “[develop] and [maintain] strong partnerships with State, local, and private stakeholders in shared conservation stewardship.” UDOT is seeking to meet the transportation demands of Washington County’s anticipated continued growth through 2050 and Washington County is also seeking a renewed ITP in order to meet the needs of its increasing population. Washington County’s current transportation infrastructure may not accommodate the County’s projected growth, and it is trying to balance that future growth with the statutory and regulatory provisions governing the Red Cliffs NCA and larger Red Cliffs Desert Reserve, and the protected wildlife that resides on those lands.

Issue

1. There has been no development of the Travel Management Plan; this DEIS seems out of the context of a TMP. The RMP denied the highway, but defined an avoidance area for a ROW if there were no other alternatives. But there are other alternatives. And the proposed ROW is larger than the avoidance area, so it cannot be granted. The RMP, upon which the TMP is based, has already denied a highway in the NCA, and has withstood an IBLA appeal on the matter. The application for a ROW has already been precluded by that denial. No circumstances have changed since that denial.
2. OPLMA requires an alternative for the Northern Corridor to be defined in the county. It does not require one to be accommodated, and it does not require accommodation within the NCA. The ROW should be denied.
3. “DOI policy goals” of accommodating local requests cannot violate OPLMA.
4. There has been no public consultation on the alternatives considered in the DEIS. Alternatives were provided by the public during scoping, but those alternatives were not used directly in the DEIS and the public (and CSU specifically, as the author of the community alternatives) was not consulted in the definition of the alternatives that were evaluated in the DEIS, violating OPLMA.

1.2 Applicants’ Objectives

1.2.1 Right-of-way Applicant’s Objectives

“UDOT submitted a ROW application for construction, operation, and maintenance of a new highway with the objective of reducing congestion, increasing capacity, and improving east-

west mobility on arterial and interstate roadways between State Route 18 (SR 18) and Interstate 15 (I-15) at milepost 13.”

Issue:

1. The applicant has stated their objective in the form of a specific solution rather than a statement of the problem to be addressed. There is an erroneous assumption that a new highway through the NCA is required to meet the objective. The real objective should be stated in terms of the problem to be solved, that is, the projected traffic congestion around specific intersections and the projected transit time between specific geographic points. The applicant has failed to demonstrate that the only solution is a highway through the NCA. The applicant’s assumption has not and cannot be validated. The DEIS proves that there are superior alternatives outside the NCA. The ROW should be denied due to an invalid purpose and need statement.
2. The applicant’s need for future traffic congestion reduction is self-inflicted due to poor land use planning, poor growth management, poor integration with transportation planning. The county has not adopted the growth planning as defined by citizens in the [Vision Dixie](#) principles. Proper growth planning could also make mass transit an effective solution. The American public and the citizens of Washington County do not support damage to the NCA just because the county has mismanaged its growth and transportation planning.
3. The applicant has failed to account the impact of anticipated technological improvements (e.g., self-driving vehicles, smart traffic management)
4. The applicant has failed to address solutions other than building new roads (e.g., removing the industrial park traffic from the congestion zones, by-pass routing of thru-traffic).
5. The Purpose and Need Statement should address the timing of the need, and it did not. It is known from prior traffic modeling exercises that traffic congestion relief is desired by 2040. That need is in the distant future. The need may not arise, the impact analysis may change significantly, and other solutions may become evident. Granting a right-of-way 20 years in advance of the need is not necessary, logical or economical. It is so far in the future as to render this DEIS invalid; a supplement should be required when the actual need is proven. The ROW should be denied on this basis alone.

1.3 Purpose and Need for Federal Actions

1.3.1 Right-of-way Application and Red Cliffs National Conservation Area Resource Management Plan Amendment

“In particular, under OPLMA Subtitle O, Section 1977, the BLM is required to develop a comprehensive travel management plan for the land managed by the BLM in Washington County and, in doing so, to “identify one or more alternatives for a northern transportation route” in the county. In 2016, as part of developing the current Red Cliffs NCA RMP, BLM considered an alternative that included a Northern Corridor in the NCA. However, at that time, BLM did not have a specific ROW application to consider as part of that planning process. Instead, the BLM relied on several conceptual alignments from the Dixie Metropolitan Planning Organization that were based on Washington County’s, a cooperating agency in developing that RMP, recommendations. While the BLM eventually selected a different alternative that did not include a corridor, the selected alternative did create an avoidance area that could accommodate a Northern Corridor alignment in the NCA. Under the 2016 RMP, an avoidance area is an area identified through resource

management planning to be avoided but that may be available for ROW location with special stipulations.

Responding to UDOT's ROW application also furthers the Department of the Interior's policy goals, as stated in the Strategic Plan for Fiscal Years 2018-2022, to "enhance conservation stewardship whereby all levels of government and private landowners work cooperatively together in an atmosphere of mutual respect to achieve shared natural resource management goals."

Issue:

1. Nothing has changed since the denial in the RMP. Why is this even being considered now?
2. There is no valid "shared natural resource management goal" in this instance.

DEIS Chapter 2. Proposed Action and Alternatives

2.1 Alternative Development

"Public and agency input received during the scoping process was considered in the development of the alternatives. The public scoping process is described in more detail in the Northern Corridor – Highway Right-of-Way, Issuance of an Incidental Take Permit and Resource Management Plan Amendments Scoping Report¹⁷ (Horrocks Engineers 2020a), available on the project website at <https://go.usa.gov/xw8TX>."

Issue:

1. While 3 of our alternatives were considered in the final analysis, they were combined/modified without explanation. The modifications resulted in both more extensive and more restrictive solutions. Please explain the logic used to derive the resulting two alternatives.
2. The above link takes the reader to <https://eplanning.blm.gov/eplanning-ui/project/1502103/510> which does not describe the process. As the author of the basis of two of the alternatives considered in the final analysis, it seems we should have been included in the process that interpreted and modified the alternatives to be considered. We believe the alternatives were modified inappropriately.

2.2 Northern Corridor Highway

"This section describes the six alternatives considered in detail for the Northern Corridor (including the No Action Alternative). The alternatives are shown on Map 2.2-1 (Appendix B) and described in additional detail in the Northern Corridor Highway Alternatives Development Technical Report (Appendix J; Jacobs 2020b). The range of Northern Corridor action alternatives is in accordance with the Council on Environmental Quality regulations implementing NEPA at 40 CFR 1500 and with the BLM NEPA Handbook (Handbook H-1790-1; BLM 2008). The BLM has analyzed in detail alternatives that are within the BLM's decision-making jurisdiction as well as an alternative that is outside the BLM's decision-making jurisdiction and could be completed without BLM action. These alternatives represent different potential approaches to resolving conflicts concerning alternative uses of available resources."

Issue

3. Really no additional information in J. What is the detail referenced?

¹⁷ Northern Corridor Highway Scoping Report

4. The defined alternatives are inadequately scoped in that they do not address traffic issues propagated at the western end of the development of alternatives 2-5. The traffic added to Red Hills Parkway, at its intersection with Bluff St/SR-18 and into Snow Canyon Parkway should be considered. The volume added to these areas of the traffic system were not included in the development of the alternatives and will likely make that intersection and follow-on roadways untenable. Approval of any of these alternatives should include a study of these areas and address any improvements necessary.
5. An in-grade intersection for alternatives 2-4 with Cottonwood Road is likely to be untenable in the 2040-2050 timeframe. Future plans should include a grade-separated intersection.

“The five Northern Corridor action alternatives were developed through collaborative discussions with traffic engineers, environmental resource leads, agency stakeholders, and the public.”

Issue:

6. We disagree: we were not involved in any “collaborative discussions” or discussions of any sort to develop the 5 NC action alternatives. Where is the notice of these discussions and why were we not invited? It appears that there was no public engagement in the develop of the 5 action alternatives, and we would have had significant design suggestions.

2.6 Alternatives for Analysis

“The BLM and the USFWS have identified Alternative 3 (UDOT Application Northern Corridor Alignment and issuing an ITP based on the Amended HCP) as the agencies’ preferred ROW alignment and ITP issuance alternative for the purposes of public comment and review, with Alternative B identified as the preferred for the two RMP amendments.”

Issue:

7. The DEIS rates the BLB preferred Alternative 3 as inferior to the Alternatives 4 and 5 in terms of environmental impacts (ref DEIS Executive Summary, Table ES.5-1. Alternative Comparison by Resource Table). Similarly, Alternative 3 rates no better than Alternatives 4 and 5 in terms of traffic congestion relief (ref Appendix J, Highway Alternatives Development Technical Report, Table 4. Transportation Analysis: 2050 Evening Peak Hour Intersection LOS Results). There appears to be no valid reason for the BLM’s preference. Please provide the rationale.
8. Washington County has proclaimed that the Northern Corridor Highway is “essential” for the county’s economy, has sold this idea to the municipalities in the county, to the state legislature and to Utah’s Congressional delegation, without proof or engagement of the public in alternatives. Indeed, that proof is proven wrong in this DEIS’s conclusion, showing alternatives outside the NCA are better in terms of both environmental impacts (see summary of environmental impacts in the Executive Summary) and traffic relief (see analysis results in the tables in Appendix J). The alternatives inside the NCA should be denied.

2.7.1 Northern Corridor Highway Alternatives Considered but Eliminated

2.7.1.2 Increased Use of Mass Transit

“Comments received during the scoping process suggested the increased use of mass transit as a Northern Corridor alternative for consideration. Transit usage in the St. George urbanized area is currently limited by the size of the area, the number of routes, and the locations served. With full implementation of the transit improvements shown in the DMPO Regional Transportation Plan, 2050 transit use accounts for less than 1 percent of all trips (DMPO 2019). Based on local planning and available funding, it is unreasonable to assume the St. George urbanized area could develop a robust transit system within the planning horizon represented by the Draft EIS that would eliminate a substantial amount of vehicle trips from the transportation system.”

Issue:

9. This analysis shows limited thinking. Existing “local planning and available funding” is not a valid reason to violate protections on public lands. It is true that if the St George metropolitan area continues its sprawl growth pattern, mass transit is not viable. It is this growth pattern that has caused the problem the Northern Corridor is proposed to solve. It is not responsible of the BLM to address traffic problems caused by poor planning. Mass transit would be viable if the area implemented a “smart growth” policy as was defined in Vision Dixie.

2.7.1.4 Land Use / Growth Regulation

“Comments received during the scoping process suggested limiting development in Washington County, or setting growth regulations as a Northern Corridor alternative for consideration. Land use planning, including existing and planned development, is controlled by the local municipalities within Washington County as outlined in each city’s general planning documents. Limiting development in Washington County, or setting growth regulations, is inconsistent with current local government general land use and zoning plans. The Land Use/Growth Regulation Alternative would be inconsistent with the managing objectives of the local municipalities over land use planning and its implementation is remote or speculative. Therefore, the alternative has been eliminated from detailed analysis in the Draft EIS.”

Issue:

10. The statement highlighted above is based on an erroneous premise: we submitted an alternative of implementing the Vision Dixie non-sprawl growth model and protections for public lands. This was developed by citizens with local governments and adopted, however it was an adoption in word rather than deed. We dispute the contention that the Land Use alternative is inconsistent with objectives of local municipalities. Those municipalities are willfully enabling development against the input of citizens, causing continual conflict with public lands protections. It should not fall on the BLM to accommodate poor land use planning that would necessitate violation of protected lands. It is a local government option to let growth occur in a manner that disables reasonable transportation planning. It is not a viable reason to violate protections on federally-managed land. We disagree with the DEIS ascertain that land-use planning is out-of-scope. A local government should not be able to create the conditions for an application through poor planning/management.

2.7.1.5 Community Transportation Alternative

“During the scoping process, the nonprofit organization Conserve Southwest Utah presented their proposed “Community Transportation Alternative” which includes the

following alternatives, ranging from roadway, land use, and transit to active transportation options:

- Alternative 1: Red Hills Parkway – I-15 Viaduct/Flyover Connection.
- Alternative 2: Improvements to Red Hills Parkway between I-15 Exits 8 and 13.
- Alternative 3: More Porous I-15 to Move Traffic North-South around Congestion Areas. This sub-alternative suggests new I-15 underpass crossings on 400 East, 700 East, and 1240 East.
- Alternative 5: Implement/Plan for Technological Improvements (i.e., traffic management using technology).
- Alternative 6: Implement Congestion Reduction Land Use Principles (Vision Dixie).
- Alternative 7: Downtown St George Loop.
- Alternative 8: Address Moving People Rather than Vehicles - Transit Options.
- Alternative 9: Long-term Thru-Traffic St. George Bypass.
- Alternative 10: Industrial Park Reuse.

“Several of the alternatives suggested as part of the Conserve Southwest Utah’s Community Transportation Alternative are similar to other alternatives that have been considered as part of the alternative development in the planning process for the Draft EIS. Based on the following conclusions, the Community Transportation Alternative has been eliminated from detailed analysis in the Draft EIS:

- Alternatives 1, 2, and 7 include suggested roadway projects that are being considered as standalone Northern Corridor alternatives, including the Red Hills Parkway Expressway, Widen Red Hills Parkway Alternative, and the St. George/100 South One-way Couplet Alternative as described previously. “

Issue:

11. Thank you for considering these alternatives, even though in modified form. CSU’s alternative 1 and elements of alternative 2 roughly correspond to the DEIS alternative 5; other elements of CSU alternative 2 roughly corresponds to DEIS alternative 5; and CSU alternative 4 roughly corresponds to DEIS alternative 6. It appears that the DEIS alternatives are defined in a manner that maximizes costs and business impacts, and that more economical solutions could be defined. And yet, even so, they seem to be superior to the BLM-preferred option.

- “Land use planning, including existing and planned development, is controlled by the local municipalities within Washington County as outlined in each city’s general planning documents. Alternatives 5, 6, and 10 of the Community Transportation Alternative, as it relates to land use planning and traffic management, are not in the decision space of this planning process. Land use planning and traffic management are under the decision authority of the local jurisdictions and are outside the decision space for this Draft EIS; therefore, this alternative has not been carried forward for detailed analysis in the Draft EIS.”

Issue:

12. This seems to be an inadequate explanation. Errors or purposeful ignorance in land use planning caused the application initiating this DEIS. The county has failed to adequately plan for growth and related transportation improvements. All of the alternatives completely or

substantially outside the RCNCA involve land use planning outside the decision space of the DEIS. This is an inadequate excuse to not consider these other alternatives. They have direct bearing on the need to place a highway in the NCA. The DEIS did not adequately address the exclusions of these alternatives. Under NEPA, federal agencies are obligated to consider feasible alternatives beyond their jurisdiction. Rejecting these alternatives for that reason is invalid.

“Alternatives 3, 8, and 9 are suggested roadway and transit improvements that would not considerably improve east-west travel demand in the St. George urbanized area when compared to other alternatives analyzed in the Draft EIS and would be substantially similar to the No Action Alternative. Therefore, these alternatives were not carried forward for detailed analysis in the Draft EIS.”

Issue:

13. Conclusions offered here are not based in facts that have presented. We contest the conclusions. Alternative 3 would enable traffic to avoid the problem intersections. Alternative 8 would be practical if coupled with the growth planning defined in Vision Dixie. Alternative 10 would definitely reduce traffic at the troubled intersections. The DEIS dismissed these alternatives with inadequate analysis.

DEIS Chapter 3. Affected Environment and Environmental Consequences

3.1 Introduction

3.1.1 Background

3.1.2 Analysis Methods and Assumptions

Direct and indirect impacts: Direct impacts are caused by a management action or implementation of an alternative and occur at the same time and place. Indirect impacts result from implementing a management action or alternative and are reasonably certain to occur but usually occur later in time or are removed in distance.

Context: Context describes the area or site-specific, local, or regional location where the impact would occur. Site-specific impacts would occur at the location of the management action, local impacts would occur in the general vicinity of the action area, and regional impacts would extend beyond the general vicinity of the management action.

Issue

1. The DEIS should but does not address impacts that occur due to planned future actions in that the county/Dixie Metropolitan Planning Organization's plans for future road construction omits plans past 2040. Plans through 2050 indicate significant impacts to the proposed Zone 6. These impacts should be included in the analysis of the efficacy of Zone 6.
2. "Context" as defined in the DEIS includes only spatial context. It should also include temporal context. The stated purpose and need for a highway that is proclaimed by the applicant to be needed primarily only after 20 years in the future. Applying for a right-of-way that is anticipated to be needed in such a distant timeframe is inappropriate since so much may change in both the environment and the need over that timeframe. The application should be denied based on the fact that any EIS performed now will have to be re-evaluated at that future time.

3.2 Vegetative Communities

The Red Cliffs area north of St. George has long been cherished by Utah botanists and ecologists as a premier area for plant species richness (Washington County itself has the highest biodiversity of any county in Utah, a state which ranks high in biodiversity). It would be unimaginable to think that a road would bisect this area by anyone who has studied it or who knows anything about it. The area includes plant species found nowhere else in Utah, including some species with very limited distributions and of high conservation concern.

Some examples of plants only found in Utah in Washington County and that have been documented from the Red Cliffs NCA area include *Buddleja utahensis*, *Camissonia parryi* (a Virgin-Mohave endemic), *Cheilanthes parryi*, *Cryptantha barbigera*, *Lepidium fremontii*, *Mamillaria tetrancistra*, and *Phacelia cryptantha*. Some of these species represent the most northern and eastern extent of their range, and may harbor unique genetics that represents novel evolutionary potential, which heightens their conservation value particularly in a climate changing world (Leppig and White 2006). In addition, botanists have made well over 500 plant collections from the area and it still needs more study, and the preferred alternative will likely impact many of these species.

3.2.2.1 Analysis Methods and Assumptions

The DEIS uses the Landscape Fire and Resource Management Planning Tools (LANDFIRE) program, which appears to be the most recent vegetation community delineation available for the project area. The vegetation communities are limited to the boundaries of the Mojave Desert Tortoise Analysis Area (Appendix E at E-1). The actual report on the vegetation along the alternative alignments 2 through 4 is noted as “(Vegetation Survey Technical Report; Jacobs 2020f)” (at 3-9 and Appendix A at A-9).

Issue:

1. *Vegetation Survey Technical Report; Jacobs 2020f* is not provided as part of the DEIS which obfuscates the reasoning behind the methodology that was used. The DEIS presents only the results of these surveys:

“Localized vegetation surveys were conducted across the three proposed highway alignments on Federal, State, and private lands within the boundaries of the Red Cliffs NCA in March and April of 2020. Survey methods followed the BLM’s assessment, inventory, and monitoring (AIM) protocol and returned results that indicate exotic invasive species represent a substantial amount of the plant cover within the ROW areas specifically. A total of 84 different plant species, or varieties, (including 18 graminoids, 38 forbs, and 28 shrubs/subshrub species) were identified in the AIM survey plots (Vegetation Survey Technical Report; Jacobs 2020f). ... The T-Bone Mesa Alignment supports a minimum of 75 percent foliar cover of exotic or invasive species, of which 52 percent is cheatgrass (Vegetation Survey Technical Report; Jacobs 2020f). The UDOT Application Alignment supports a minimum foliar cover of 67 percent exotic or invasive species, of which 41 percent is cheatgrass (Vegetation Survey Technical Report; Jacobs 2020f). The Southern Alignment supports a minimum foliar cover of 78 percent exotic or invasive species, of which 46 percent cover is cheatgrass, and 14 percent is split/Mediterranean grass (Vegetation Survey Technical Report; Jacobs 2020f).”

(DEIS at 3.9)

2. It is unclear how the Jacobs (2020f) plot analysis is actually used.
3. No justification is provided as to why on-the-ground vegetation mapping surveys (coupled with rare plant surveys – see below) along each Alternative right-of-way (ROW) was not done. The DEIS relies on the Landfire data for impact analysis while recognizing that it is inaccurate:

“The LANDFIRE data are not intended to imply 100 percent accuracy on the ground.”

(DEIS at 3-12)

Comprehensive on-the-ground surveys are required to provide the necessary information on the actual vegetation communities that occur within the ROWs in order to analyze the actual acreage of permanent and temporary impact for each vegetation community. For example, it is unclear if any of the unique plant communities, including riparian and wash communities, are within the alternatives’ ROWs.

4. While Appendix E identifies 105 different Vegetation Types, the impact analysis does not identify the detailed vegetation types that would be impacted, but instead reduces them down to only three categories - Desert scrub, Exotic-Invasive species and Shrubland (Table 3.2-2 at 3-12). It is unclear how these categories were determined and which “physiognomy” types were included in the three categories. This oversimplification into just three categories undermines the existing complexities of the landscape and results in an inaccurate evaluation of the potentially impacted plant communities.
5. Subsequent to this DEIS release, the devastating fire that occurred in late July 2020 and impacted over 12,000 acres of the Red Cliffs NCA in high-value habitat for desert tortoise dramatically changes the analysis of the vegetation community impacts as well. This changed circumstance also requires a supplemental EIS be produced that updates the status of the post-fire plant communities. See below for additional comments on the fire issues.
6. Because of this lack of accurate analysis alone, we request that either a supplemental EIS be produced that includes an actual analysis of the impacts by plant community.

3.2.1.2 Exotic and Invasive Plant Species

Non-native exotic species including cheatgrass (*Bromus tectorum*) have long been known to invade native plant communities (Pellant 1996) and increase competition with native forbs (Bradley et al. 2008; Matthew L Brooks 2000; Pellant 1996). Cheatgrass and other non-native invasive plant species also fundamentally change the function of the plant community and habitat through direct competition with native species, changes in nutrient and water cycling, and the fire cycle (see below) (DeFalco, Fernandez, and Nowak 2007; Matthew L Brooks 2000; M L Brooks and Berry 2006; Reid, Goodrich, and Bowns 2008). Recently, differentiated genetic strains of cheatgrass have been documented that are adapted to specific ecological condition, providing an adaptive advantage that could exacerbate the spread of this aggressive invader (Meyer et al. 2016).

Issue:

1. One of the documented vectors for the spread of invasive plant species are roads (Gelbard and Belnap 2003; Speziale et al. 2018). Alternative 2 through 4 allow for the construction of a new road within the boundaries of the Red Cliffs NCA and the Red Cliffs Desert Reserve, which would result in new opportunities for invasive plant species introductions and spread. While the DEIS puts in safeguards for desert tortoise (DEIS at 2-7),

shockingly, it does not provide any minimization or mitigation measures for road construction. Typically, DEIS' provide a long and comprehensive list of Best Management Practices (BMPs) for linear construction projects, but we were unable to locate any basic BMPs in this DEIS. Conventional BMPs for construction always include minimization and mitigation measures to minimize the introduction of invasive species and typically include a plan for detection and eradication of invasive species along the construction ROW. The fact that BMP are not even acknowledged, much less provided to the public and decision-makers is a fatal flaw in the DEIS.

2. Equally egregious, is the failure to analyze the long-term operational impacts from a new roadway as a permanent ongoing vector for introductions of invasive species. Increasing the cover and number of invasive plant species into the conservation areas would further degrade the habitat that is already experiencing degradation from ongoing large-scale fires exacerbated by climate change (see sections below). Long-term mitigation is required to prevent introduction of invasive plants (and animals) via any constructed road in or near the conservation areas. Mitigation would require regular monitoring for invasive species and the development and implementation of an Integrated Pest Management Plan that would effectively prevent any additional introductions of non-native species into the NCA and Preserve. Brooks et al. (2004) state "One of the few certainties of invasive plant management is that exclusion of potentially threatening species before they invade, or at least early detection and rapid response at the very early stages of invasion, is the most cost-effective and successful way to prevent their negative ecological and economic impacts".

The HCP would also need to provide ongoing resources to reduce the already substantial non-native infestations that occur in the NCA and Preserve as an ongoing management activity in order to fully mitigate the impacts not only of the road, but also the "take" of species under the amended HCP.

3.3 Special Status Plants

3.3.1 Affected Environment

Washington County has some of the greatest biodiversity of plants in the state of Utah. Five federally listed threatened or endangered plants are identified as occurring in the action area of the DEIS and HCP. They include the endemic-to-Washington-County and endangered Dwarf Bear-poppy (*Arctomecon humilis*), the endangered Gierisch mallow (*Sphaeralcea gierischii*), the endangered Holmgren (Paradox) milk-vetch (*Astragalus holmgreniorum*), the endemic-to-Washington-County and endangered Shivwits milk-vetch (*Astragalus ampullarioides*) and the threatened Siler pincushion cactus (*Pediocactus* [*Echinocactus utahia*] *sileri*). Other BLM listed sensitive plants in Washington County include the State imperiled (S2) escarpment milk-vetch (*Astragalus striatiflorus*)¹⁸, the endemic-to-Washington-County and state critically imperiled (S1) Baird's camissonia (*Camissonia bairdii*)¹⁹, the state critically imperiled (S1) Diamond Valley suncup (*Eremothera* [*Camissonia*] *gouldii*)²⁰, the state critically imperiled (S1) Virgin thistle (*Cirsium virginensis*)²¹, the state critically imperiled (S1) Nevada willowherb (*Epilobium nevadense*)²², the rare wirestem buckwheat (*Eriogonum pharnaceoides* var. *cervinum*)²³, the state imperiled (S2) Pine Valley goldenbush (*Ericameria crispa* = *Haplopappus crispus*), the vulnerable Barneby's breadroot (*Pediomelum aromaticum* var. *barnebyi*)²⁴, the state critically imperiled (S1) Parry's sandpaper plant (*Petalonyx parryi*)²⁵. Populations of all of these species are located within the permit area of the HCP (DEIS Appendix B, Map 2.4-1. Washington County HCP/ITP: Permit Area). Table 3.3-1. Federally Listed Plant Species—Occupied Habitat (Reported Extant Occurrences), Designated Critical Habitat, and Modeled Suitable Habitat within the Boundaries of the Analysis Areas (DEIS at 3-15) provides information on the listed plant species within the various analysis areas. Likewise, Table 3.3-2. BLM-Listed Sensitive Species—Known Reported Occurrences in the Analysis Areas (DEIS at 3-20) provides information on some, but not all, of the BLM sensitive plant species within the various analysis areas.

Issue:

1. Some of these sensitive species are critically imperiled in Utah as noted above and could easily qualify for protection if petitioned under the Endangered Species Act. These species should also be analyzed in the impact analysis of the DEIS. Because this analysis is lacking, a supplemental DEIS needs to analyze the impacts of the proposed Alternatives to ALL of the BLM-Listed sensitive plant in Washington County within the HCP area.

While the Washington County HCP is focused on a single species – the desert tortoise – the most recent guidance provided by the USFWS' 2016 Habitat Conservation Planning and Incidental Take Permit Processing Handbook (Handbook) clearly encourages inclusion of listed and

¹⁸ https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.129878/Astragalus_striatiflorus

¹⁹ https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.149636/Camissonia_bairdii

²⁰ https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.134238/Camissonia_gouldii

²¹ https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.146618/Cirsium_virginense

²² https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.142061/Epilobium_nevadense

²³ <https://www.unps.org/miscpdf/blmspslFeb2011.pdf>

²⁴ https://www.utahrareplants.org/rpg_species.html

²⁵ https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.138576/Petalonyx_parryi

sensitive plant species as covered species under HCPs. Section 3.7 of the Handbook entitled Other Compliance Requirements discusses listed plants and critical habitat and states:

“A project proposal may affect other resources for which the Services are responsible. Although an applicant may not be on the “hook” for effects to listed plants, critical habitat, or migratory birds, the Services do have responsibilities for these resources under the ESA or other laws as described below.”

Handbook at 3-27²⁶. As part of the Incidental Take Permit issuance for the Habitat Conservation Plan, the U.S. Fish and Wildlife Service must perform an Intra-Service Consultation. The Handbook states:

“If listed species that occur in the plan area are dropped from the covered species list for lack of information, or are not included in the HCP from the onset, they still must be addressed in the intra-Service section 7 biological opinion to determine if they may be adversely affected by the proposed covered activities. If adverse effects to a species are possible, we should encourage an applicant to include them in the HCP and permit application (see Chapter 7).”

Handbook at 3-28 (emphasis added). Here, listed plants have the potential to be “adversely affected by the proposed covered activities”. Although Appendix C of the HCP attempts to downplay the potential for adversely affecting the listed plants and their critical habitat (for those that have federally designated critical habitat - see discussion below) Section 3.7.2 of the Handbook explicitly addresses listed plant and their designated Critical Habitat stating:

“In the Services’ intra-Service consultation prepared for its incidental take permit decision, we must analyze and identify measures to conserve listed plant species as well as any designated critical habitat. Like any other Federal agency, the Services may not undertake an action that is likely to jeopardize the continued existence of listed plants, or destroy or adversely modify critical habitat. Although an applicant is not responsible for the Services’ compliance with ESA section 7, it is to their benefit to address impacts to listed plants or critical habitat in their HCP to help us meet our obligations under section 7.”

Handbook at 3-28 (emphasis added).

While “take” permits for plants are not required under the Endangered Species Act, the U.S. Fish and Wildlife Service “cannot issue a permit that would jeopardize the continued existence or adversely modify the designated critical habitat of any listed species, including plants, so addressing listed plants in the HCP may be prudent.” (Handbook at 7-2, emphasis added). The Handbook highlights a “Helpful Hint” that states:

“Helpful Hint: All ESA-listed species that will be taken through implementation of covered activities must be included as covered species, or we cannot issue the incidental take permit (unless covered by another ESA mechanism). The applicant must adjust covered activities to avoid take of ESA-listed species that are not covered by the HCP.”

(Handbook at 7-3, emphasis original)

A second “Helpful Hint” states:

“Helpful Hint: You must have at least one ESA-listed animal species to do an HCP. Encourage applicants to also include listed plants if any occur in the plan or permit area; and proposed or candidate species that may be listed during the life of the permit if they may be impacted.”

(at 7-6, emphasis original, underlining added).

²⁶ “Services” refers to both the U.S. Fish and Wildlife Service and the National Marine Fisheries Service.

Appendix C of the Habitat Conservation Plan for Washington County, Utah – Final Draft Restated and Amended, dated May 2020 (HCP) tries to justify reasons for not including the listed plants as covered species under the HCP.

In each case, for the five listed plants that are addressed, the HCP relies on BLM management of public lands for the species conservation, without providing any substantive evidence that such safeguards are in place. In fact, only one Area of Environmental Concern (ACEC)- the Red Bluff ACEC- has the potential to prioritize conservation over other multiple use mandates of BLM-managed lands. The Red Bluff ACEC includes populations of the dwarf bear poppy and Holmgren milk-vetch, but in both species cases most of the populations occur outside of the ACEC on BLM-managed lands managed for multiple use, SITLA lands and private lands. None of the other three listed plants occur within the Red Bluff ACEC. Although suitable habitat for Siler's pincushion cactus is modeled in the Red Bluff ACEC, it has never been found there to date. While we recognize that the private lands managed by The Nature Conservancy's White Dome Preserve are managed for conservation and protect the dwarf bear poppy and Siler's pincushion cactus, that 800- acre preserve contains only a small portion of the known species occurrences. Only a small portion of the Shivwits milk-vetch populations are within the boundary of the Red Cliffs NCA and Red Cliffs Desert Reserve west of the I-15.

Issue

2. Because the listed rare plants, not to mention the sensitive rare plants are primarily either on BLM-managed lands for multiple use, SITLA lands or private lands. Absent clear protective mechanisms, they remain vulnerable to ongoing and future impacts, including climate change. Based on the guidance from the USFWS' 2016 Habitat Conservation Planning and Incidental Take Permit Processing Handbook as documented above, the listed and sensitive plant species in the area need to be included as covered species under the Washington County HCP amendment and an analysis of impacts to these species provided in a supplemental EIS that is circulated to the public.

Currently, the best publicly available science on the status of these species by species is provided below:

Dwarf Bear-poppy (*Arctomecon humilis*)

In USFWS Five Year Review (2016) of the dwarf bear poppy, it found the following:

“Land development on dwarf bear-poppy habitat has had a significant negative impact on the species since listing, with up to 50 percent of the habitat lost and development continuing to increase in the area, likely resulting in additional habitat loss on State and private lands. This habitat loss and fragmentation has also resulted in a reduction in pollinator diversity for the species, which can negatively impact reproduction and decrease gene flow. With increased human population and development come increased pressure from recreation, which may also impact pollinator presence and diversity.”

(at 37)

The five-year review notes that despite the designation of the Warner Ridge/Ft. Pearce ACEC (4,281 acres) and the Red Bluff ACEC (6,168 acres) designated in the 1999 and the proposed Webb Hill ACEC in 2015, it states:

“The designation of ACECs at two of the populations on BLM lands and the creation of TNC Nature preserves at two more has provided some protection from both development and recreation; however, illegal or unauthorized recreation and vandalism still occur at

these areas and past use of motorized vehicles still heavily impacts populations within protected habitat. While ACECs and the TNC preserves do provide some protection for the species outside of the Act, the remaining populations have few to no legal protections and the ACEC protections may not be adequate to preserve the species. We consider the lack of legal protections on State and private lands to constitute a high threat to the species at this time.”

(at 37, emphasis added) We note that the prior Washington County HCP was in place at this time and because it was a single species HCP, it provided no conservation or recovery for this endangered and declining plant. The five-year review determined that no revision to the plant’s endangered status was necessary. Based on the finding in the five-year review the dwarf bear poppy has declined since being listed in 1979.

The preferred alignment makes mention of potential impacts on “suitable” habitat for the endangered *Arctomecon humilis*, even though that species is not currently known from the Red Cliffs NCA. Yet, the USFWS has never designated critical habitat for the species despite having ample opportunity to do so, and knowing about continually increased threats to its habitat plus its few occurrences which have now become significantly segregated by roads and subdivisions. Both it and its pollinators are in decline.

Issue

3. A critical habitat determination should be made before any “suitable” habitat is impacted. This plant, along with perhaps *Astragalus holmgreniorum*, is likely to become the first documented plant species to become extinct in Utah. And it relates to a never-ending cycle of growth and poor long-term planning by local governmental leaders and planners.

Gierisch mallow (*Sphaeralcea gierischii*)

The single Utah population of Gierisch mallow is located on BLM-managed lands and modeled habitat is located on SITLA lands. At the time of listing, impacts to this population included potential gypsum mining, grazing, illegal off-road vehicle activities, competition with invasive species, target shooting and trash dumping (78 FR 49149)

The listing document in the Federal Register states specifically about the Utah population:

“While this is only one of 18 known populations, this is the second largest population of the plant and this population includes almost half of the total population, range-wide. This population is important to the long-term viability of the species. Given that this large population only encompasses 1.01 ha (2.5 ac) and is easily accessible, these activities may lead to enough Gierisch mallow plants being crushed to reduce the overall fitness of the population.”

78 FR 49149

Impacts to this population in Utah, have effects throughout the species range. The U.S. Fish and Wildlife Service also establishment of critical habitat for the Gierisch mallow in 2013 at Starvation Point in Utah, on 802 ha (1,982 ac) of BLM-managed land and 68 ha (167 ac) of SITLA lands (78 FR 49167), which may be impacted by on-going management on BLM-managed lands and development on SITLA lands in the future.

Holmgren (Paradox) milk-vetch (*Astragalus holmgreniorum*) and Shivwits milk-vetch (*Astragalus ampullarioides*)

These two milk-vetches were listed together and had critical habitat designated at the same time. Due to the concomitant federal designations, they are addressed together here. All of the populations of the Holmgren milk-vetch occur outside of the Red Cliffs NCA and Red Cliffs Desert Reserve (DEIS at Map 3.3-3a and Map 3.3-3b). One or two populations of the Shivwits milk-vetch occur inside or partially inside of the Red Cliffs NCA and the Red Cliffs Desert Reserve (DEIS at Map 3.3-4a and Map 3.3-4b). The Stucki Spring critical habitat unit for the Holmgren milk-vetch overlaps with the proposed Zone 6. Part of the Silver Reef Critical Habitat Unit for the Shivwits milk-vetch may fall within the Red Cliffs NCA and Red Cliffs Desert Reserve, as do parts of the Harrisburg Bench and Cottonwood Critical Habitat Unit. The remaining populations of both species in Utah reside on BLM-managed lands, SITLA lands and private lands. According to U.S. Fish and Wildlife Service's most recent Five-Year Review (2007) of both Holmgren and Shivwits milk-vetches, few of the recovery criteria have been met. The Review states by Impact Factor:

“Factor A. The present or threatened destruction, modification, or curtailment of habitat or range...Permanent land protection is achieved for a minimum of four *A. holmgreniorum* and four *A. ampullarioides* recovery populations. Protection has not yet been achieved permanently for any population of either species.

Factor D. The inadequacy of existing regulatory mechanisms. ...No management agreements are under development for range-wide conservation outside of the commitments of the federal agencies under the Endangered Species Act;

Factor E. Other natural or manmade factors affecting the species' continued existence.... (T-6) Means are identified and management is initiated to control invasive nonnative species that compete with or otherwise harm (e.g., through associated fires) *A. holmgreniorum* and *A. ampullarioides* recovery populations and/or their habitats...no weed control work within either species populations is currently occurring. This criterion has not been achieved.

(T-7) In conjunction with recovery criterion P-2, the habitat base for each of the four recovery populations designated under criterion P-1 is large enough to offset the threat of loss or restriction of the species' pollinators... Actions under this criterion are ongoing, but have not been achieved and will take multiple years to complete.

(T-8) Use of pesticides or herbicides known or thought to be detrimental to either of the milk-vetches or their pollinators is prohibited in the vicinity of all recovery populations, either by local or State ordinances or through conservation agreements... No actions currently address this criterion and, therefore, it has not been achieved.

(T-9) Research shows evidence of the genetic fitness of *A. holmgreniorum* and *A. ampullarioides* populations, alleviating concerns about inbreeding or outbreeding depression... Actions under this criterion are current and it is expected that this criterion could be met in the next decade.

(T-10) Offsite conservation, e.g., seed collection and storage, is underway for all extant *A. holmgreniorum* and *A. ampullarioides* populations, averting the risk of immediate extinction from stochastic events or environmental catastrophes... This criterion is being acted upon and is expected to be met within the next 5 years.

(Review at 6-7, emphasis added)

It is unclear based on the Recovery Action Plan Implementation Progress if any of the in-progress actions have been completed.²⁷ In addition no down-listing criteria had been met, so the Five Year Review concludes:

“No change is recommended. According to the recovery priority table, both *A. ampullarioides* and *A. holmgreniorum* are categorized as species, have a high degree of threat, and have a low recovery potential.”

Siler pincushion cactus (*Pediocactus* [*Echinocactus utahia*] *sileri*)

While the most recent U.S. Fish and Wildlife Service Five Year Review (2018) for the Siler pincushion cactus notes that the establishment of the White Dome conservation area, managed by The Nature Conservancy, helps to protect the Siler Pincushion cactus (and the dwarf bear poppy), no change is recommended in the listing status or the recovery priority number which is currently classified as 8 (moderate degree of threat/high recovery potential). The Review specifically identifies remaining threats in Utah as:

“The threat of urban development in Utah and the uncertainty of regional climate change remain.”

(Review at PDF 7)

Issue

4. The various federal documents on the status of the plants identify that none of the listed plant species have adequate mechanisms to assure conservation of the species into the future, the HCP must be clearly identified, science-based justification as to why these listed plants are not able to be amended into the HCP. Otherwise they must be included in the amended to the HCP as “covered species”.
5. Recent publicly available data sets are not available for most of the BLM sensitive plants. The HCP must also consider and include the appropriate unlisted, BLM-sensitive plant species as covered species in the HCP amendment in order to provide comprehensive conservation now and prevent listing in the near future.

²⁷ <https://ecos.fws.gov/ecp0/reports/implementation-activity-status-ore-report?documentId=1001589&entityId=1088> (for Shivwits milk-vetch);
<https://ecos.fws.gov/ecp0/reports/implementation-activity-status-ore-report?documentId=1001589&entityId=1020> (for Holmgren milk-vetch);

3.5 Special Status Wildlife

Mojave Desert Tortoise

The threatened Mojave Desert Tortoise and its critical habitat are affected by the proposed actions. We offer the following comments related to the Mojave Desert Tortoise (MDT).

A. Overview

The threatened MDT is declining range-wide, within the Upper Virgin River Recovery Unit (UVRU), and within the Red Cliffs National Conservation Area and Desert Reserve. The UVRU is the smallest of the five Recovery Units. USFWS 2011 at 46. It is highly fragmented – and continues to grow more so – leading to smaller isolated patches within the larger recovery unit. Between 2004 and 2014, the MDT population in the UVRU is estimated to have declined by 24% and across the range by 37%. DEIS at 3-47. Between 1999 and 2020, MDT populations within the Reserve declined by 41%. DEIS at 3-48. MDT population decline is estimated at 3.2% per year although this figure is thought to be low. USFWS 2020 at 32. Some experts contend that this species is on the path to extinction under current conditions (Allison and McLuckie 2018).

The Red Cliffs NCA and Red Cliffs Desert Reserve are both designated for the conservation of MDT. The section of these units where the Northern Highway Corridor (NHC) alignments are proposed is designated critical habitat²⁸ and also houses a particularly dense cluster of tortoises within the larger units. DEIS at 3-58 (“Zone 3 is an important area of the Reserve because of the density and abundance of tortoises compared to other zones. An important area of desert tortoise density is located along the proposed alignments within the Reserve Impacts to Zone 3 are likely more substantial than impacts to other areas of the Reserve.”) “This may be the most important high-density cluster of desert tortoises in the recovery unit (USFWS 2020a).” DEIS at 3-63.

The USFWS estimates that more than 50% of the MDTs in the UVRU are within Red Cliffs NCA and 75% of those are within the East and West Cottonwood Analytical Units, the units affected by the proposed highway right-of-way. USFWS 2020 at 16. In addition to the threat of the proposed highway, these Analytical Units are invaded with exotic annual grasses and therefore face a high risk of future wildfire. *Id.* at 47. They also face future threats from climate change as well as increased urbanization and recreation. DEIS 3-35 to 3-44.

Recent MDT research has demonstrated that connectivity of suitable MDT habitat is a critical component of MDT conservation and recovery (Averill-Murray et al. 2013). That is, it is not enough to conserve suitable habitat; without ensuring multi-generational connectivity between recovery units and subunits within, the species will continue to decline and face extinction.

Roads stress tortoises. DEIS at 3-35 to 3-37. In addition to fragmenting habitat, roads cause a *road effect* zone that extends out from the road corridor. Within the road effect zone, wildlife are impacted by the presence of the road itself and the activities that occur on or near the road (littering, poaching, releasing captive tortoises, predation, etc.). The road effect zone for MDT has been detected up to 4.6 km for the MDT. DEIS at 3-35.

²⁸ 59 Fed. Reg. 5834 (Feb. 8, 1994)

The DEIS alternatives for the NCH alignments offer a new Zone 6 as a mitigation. Zone 6 is a small area (about 6,800 acres) disconnected from the Reserve that is not designated critical habitat. Currently, an array of intensive land use activities, including motorized and non-motorized recreation and grazing, occur in Zone 6. Also, considerable development is envisioned in various municipal plans proximal to Zone 6 in the future. Finally, about half of the area is administered by SITLA whose mission is to maximize return on state lands by collecting fees for a variety of industrial and recreational uses.²⁹

The DEIS provides viable alternatives that address traffic concerns for the growing St. George community while at the same time leaving intact the current National Conservation Area, Red Cliffs Desert Reserve, and designated MDT critical habitat. The USFWS and the BLM should commit to one of these scenarios, and, in addition, as offered elsewhere in these comments, conserve additional unprotected high-quality habitat to help the declining MDT population in the UVRU which continues to decline as a result of increasing wildfires, invasive species, urbanization, and drought. USFWS 2011 at 47. Given the precarious condition of the UVRU and its vital role range-wide for the MDT, doing so would contribute to staving off the extirpation of the MDT in the UVRU that is anticipated absent more aggressive conservation. Draft Biological Report at 117, USFWS 2011 and Allison and McLuckie (2018).

B. The DEIS does not provide adequate information to make an informed decision

i. The DEIS utilizes and relies on inadequate, incomplete, and unsubstantiated data.

Issue

1. The DEIS utilizes and relies on inadequate, incomplete, and unsubstantiated data.

1. The survey and density data are inadequate for comparing gains and losses to the MDT in the proposal

For purposes of evaluating the mitigation value of Zone 6 for habitat lost if the NCH is constructed, the DEIS evaluates and compares MDT population data from Zone 6 and Zone 3. There are several problems with the DEIS' approach. First, the survey methods used in Zone 6 were not intended to estimate population density and are inadequate for the task. The DEIS states that USFWS pre-project survey protocols were used to estimate the abundance of 22.5 tortoise/km² in Zone 6, and that this protocol, "is only intended to locate individual tortoises and not to derive density estimates. Therefore, this density estimate is not comparable with other Mojave desert tortoise populations. Additional years of survey data will be needed to validate Mojave desert tortoise density in proposed Zone 6." DEIS at 3-49.

Second, the DEIS uses data from 2017 even though data from 2019 was available without a valid explanation. Zone 3 surveys were conducted in 2017 and 2019. The 2019 data appeared more dismal, yielding a density of 12.3 MDT/km sq. while the 2017 data yielded a density of 17.2 MDT/km sq. DEIS at 3-55. The DEIS rationalizes its use of the 2017 data by saying that the confidence intervals of both surveys overlapped and that they wanted to compare the 2017 data from zone 6 with the 2017 data in Zone 3. DEIS at 3-55.

²⁹ See SITLA website at <https://trustlands.utah.gov/our-agency/>. ("Approximately six percent of the land within Utah's borders is trust land. SITLA works with private business to generate revenue from energy and mineral royalties, and real estate and surface development.")

Third, the survey methods used in Zone 6 and Zone 3 were not the same and therefore the data are not comparable. As stated above, Zone 6 protocol yielded data not intended to estimate density while Zone 3 protocol (distance sampling method, UDWR 2018 at 1) did.

2. Absence of project specific survey

The DEIS does not disclose or analyze relevant survey data. The DEIS should have included the project-specific survey completed in September 2018 by Washington County as part of the County's effort to complete a MDT survey of the alignment. This data is available from the Washington County habitat Conservation Plan Office. This survey showed more than 50 tortoises were found in a 300-foot wide corridor around the proposed NCH Alternative 3. A project-specific survey that discloses the number of MDT that would be adversely impacted by the highway will substantially contribute to understanding the direct impacts of the NCH on MDT and critical habitat.

3. The minimum target population of 3,000 is unsupported

The DEIS states that the management target for viable MDT analytic units is 3,000 individuals but fails to show how this calculation is made. The DEIS at 3-35 references a 2019 USFWS workshop³⁰ and similarly DEIS at 3-45 references a USFWS 2020 Draft Biological Report. The USFWS 2020 report offers the 3,000 figure saying participants at a 2019 workshop "indicated that 3,000 adult desert tortoises should be sufficient for this long-lived species to prevent genetic deterioration over the next 25 to 50 years in each AU (USFWS 2019a)." USFWS 2020 at 30. No scientific basis is offered for the 3,000 figure.

The 1994 Desert Tortoise (Mojave Population) Recovery Plan which informed the 2011 Recovery Plan suggests that "a minimally viable population of desert tortoises from genetic considerations should probably contain at least 2,000 to 5,000 adult animals." USFWS 1994 at 32. Given that in 1994 (and when the 2011 Recovery plan was crafted), the importance of habitat connectivity was not fully appreciated, this number may in fact be low and the DEIS absent evidence to the otherwise should use the 5,000 figure.³¹

4. The DEIS states that 6,760 acres in Zone 6 are occupied tortoise habitat but surveys were not done on all of these acres

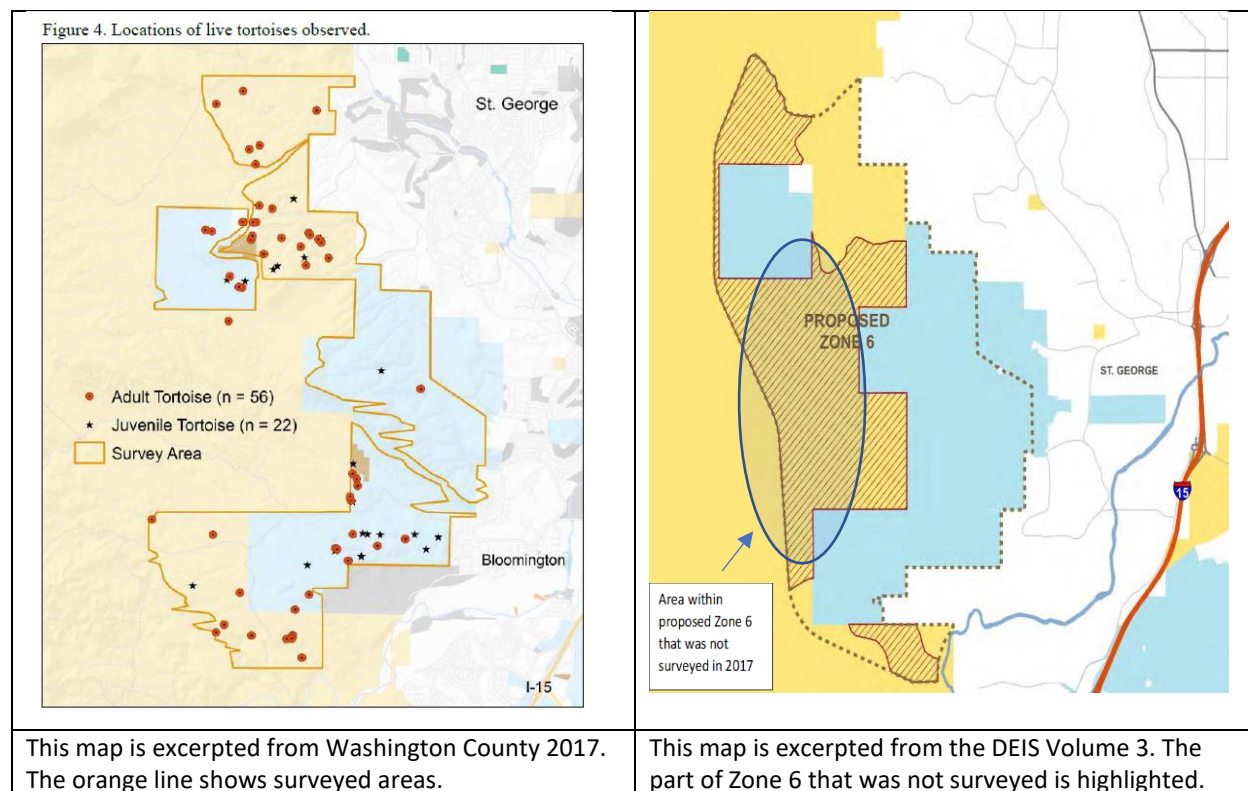
The DEIS at 3-48 states that 76 live MDT were found within Zone 6 when surveying transects.³² This information was from a survey conducted by Washington County in 2017 (Washington

³⁰ Listed in the cited references as "U.S. Fish and Wildlife Service (USFWS). 2019b. Mojave Desert Tortoise in the Upper Virgin River Recovery Unit, Current and Future Conditions. Workshop. St. George, Utah. September 17 and 18, 2019." No written materials from the workshop are made available in the DEIS or on e-planning.

³¹ USFWS 1994 at 32 pointed out that this figure is also affected by other demographic conditions. "In addition to genetic deterioration that can occur at very small population sizes, numerous negative demographic effects can occur when population sizes are small or when their densities are low. When population densities are very low, random variations in sex ratios, age distributions, and birth and death rates among individuals (called demographic stochasticity) can cause the population to fluctuate widely and potentially go extinct (Richter-Dyn and Goel 1972). In very sparse populations, males and females may have problems finding mates. This phenomenon is called the Allee effect, and it also can result in population declines or extinction (Ehrlich and Roughgarden 1987). In desert tortoises, the population densities below which demographic stochasticity and the Allee effect become a matter of concern are estimated to be approximately 10 adults per square mile (See Appendix C). Below this density extinction becomes increasingly possible."

³² Also see DEIS Volume 3 map 3.5-4a that shows Zone 6 (and other places) as occupied habitat without evidence.

County 2017). The survey report shows a map of the surveyed area (orange line in first map below). When we compare the surveyed area to Zone 6 (second map below) it is apparent that a large chunk of BLM land south and southeast of the northernmost SITLA parcel was not surveyed (this area is demarcated on the second map below). Yet the DEIS states that 6,760 of the 6,800 acres – all but 40 acres -- within the proposed Zone 6 are occupied.³³ Extrapolating from the survey areas to proximal un-surveyed areas is inappropriate given the wide variation in habitat types. Washington County 2017 at 4 (“Although the survey area is relatively small, the soil and terrain varies greatly.”) Hence, the DEIS’ statement that 6,760 acres in Zone 6 are occupied MDT habitat appears to be a considerable over-inflation, at least based on the cited survey.



We also note that the Draft Biological Report at 69 asserts that little is known about MDT demographics in the proposed Zone 6. USFWS 2020 at 69 (“Demographically, very little is known about this species west of the Red Cliffs Desert Reserve, proposed zone 6 area because protecting sensitive biocrusts prevents human access for substantive surveys in some areas—other areas simply have low development and recreation pressure, lack of which decrease the need for surveys.”) the report also states that “Overall, experts at the Workshop (USFWS 2019a) speculated that density and abundance estimates are lower in areas west of the Red Cliffs Desert Reserve, proposed zone 6. Although this seems to conflict with the high densities reported in the proposed zone 6 area, desert tortoises are a clustered species. Individuals have also been relocated to proposed zone 6 lands following adjacent development clearance surveys and the densities there may be partially the result of these translocations.” USFWS 2020 at 69.

5. The DEIS states that the Reserve 3 populations are stable absent evidence

³³ Also see Map 3.5-4a (DEIS Volume 3 at B-51) that show Zone 6 as occupied habitat without citation.

The DEIS at 3-48 describes that the MDT population within the UVRRU is in a serious decline but then in overt contradiction states that the UVRRU MDT population is stable:

Within the UVRRU, the 2014 population estimate represents a 24 percent decrease from an estimated 13,226 Mojave desert tortoises in 2004 (Allison and McLuckie 2018). However, this rate of decline is based on data collected within the Reserve; therefore, the rate of decline outside of the Reserve could be greater. Within the Reserve, UDWR surveys between 1999 (3,404 Mojave desert tortoises) and 2020 (2,011 Mojave desert tortoises) show an overall decline of 41 percent (UDWR 2020). These estimated declines include losses as a result of a 2002 drought and a 2005 wildfire. Survey results for estimated Mojave desert tortoise abundance conducted after the 2005 wildfire (2007 and 2019) have ranged from a low of 1,603 (2009) to a high of 2,238 (2011). *As a result, UDWR considers that the population may be stable*, although more years of data without a stochastic event are needed to confirm this assumption (UDWR 2020).

Emphasis added. We see no evidence that the MDT population is stable or even close to stable. To the contrary, the MDT population in the entire UVRRU is close to the target minimum population of 3,000 offered in the DEIS (discussed above). The MDT populations in the East and West Cottonwood Analytical Units are considerably below the 3,000 figure. Additionally, population growth rates are negative in the Analytical Units and in the UVRRU, which indicates that we are trending away from recovery per the 2011 Recovery Plan. USFWS 2011 (“[I]f all areas demonstrate a positive population trend regardless of actual population counts, the interpretation will be that recovery is occurring.”)

ii. The DEIS does not provide necessary documents for decision making

Issue

2. The DEIS does not provide necessary documents for decision making.

The DEIS documentation released in June on eplanning was deficient. First, the eplanning site did not provide the Draft Biological Report (USFWS 2020). We requested it in early August and received it August 23, 2020. This important document should have been available for public review at the start of the comment process for careful scrutiny and review. It contains important information necessary for informed analysis and decision-making.

The DEIS references, but fails to share, tools -- include the resource equivalency analysis and spatial decision support model -- that are critical to understanding NCH impacts to the threatened Mojave desert tortoise. DEIS at 3-57 (“The USFWS is exploring various tools to assist in evaluating the impacts of the BLM decisions and the proposed conservation measures to replace the resources potentially impacted by the ROW and RMP revisions.”) BLM has not responded to a request for these tools made on 8-20-20. The DEIS also states that the agencies have not yet decided which of these (or other) models they might use to aid their calculations of MDT harm and gain in evaluating the proposed actions. Absent this information it is not possible for the public to comment on the potential mechanisms for calculating habitat modification and take or to understand the impacts of the proposed actions.

Finally, the DEIS cites repetitively to USFWS 2019 which is a workshop held in 2019. No written materials associated with that workshop are available in the DEIS materials or on e-planning.

iii. The DEIS' application of the USGS (2009) model does not acknowledge and address shortcomings

Issue

3. The DEIS' application of the USGS (2009) model does not acknowledge and address shortcomings

The DEIS relies heavily on a 2009 US Geological Survey (USGS) model developed by Nussear et al. to identify potential suitable habitat. Correctly understanding and applying the model is important because the DEIS is using the model to compare the harms and gains to MDT from the proposed NCH, Zone 6 mitigation and HCP. The DEIS misapplies the model in a number of ways.

First, the DEIS states that the purpose of the Nussear et al. (2019) model was to “estimate the distribution of Mojave desert tortoise across its entire range” and “was used to estimate the current extent of Mojave desert tortoise habitat within the UVRU.” DEIS at 3-49.³⁴ This is not correct. In fact, as Nussear et al. 2019 explain, the model provides an output of the statistical probability of MDT habitat potential that can be used to map potential areas of MDT habitat. The model provides outputs at a coarse scale – i.e., at a spatial resolution of one square kilometer. The model identifies potential habitat by looking at inherent land characteristics (e.g., soil type, slope) and does not account for land condition or anthropogenic activities. Hence, as Nussear et al. 2019 strongly point out (e.g., see pages 1 and 15), the maps generated by the model should not be interpreted as suitable habitat.

While the DEIS at 3-49 acknowledges that the model offers information on the probability of potential habitat, the DEIS then goes forth to use the model to calculate MDT suitable habitat. E.g., see DEIS at 3-49 (“Potential Mojave desert tortoise habitat is modeled habitat that is not associated with a documented Mojave desert tortoise occurrence, *but is modeled as suitable* for use by Mojave desert tortoise.”) Emphasis added. The agencies must be sure not to inappropriately interpret the model as identifying suitable habitat and cannot use the output to compare acres of suitable habitat gained and lost by the proposed actions.

Second, the DEIS modifies the model. One alteration is to remove areas with less than 50% probability of habitat potential. DEIS at 3-49. According to Nussear et al. (2009) at 12, a probability of 50% indicates the equivalent of a random guess as to whether an area may or may not be potential tortoise habitat and 100% indicates perfect model performance. Hence, the DEIS is regarding areas that have a random chance of being MDT potential habitat as well as those that have a 100% chance as all being suitable habitat. The DEIS does not offer a scientific basis for using such a broad range or for not trying to grade the habitat by its potentiality in the mapped outputs. Another alteration was to remove patches smaller than one square kilometer when isolated by open water or hardscape. DEIS at 3-49. We presume that this is based on the home

³⁴ Also see, e.g., DEIS at 3-46 (provides suitable habitat acreages for each analytical unit) and 3-55 (“Analysis of project-related direct effects to Mojave desert tortoise was based on calculating the number of acres of *lost suitable habitat* within the proposed ROW within the Reserve and the number of Mojave desert tortoises to be relocated from the proposed ROW, with calculations based on the 2019 estimate of abundance of Mojave desert tortoise in the Reserve.”) And USFWS 2020 at 14 (“We calculated Red Cliffs Desert Reserve *suitable habitat* using the 2009 habitat model up to 4,500 ft to account for desert tortoises that may be above the 4,000-foot elevation (USFWS 2019a).”) Table 2 at 15, Table 3 at 21, and Table 4 at 24. Emphasis added.

range size of an adult tortoise. Again, this number seems arbitrary and without scientific basis given that one adult tortoise does not result in viable populations.

Third, in addition to the fact that the Nussear et al. 2009 model does not account for anthropogenic activities and land conditions, it also does not account for potential habitat patch size or configuration or patch connectivity. It is a well-accepted tenet of conservation biology that larger intact habitat patches, smaller edge/core ratios, and more connectivity among patches improves habitat potential (Forman and Godron 1986; August et al. 2002; Groves et al. 2002; Fayrig 1997). The model does not account for these factors. This is another reason why the agencies cannot regard the map output as a proxy for suitable habitat and must regard it as a display of potential habitat based on inherent land characteristics.

iv. The DEIS relies on Nussear et al. 2009 even though more sophisticated modeling tools exist

Issue

4. The DEIS relies on Nussear et al. 2009 even though more sophisticated modeling tools exist.

Defenders of Wildlife and NatureServe teamed up in 2019 to provide a more sophisticated MDT potential habitat mode (Feinberg et al. 2019). This model was submitted in the scoping letter submitted by the Red Cliffs Conservation Coalition (see page 61 and Appendix F). The Feinberg et al. (2019) model updates and refines Nussear et al. 2009 in the following ways:

- The model output is 30-meter resolution, in contrast to the 1-kilometer resolution of the USGS model. This is over 1,000 times finer resolution, with each mapped pixel representing about 0.2 acres (in contrast to each pixel in the USGS model representing 247 acres).
- The model incorporates imagery from the Landsat 8 satellite (launched in 2013).
- The model incorporates higher spatial and temporal resolution climate data.
- The model does not include occurrence data for the Sonoran desert tortoise (*Gopherus morafkai*). The USGS model had included data for this species as it was developed before the Mojave and Sonoran desert tortoises were formally recognized as distinct species.
- The model includes more recent occurrence data, including from NatureServe's proprietary observation records.

Feinberg et al. (2019) at 2.

The Feinberg et al. (2019) model, in contrast to Nussear et al. (2009) that classified a large area as a single value (color) of potential habitat, further refines that area into a range of potential habitat quality, allowing for quantification of potential habitat quality. In addition, Feinberg et al. (2019) also expanded the 2009 model scope to include a component to predict potential connectivity. This connectivity model can be used to identify likely areas of high and low connectivity, as well as “pinch” points, where movement corridors are narrowed by landscape features that do not support tortoise movement, such as high elevation mountains or interstate highways. Feinberg et al. (2019) at 13.

The Feinberg et al. (2019) connectivity model differs significantly from a widely used USFWS desert tortoise corridor model that was released in 2013 by Averill-Murray et al. The 2013 model

was developed specifically to find least-cost corridors (i.e., regions of low resistance for the species under consideration) between a set of pre-assigned core habitat areas. While it is an important tool for identifying key habitat linkages, it does not assess connectivity across the entire Mojave ecoregion, independent of habitat cores. Feinberg et al. (2019) model produces omnidirectional outputs, meaning it does not identify corridors between pre-designated sites, but instead predicts potential connectivity across the entire landscape, without regard to locations of core populations. This omnidirectional approach allows the identification of locally important connectivity areas that might otherwise go undetected and provides a more complete representation of potential tortoise movement than the 2013 model. Feinberg et al. (2019) at 13. This connectivity model was recently published by Gray et al. (2019).

Finally, Feinberg et al. (2019) also offers a human footprint component. While the report only applies this model to Southern Nevada MDT habitat, the report nonetheless offers the methodology which attempts to account for the presence of some anthropogenic features including unpaved roads and transmission lines. This information allows for a better evaluation of whether areas of modeled high-quality potential habitat have been degraded by these two types of features. Feinberg et al. (2019) at 2 and 11.

Note that Feinberg et al. (2019) and Gray et al. (2019) model potential habitat and, similar to Nussear et al. (2009) are based on inherent characteristics of the land and not on current condition or anthropogenic activities.

Defenders of Wildlife continues to refine its modeling. Most recently, Defenders has created a web application that utilizes the potential habitat model in Feinberg et al. (2019) and Gray et al. (2019) to allow users to quantify habitat losses and gains envisioned by conservation “deals” similar to the one presented in this DEIS. The application, which can be accessed at <https://defendersofwildlife.users.earthengine.app/view/tortoise2>, permits the user to weigh the relative importance of core habitat and connectivity habitat, depending on local area conditions and expert knowledge. We have used the Defenders’ web application to offer quantifications related to the DEIS’ proposal to build a NCH (Alternative 3) and designate Zone 6. A description of the app and methodology is attached as [Appendix 2. Web Application Methodology, Defenders of Wildlife, September 2020](#).

These models should be considered best available science and as such the agencies in the Final EIS must utilize them.

v. The DEIS fails to take a hard look at the habitat condition in Zone 6

Issue

5. The DEIS fails to take a hard look at the habitat condition in Zone 6.

- a. The DEIS is missing fundamental information about the condition of the land and habitat in Zone 6

The DEIS is missing fundamental information and analysis related to the condition of the land and habitat in Zone 6. This information is important to evaluate the mitigation value of Zone 6.

The DEIS' failure to disclose and analyze the information is a violation of NEPA³⁵. The DEIS is missing the following:

- The DEIS discloses the land cover types in Zone 6 (DEIS at 3-7) but does not disclose, discuss or analyze the condition of the vegetation. For instance, is it significantly grazed? Is the vegetation damaged by excessive off-route recreation?
- The DEIS does not disclose the condition of the range based on, for instance, required rangeland evaluations and monitoring pursuant to 43 CFR part 4100.
- The DEIS indicates that the majority of Zone 6 has been open to mineral location and development, but fails to disclose the number of acres that are committed in some way to possible future mineral development as well as the number of acres that have been impacted by past mineral development activities and may be in need of restoration. Mineral development activities cause long-term adverse impacts on MDT habitat, and restoration and revegetation efforts are slow. Minerals in this context include those that are fluid, saleable, leasable, and locatable.
- The DEIS fails to consider the adverse impacts of high levels of recreation in Zone 6 in relation to the tortoise's life cycle. Zone 6 receives a high number of visits in spring and early summer when tortoises are emerging from brumation and females are nesting. Some of the competitive mountain bike races, like the True Grit Mountain Bike Race, are held in spring. Since the SGFO RMP Amendment B would allow competitive sporting events to continue, consideration should be given to moving these events to the tortoise inactive season.
- The DEIS fails to disclose and analyze the impacts from competitive events that will be allowed to continue (and more possibly added) in Zone 6. The DEIS fails to describe the events (e.g., name, dates of occurrence, type, recurrence, permit area).
- The DEIS fails to describe and analyze the environmental impacts to Zone 6 that will continue to occur until the SITLA lands are acquired and assigned a conservation management status.
- The DEIS fails to describe and analyze how the high level of recreation in Zone 6, which is slated to continue albeit on a reduced system of designated routes, will affect the MDT in the short and long term.
- The DEIS fails to describe and analyze how the BLM will assure that illegal use of Zone 6 lands, including dumping, long-term camping, and uncontrolled target shooting, will not continue and possibly expand. The DEIS mentions additional law enforcement and education activities (DEIS at 2-17, 2-19, and 3-64) but in no way shows that the additional capacity will be sufficient or effective and curbing illegal uses. The BLM has a long history of allowing unlawful uses to occur resulting in land damage both generally and specific to Zone 6.

³⁵ The Council of Environmental Quality recently revised the regulations implementing NEPA. 85 Fed. Reg. 43,304 (July 16, 2020). The revised regulations go into effect September 14, 2020. Numerous entities, including a subset of the undersigned, have filed lawsuits challenging the regulations. It is our expectation that this EIS process that started under the previous NEPA regulations will continue to be implemented pursuant to the previous regulations. This is only prudent considering the high likelihood that the revised rules will be enjoined or reversed.

- The DEIS fails to disclose and analyze the poor connectivity/fragmentation conditions in Zone 6. For instance, the DEIS fails to consider impacts caused by the future Western Corridor which would prevent MDT movement between the UVRRU and Northeastern Mojave Recovery Unit. It also fails to consider habitat fragmentation impacts caused by the future extensions of Navajo Dr. and Green Valley Dr. that travel from east to west across Zone 6. Finally, it fails to analyze the high level of habitat fragmentation of the 150-mile network of routes in Zone 6 and the even larger network of unauthorized routes.
- The DEIS fails to consider the history of casual translocations to Zone 6. Washington County 2017 at 15. As Bloomington, Sunbrook and other neighborhoods on the western edge of St. George were built out, tortoises cleared from development were resettled in Zone 6. This pattern of resettlement could lead to inflated population estimates with high observations of MDT in transects conducted in the eastern portions of Zone 6 where tortoises were historically resettled. Population density estimates relying on data like this may not be reflective of the true number of MDT living in Zone 6.
- The DEIS fails to consider that reducing available OHV routes in Zone 6 may likely lead to increased OHV activity and related fragmentation in the larger Green Valley AU including in Red Bluffs and Virgin River ACEC.

We also note that DEIS at 3-46 list the habitat quality in the Green Valley AU as Good while the USFWS 2002a at 63 lists it as Moderate. The DEIS should disclose and evaluate whether the rating for the entire Green Valley AU would hold if we just looked at Zone 6, a small subset of the AU, and describe using Table 10 in the USFWS' Draft Biological Report how it reached its conclusion.

b. The DEIS does not disclose why Zone 6 is the best option in the UVRRU for additional protection

The DEIS at 2-19, 2-20 and 3-64 states that Zone 6 has been identified as mitigation for the NCH. However, nowhere does the DEIS explain why Zone 6 was chosen or what determined the boundaries of Zone 6. Map 3.5-4a (DEIS Volume 3 at B-51) shows other areas in the vicinity with occupied or potential habitat yet there is no explanation as to why these other areas were not considered for enhanced protection.

The missing information listed in this subsection is fundamental to evaluating the suitable habitat and habitat quality in Zone 6 and to evaluating appropriate future management of these lands (regardless if the NCH is constructed).

vi. The DEIS fails to take a hard look at the impacts to MDT critical habitat

Issue

6. The DEIS fails to take a hard look at the impacts to MDT critical habitat
 - a. The DEIS fails to disclose and accurately analyze the full amount of adverse modification of critical habitat for the threatened MDT
 - b. The agencies have a duty to take a hard look at the consequences of their proposed actions under NEPA. In calculating the impact of various NCH alignments on MDT habitat, including designated critical habitat, the DEIS

inappropriately uses a road impact zone based on the size of an adult male MDT's annual home range (508 meters) when studies show that roadways depress tortoise populations from 2,150 meters to 4.6 kilometers from the road. DEIS at 3-35.

In discussing the impacts of paved 2-4 lane highway roads on MDTs, the DEIS at 3-35 offers the following: "How much of an impact a roadway has on an individual tortoise or population is a function of the size and frequency of use of the road. Von Seckendorff Hoff and Marlow (2002) identified a direct correlation between higher traffic levels and greater road avoidance distances in Nevada. They reported that the magnitude of the road impact zone for roads without exclusion fencing varied from 2,150 to 4,250 meters for 2-lane to 4-lane highways, and 1,090 to 1,389 meters for graded and maintained electrical-transmission-line access roads. The zone of impact increased significantly with increasing traffic levels, and populations were found to be depressed from less than 175 meters to up to 4.6 kilometers from a roadway (Von Seckendorff Hoff and Marlow 2002)."

However, in contradiction to these findings, the DEIS then goes on to calculate the affected acres of MDT habitat from the proposed NCH alignments using a width of 508 m. See, for instance, Table 3.5-10 at 3-59 where the DEIS uses a road effect zone of 508 meters to calculate the acres indirectly affected by NCH road alignments. The DEIS at 3-56 states: "The analysis area for indirect effects from the Northern Corridor alternatives in the Reserve that require construction of a new roadway includes suitable Mojave desert tortoise habitat within 508 meters on either side of the ROW. The 508-meter buffer is based on the annual home range size of an adult male Mojave desert tortoise of 200 acres (Franks et al. 2011, USFWS 2011a). The annual home range was applied because of the short-term indirect effects of noise, vibration, and other construction-related disturbances." The rationale for the 508-meter buffer makes no sense since the effects of roads are well documented to continue beyond the short-term construction period (Von Seckendorff Hoff and Marlow 2002; DEIS at 3-35 to 3-37).

This error significantly underestimates the impact to MDT critical habitat from the proposed NCH road alignments and must be corrected in the FEIS.

- c. The DEIS does not evaluate the cumulative impact to MDT critical habitat making it impossible for the agencies to determine the significance of the proposed actions on critical habitat

The DEIS does not evaluate the impact of the proposed NCH road alignments on critical habitat in violation of NEPA. This analysis is crucial to an accurate evaluation of the various alternatives. It is also integral to the Section 7 evaluation required by the Endangered Species Act (ESA).

The five MDT Recovery Units were all deemed necessary for the MDT's survival. USFWS 2011 and USFWS 2020 at 14 ("We consider these five recovery units necessary to conserve the genetic, behavioral, morphological, and ecological diversity necessary for long-term sustainability of the entire listed species (Awise 2004, Mace and Purvis 2008, USFWS 2011)"). The UVRRU is the smallest of the five Recovery Units. The UVRRU is divided into 11 Analytical Units (AU) on the basis of MDT occupation, suitable habitat and connectivity potential to other AUs. AUs are "biologically meaningful sub-populations." USFWS 2020 at 16. The USFWS estimates that more than 50% of the MDTs in the UVRRU are within Red Cliffs

NCA and 75% of those are within the East and West Cottonwood AUs. USFWS 2020 at 14 and 16. The East and West Cottonwood AUs are estimated to contain close to 2,000 adult MDTs, a number considerably below the minimum population necessary for a single AU to prevent genetic deterioration over the next 25 to 50 years. USFWS 2020 at 24 and 95³⁶, DEIS at 3-35 and USFWS 1994.³⁷ At the Recovery Unit scale, the UVRU is currently estimated to have 4,500 adult tortoises and is declining at a rate of about 3.2% annually. USFWS 2020 at 32. Seventy-eight percent (42,598 acres) of the initial habitat designated as critical remains suitable. *Id.* at 14. This figure may be low (and the population over-estimated) given the 2020 fires in and around Zone 3 (see [3.22 Fire and Fuels Management](#)).

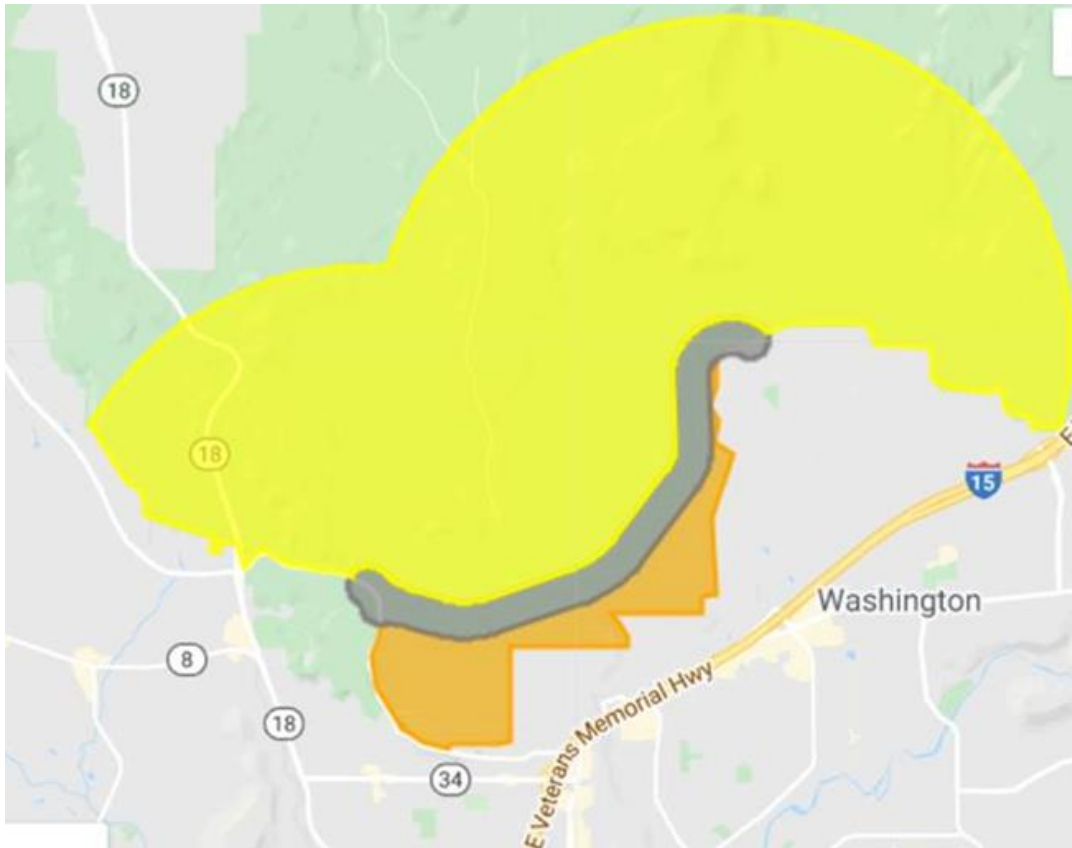
While the DEIS does evaluate impacts to Zone 3 habitat (which is critical habitat), it does not evaluate how the proposed NCH alignments will affect critical habitat for the MDT as a whole. The proposed NCH, regardless of alignment, would result in the destruction and adverse modification of critical habitat within the East and West Cottonwood AUs that house close to 40% of MDT in the UVRU as well possibly “the most important high-density cluster of desert tortoises in the recovery unit” (DEIS at 3-63) and further reduce the population within these two analytical units. Given that the East and West Cottonwood AUs currently have populations below the minimum population deemed necessary for a single AU to prevent genetic deterioration over the next 25 to 50 years, further diminishing the habitat and dependent MDT population may in fact deliver a mortal blow to the UVRU unit, and thus (because the UVRU is necessary for the long term survival of the species) to the broader MDT range.

By our calculation, Alignment 3, the agencies’ preferred alternative, would destroy about 870 acres of critical habitat within the 500 foot wide highway corridor (gray in the map below) and substantially diminish 1,085 acres of critical habitat that would be fragmented from the rest of the habitat in the Red Cliffs NCA and functionally disabled (orange), and substantially diminish the quality in at least another 12,248 acres of critical habitat north of the NCH in the road effect zone (yellow).³⁸ Given that 42,598 acres of critical habitat remains suitable within the UVRU, the NCH will adversely impact over one third (36%) of the remaining suitable critical habitat.

³⁶ USFWS 2020 shows that the East and West Cottonwood AUs have an estimated MDT population of 1,749. USFWS 2020 at 95 states “The Red Cliffs Desert Reserve is estimated to support 2,401 adult desert tortoises and 54 percent of the recovery unit population (Table 4). West and East Cottonwood AUs support 73 percent of the Red Cliffs Desert Reserve population (1,749) and these core AUs support 42 percent of the UVR recovery unit’s conservation value (Table 15 and Table 16).”

³⁷ *See, supra*. The 1994 Desert Tortoise Recovery Plan which informed the 2011 Recovery Plan suggests that “a minimally viable population of desert tortoises from genetic considerations should probably contain at least 2,000 to 5,000 adult animals.” USFWS 1994 at 32. This figure only takes into account genetic considerations and does not account for other demographic factors that impact viability. *Id.*

³⁸ For this calculation, we assumed a 4.6 km road effect zone per Von Seckendorff Hoff and Marlow 2002.



What is the effect of losing this critical habitat to the ecological function of the AUs, the UVRU, and the range? What is the effect to MDT conservation, viability and recovery? The DEIS fails to offer this very important context without which the agencies cannot make a reasoned decision.

- d. The DEIS fails to take a hard look at how each alternative will or will not achieve the requirements of other environmental laws and policies

As part of the “hard look” duty an agency must evaluate the effects of each alternative in a way that will inform the public and the agency’s understanding of whether and how the proposed action complies with applicable substantive statutes. According to the CEQ regulations, an EIS “shall state how alternatives considered in it and decisions based on it will or will not achieve the requirements of ... other environmental laws and policies.” 40 C.F.R. § 1502.2(d). *Oregon Nat. Desert Ass’n v. Bureau of Land Mgmt.*, 625 F.3d 1092, 1108 (9th Cir. 2010) “[B]ecause NEPA places upon an agency the obligation to consider every significant aspect of the environmental impact of a proposed action ... the considerations made relevant by the substantive statute driving the proposed action must be addressed in NEPA analysis.” *Also see* *Montana Wilderness Ass’n v. McAllister*, 666 F.3d 549, 555, 558 (9th Cir. 2011) (the Forest Service violated NEPA by failing to explain how the agency’s travel management plan for the Gallatin National Forest would comply with the Wilderness Study Act) *and* *League of Wilderness Defenders/Blue Mountains Diversity Project v. U.S. Forest Serv.*, 585 F. App’x 613, 614 (9th Cir. 2014) (“[b]ecause PACFISH/INFISH provides the approved strategy for managing riparian habitats and the criteria for assessing whether such habitats are adequately maintained, the Forest Service was required, under NEPA, to include an explicit PACFISH/INFISH analysis in its EIS.”).

The DEIS fails to evaluate how the alternatives comply or do not comply with relevant guiding statutes. These include Public Law 111-11 and the Endangered Species Act (see the ESA section [Legal Issues](#)).

vii. The DEIS fails to take a hard look at specific issues related to both Zone 6 and Zone 3

Issue

7. The DEIS fails to take a hard look at specific issues related to both Zone 6 and Zone 3.

The agencies have a duty to take a hard look at the consequences of their proposed actions under NEPA. The DEIS fails to take a hard look at the effects of the alternatives on Zone 3 and Zone 6 lands and resources relative to the following issues.

- *Predation.* The DEIS fails to evaluate the effect building the NCH will have on predator presence and predation on the MDT. The DEIS generally states that roads result in increased habitat degradation and predation, the latter because roads increase roadkill and litter which attract predators like ravens and coyotes. DEIS at 3-36. However, the DEIS fails to calculate or estimate MDT loss from increased predation resulting from the NCH. In addition, if predation increases, the agencies may increase predator control which has its own array of impacts to ecological integrity and community safety. These impacts are not discussed or disclosed.
- *Disease.* While the DEIS raises the specter of disease as an increasing threat with increased urbanization, it does not in any way attempt to quantify this effect given further fragmentation in Zone 3 and increased translocations. The DEIS also fails to consider an increase in upper respiratory tract disease in MDT in Zone 6. This MDT population lives adjacent to fast-growing communities on the western edge of St. George and sees a great deal of human interaction.
- *Translocation.* The DEIS fails to disclose and consider the following information related to translocation:
 - The potential translocation of tortoises impacted by the NCH may not be successful given studies to date that show translocation leads to higher stress and lower reproduction (Berry 2016). DEIS at 3-43. The DEIS makes no effort to estimate the likelihood of translocation success of MDT into Zone 6.
 - The likelihood of adverse impacts to translocated MDT in Zone 4 that will be caused by widening and paving the Babylon Road (Project 91 in the Dixie MPO's Draft 2019-2050 Regional Transportation Plan³⁹) through Zone 4.
 - The fact that MDT that are translocated a short distance to remove them from the NCH construction zone would be subject to stresses induced by translocation and subsequently stresses induced by the presence of the road (within the road effect zone), and the effects of the combined stressors.

³⁹ <https://dixiempo.wordpress.com/2019-2050-regional-transportation-plan/>

Further, the DEIS does not explain or include information on whether MDT located south of the NCH will be translocated to another site. No details are provided on a translocation plan for tortoises impacted by the NCH.

Finally, calculations of the number of MDT that would be relocated from the BLM-preferred NCH ROW based on 2017 density estimates are inadequate because they are much lower than the number of tortoises actually observed in the 2018 pre-survey of the NCH ROW. Surveyors observed more than 50 tortoises in the ROW and 300-foot buffer area discussed previously in this section). Since this analysis is based on a 500-foot ROW area, the number of tortoises that would be relocated should be expected to be well over 50 individuals.

- *Fragmentation and climate change.* The DEIS fails to fully analyze habitat fragmentation impacts caused by the NCH because it does not address how the highway will act as a barrier for MDT south of the proposed highway attempting to travel to higher elevations in Red Cliffs located north of the proposed highway. The DEIS acknowledges that with climate change, MDT may need to access higher elevation habitats: “Climate change may potentially affect future distribution and habitat use by Mojave desert tortoises. Assuming a general increase in temperatures, vegetation communities may shift to higher elevation as may tortoise populations. Most documented Mojave desert tortoises in the Reserve are found below 4,000 feet elevation.” DEIS at 3-56.⁴⁰ Perplexedly, the DEIS then says that “[t]he approximately 2,360 acres of potential habitat on the Reserve between 4,000- and 5,000-feet elevation would not be restricted by any project-related actions.” *Id.* Wouldn’t the MDT south of the highway be unable to access higher elevation habitats? Given that MDT have almost never been documented using culverts to pass through highway corridors, the DEIS should not rely on culverts to enable connectivity. DEIS at 3-36.
- *Increased development pressure.* The DEIS fails to discuss how the BLM-preferred alternative for the NCH is routed through private inholdings (see map excerpted from DEIS below where the purple line depicts Alt. 3 alignment for the NCH and white depicts private and municipal lands). The highway would increase access to these inholdings and could drastically increase development pressure. This is concerning given that the draft HCP explicitly makes the following two statements: “[A]ll Reserve acquisitions will be limited to those transactions involving willing participants. No entity will be required or compelled to sell, donate, transfer, purchase, or receive lands or interest in lands for the purpose of this Amended HCP.” and “It is possible that a private landowner or SITLA may seek alternative means of ESA compliance, other than through this Amended HCP, and ultimately develop lands within the Reserve.” Draft Amended HCP at vi and 140, respectively.

⁴⁰ Also see: USFWS 202a at 14 (“Desert tortoises within the recovery unit are not known to occur at elevations exceeding 4,500 ft, but these higher elevation habitats could become occupied under projected climate change scenarios and will thus be evaluated under future conditions (USFWS 2019b).”



- Increased fragmentation effect of existing roads in Zone 3.* Importantly, the DEIS says that the NCH will include “a new at-grade intersection with traffic signals at Cottonwood Springs Road (also known as Old Dump Road or Turkey Farm Road); this connection would fit within the 500-foot ROW.” DEIS at 2-5. Placing an intersection at Cottonwood Springs Road would allow vehicle access to busy shopping and business centers in St. George and Washington City. It’s important to note that Cottonwood Springs Road is very steep, narrow and windy below its intersection with the proposed NCH. To have this section of the road function as a major artery approximately 1 mile south of the NCH would require straightening and possible widening. In addition, connecting an improved Cottonwood Springs Road with the Northern corridor would substantially increase the vehicle miles traveled and correspondingly the road effect zone for MDT. The impacts of this project to MDT in Zones 2 and 3 would be substantial and must be evaluated.
- Inadequate comparison of Zone 6 and 3 because the DEIS only looks at acres.* The analysis of project-related direct effects to Mojave desert tortoise was based on calculating the number of acres of lost suitable habitat within the proposed ROW within the Reserve and the number of Mojave desert tortoises to be relocated from the proposed ROW and the acres of suitable habitat and MDTs within Zone 6. DEIS at 3-55. As discussed at length in a previous section, it is inadequate to look just at acres and MDT numbers. There are other important factors to consider including, but not limited to, patch size and configuration and connectivity between patches at multiple scales (Forman and Godron 1986; August et al. 2002; Groves et al. 2002; Fayrig 1997). In addition, looking at suitable acres using Nussear et al. (2009) is inappropriate since this model outputs potential habitat and not suitable habitat (i.e., does not consider land condition, anthropogenic activities, and connective value that affect suitability).
- The impacts to the National Landscape Conservation System.* The DEIS fails to disclose or analyze the impacts to the integrity of the National Landscape Conservation System. Violating the purposes of Public Law 111-11 sets an adverse precedent thereby threatening the integrity of the System today and into the future.
- Uncertainty of restoration effectiveness.* The DEIS and Biological Report readily admit that Zone 6 has been used intensively and is consequently degraded.

While most of the Green Valley AU has relatively low levels of impacts, the proposed zone 6 area is a popular recreation area, with recent estimates of 85,000 visitors per year

documented on the BLM lands (compared with 40,000 visitors across much larger areas in West and East Cottonwood AUs). Trail braiding is extensive on the approximately 3,400 acres of SITLA lands in this area. Non-motorized recreation activities bring with them threats associated with increased human presence, such as loss of habitat from development of recreational facilities, handling and disturbance of desert tortoises, increased road kill and deliberate maiming or killing of tortoises, increased raven predation, degradation of vegetation, and soil compaction (USFWS 1994a, Averill-Murray 2002). In general, tortoises in areas with heavy visitor use are vulnerable to collecting and vandalism and road kills (e.g., Berry et al. 2008, Hughson and Darby 2013). Human presence is often attributed as a primary factor in desert tortoise declines (Berry and Murphy 2019). The impacts of human access on the demographics in the east portion of this AU also likely includes attracting ravens and off-leash dogs.

USFWS 2020 at 69-70. However, the DEIS makes no attempt to disclose or analyze the effectiveness of restoration treatments over time in arid landscapes and if MDT habitat elements and integrity could effectively be restored. In regard to this first point, restoration in arid landscapes is notoriously difficult and probably will only get harder with the influence of climate change.⁴¹ Jones (2019) recently did a comprehensive literature review of restoration treatments in arid lands and found them mainly to be ineffective or deleterious. In regard to the second point, effective restoration also depends on the willingness of people to comply with new behavioral requirements and restrictions. Especially when it comes to modifying recreational habits, this too is notoriously difficult. Hence, the BLM must disclose and analyze the likelihood that restoration of impacted landscapes will substantially improve the condition of MDT habitat in the short and long term.

viii. The BLM must address changed circumstances triggered by recent fires

Issue

8. The BLM must address changed circumstances triggered by recent fires.

The DEIS does not address the impacts of the recent Turkey Farm Road and Cottonwood Trail Fires which have burned 14,000 acres (over 20%) of MDT critical habitat in Red Cliffs. These fires burned almost entirely within critical habitat within Zone 3 which is home to an important population of MDT in the UVRU and also the BLM-preferred alternative for the NCH. Ann McLuckie, a wildlife biologist with the Division of Wildlife Resources, was quoted in the St. George Spectrum as saying that she expects this blaze to have "devastating impacts on the tortoise populations."⁴² The baseline conditions captured in the DEIS are no longer accurate. The number of MDT that survived these fires and the number of viable critical habitat acres that remain are both unknown. The BLM must issue a supplemental DEIS to address the impacts of these fires.

ix. The cumulative effects analysis is deficient in violation of NEPA

⁴¹ e.g., see https://www.usgs.gov/centers/sbsc/science/restoration-and-ecosystem-recovery-dynamics-arid-and-semiarid-landscapes?qt-science_center_objects=0#qt-science_center_objects

⁴² See <https://www.thespectrum.com/story/news/2020/09/03/tortoise-and-fire-surveys-search-life-red-cliffs-nca/5684824002/>. Attached as a cited reference.

Issue

9. The cumulative effects analysis is deficient in violation of NEPA.

The cumulative effects analysis is a critical part of the DEIS, especially when considering the impacts of the proposed actions on imperiled species. Species are particularly vulnerable to myopic analyses and can fall victim to “death by one thousand cuts.” Each project alone may be judged to have incremental negative effects but viewed in aggregate the impacts from multiple projects might be devastating.

The CEQ regulations define “cumulative impacts” as those which, “when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same [EIS].” 40 C.F.R. § 1508.25(a)(2). The regulations add that a cumulative impact:

is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

40 C.F.R. § 1508.7. As noted, an adequate cumulative effects analysis requires some “quantified or detailed” information. *Klamath-Siskiyou Wildlands Ctr.*, 387 F.3d at 993. *Cf. Sierra Club v. Bosworth*, 510 F.3d 1016, 1028-30 (9th Cir. 2007) (requiring consideration of cumulative impacts for activities covered by categorical exclusion for fuel reduction activities); *Soda Mountain Wilderness Council v. Norton*, 424 F. Supp. 2d 1241, 1266-67 (E.D. Cal. 2006) (finding one-page cumulative impact analysis inadequate). Generalized, conclusory statements about the insignificance of cumulative effects or how they will be effectively mitigated will not suffice. *Te-Moak Tribe of Western Shoshone of Nevada v. U.S. Dept. of Interior*, 608 F.3d 592, 606 (9th Cir. 2010) (failure to include quantified or detailed information on cumulative effects of past, present, and reasonably foreseeable mining activities). *See also Great Basin Mine Watch v. Hankins*, 456 F.3d 955, 971-74 (9th Cir. 2006) (holding cumulative impact analysis for gold mining operations inadequate because it consisted of “vague and conclusory statements, without any supporting data” and lacked any explanation for why other mining projects were not explicitly discussed).

Agencies not only have an obligation to discuss the cumulative impacts of related projects; they also have an “affirmative duty to locate, describe, and consider other projects that could have cumulative impacts when combined with the project under consideration.” *Edwardsen v. United States Dep’t of the Interior*, 268 F.3d 781, 786 (9th Cir. 2001), citing 40 C.F.R. § 1508.25(c)(3); *Kettle Range Conservation Group v. United States Forest Serv.*, 148 F. Supp. 2d 1107, 1129 (E.D. Wash. 2001). In assessing cumulative impacts, “the [EIS] must give a sufficiently detailed catalogue of past, present, and future projects, and provide adequate analysis about how these projects, and differences between the projects, are thought to have impacted the environment.” *Lands Council v. Powell*, 395 F.3d 1019, 1028 (9th Cir. 2005). *See also Western Watersheds Project v. Kraayenbrink*, 620 F.3d 1187, 1207 (9th Cir. 2010) (failure to address combined effects of various reductions in opportunities for public participation in process of issuing grazing allotments); *League of Wilderness Defenders-Blue Mountains Biodiversity Project v. United States Forest Serv.*, 549 F.3d 1211, 1218–19 (9th Cir. 2008) (identification of one past timber sale and general statement that other timber sale had occurred insufficient); *Oregon*

Natural Res. Council Fund v. Goodman, 505 F.3d 884, 892-93 (9th Cir. 2007); *Oregon Natural Res. Council Fund v. Brong*, 492 F.3d 1120, 1133 (9th Cir. 2007).

- a. The DEIS inappropriately relies on current conditions to express effects of past and present actions.

The agencies erred when they relied on the current condition to express effects of past and present actions. DEIS at 3-178. Agencies can use this approach when past actions do not have effects that continue into the future. However, in this case, past projects (e.g., roads, urbanization) do have continuing effects (e.g., see discussion on road effect zones in this document). This is especially true in the case of the MDT where lifespans are long, time to sexual maturity is long and connectivity requires multiple generations. The National Park Service explains this issue clearly in its [NPS NEPA Handbook Supplemental Guidance](#) (2015) at 5. (“Not all past actions need to be included in the cumulative impact analysis. Past actions should be included only when their impacts are ongoing.”)

- b. The DEIS fails to provide adequately detailed or quantified information in the cumulative effects analysis

The cumulative effects analysis for “Special Species Wildlife” including for the MDT is less than one page long. DEIS at 183-184. The section provides only general statements about trends and does not provide any detailed information related to the spatial and temporal nature of the effects. Nor does it provide any quantification of the effects or contextualize the incremental effect of the proposed actions. For instance, in evaluating the incremental effect of the NCH alignments, the DEIS offers the following generalized statements:

The incremental cumulative impact of roadway improvements associated with Alternatives 5 and 6 would be negligible, but the loss of habitat with Alternatives 2, 3, and 4 could lead to a moderate adverse contribution to the cumulative impacts on special status wildlife. Most of the projects described in Table 3.28-1 require ground-disturbing activities on previously undeveloped land. These projects would adversely impact special status wildlife, most notably the Mojave desert tortoise, and lead to habitat degradation and loss. Transportation and development projects listed in Table 3.28-1 would also contribute to fragmentation of special status wildlife habitat, and possibly injury or mortality of individuals....

The DEIS then goes on to hand-wave at the possible benefits offered by Zone 6:

The designation of proposed Zone 6 would result in the beneficial effect of protecting special status wildlife habitat, offsetting and reducing the overall effect of this and other projects, though to varying degrees, the implementation of the proposed project combined with the ground-disturbing projects listed in Table 3.28-1 would result in incremental cumulative impacts to special status wildlife within the analysis area.

And concludes:

The implementation of the Washington County Amended HCP, which includes expanded protection of proposed Zone 6, continues to help offset the long-term, cumulative impacts to Mojave desert tortoise from development in the county on non-Federal lands. The

combination of the Proposed Actions (HCP, Zone 6, and ROW) contribute to positive and adverse cumulative effects to Mojave desert tortoise.

We again can look to the National Park Service's NEPA guidance for direction on cumulative impact analyses. It counsels that while the DEIS does not need to analyze the impact of each individual past, present, or reasonably foreseeable future action that contributes to cumulative impacts in detail, it does need to make a good-faith effort to disclose enough information about these actions collectively to adequately characterize the impacts. "[The] cumulative impact analysis should discuss not only how much impact all the other actions (not connected to your proposal) are having on the same resource, but also the increment contributed by the direct and indirect impacts of the actions in your alternatives and the total impact that would result when the impacts of your action are added to the impacts of the other actions." [NPS NEPA Handbook Supplemental Guidance](#) (2015) at 6.

Beyond hand waving, the DEIS does not tell us (or give us any sense whatsoever) how much Zone 6 might offset the "long-term, cumulative impacts to Mojave desert tortoise" nor does it try to quantify or offer detail on how much habitat or how many tortoises have been and will be impacted by the many past, present and anticipated projects.⁴³ It's not adequate for the DEIS as is the case here to declare that all the reasonably foreseeable projects related to urban development will take a toll on habitat but not to describe the degree of anticipated impacts and resultant pressure on MDT individuals and population dynamics.

From this analysis there is no way to tell the incremental effect of this project. Given the importance of the Red Cliffs NCA and specifically the West and East Cottonwood AUs to the UVRRU and correspondingly the importance of the UVRRU to the MDT range, will this proposal have out-scaled and reverberating effects to the MDT critical habitat and populations range-wide? We cannot tell and nor can the deciding agencies with the information presented in this DEIS.

c. The DEIS leaves important projects out of the list of reasonably foreseeable projects.

The DEIS' list of projects does not include paving of the Babylon Road through Zone 4 where over 485 tortoises have been translocated since 1995; construction of the full Western Corridor (seven miles) and extensions of Navajo Dr. and Green Valley Dr. that would impact or fragment Zone 6; and possible improvements to Cottonwood Road. In addition, the cumulative effects analysis does not consider the impact of the 2020 fires that burned critical habitat (see [3.22 Fire and Fuels Management](#) and previous fires including the major fire in 2005).

C. The DEIS fails to show how the BLM-preferred SGFO RMP Amendments B or C could adequately increase protections for the MDT in Zone 6 and mitigate damage caused by the NCH

Zone 6 is being proposed as mitigation for the NCH in Zone 3. Zone 6 is heavily used and impacted. According to the USFWS:

⁴³ See section above that discusses the DEIS' failure to take a hard look at the impacts, including cumulative impacts, to critical habitat.

While most of the Green Valley AU has relatively low levels of impacts, the proposed zone 6 area is a popular recreation area, with recent estimates of 85,000 visitors per year documented on the BLM lands (compared with 40,000 visitors across much larger areas in West and East Cottonwood AUs). Trail braiding is extensive on the approximately 3,400 acres of SITLA lands in this area. Non-motorized recreation activities bring with them threats associated with increased human presence, such as loss of habitat from development of recreational facilities, handling and disturbance of desert tortoises, increased road kill and deliberate maiming or killing of tortoises, increased raven predation, degradation of vegetation, and soil compaction (USFWS 1994a, Averill-Murray 2002). In general, tortoises in areas with heavy visitor use are vulnerable to collecting and vandalism and road kills (e.g., Berry et al. 2008, Hughson and Darby 2013). Human presence is often attributed as a primary factor in desert tortoise declines (Berry and Murphy 2019). The impacts of human access on the demographics in the east portion of this AU also likely includes attracting ravens and off-leash dogs.

USFWS 2020 at 69-70.

The DEIS provides very little information on the condition of the land within Zone 6. How much of the soil is disturbed and how much retains its biological crust? How pervasive is the human presence within Zone 6? How much (and where) of Zone 6 has the essential habitat elements for MDT⁴⁴? The use in Zone 6 has and continues to be so intensive that Zone 6 may not have the capacity – especially as climate change effects are more manifest – to provide adequate habitat for MDT or provide adequate mitigation for the NCH. The DEIS has failed to show how Alternatives B and C to the SGFO RMP amendment would result in substantially improved habitat or protections for the MDT.

i. The DEIS without evidence asserts that proposed management changes in Zone 6 will mitigate habitat degradation

Issue

10. The DEIS without evidence asserts that proposed management changes in Zone 6 will mitigate habitat degradation.

As an overarching matter, about half of the lands in Zone 6 are administered by SITLA. Activities allowed on SITLA lands until acquisition occurs (if it does) by the BLM will continue to cause adverse effects to the MDT. The transfer of state and private lands to federal ownership is a very slow and arduous process (based on the history of land acquisitions in Red Cliffs). These effects are not fully analyzed or disclosed in the DEIS.

a. OHVs, roads, and rights-of-ways for roads

The DEIS provides extensive evidence that OHV use and roadways cause continuing harm to the MDT. See, e.g., DEIS at 3-35, 3-36, 3-37, 3-39, 3-90, 3-133, 3-141.⁴⁵

⁴⁴ As established in 59 Fed. Reg. 5820 (Feb. 8, 1994)

⁴⁵ “The placement of roads through Mojave desert tortoise habitat is well understood to cause disruptions by influencing movements, fragmenting habitats, and causing direct mortality during crossing attempts.”

Zone 6 currently has 150 miles of roads and trails (used by vehicles, dirt bikes and OHVs) that adversely impact the MDT and its critical habitat and at least an additional 42 miles of unauthorized routes. DEIS at 3-129. Under BLM's preferred Alternative 3 with SGFO Amendment Alternative B, OHV use would continue on 65 miles of routes in Zone 6.⁴⁶ DEIS at 3-141.

Relative to direct mortality of MDT (i.e. being run over by vehicles), the Draft HCP says that "the County will install Foot Traffic and Tortoise Fencing along the eastern parts of Reserve Zone 6 boundary and along the Navajo Road corridor to prevent motorized access outside the road ROW" (pg. 132) but makes no mention of fencing other open routes. Hence, MDT will continue to be run over and killed by vehicles on roads and tracks (and vehicles traveling illegally off established routes). In addition, while fencing would help to prevent road mortality,

"The 2011 Mojave Desert Tortoise Recovery Plan (USFW 2011) referred to the 1994 Recovery Plan identifying noise and vibration as having potentially significant effects on the desert tortoise's behavior, communication, and hearing (USFWS 1994)."

"Roads increase the spread of nonnative plant species (Brooks and Berry 2006, Brooks and Chambers 2011), which reduces Mojave desert tortoise forage quality and increases the risk of fire within Mojave desert tortoise habitat. Roads can be a direct source of fire ignition, increased litter, increased presence of predators, and increased toxicants into the environment (Forman and Sperling 2003). Herbicide use and weed control, as part of a long-term plan, may reduce the spread of invasive species during road construction, maintenance, and use; however, the presence of nonnative species, and nonnative grasses in particular, is pervasive."

"OHV use has been shown to negatively affect Mojave desert tortoises and their habitat in numerous ways, including direct mortality of tortoises, collapse of burrows, soil compaction, erosion, loss of vegetation, increased exposure to and spread of nonnative invasive plant species, and changes in hydrology (Bury and Luckenbach 2002, Keith et al. 2008)."

"Proposed Zone 6 is a popular recreation destination with over 100 miles of roads and trails, including unpaved roads, and motorized and non-motorized trails, many of which were user-created."

"Under Alternatives 2, 3, and 4, amendments to the BLM SGFO RMP would not directly alter the management of existing trails and routes within proposed Zone 6. Under either SGFO RMP Amendment Alternative B or Amendment Alternative C, no trails would be created, closed, or altered. The potential SGFO RMP Amendments and the Revised Washington County HCP contain an action that would reduce the total trail miles within proposed Zone 6; however, decommissioning of specific trails or routes on BLM-administered lands within proposed Zone 6 would be evaluated in a future NEPA analysis. The selection of one of these alternatives would result in the reduction of available routes to 65 miles of routes available in proposed Zone 6, over time, as the HCP is implemented."

"Until a Comprehensive Travel and Transportation Management Plan for the BLM St. George Field Office in Washington County is prepared and made available to the public, areas classified as "Limited to Designated Roads and Trails" will be managed as "Limited to Existing Roads and Trails" for OHV use."

"In proposed Zone 6... ROWs that have been designated in perpetuity would not be impacted, but reauthorization of the existing trail and access road ROWs would be subject to the regulations existing at the time of renewal, and additional conditions could be applied by the authorized officer at the time of renewal."

⁴⁶ Although, confusingly, the description of Alt. B at 2-25 says that "Through the BLM's implementation-level comprehensive travel and transportation plan, existing routes would be designated as open or closed and *overall mileage of open routes would be limited to approximately 4 miles of motorized and 35 miles of non-motorized roads and trails.*" Emphasis added. This inconsistency should be addressed in the FEIS. In addition, the description of Alternative B at 2-25 does not limit routes to 65 miles and in fact explicitly states that routes may be added to the existing system.

it would increase habitat fragmentation effects. None of this is adequately disclosed or discussed in the DEIS.

Further, while the DEIS states that agencies will provide extra law enforcement and education to reduce illegal vehicular and recreational use of Zone 6 (e.g., DEIS at 3-64), the DEIS offers no evidence that the interventions will be sufficient or even partially effective. In our experience, illegal vehicular use of BLM lands is a pervasive problem across Utah and the west. See Switalski 2018 and Compilation of News Articles Related to OHV Use. The final decision cannot rely on the assumption that these interventions will be sufficient without providing evidence of such.

Under SGFO Amendment Alternative B, 3,471 acres of BLM lands in Zone 6 would be managed as a ROW exclusion area, but it is not clear if this would impact the existing ROW's and would allow for the conversion of existing Navajo Drive and Green Valley Drive into four-lane highways as planned in the Dixie MPO's Draft 2019-2050 Regional Transportation Plan.⁴⁷ These future roadways would fragment MDT habitat and adversely impact the MDT in Zone 6. Under Alternative C, future ROW's would be allowed in Zone 6 further fragmenting and degrading MDT habitat and leading to direct mortality.⁴⁸

Additionally, habitat within Zone 6 will be adversely impacted by external roadway development and urbanization. This includes the future Western Corridor which would parallel the western boundary of Zone 6, fragmenting MDT habitat in the Red Bluffs ACEC.

b. Utilities, Renewable Energy Resources, Grazing, Mining, Drilling for Resources, Water Development, and Flood Control, 3-37

Alternatives B and C allow various levels of industrial activity and development on BLM lands. Under both, mineral location will be allowed until recommended withdrawal is completed. Administrative mineral material mining is also allowed. Under Alternative C but not B some grazing⁴⁹ and target shooting will be allowed. All of these uses impact MDT. The DEIS does not provide evidence that these activities will not singly or aggregately with other Zone 6 activities adversely affect MDT populations and impair the mitigation benefit of Zone 6. Mining is allowed on SITLA lands as is grazing, recreation, shooting, etc. and it is not clear in the DEIS how these uses will be curtailed by SITLA if at all prior to transfer of SITLA lands. The DEIS does not provide evidence that these activities will not singly or aggregately with other Zone 6 activities adversely affect MDT populations and thus the mitigation benefit of Zone 6.

c. Recreation

The DEIS discloses the high level of recreation in Zone 6 *and* how recreation, especially OHV use, adversely impacts the MDT. DEIS at 3-38 to 3-39. While the DEIS states that recreational activities will be more closely managed under Alternatives B and C (DEIS at 3-64), it does not

⁴⁷ <https://dixiempo.wordpress.com/2019-2050-regional-transportation-plan/>

⁴⁸ While the DEIS at 2-21 provides stipulations for future ROW development, these will not prevent future mortality and impacts to the MDT.

⁴⁹ Note that the draft HCP says that, "like Reserve land acquisitions, no entity will be required or compelled to sell, donate, transfer, purchase, or receive interest in lands for the purpose of this Amended HCP. Nor does this establish a timetable for completing grazing permit acquisitions for Reserve Zone 6." (pg. 132). This shows that grazing may not be entirely eliminated in Zone 6.

explain how recreation will be more carefully managed on SITLA lands prior to acquisition or assure that recreation management with Zone 6 will be adequately protective of the MDT.

Further, competitive sporting events will be allowed within Zone 6 under alternatives A through C. The five competitive mountain biking events and jamborees in Zone 6 draw thousands of participants who directly and indirectly impact MDT, causing direct mortality, noise, vibrations, litter and predator subsidies, human interaction and poaching, creation of social trails, destruction of nests, burrows, and vegetation, and more.

As stated above, unauthorized travel by OHVs and bikes is a significant problem in Zone 6. Over one-third of the routes in Zone 6 are unlawful. DEIS at 3-129. Social trails damage MDT habitat including nest sites, burrows and vegetation. The DEIS provides no compelling evidence that the BLM is capable of controlling unlawful social trailing and the impacts it causes to MDT and if past is prologue, the BLM will not be capable generally of controlling unauthorized activities effectively.

Finally, the DEIS explains that predation of MDT increases with human access and the addition of manmade structures like roads and utilities and that high levels of tortoise predation already occur in Red Cliffs by ravens, domestic dogs and coyotes, in addition to illegal take by people. While it is not clear how much predation is occurring in Zone 6, given the very high levels of recreation in Zone 6 and its proximity to urban areas, these rates are likely high and will lead to MDT mortality and stress. Similarly, the DEIS has not demonstrated that disease, which increases with human proximity (Berry et al. 2016 at 116, 119, 121, and 125) will not be a factor in future MDT viability.

The DEIS does not provide evidence that these activities will not singly or aggregately with other Zone 6 activities adversely affect MDT populations and thus impair the mitigation benefit of Zone 6.

ii. *The DEIS assumes that recovery and restoration actions in zone 6 will improve habitat in the short and long term without evidence*

Issue

11. The DEIS assumes that recovery and restoration actions in zone 6 will improve habitat in the short and long term without evidence.

The DEIS fails to demonstrate that restoration of impacted lands within Zone 6 can be effective to restore MDT habitat integrity. Restoration in arid landscapes is notoriously difficult and probably will only get harder with the influence of climate change. USFWS 2011 at 73. Jones (2019) recently did a comprehensive literature review of restoration treatments in arid lands and found them mainly to be ineffective or deleterious. Effective restoration also depends on the willingness of people to comply with new behavioral requirements and restrictions. Especially when it comes to modifying recreational habits, this too is notoriously difficult.

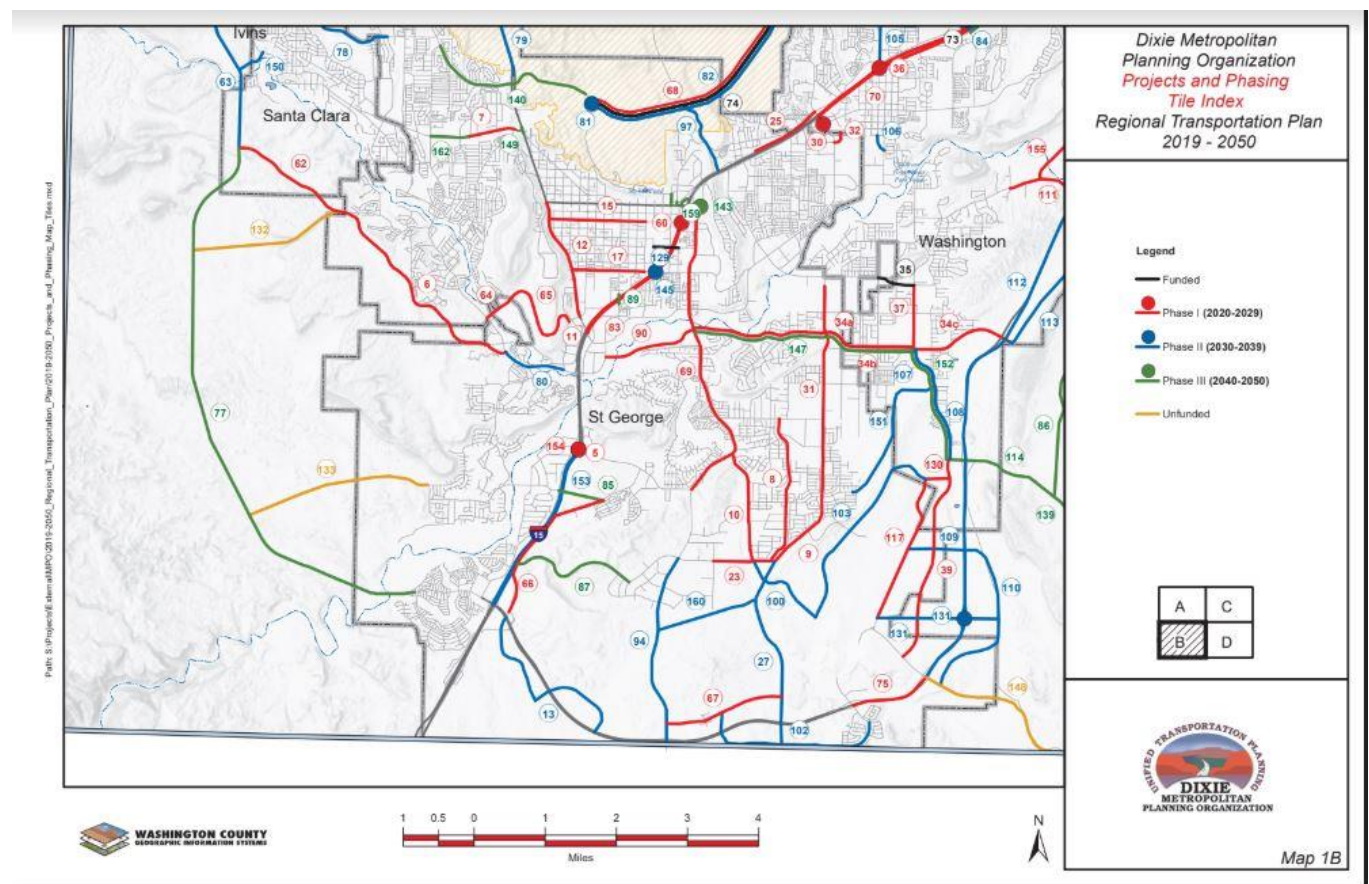
1. The DEIS inaccurately presents the mitigation value of Zone 6

As discussed in a previous subsection, the DEIS inappropriately applies Nussear et al. (2009) to calculating suitable habitat. In addition, the MDT data provided in the DEIS is inadequate and

inappropriately applied to calculating MDT density. The mitigation value of Zone 6 cannot be determined without accurate data.

2. The DEIS fails to show how Zone 6 in the Green Valley Analytic Unit can increase habitat connectivity for MDT

The DEIS fails to demonstrate that designating Zone 6 could enhance or support habitat connectivity between UVRU and the Northeastern Mojave Recovery Unit. First, the DEIS readily admits at 3-64 that the Proposed Zone 6 is isolated and that connections to the Northeastern Mojave Recovery Unit are highly limited. Second, the DEIS fails to explain how fragmentations resulting from the future Western Corridor (project 77 on the map below) that would parallel the western boundary of Zone 6, linking I-15 to Old Highway 91 and preventing all MDT movement south, west and north of the highway. Zone 6 may not increase habitat connectivity between recovery units because of the barriers noted above and enhanced connectivity cannot be assumed in terms of a conservation “gain.”



Project 77 would parallel the western edge of Zone 6, fragmenting the Red Bluffs Area of Critical Environmental Concern and preventing long-distance MDT movement. Projects 132 and 133 are two highways that would fragment Zone 6. These projects showed up in a June 2019 draft of the Regional Transportation Plan but were removed in a subsequent draft dated October 2019 (without explanation or commitment to protect MDT habitat in Zone 6) after St. George residents voiced concerns over the impact to the proposed Zone 6.

3. The DEIS fails to demonstrate that Zone 6 because of its small size and predicted isolation is able to support a viable population in the long term

The DEIS at 3-65 states that:

Proposed Zone 6 is a relatively small size (6,813 acres) and is unlikely to support an abundance of tortoises on its own, relying on its connectivity to the larger Green Valley Analytical Unit and habitat connectivity corridors for resiliency (USFWS 2020a). Recent studies show that there is an apparent, relatively high, but non-quantified, density of tortoises within proposed Zone 6 and these tortoises may provide a clustered population that could benefit the UVRU overall if continuity to the western analytical units and Northeastern Mojave Recovery Unit is maintained (USFWS 2020a).

The DEIS does not provide genetic information on the MDT in Zone 6 (presumably unavailable) and hence we cannot tell if they arise from translocated (or unlawfully deposited) MDT or from other parts of the Green Valley Analytical Unit or even from the Northeastern Recovery Unit. What we do know however is that the small size and relative isolation of Zone 6 coupled with a MDT population below 3,000, the figure cited in the DEIS as a minimum necessary population, are distinct impediments to a viable population in the long term.

4. As the SGFO Amendment (Alt B or C) is proposed, management would not be consistent with the conservation goals of Zone 3

The DEIS at 3-64 states that “proposed Zone 6 would be managed consistent with the conservation goals of Zone 3, elevating the protection of Mojave desert tortoise habitat and removal or reduction of specific threats through actions such as fencing the eastern borders to prevent OHV access in non-designated areas; reducing the total mileage of designated access routes; and providing additional funding for law enforcement, education, monitoring, habitat restoration, litter control, and fire management.” However, this is not an accurate statement for the following reasons:

- Fencing the eastern border of Zone 6 to prevent OHV access is beneficial to the MDT. However, OHV routes in Zone 6 will be reduced but not eliminated. OHV travel is not permitted in Zone 3 of Red Cliffs NCA.
- The DEIS fails to show that BLM has budgeted for the necessary management and restoration of Zone 6. The draft amended HCP discusses funding for Zone 6 provided by Washington County that is insufficient for reducing threats to MDT caused by the uncontrolled recreation that occurs there.
 - While no details are provided in the DEIS on the number of law enforcement officers that would be assigned to Zone 6⁵⁰, it is clear that multiple law enforcement officers assigned only to Zone 6 would be required to prevent the illegal dumping, target shooting, OHV use, dispersed camping and off trail mountain bike use that regularly occurs in Zone 6.
 - The DEIS does not demonstrate that the funding would be sufficient for effective long-term habitat restoration in the portions of Zone 6 that have been mined, heavily grazed and crisscrossed with more than 42 miles of social trails and more than 100 miles of other routes.

⁵⁰ Note that the Draft HCP only says that “the County will provide additional funding for Washington County Sheriff Deputy patrols within the Reserve. Law enforcement will support Reserve integrity, help manage allowed uses of the Reserve, and minimize impacts on MDT and listed plants within Reserve Zone 6.” Draft HCP at 132.

- The funding would only provide for “education and outreach efforts that may include videos, advertising, handouts, community engagement, contractor training, and volunteer coordination” (Draft HCP pg. 132). This funding is insufficient because it does not support additional education specialists. To reign in the damaging recreational uses, multiple education specialists would be required to provide outreach to the 82,775 annual visitors (2019) and the fast-growing communities adjacent to Zone 6 on tortoise awareness and authorized uses in Zone 6.
- Funding for fire management is limited to \$324,426 over the 25-year term. Given the size and frequency of wildfires in MDT habitat over the last 20 years, \$324,000 is not enough to deal with the larger and more frequent fires that have defined the recent past and are anticipated in the future. For comparison, preliminary estimates for suppression costs for the 2020 Turkey Farm Road Fire was \$1,724,000 and for the Cottonwood Trail Fire was \$442,000. Furthermore, the Draft HCP at 138 notes that “In the event of multiple fires over several years, this commitment ends after the budgeted monies for this line item have been spent.”

Further, MDT numbers in the Red Cliffs NCA are in decline so assigning a management level consistent with that in Zone 3 is clearly inadequate.

D. The agencies have not demonstrated that Zone 6 is the best option in the UVRU for additional protection

i. The DEIS nowhere discusses why Zone 6 is located or drawn the way it is

Issue

12. The DEIS does not analyze or disclose why Zone 6 is located or drawn the way it is.

The DEIS at 2-19, 2-20 and 3-64 states that Zone 6 has been identified as mitigation for the NCH. However, nowhere does the DEIS explain why Zone 6 was chosen or what determined the boundaries of Zone 6. Map 3.5-4a (DEIS Volume 3 at B-51) shows other areas in the vicinity with occupied or potential habitat yet there is no explanation as to why these other areas were not considered for enhanced protection. The proposed Zone 6 is small, experiences heavy recreational use, is open to grazing, and, while already fragmented from other MDT habitat patches, will become more isolated with increased proximal urbanization (facilitated by the future Western Corridor).

The DEIS must explain its reasoning for the proposed Zone 6 configuration and location. It should list and rank remaining MDT habitats in the plan area, identify the optimal boundary for a potential satellite reserve, and explain the rationale. In doing so, the DEIS should consider current activities and land condition and apply principles of conservation biology for reserve design. These include maximizing size, core/edge ratio, intactness, and connectivity to other protected habitats (e.g., see Forman and Godron 1986; August et al. 2002; Groves et al. 2002; Fayrig 1997).

ii. The DEIS must explore additional options for Zone 6 in the SGFO amendment to provide a range of reasonable alternatives for Zone 6

Issue

13. The DEIS must explore additional options for Zone 6 in the SGFO amendment to provide a range of reasonable alternatives for Zone 6.

NEPA requires agencies to analyze a range of reasonable alternatives. The BLM must consider a range of alternatives for a potential Zone 6. The alternatives should provide a variety of configurations and sizes including at least one alternative that optimizes the conservation and recovery of the MDT.

E. The agencies must choose an alternative that does not include construction of the NCH

The NCH violates numerous laws and policies. Therefore, the agencies must not choose an alternative that authorizes the ROW and thus enables the NCH.

i. The NCH violates the Federal Lands Policy and Management Act (FLPMA)

Issue

14. *The NCH violates the Federal Lands Policy and Management Act (FLPMA).*

I. The NCH will result in undue and unnecessary degradation

FLPMA requires that the Secretary in managing the public lands shall take any action necessary to prevent unnecessary or undue degradation of the lands. 43 U.S.C. § 1732(b). BLM regulations in describing ways to prevent unnecessary or undue degradation specifically include “Attaining the stated level of protection or reclamation required by specific laws in areas such as the California Desert Conservation Area, Wild and Scenic Rivers, BLM-administered portions of the National Wilderness System, and BLM-administered National Monuments and National Conservation Areas.” 43 CFR §3809.415. The construction of the NCH is clearly detrimental to the National Conservation Lands System, the Red Cliffs National Conservation Area and its purposes, the Red Cliffs Desert Reserve, the UVRU, and the MDT. In bifurcating a core MDT area within Red Cliffs NCA and Reserve that is considered integral to the integrity and viability of the UVRU and thus to the MDT range-wide, the NCH will clearly result in undue and unnecessary degradation on our public lands. Thus, the agencies would violate FLPMA if they were to authorize the ROW and enable the NCH.

II. The NCH violates BLM Manual 6840

BLM Manual establishes that BLM policy is to further the conservation and/or recovery of federally listed species. BLM Manual 6840.06. Numerous sections of the Manual provide direction on how to do this – e.g., Section 2 directs BLM to incorporate Recovery Plan objectives and actions into BLM plans and projects. The NCH impedes the conservation and the recovery of the MDT and thus is in violation of the Manual.

ii. *The NCH violates Public Law 111–11 because it will not meet the requirements specified for management of the NCA in the Act*

Issue

15. The NCH violates Public Law 111–11 because it will not meet the requirements specified for management of the NCA in the Act

As discussed in much more detail elsewhere in these comments, authorizing the NCH violates Section 1974 of Public Law 111–11 and BLM Manual 6220. The Secretary shall only allow uses of the Red Cliffs NCA that further one or more of the purposes for the NCA which include protecting each species that is located in the NCA and listed under the ESA. Section 1974(a)(2). The NCH will clearly damage and take MDT and the designation of Zone 6 will not mitigate the destruction of this habitat such that the net effect will be conservation gain.

F. The NCH violates the Endangered Species Act (ESA)

Issue

16. The NCH violates the Endangered Species Act (ESA).

ESA requires every federal agency to obtain review and clearance for activities that may affect listed species or their habitat. If an activity authorized, funded, or carried out by a federal agency may affect a listed species or its designated critical habitat, that activity cannot go forward until consultation (a biological review of the proposal by FWS or NMFS) ensures that it will not “jeopardize” the species or result in the “destruction or adverse modification” of designated critical habitat. 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14(a). The Services have a statutory duty to use the best available scientific information. 16 U.S.C. § 1536(a)(2); 50 C.F.R. 402.14(g)(8).

“Jeopardy” results when it is reasonable to expect that the action would “reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species.” 50 C.F.R. § 402.02. As part of the jeopardy analysis, the Service must identify a benchmark—a “tipping point precluding recovery”—against which the Service can gauge the project’s impacts. *Wild Fish Conservancy*, 628 F.3d at 527. See also *NWF I*, 524 F.3d at 936 (Service must “know roughly at what point survival and recovery will be placed at risk before it may conclude that no harm will result”); *NWF v. NMFS* 184 F. Supp. 3d 861, 892 (D. Or. 2016) (*NWF II*) (biological opinion is deficient where it “does not include any metric or goal that considers whether the incremental improvements to the currently low abundance levels are sufficient” to avoid jeopardy). While the best available science and the Service’s judgment will define the tipping point precluding recovery for a particular species, the Service must identify a benchmark—and measure the proposed action against it—to ensure its recovery analysis and conclusion accurately informs its biological opinion and advises the action agency on how to avoid jeopardy. *NWF I*, 524 F.3d at 933 (agency may not omit full analysis of recovery risks where “the highly precarious status of the listed [species] at issue raises a substantial possibility that considering recovery impacts could change the jeopardy analysis”).

Destruction or adverse modification “means a direct or indirect alteration that appreciably diminishes the value of critical habitat as a whole for the conservation of a listed species.”⁵¹ 50

⁵¹ Note that this definition was established in a 2018 revision of the ESA regulations and is currently being challenged by a number of entities including some of the organizations submitting this letter. The Services’ new

C.F.R. § 402.02. In the case of the MDT, the USFWS must issue an adverse modification opinion if it determines that a proposed action is likely to preclude recovery of the tortoise in a particular unit. 59 Fed. Reg. 5834 (February 8, 1994). The “basis for an adverse modification opinion should follow the recommendations in the recovery plan for maintaining viable populations and variation throughout the range.” *Id.*

Formal consultations culminate with the Services’ issuance of a biological opinion, in which the Services determine whether an action is likely to either jeopardize the survival and recovery of a listed species or destroy or adversely modify a species’ designated critical habitat. 16 U.S.C. § 1536(b); 50 C.F.R. 402.02 (definition of “formal consultation”). In order to make this determination, the Service must review all relevant information and provide a detailed evaluation of the action’s effects, including the cumulative effects of other activities in the area, on the listed species and critical habitat. 16 U.S.C. § 1536(b)(3)(A); 50 C.F.R. § 402.14(g)-(h).

As part of the formal consultation process, the Services must also formulate discretionary conservation recommendations to reduce or minimize the action’s impacts on listed species or critical habitat. 50 C.F.R. § 402.14(g)(6). If the Services determine that the action is likely to jeopardize the species or adversely modify its critical habitat, the biological opinion must specify reasonable and prudent alternatives that will avoid such jeopardy or adverse modification. 16 U.S.C. § 1536(b); 50 C.F.R. § 402.14(h)(3). If the jeopardy or adverse modification cannot be avoided, however, the agency action may not proceed.

- a. The NCH will destroy or adversely modify critical habitat in violation of 16 U.S.C. § 1536(a)(2)

The proposed NCH will destroy or adversely modify critical habitat in violation of 16 U.S.C. § 1536(a)(2). While the NCH cuts across one portion of the critical habitat within the UVRU, there is a high likelihood that it will be the action that commits the UVRU to a sub-functional condition and precludes MDT recovery.

The USFWS in the recovery plan for the MDT established five recovery units. All are deemed necessary for the MDT’s survival. USFWS 2011 at 41 and USFWS 2020 at 14 (“We consider these five recovery units necessary to conserve the genetic, behavioral, morphological, and ecological diversity necessary for long-term sustainability of the entire listed species (Avisé 2004, Mace and Purvis 2008, USFWS 2011)”). The UVRU is the smallest⁵² and most

definition of “destruction or adverse modification” of critical habitat requires the scale of the impacts to be relative to the value of critical habitat “as a whole.” 84 Fed. Reg. at 45,016. Yet the purpose of establishing critical habitat is for the government to delineate territory that is not only necessary for the species’ survival but also essential for the species’ recovery. The critical habitat designation already represents the area essential to the survival and recovery of species, adding “as a whole” conflicts with the ESA’s plain language and focus on recovery. The “as a whole” language means that the prohibition on “destruction or adverse modification” of critical habitat will not be triggered unless the critical habitat would be reduced below the minimum deemed necessary for survival or recovery of the species, which amounts to jeopardizing the species. This impermissibly prevents the prohibition on “destruction or adverse modification” from having independent effect from the prohibition on jeopardizing the species. While we disagree with the revised definition and fully expect it to be overturned, as explained in the next section, the proposed NCH will result in the destruction or adverse modification of critical habitat under the revised (and previous) definition.

⁵² The small size of the UVRU has compromised the potential viability of the MDT population. DEIS at 3-48 (“Even though the Reserve has some of the highest densities, the small geographic size of both the Reserve and the UVRU compromises the potential viability of the Mojave desert tortoise population. Tortoise abundance in each of the analytical units is lower than the 3,000 animals recommended by USFWS (USFWS 2020a).”)

fragmented of the five Recovery Units established for the MDT range wide and is home to an estimated 4,450 MDT. DEIS at 3-47. Since the designation of critical habitat in 1994, 22% (12,002 acres) of the initial habitat designated as critical (54,600 acres) within the UVRRU is no longer suitable. USFWS 2020 at 14. Further MDT in the UVRRU have declined by 24.3% between 2004 and 2014 and “Within the Reserve, UDWR surveys between 1999 (3,404 Mojave desert tortoises) and 2020 (2,011 Mojave desert tortoises) show an overall decline of 41 percent. (UDWR 2020).” DEIS at 3-47 to 3-48. MDT within the UVRRU are currently estimated to be declining at an annual rate of 3.2% or greater.⁵³ USFWS 2020 at 32. As a result of the 2020 fires that occurred within and near the southern portion of the Red Cliffs NCA, both of these figures may overestimate the condition of the critical habitat and population.

The UVRRU is divided into 11 Analytical Units (AU) on the basis of MDT occupation, suitable habitat and connectivity potential to other AUs. AUs are “biologically meaningful sub-populations.” USFWS 2020 at 16. The NCH is routed through the southern portion of the West and East Cottonwood AUs within the Red Cliffs NCA and Reserve (both of which were specifically designated to protect the MDT) and would carve up what “may be the most important high-density cluster of desert tortoises in the recovery unit (USFWS 2020a).” DEIS at 3-63, Map 3.5-5 at DEIS Vol. 3, B-53 (excerpted below). These AUs contain almost half of the MDT within the UVRRU. Together they are estimated to contain under 2,000 adult MDTs, a number considerably below the minimum population necessary for even a single AU to prevent genetic deterioration over the next 25 to 50 years. USFWS 2020 at 24 and 95⁵⁴, DEIS at 3-35 and 3-48, and USFWS 1994.⁵⁵

The damage to critical habitat that would result from the NCH cannot be mitigated by the addition of Zone 6 or other conservation measures to the reserve as discussed elsewhere in these comments.

In sum, the NCH will destroy a vital portion of the MDT critical habitat and population within the UVRRU which is already teetering on the edge in regard to its capacity to recovery MDT. By disabling the UVRRU as a functional recovery unit, the NCH will preclude recovery across the range. Hence, the NCH will adversely modify critical habitat for the MDT.⁵⁶

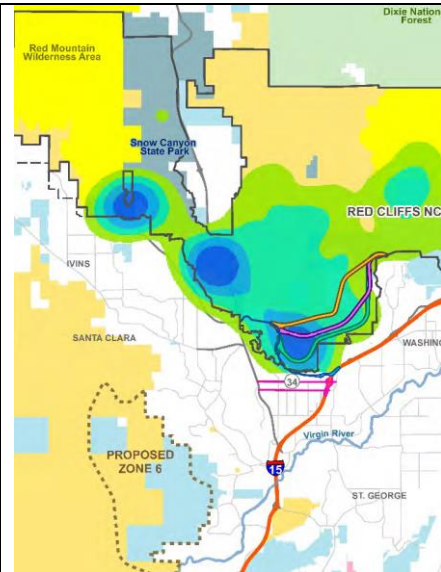
⁵³ Note that “if population growth rates (lambdas, proportional change in abundance from one year to the next) are below 0.975 on average, no population size is large enough for persistence to 390 to 500 years (15 to 20 desert tortoise generations; USFWS 1994).” USFWS 2020 at 31.

⁵⁴ USFWS 2020 shows that the East and West Cottonwood AUs have an estimated MDT population of 1,749. USFWS 2020 at 95 states “The Red Cliffs Desert Reserve is estimated to support 2,401 adult desert tortoises and 54 percent of the recovery unit population (Table 4). West and East Cottonwood AUs support 73 percent of the Red Cliffs Desert Reserve population (1,749) and these core AUs support 42 percent of the UVR recovery unit’s conservation value (Table 15 and Table 16).”

⁵⁵ See, *supra*. The 1994 Desert Tortoise Recovery Plan which informed the 2011 Recovery Plan suggests that “a minimally viable population of desert tortoises from genetic considerations should probably contain at least 2,000 to 5,000 adult animals.” USFWS 1994 at 32. This figure only takes into account genetic considerations and does not account for other demographic factors that impact viability. *Id.*

⁵⁶ Note that the 1994 critical habitat listing notice emphasized the importance of the MDT conservation areas (referred to as DWMA’s) of which the Reserve is one: “The Service expects that proposed actions that are inconsistent with land management recommendations for DWMA’s in the Draft Recovery Plan would likely be considered to adversely modify critical habitat. Proposed actions that are consistent with the recommendations within the Draft Recovery Plan would not be likely to result in destruction or adverse modification of critical habitat.” 59 Fed. Reg. 5835 (Feb. 8, 1994). The Final Recovery Plan (USFWS 1994) at 58 states that there should be no new roads in DWMA’s.

Map showing the proposed NCH alternatives and MDT hotspots. The hotspot through which the NCH would route is within critical habitat. The relative density of MDT is lowest in the green area and highest in the dark blue area. Excerpted from Map 3.5-5 at DEIS B-53.



b. The NCH jeopardizes the MDT in violation of 16 U.S.C. § 1536(a)(2)

“Jeopardy” results when it is reasonable to expect that the action would “reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species.” 50 C.F.R. § 402.02. For all the reasons outlined above, it is clear that further diminishment of the MDT population and habitat within the UVRU may be the tipping point precluding recovery.

c. The NCH violates the 2011 Recovery Plan

The 2011 Recovery Plan is clear that human land uses that degrade and fragment habitat constitute the major threats to the MDT. The MDT requires unfragmented patches of high-quality habitat that are sufficiently large to provide for genetic dispersal and stochastic events. “Because desert tortoises occupy large home ranges, the long-term persistence of extensive, unfragmented habitats is essential for the survival of the species. The loss or degradation of these habitats to urbanization, habitat conversion from frequent wildfire, or other landscape-modifying activities place the desert tortoise at increased risk of extirpation.” USFWS 2011 at viii. The Recovery Plan emphasizes the importance of designated MDT conservation areas (which includes the Red Cliffs NCA and Reserve) and urges aggressive conservation management within these areas. The plan highlights that given the uncertainties related to climate change on MDT populations and distribution MDT conservation areas must be a foci of recovery efforts. USFWS 2011 at 34-35.

The Recovery Plan lists three objectives and associated criteria to achieve delisting. USFWS 2011 at ix and x. The first objective is to maintain self-sustaining populations of desert tortoises within each recovery unit into the future. The second objective to maintain well- distributed populations of desert tortoises throughout each recovery unit, and the third is to ensure that habitat within each recovery unit is protected and managed to support long-term viability of desert tortoise populations with a criteria that the quantity of desert tortoise habitat within each conservation area be maintained with no net loss until population viability is ensured.

The Recovery Plan establishes Recovery Actions. USFWS 2011 at 68-76. These include:

Recovery Action 2.1: Conserve intact desert tortoise habitat. Land disturbances should be precluded within tortoise conservation areas. Disturbances to be avoided include those caused by development, off-highway-vehicle use, overgrazing by domestic livestock, construction of roads or other linear facilities, increased fire frequency, and other surface disturbing activities.

USFWS 2011 at 68.

Recovery Action 2.5: Restrict, designate, close, and fence roads. Paved highways, unpaved and paved roads, trails, and tracks have significant impacts on desert tortoise populations and habitat. In addition to providing many opportunities for accidental mortality, they also provide access to remote areas for collectors, vandals, poachers, and people who do not follow vehicle-use regulations. Substantial numbers of desert tortoises are killed on paved roads. Roads also fragment habitat and facilitate invasion of non-native vegetation.

Collectively, the actions described below are of relatively high priority in all recovery units.

- Establishment of new roads should be avoided to the extent practicable within desert tortoise habitat within tortoise conservation areas; tortoise conservation areas should have a minimum goal of “no net gain” of roads.

USFWS 2011 at 71.

Recovery Action 2.11. Connect functional habitat. Connecting fragmented habitat helps to maintain gene flow between isolated populations. This action improves species fitness (ability to maintain or increase its numbers in succeeding generations) by maintaining diversity, allowing populations to interbreed, and providing access to larger habitats (Forman et al. 2003). Roads and urban areas form barriers to movement and tend to create small, local populations which are much more susceptible to extinction than large, connected populations (Wilcox and Murphy 1985).

USFWS at 76.

The NCH is an undertaking that directly contradicts the direction in these three Recovery Actions. There is little point to a Recovery Plan if federal agencies blatantly ignore its direction.

G. The agencies should protect and restore additional high quality in the UVRRU that would enhance the distribution, abundance, and density of MDT *in addition to not building the NCH for the MDT*

Issue

17. It is clear from the discussions in the previous subsections that the MDT is in considerable trouble and that the UVRRU is teetering on the edge. Given the precarious condition of both, the agencies should not only reject alternatives that involve the NCH but should also protect as much high-quality habitat within the UVRRU as possible.
18. As discussed above, the rationale for choosing Zone 6 is not well articulated in the DEIS. Zone 6 is isolated from the Reserve and will become increasingly affected by urbanization and roads in the future. It is also intensively used and thus may not offer suitable habitat. The DEIS must not only provide a logical rationale for identifying

- Zone 6 as currently mapped but also explain why Zone 6 presents better opportunities for MDT conservation and recovery than other areas (including a vastly increased Zone 6).
19. Based on a more detailed and comprehensive review of land conservation opportunities within the UVRU in the DEIS, the agencies should identify a suite of lands that will maximize additional conservation and recovery for the MDT.

Federally Threatened Mexican Spotted Owl

DEIS at 3-67 and 3-68:

A desktop analysis was conducted using GIS to determine where spotted owl habitat (in particular, steep slopes) may be present in relation to the analysis area. The nearest spotted owl potential nesting habitat is at least 0.2 mile away from locations where HCP Covered Activities may occur. According to the data presented in Table 4 in Appendix K, Noise Technical Report, construction noise at this distance attenuates such that, while spotted owls may be alerted by the noise, it would not reach a level that causes disturbance. Therefore, while HCP Covered Activities may impact Mexican spotted owls, it is anticipated that these impacts would be minor and not result in adverse effects to the Mexican spotted owl.

Issue:

20. The DEIS admit that nesting habitat lies 0.2 miles from potential NCH impacts, but fails to analyze how owl foraging habitat could be removed and degraded by construction activities and indirect impacts from such a large construction project, and continuing operations of a highway through Mojave Desert habitats where rodents prey of these owls live.

The DEIS excludes Federally Threatened Yellow-billed cuckoo (*Coccyzus americanus*), western distinct population (DEIS at G-4):

Unlikely to occur. The HCP Permit Area, proposed Zone 6, and the highway alignment alternatives are located within the geographic and elevational range of the species; however, suitable riparian habitat does not occur within the areas affected by the proposed actions. Potentially suitable foraging habitat may be present near where HCP Covered Activities may occur within the floodplains of the Virgin River.

Issue:

21. The EIS needs to analyze this rare bird, which could be indirectly impacted by downstream erosion, fuel spills, and herbicide treatments in its riparian habitat near to the NCH project.

Similarly, the DEIS fails to adequately analyze potentially significant impacts to Southwestern willow flycatcher, which has Critical Habitat. The DEIS at G-7 states:

Critical habitat for the southwestern willow flycatcher includes riparian areas and stream segments, the lateral extent of which incorporates the 100-year floodplain or flood-prone areas surrounding the stream segments. A 94.4-mile critical habitat unit extends along a segment of the

Virgin River beginning at Berry Springs in Hurricane, Utah, flowing southwest through Arizona and into Nevada. The Virgin River, including this segment, flows just south of St. George.

Issue:

22. The Southwestern willow flycatcher is excluded from analysis, yet the Virgin River Critical Habitat segment lies just below St. George. A large new highway project could lead to increased erosion, sedimentation of downstream waters, and pollution by herbicides, hazardous material spills, fuel, and dust palliative chemicals. No mitigation measures are suggested for Southwestern willow flycatcher or Western yellow-billed cuckoo. This is unacceptable.

Native fish species seem to be completely dropped out of the analysis in the DEIS, including the Federally Threatened Virgin River chub (*Gila seminuda*) and Federally Threatened woundfish (*Plagopterus argentissimus*) (DEIS at G-3). Both have Critical Habitat present. The DEIS at G-3 states:

Unlikely to occur. The Virgin River chub is a fully aquatic species. Habitat for the Virgin River chub does not overlap with desert tortoise habitat. However, Virgin River chub critical habitat includes portions of the 100-year floodplain of the Virgin River (USFWS 1995b and 2008), which could be near locations where HCP Covered Activities may occur.

Issue:

23. The DEIS claims that local zoning and ordinances will be enough to safeguard these two rare fish species (such as DEIS at G-9), yet again fails to consider indirect impacts of highway construction upstream of Critical habitat, including erosion, sedimentation, debris from flash floods, and pollution from fuel spills, chemical leaks, herbicide treatments, and dust palliatives to water quality and habitat substrate. No mitigation measures are proposed or analyzed.

The DEIS states at 3-31:

3.4.2.3 Direct and Indirect Impacts from Alternatives 2, 3, and 4

Alternative 2, T-Bone Mesa Alignment, would result in direct and indirect adverse impacts to general wildlife within the Red Cliffs NCA from the Northern Corridor. Construction of the highway would result in habitat loss within the footprint of the highway, and habitat degradation to areas that remain unpaved within the ROW, and areas adjacent to the ROW. Some animals may be injured or killed when they attempt to cross the road. Two types of mesh ROW fencing would be installed that would prevent most small and large wildlife species from attempting to cross the highway, reducing the potential for injuries and mortalities resulting from vehicular interactions. However, the mesh fencing, along with the highway, would result in habitat fragmentation by precluding the movement of small and large wildlife species across the 500-foot-wide corridor, except at drainages where bridges or culverts would be installed, and thus preventing individuals from using habitat on both sides of the road. Avian species would continue to be at risk from collisions with vehicles and with any utility lines that might also be authorized within the highway ROW corridor. Noise from construction of the highway would disturb wildlife in the vicinity and potentially cause reproductive failure for species breeding nearby. Construction of the new highway would be expected to increase the spread of exotic invasive species, particularly annual grasses, that reduce the quality of foraging habitat and increase the potential for a wildfire. The number of ravens, which are attracted to roadkill, may

increase after the new highway is constructed, and ravens are known to have a negative impact on certain wildlife species.

Issue:

24. This Section from 3-31 to 3-80 does a detailed analysis of direct and indirect impacts to acres of habitat for special status species among the different Alternatives, such as to Special Status Species such as Gila monster, burrowing owl, kit fox, Arizona toad, and Mojave poppy bee, but fails to analyze how the quality of habitat is not the same in the degraded Zone 6 lands proposed as mitigation habitat in exchange for slashing a highway corridor through a Reserve specifically designed to conserve and protect high-quality habitat for these species. The DEIS did not address how fragmentation would truly be mitigated, nor how the construction of exclusion fences along a highway corridor would be mitigated, other than to suggest degraded Zone 6 lands which have littler, adjacent urbanization, pets such as dogs running into the area, and off-road activities rampant. See the photos in the coalition scoping comments starting at 126 and following:

- The DEIS fails to address our concern about the use of duct palliatives, herbicides, hazardous materials, spills, and other direct impacts to habitats in the Reserve (see our scoping comments at 95).
- The DEIS fails to analyze impacts to California condor, which we requested in scoping comments at 95. How will roadkill scavenging sources caused by a new highway, and potential microplastic litter impact the California condor? The DEIS, Appendix G-1 states:

Potentially present. Nesting and roosting habitat are not present where Habitat Conservation Plan (HCP) Covered Activities are expected, in proposed Zone 6, or in the Red Cliffs National Conservation Area (NCA). Potential foraging habitat is present in the open foothills and grasslands where HCP Covered Activities are expected, in proposed Zone 6, and in the Red Cliffs NCA. The justification for excluding this species from analysis in Chapter 3 is included following this table.
- The justification for excluding California condors seem to be based loosely on “density of potential big game prey to attract condors to forage in desert scrub habitats” (DEIS at G-5), while much of the Red Cliffs area is open habitat, especially because of wildfires, and condors commonly scavenge on small mammals, dead reptiles, and other non-big-game sources of food. Again, the DEIS fails to analyze road mortality impacts on condors within this experimental population range.
- We requested the DEIS detail how burrowing owls would be passively translocated out of the reserve if any highway construction occurred (our scoping comments at 96), and the DEIS fails to do so.
- The DEIS fails to analyze how kit fox populations elsewhere in the Mojave Desert have suffered disease outbreaks at construction sites, as we requested in coalition scoping comments at 97.
- The DEIS fails to analyze highway impacts to bats, as we requested in scoping comments at 97.

- The DEIS fails to include a survey and translocation plan for Gila monsters which could be in the path of the proposed NCH, as requested in scoping comments at 98.
- The DEIS fails to analyze direct and indirect impacts to Arizona toads, from road mortality, how fencing may not stop road crossing, how flash floods could take exclusion fences down, or how road run-off could create temporary rain pools that actually attract these desert toads. See our scoping comments at 98.

The DEIS completely fails to even mention, let alone analyze impacts to Special Status fish species in the area. We stated in our scoping comment (at 96): Aquatic habitats in Leeds Creek and the Virgin River support populations of BLM sensitive fish species including Virgin spinedace (*Lepidomeda mollispinis*), desert sucker (*Catostomus clarki*), and flannelmouth sucker (*Catostomus latipinnis*). The DEIS should analyze any impacts to these fish species from development of a highway, including erosion, water quality degradation, groundwater pumping, habitat degradation, sedimentation, or other threats. The DEIS fails to do any of this.

All aquatic and riparian fish and bird species could be indirectly impacted by grading, trenching, vegetation removal, topsoil placement, cleared areas, trash piles before clean-up, rock, weeds, and seeded areas that could impact downstream waters during flood events without proper stormwater prevention plans. Re-seeding bare soils proposes to use “BLM approved seed mixes” (DEIS, Appendix D-7) yet these can commonly contain European non-native grasses and other plant species that may not adequately protect soils from erosion.

But the DEIS defers important discussion of impacts, mitigation measures and analysis that should be a part of this review when the public can have input. Instead, the DEIS defers this analysis to a time after approval, and after the public process. A Stormwater Pollution Prevention Plan will be prepared at some unspecified later date, and only generalized Best Management Practices are enumerated in a table in Appendix D-10 of the DEIS. No discussion of how BMPs attempting to prevent disturbed soil will stop erosion into waterways, specifically to Critical habitat units for fish, or how stormwater prevention plans will protect nearby riparian areas that harbor listed bird species. No specific stormwater control designs are included for the NCH.

A Blasting Plan is deferred until after project approval, after the NEPA process has completed. No discussion is made of how blasting in the Red Cliffs Reserve will impact Special Status Wildlife and Fish Species or listed species. DEIS at D-13. This needs analysis.

A Noxious Weed Management Plan is deferred until after the environmental public review is over, with no public input. Ibid.

A Hazardous Materials, Hazardous Waste, and Spill Prevention Plan is deferred until after project approval. Ibid. This analysis should be done in the Final EIS

because water pollution from highway construction could significantly impact sensitive and threatened fish in adjacent downstream waters and Critical Habitats.

3.6 Endangered Species Act Section 6 Land Acquisition Grants

Refer to section II, Legal Issues, item 1.

3.7 Geology, Mineral Resources, and Soils

The construction of the Alternatives 2 through 4, as well as covered activities in the HCP will disturb the cryptobiotic soil crusts, allowing for at least temporary increases emissions of PM₁₀ and PM_{2.5} particles because of the disruption and elimination of potentially hundreds of acres of cryptobiotic soil crusts. Destroying these soil crusts also allows for invasion by invasive plants species. Cryptobiotic soil crusts are an essential ecological component in arid lands. They are the “glue” that holds surface soil particles together precluding erosion, provide “safe sites” for native seed germination, resisting invasive species, trap and slowly release soil moisture, and provide CO₂ uptake through photosynthesis (Belnap 2003, Belnap et al 2003, Belnap 2006, Belnap et al. 2007).

Issue

1. The DEIS does not describe the on-site cryptobiotic soil crusts. The proposed projects will disturb an unidentified amount of these soil crusts, causing them to lose their capacity to stabilize soils and trap soil moisture. The DEIS fails to provide a map of the soil crusts over the proposed project sites, and to present any avoidance or minimization measures. It is unclear how many acres of cryptobiotic soils will be affected by the proposed projects. A revised or supplemental DEIS must identify the extent of the cryptobiotic soils on site and analyze the potential impacts to these diminutive, but essential arid land ecosystem components.

3.8 Paleontology

The DEIS states at 3-85:

Management actions for the Red Cliffs NCA are designed to conserve, protect, and enhance resource values, including paleontological resources of the Red Cliffs NCA.

Yet the DEIS also states that:

3.8.2.3 Direct and Indirect Impacts from Alternatives 2, 3, and 4

The T-Bone Mesa, UDOT Application, and Southern Alignments of the proposed Northern Corridor would disturb geologic units within the Red Cliffs NCA classified as PFYC Classes 1 and 2. No geologic units classified as PFYC Classes 3 through 5, with a higher probability to contain scientifically important fossil resources, would be affected by the construction of these highway alternatives. Although the alignments would not impact geologic units that are classified as more sensitive and likely to contain paleontological resources, construction of the highway would preclude discovery of any potential fossil records within the highway footprint for future scientific research. (*id.*)

Issue:

1. The Red Cliffs NCA should protect all paleontological resources, not just those with lower sensitivity. Again, Zone 6 will not mitigate destruction of fossil resources, including trackways, that may be unique to the Reserve area. BLM needs to analyze these significant resources much better, with maps of fossil formations, identified fossil resources, and real mitigation measures. Using Zone 6 as a supposed universal mitigation measure for all resources is a faulty premise and will not reduce impacts to less than significant.
2. A Paleontological Resources Protection Plan is deferred until after approval of a ROW (DEIS Appendix D-14), without the ability of public input or expert review. This needs to be analyzed in the Final EIS. Simply designating a buffer around any discoveries of significant fossil resources during construction does not adequately protect these important and unique resources in the Red Cliffs NCA.

3.13 Visual Resources

3.13.1.2 Northern Corridor and Red Cliffs NCA RMP Amendments

Through OPLMA of 2009 (P.L.111- 11 at Title I, Subtitle O at sec. 1974(a)), codified at 16 U.S.C. 460www, Congress identified scenic resources as one of nine resources the Red Cliffs NCA was designated “to conserve, protect, and enhance for the benefit and enjoyment of present and future generations.”

Issue:

1. Downgrading the VRM Class is inconsistent with the mission of the Red Cliffs Reserve. The Record of Decision defines the purpose of the NCA.

As indicated by the Class A scenic quality inventoried in the VRI, the Red Cliffs NCA is a “highly scenic area” consisting of a “colorful and diverse topography” that is “reflected in the stunning visual impact of the NCA” (BLM 2015a). The NCA’s scenic qualities are one of the reasons that new residents choose to move to the area. “The natural character of the NCA landscape contrasts sharply with the highly modified human environment just outside its boundaries; the proximity of this stunning landscape is often used as a selling point by local realtors.” The landscapes to the NCA’s east and south sides are visible from I-15 for 14 miles, extending all the way through downtown St. George. This landscape forms dramatic contrasts, with jet-black lava flows set against deep red sandstone cliffs (BLM 2015a).

Land use planning goals, objectives, and management decisions approved in the RMP for the Red Cliffs NCA must be consistent with the designation purposes, authorized uses, and other direction in OPLMA that relates to this NCA. Building a highway in this reserve is very inconsistent with the conservation mission outlined in the Red Cliffs National Conservation Area Record of Decision and Approved Resource Management Plan.

The Record of Decision also further defines the purpose of the NCA regarding scenic and visual quality of its wilderness areas:

“Scenic landscapes of the Red Mountain and Cottonwood Canyon Wilderness areas that provide outstanding opportunities for solitude, natural quiet, primitive and unconfined recreation, and high-quality wilderness experiences;”

The General Plan of Washington County, Utah, 2010, comprises The Washington County Resource Management Plan; in Section Seven, County Goals and Objectives, it identifies a goal to “preserve, protect, enhance, and make available for public visitation, scenic areas” in the county, with an objective to make these sites “available for visitation and enjoyment by all residents of the county.

The City of St. George General Plan notes the scenic nature of the surrounding region, as exemplified by the numerous national parks, forests, monuments, and recreation areas; state parks; and wilderness areas nearby. According to the plan, “the visually striking red sandstone and black lava rock hillsides are significant natural assets to the community. The hillsides and plateaus provide a scenic backdrop to the community and provide the

most defining physical characteristics for the area.” The plan states that hillsides comprise an “important visual character that defines the community,” development of which is regulated to protect their visual character. The plan calls for preservation of hillsides by “minimizing the amount of hillside excavation” and requiring “full reclamation to natural appearances

2. The DEIS inadequately addresses impacts to viewshed, scenery, and designated wilderness, and must consider and uphold the VRM management objectives in special status areas.

Table 3.13-1. BLM VRM Class Definitions

Under Red Cliffs NCA RMP Amendment Alternative B, the ROW would be managed as VRM Class IV. Therefore, implementation of this alternative would then be in conformance with amended VRM Class IV. Under Red Cliffs NCA RMP Amendment Alternative C, a new ROW corridor would be designated, managed as VRM Class IV, and open to aboveground and buried utilities. Future construction of aboveground utilities could introduce vertical components into the landscape, with indirect adverse visual impacts. Visual impacts related to belowground utilities would be primarily short term and would occur during construction and occasional maintenance.

Issue:

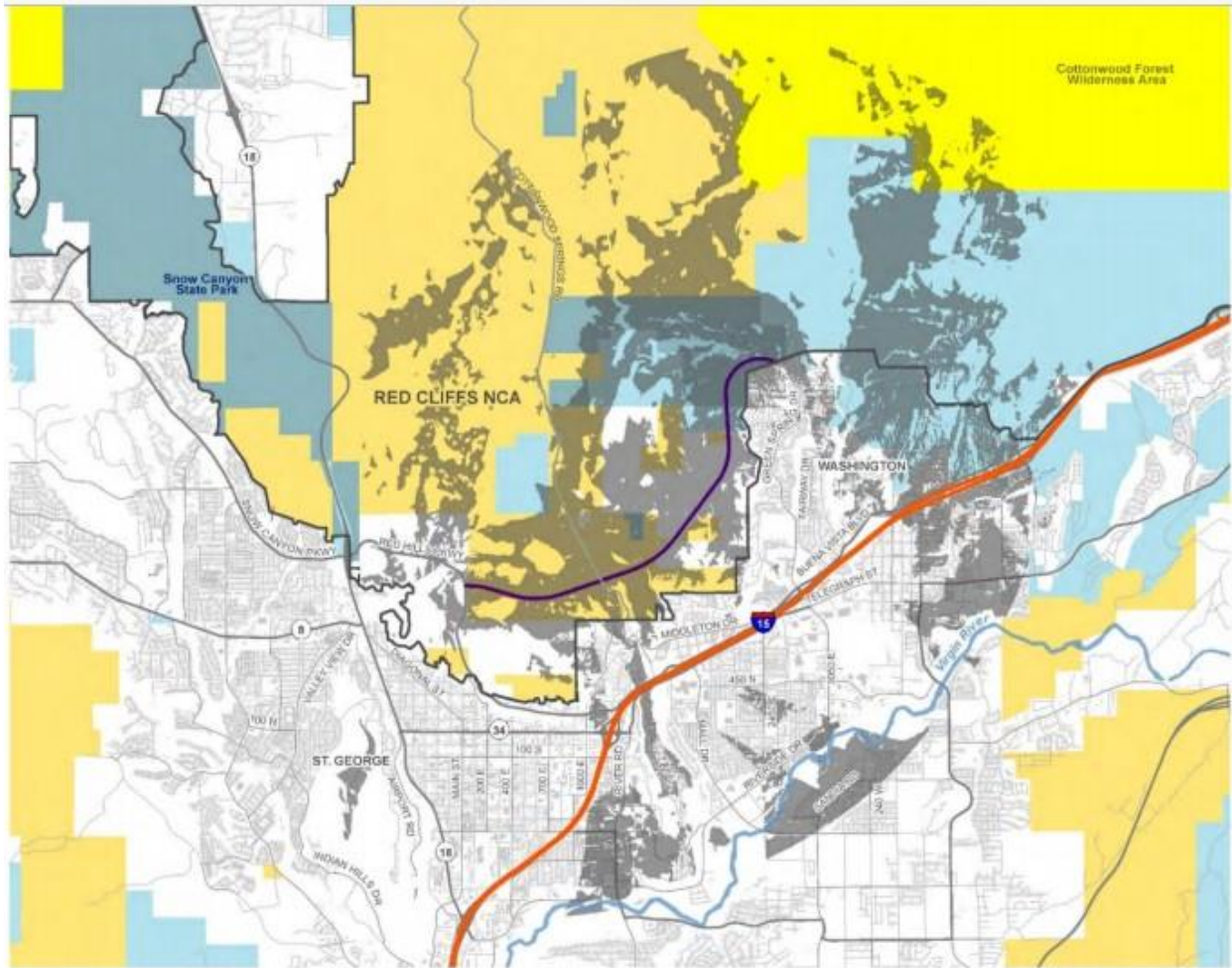
3. Most of the Foreground/Middleground areas have been designated VRM Class II and the main objective for VRM Class II is to “Retain the existing character of the landscape. Allow a low level of change that should not attract the attention of a casual observer.”

The preferred alternative (Alternative 3) would impact 19, 989 acres which are now designated as VRM Class I, 18,630 acres that are VRM Class II, 6,095 acres that are VRM Class III and 130 acres that are VRM Class IV. The DEIS does not do a clear job of adding up all of the acres that would need to have the VRM Class downgraded for each alternative. For example, how many acres of VRM Class II lands would be downgraded for Alternative III? What is the total acreage?

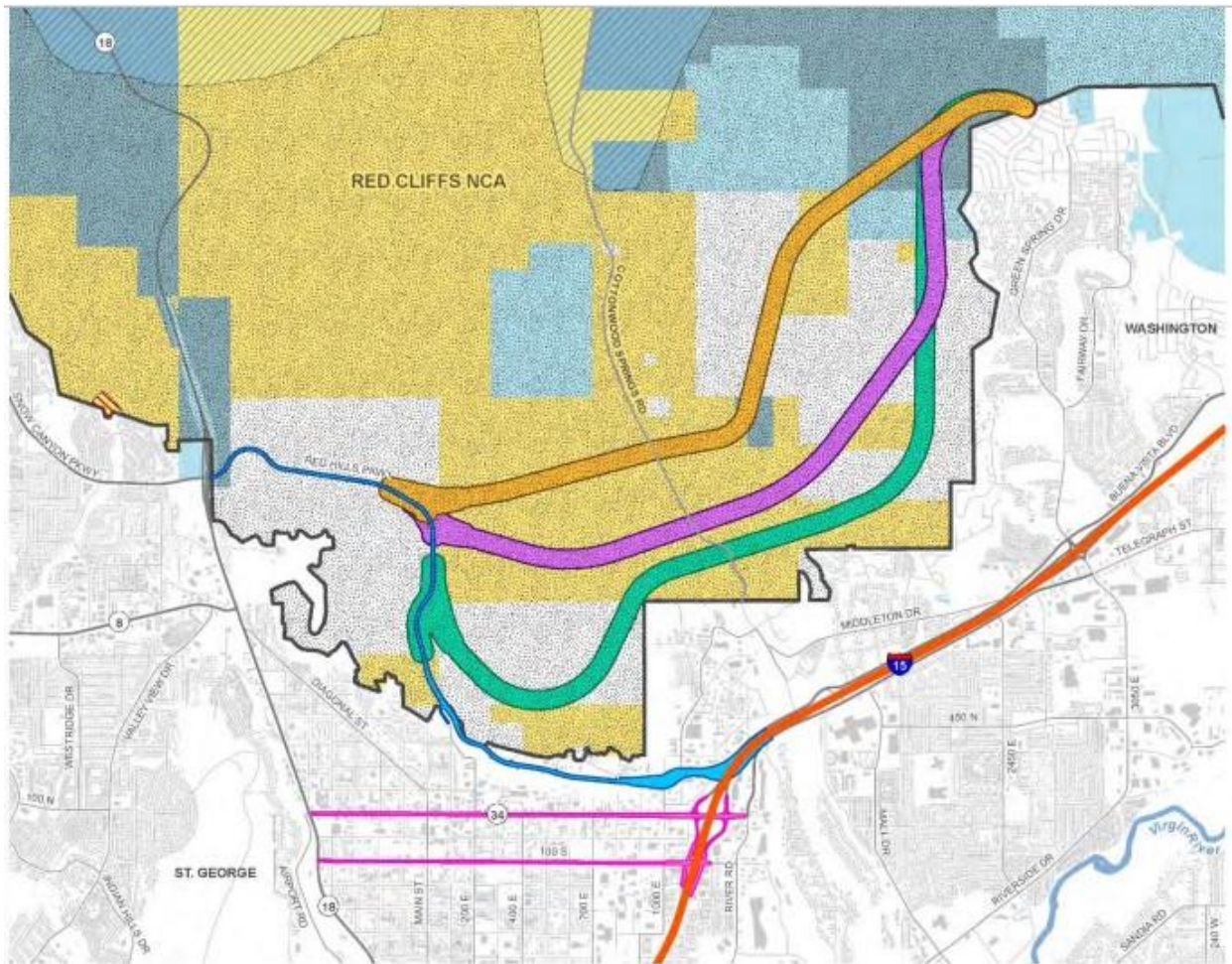
4. According to the Jacob’s Visual Technical Report in Appendix M, the Red Cliffs Reserve has 18,630 acres of lands designated as VRM Class II, yet the same table shows the exact same acres for Alternative 3. If the VRM Class is going to be downgraded, the DEIS should list the exact acres that will be changed and this should also be mapped.

Under Alternative 3 and B, how many acres exactly would have the VRM Class downgraded and where would these be located?

The Jacob Report in Appendix M of the DEIS states: “Red Cliffs NCA RMP Amendment Alternative B: This alternative would allow for a one-time exception to cross a ROW avoidance area, manage the ROW for Northern Corridor as VRM Class IV, and manage an area around the selected route as part of the Rural Recreation Management Zone.” The DEIS fails to provide the exact acres that would need to be downgraded to VRM Class IV.



The above visibility map comes from the Jacobs Visual Impact Assessment report in Appendix M of the DEIS. The dark sections on the map show that the preferred alternative will be visible from areas representing all 4 of the VRM Classes including a percentage of lands in the Cottonwood Forest Wilderness Area which are the highest VRM Class – VRM Class I.



The above map shows the preferred alternative route going through VRM II Class lands, but a highway will be visible from great distances impacted VRM Class I and III lands as well. This map shows that building this highway would be highly inconsistent with the management objectives of the reserve.

5. Because of the long -range visibility of the proposed Northern Corridor Highway, The Background Distance Zones should have been reviewed more adequately in the DEIS. The impacts to both the scenic quality as well as the night sky will be visible for great distances. Distance zones are described as:
Areas seen beyond the foreground-middleground distance zone, but less than 15 miles away, are in the background zone. Areas not seen in the foreground-middleground or background distance zones are in the seldom seen distance zone.
A new highway would be noticeable, especially at night, from the background zones. This would be especially true for the Cottonwood Forest Wilderness Area.
6. The DEIS has inadequate Zone 6 visual resources mitigation. The proposed Zone 6 would add over 6,000 acres to the reserve. The DEIS does not make it clear how many acres in Zone 6 are designated as VRM Class III, but it appears to be about 5,000 acres. But the DEIS does make it clear that Because the BLM is proposing to downgrade large unit of VRM Class II lands adjacent to the proposed alternative, this is not an adequate mitigation for visual resources. The BLM clearly values VRM Class II lands over VRM Class III, but provides no mitigation for the loss of VRM Class II lands in the Red Cliffs Reserve.

7. The DEIS has inadequate Key Observation Point (KOP) simulations. The KOP simulations do not cover the background distance zones and the BLM failed to provide a night- time KOP simulation for dark skies. The highway will have a particularly big impact to dark skies with several moving headlights. This should be considered a major impact from this project.

3.14 Cultural Resources and Native American Concerns

Table 3.14-1. National Register Eligible Cultural Resources in Each Northern Corridor Alignment

The DEIS discloses that there are 8 National Register Eligible Cultural Resources in the UDOT Application Alignment for the NCH.

Issue:

1. BLM fails to discuss how they will mitigate adverse impacts of the NCH on NHPA resources identified in the DEIS analysis.

Additionally, the DEIS notes: “a potential increase in access and visitation to heritage resources may lead to indirect impacts from vandalism” (DEIS page 3-123).

Issue

2. BLM fails to discuss how it will prevent or mitigate increased vandalism.

3.14.2.1 Analysis Methods and Assumptions (DEIS page 3-121)

“Indirect” effects to historic properties are those caused by an undertaking that are later in time or farther removed in distance but are still reasonably foreseeable. Such adverse effects to historic properties under NHPA would constitute impacts to cultural resources under NEPA.”

Issue

3. This raises a host of concerns about the NCH’s long-term negative impacts on not just known heritage sites but also unknown sites. Thinking of reasonably foreseeable, cumulative effects such as from dust, noise, and vibration, and with much of the NCA yet to be formally surveyed, the impacts of the NCH could be devastating.

All of the above issues are of extreme concern to Conserve Southwest Utah (CSU), which has developed a site steward program through Southern Utah National Conservation Lands Friends to steward heritage sites within the Red Cliffs NCA/DR. Over 40 volunteers engage in this ongoing effort to support BLM land managers and involve the community in preserving these unique, invaluable sites.

Red Cliffs NCA RMP Amendments (DEIS at 3-123)

Issue

4. The proposed RMP Amendments B and C would downzone the RMZ in order to provide a ROW for the NCH. Such a change would greatly alter the level of respect for and protection given to cultural resources. Alternative C would be more directly impactful than B; overall, both represent a grave threat to the proximal areas’ cultural resources — the conservation, protection, and enhancement of which is one of the key purposes for designating the Red Cliffs NCA.

For potential heritage resources found on non-federal ITP lands, we are encouraged to see mention of the collaborative compliance effort that will be developed between federal and other agencies, Native American tribes, and Washington County.

Archaeologists in Washington County have documented Native American burials in rocky crevices in washes. BLM must first consult with the Shivwits Band of the Paiute Indian Tribe of Utah, in addition to other Native American tribes with

affiliation to the area, and then survey Middleton and Chisel washes to ensure that there are no burials where the NCH crosses these washes.

3.15 Recreation and Visitor Services

3.15.1 Affected Environment

There are a multitude of recreation resource issues that are not adequately addressed in the DEIS, particularly with respect to potential impacts of the Northern Corridor Highway contained within Alternatives 2 - 4 on recreation and visitor services. These comments generally track the order of Chapter 3.15 of the DEIS. Where appropriate, the comments highlight issues raised by the Red Cliffs Conservation Coalition not addressed within the DEIS.

It is of note that the BLM highlights the Red Cliffs NCA Special Recreation Management Area (SRMA), as:

“an administrative unit where the existing or proposed recreation opportunities and recreation setting characteristics are recognized for their unique value, importance, or distinctiveness, especially compared to other areas used for recreations”

DEIS at 3-125.

The quantitative and qualitative negative effects of Alternatives 2 - 4 on these criteria cannot be overstated.

Issue

1. Unfortunately, given the vital importance of recreation activities in the NCA, the Affected Environment section lacks any description of the specific trails, trail systems, and trailheads that face direct, indirect, and/or cumulative effects from the alternative actions. Without such information, that can then be evaluated in the context of the actions of each of the alternatives, no effective analysis is possible. While Table 3.15.2 presents a trail network summary for the entire NCA, it has no information on the trail type, uses, scenic values, habitat, level of noise disturbance and other attributes for each of the trails it lists in the Environmental Consequences section, Table 3.15.5.
2. In addition, given the recent Turkey Farm Road and Cottonwood Trail wildfires, the DEIS does not represent current conditions, and supplemental information needs to be provided in order to help decision-makers, land managers, and the public understand changes that have occurred to the NCA's recreational resources because of these wildfires.

3.15.1.3 Recreation and Visitor Services in Proposed Zone 6

Issue

3. There are several activities not included in the DEIS that affect Zone 6 and the quality of the area as mitigation for impacts from the NC. These include illegal dumping, and other trash left from activities such as target shooting, partying, and paintball on SITLA portions of Zone 6, development of a massive residential area (Divario) directly adjacent to Zone 6's northeastern side and new development near Moe's Valley, and the visually disturbing presence of the electrical substation and transmission lines on the eastern side. Also missing from the DEIS is the disclosure of the Western Corridor (a planned future highway that would parallel the western boundary of Zone 6)

and the expansions of Green Valley Drive and Navajo Drive (two highways that would travel through Zone 6 from East to West).

4. The current condition of Zone 6 is quite a mix:
 1. 100 miles of roads and trails, motorized and non-motorized, many user-created
 2. 82,775 annual visits
 3. Higher density of recreation then any area of public land in Red Cliffs NCA
 4. 51% BLM administered
 5. Target shooting with associated shooting trash
 6. Evidence of partying, illegal dumping
 7. 122 miles roads and trails including 50 miles open to OHV
 8. SRPs include 5 competitive mountain bike races
 9. Dispersed and car camping
 10. Rock climbing, currently not limited to designated sites

Pictures of current conditions



Rim of the Gap



Graffiti in SITLA lands



Burn scars in the Gap



OHV tracks in SITLA land, proposed Zone 6



Trash in SITLA land proposed Zone 6



Trash in SITLA land, proposed Zone 6

3.15.2 Environmental Consequences

3.15.2.3 Direct and Indirect Impacts from Alternatives 2, 3, and 4

On the Red Cliffs NCA, SGFO RMP Amendments and Amended HCP/ITP Issue

5. The DEIS analysis methods and assumptions for evaluating impacts to recreation and visitor services resulting from the proposed Northern Corridor are woefully inadequate. BLM assumes that:
 “The analysis areas contain recreational user types or groups, and each type or group has differing recreational expectations and experiences.”
 DEIS at 3-129.

However, the analysis fails to address the specific nature of each of the recreation areas and what composes the “differing recreational expectations and experiences.”

It also fails to raise site-specific prospective impacts to recreation and visitor services including noise disturbance, air quality, views, pollution from trash, and habitat quality and related wildlife viewing.

6. The DEIS did not define impacts to specific trails

The following table provides a detailed list of information concerning potential impacts to specific trails requested by the Red Cliffs Conservation Coalition during the scoping process **that have not been analyzed in the DEIS**. It also addresses what will be lost with an RMP Amendment downzoning the RMZ from Frontcountry to Rural.

Trail-Specific Impact Issues and Questions not Addressed in DEIS

Trail	Info. Requests and Impact Issues from CSU's Scoping Comments not Addressed in DEIS	RMP Amendment Tradeoffs for Alternatives B & C
T-Bone	<p>Direct impacts: For Alternatives 2-4, DEIS is unclear on how much of trail will be altered/closed and if/how trail passage thru NCH will be accommodated.</p> <p>Other Direct Impacts, Indirect and Cumulative Impacts: Noise, Viewshed/Scenic Qualities, Air Quality, Fragmented Wildlife Habitat,</p>	<p>Easily accessed, local favorite trail for hiking and trail running — this peaceful, scenic non-motorized recreational experience irretrievably lost with NCH. Possible incorporation into paved pedestrian/bike trail along NCH would mean complete loss of trail. Additional future impacts with Alt. C of RMP Amendment.</p>
Cottontail	<p>Better understand visitor use on this trail with visitor counters. No info. in DEIS about visitor numbers.</p> <p>Direct impacts: For Alternatives 2-4, DEIS unclear on how much of trail will be altered/closed and if/how trail passage thru NCH will be accommodated.</p> <p>Other Direct Impacts, Indirect and Cumulative Impacts: Noise, Viewshed/Scenic Qualities, Air Quality, Fragmented Wildlife Habitat,</p>	<p>Important trail in Green Springs area, providing connection for hikers and mtn. bikers to Middleton Powerline, Mustang Pass, Ice House trails. Non-motorized recreational experience irretrievably lost with NCH. Possible incorporation into paved pedestrian/bike trail along NCH would mean complete loss of trail. Additional future impacts with Alt. C of RMP Amendment.</p>
Pioneer Rim	<p>Direct impacts: For Alternative 4, DEIS unclear on how much of trail will be altered/closed and how trail passage thru NCH will be accommodated, incl. for equestrian users.</p> <p>Other Direct Impacts, Indirect and Cumulative Impacts: Noise, Viewshed/Scenic Qualities, Air Quality, Fragmented Wildlife Habitat.</p>	<p>Increasingly popular trail, family friendly non-motorized hiking and biking, accessible via Pioneer Park. Will face major degradation of recreation experience, positioned between Red Cliffs Parkway and NCH. High tortoise density and wildlife</p>

Trail	Info. Requests and Impact Issues from CSU's Scoping Comments not Addressed in DEIS	RMP Amendment Tradeoffs for Alternatives B & C
		viewing threatened by the NCH.
Pioneer Hills Trail & Trailhead	<p>Direct Impacts: For Alternative 4, DEIS does not specify impacts to Pioneer Hills Trailhead and Trail, and how these will be addressed, incl. for equestrian users.</p> <p>Other Direct Impacts, Indirect and Cumulative Impacts: Noise, Viewshed/Scenic Qualities, Air Quality, Fragmented Wildlife Habitat.</p>	Increasingly popular trail, family friendly hiking and biking, accessible via Pioneer Park. Will face complete degradation of recreation experience, positioned between Red Cliffs Parkway and NCH. High tortoise density and wildlife viewing threatened by the NCH. Additional future impacts with Alt. C of RMP Amendment.
Owen's Loop	Indirect and Cumulative Impacts: Noise, Viewshed/Scenic Qualities, Air Quality impacts from proximity to Red Cliffs Parkway and NCH interchange	Degradation of recreation experience in this BLM-designated Intensive Use Area.
City Creek	Indirect and Cumulative Impacts: Noise, Viewshed/Scenic Qualities, Air Quality impacts from proximity to Red Cliffs Parkway and NCH interchange	Degradation of recreation experience in this BLM-designated Intensive Use Area.
Broken Mesa	Direct, Indirect and Cumulative Impacts: Noise, Viewshed/Scenic Qualities, Air Quality impacts from exposure to NCH below the trail to the south	Degradation of recreation experience, with trail's setting impacted by the Project
Mill Creek and Mill Creek Trailhead	Direct, Indirect and Cumulative Impacts: Noise, Viewshed/Scenic Qualities, Air Quality impacts from proximity to Project's connection to Washington Parkway Extension. Impacts on Mill Creek Trail and access to Elephant Arch, Mustang Pass, Ice House, Sand Hill, and Dino Cliffs trails, all popular trails for equestrians	Degradation of recreation experience, including for equestrians, with trail's setting impacted by the Project

Trail	Info. Requests and Impact Issues from CSU's Scoping Comments not Addressed in DEIS	RMP Amendment Tradeoffs for Alternatives B & C
Bone Wash	<i>Direct, Indirect and Cumulative Impacts:</i> Noise, Viewshed/Scenic Qualities, Air Quality impacts from proximity to Project's connection to Washington Parkway Extension	Degradation of recreation experience, with trail's setting impacted by the Project
Sand Hill	<i>Direct, Indirect and Cumulative Impacts:</i> Noise, Viewshed/Scenic Qualities, Air Quality impacts from proximity to the NCH's connection to Washington Parkway Extension	Degradation of recreation experience, with trail's setting impacted by the Project
Dino Cliffs	<i>Direct, Indirect and Cumulative Impacts:</i> Noise, Viewshed/Scenic Qualities, Air Quality impacts from proximity to the NCH's connection to Washington Parkway Extension	Degradation of recreation experience, with trail's setting impacted by the Project
Grapevine	<i>Direct, Indirect and Cumulative Impacts:</i> Noise, Viewshed/Scenic Qualities, Air Quality impacts from proximity to Project's connection to Washington Parkway Extension	Degradation of recreation experience, with trail's setting impacted by the Project
Cottonwood Canyon Wilderness trails, incl. Ice House, Mustang Pass, Middleton Powerline, Millcreek, Bone Wash	<i>Direct, Indirect and Cumulative Impacts:</i> Noise, Viewshed/Scenic Qualities, Air Quality impacts from NCH, located approx. two miles from wilderness area	Quality of recreation on trails leading into Cottonwood Canyon Wilderness degraded, and impacts to unconfined, primitive experience, incl. dark skies, natural quiet, and solitude
Cottonwood Springs Road	<i>Direct, Indirect and Cumulative Impacts:</i> DEIS does not specify how passage/crossing of this important motorized road by the NCH will be accommodated	Potential impacts to motorized route providing remote access to Yellow Knolls Heritage Site and other trails, and used by mountain bikers, trail runners, and hikers

In summarizing the table, although the current Frontcountry RMZ recognizes an urban interface with landscapes that have human-made infrastructure, the DEIS fails to evaluate the existing qualities of the trails listed in the above table. These trails are

a hallmark of why the Red Cliffs has been designated as a National Conservation Area. Recreation is one of the 9 resource values the NCA was designated to protect, conserve, and enhance for present and future generations. As previously noted, the DEIS fails to look at the specific qualities of these trails and trail users, and thus cannot effectively weigh the tradeoffs between the alternatives.

7. Simply based on the review in the table above, **changes in the existing RMP's RMZ should not be allowed, as this will irreparably damage the experience of quiet recreation within the NCA, and completely dilute the attributes for which the NCA was designated in first place.**
8. While the DEIS does indicate the number of acres affected by a change in the RMZ from Frontcountry to Rural due to the Project, it does not evaluate actual impacts of the NCH on the acreage of the ROW area, or on other areas exposed to the highway alignment from the standpoint of views, noise, air quality, and quality of wildlife habitat. As indicated in the table above, there are major impacts on recreation resources of the greater areas surrounding each of the proposed alignments in Alternatives 2, 3, and 4.

The DEIS states

".... all alternatives would require alteration or closure of portions of the existing trails and consideration during design on how to or if to accommodate trail crossings" DEIS at 3-131.

This statement raises a major concern that trail crossings potentially will not be accommodated. For the possible accommodations mentioned on p. 3-131, the recreation visitor's experience will be negatively impacted, whether having to navigate a grade-separated culvert, travel along the NC's road profile, and/or cross the NCH's roadway.

9. The DEIS fails to address overall impacts to recreation experiences, specifically those mentioned in Scoping Comments, such as
 - a. Cumulative effects and BLM's mitigation of the Project's noise and air pollution experienced by recreation visitors in the NCA, as well as the loss of recreation in quiet, natural spaces. Just the noise impacts alone could produce 70-80 decibels continuously by the year 2040. Studies have shown that this level of noise will increase heart rate, blood pressure, and cortisol. The easily-accessed sanctuary of protected trails that currently offer physical, mental, and emotional benefits to visitors will be lost.

No mitigation measures are discussed re. noise. Such approaches might include decreased speed limit (30 mph or less), and use of under/overpasses for trails.

- b. Impacts to the viewshed for recreation visitors from increased threat of catastrophic wildfire caused by issues including vehicle incidents on the roadway, and careless tossing of lit cigarettes. Impacts of litter from the roadway ending up in the NCA's recreation areas.
 - c. A major factor influencing recreation experience is habitat quality. Visitors hope to observe desert tortoises and other wildlife while on trails. The connection between direct impacts to wildlife habitat and what motivates and

enhances the experience of hikers, bikers, photographers, birders, and equestrians is not made in the DEIS. The Project will have a variety of negative impacts on this aspect of recreation.

- d. The DEIS does not indicate how the BLM will prevent new potential ease of access and related social trails resulting from the NCH.
- e. Not addressed are impacts to and mitigation measures specifically for equestrian users, relating to exhaust, dust, and noise emissions from the NCH.
- f. The BLM has benefitted from strong relationships with different groups who use and care about the Red Cliffs NCA. One such group is the Backcountry Horsemen, Southwest Chapter, which has demonstrated long-standing efforts in working with BLM, providing stewardship within the Red Cliffs NCA. The Project could have negative effects on this relationship and the group's ability to continue providing support.

Zone 6

Issue

- 25. Under Alternatives 2-4, the promises made by Washington County for Zone 6 in exchange for the ROW for the NC far exceed the reality that could be obtained. Zone 6 is a multiuser recreation area which recently has been bordered by development near the Moe's Valley bouldering area and the Gap climbing area, Bearclaw Poppy Trail used by mountain bikers and hikers, and the Zen Trail, used by hikers, mountain bikers, and climbers. This new development has begun the process of concentrating users. OHV users are crossing over bike paths in their attempts to continue usage. Many of these motorized visitors are from the short-term rental condos nearby, but also the new residential developments, which are marketed as having recreational activities in their backyards, are new sources of both motorized and non-motorized users. Camping on the rim of and inside the canyon of the Gap has left trash, multiple campfire rings and recently, a burn in the canyon. The SITLA lands are a maze of user-made trails. Makeshift target shooting ranges appear wherever people can obtain access. The county's inabilities include:
 - a. Funding the acquisition of 3X the acreage of land within the corridor ROW
 - b. More stringent management and enforcement of recreational activities
 - staff added
 - Fencing on the Eastern border and Navajo Road
 - Additional Law Enforcement funds
 - Areas for rock climbing and potential restrictions will be identified
 - Reduction of total mileage of recreational access routes by more than half
 - Closing social trails
 - Camping either more limited or eliminated
 - Increased fire management
 - c. Grazing retirement
 - d. Community education and outreach
- 26. It was originally proposed that the multi-use recreation would be able to exist without change, but now Washington County is proposing restrictions and law enforcement.

- There will be opposition to such restrictions, making it an extremely difficult job to keep up with enforcement. **The DEIS fails to adequately explain how law enforcement will be handled on 3,225 acres of SITLA lands, meaning that damaging recreational uses could continue occurring in half of Zone 6.**
27. The DEIS also does not discuss how the already-damaged areas in Zone 6 will be restored. There is graffiti, trash, trail scars, paintball relics, campfire scars, and other types of impacts. This is a heavily used recreation area, and it should be treated as such — a recreation area. It in no way can provide the same kinds of quiet recreational experiences that are enjoyed by recreators in the Red Cliffs NCA.
 28. Zone 6 is a multiuser recreation area which has recently been bordered by development near Moe's Valley bouldering area and the Gap, climbing area; Bearclaw Poppy mountain bike and hiking trail; as well as the Zen trail, mountain bike, hiking and rock-climbing area. This development has begun the process of concentrating users. OHV users are crossing over bike paths in their attempts to continue usage. OHV users often are from the short-term rentals found adjacent to the Gap area but recently UTVs are appearing to originate from the new developments which are billed as having access to outdoor recreation. Camping on the rim of and inside the canyon of the Gap has left trash, multiple campfire rings and recently a burn in the canyon. The SITLA lands are a maze of user made trails. Makeshift target shooting ranges crop up wherever people can obtain access.
 29. It was originally proposed that all this multiuse would be able to exist without change but now Washington County is proposing restrictions and law enforcement. This seems right if this was to be an addition which truly was to protect the Mojave Desert Tortoise but it will most likely be met with opposition to those rules. It will be a full-time job to try to keep up with rule enforcement.
 30. There is also no mention of rehabilitation of the already damaged areas. As in the case with graffiti, most land managers would agree that graffiti must be removed promptly or more will follow. In Zone 6, there is graffiti, trash, trail scars, paintball relics and it goes on. This is a heavily used recreation area and should be treated as such, a recreation area.
 31. The penalties of not approving the Northern Corridor ROW (Washington County would not implement the amended HCP and would cease implementing the 1995 HCP; no future funding for Mojave tortoise conservation including facilitating land acquisitions, monitoring of tortoise relocations, fence maintenance, law enforcement, outreach, recreation manager or other tortoise conservation actions) show that there is a lack of commitment to the Zone 6 area. It is only being used as a bargaining tool.

The penalties that come with not approving the NCH show that there is a lack of commitment to the Zone 6 area. Sadly, it is only being used as a bargaining tool.

Equine Recreation

The Red Cliffs National Conservation Area (NCA) is an important landscape in southwestern Utah that currently provides outstanding recreational experiences for hikers, horseback riders and other outdoor enthusiasts. It is visited and enjoyed year-round by locals and tourists, and particularly during the winter when conditions in northern climates and the Midwest are viewed by tourists as less than optimal for outdoor pursuits.

Issue

32. The proposed Northern Corridor Highway, if constructed, would undermine the intent of Congress when it passed the 2009 Omnibus Public Lands Act that formally designated the NCA. Among its declared purposes were to “conserve, protect and enhance” the public’s “enjoyment” of the NCA, including its scenic and recreational resources (P.L. 111-11, Sec. 1974(a)(1)). If approved, however, the highway and its traffic would:
- Impair the continuity of many long-established public trails throughout the NCA;
 - Disrupt the NCA’s remarkable scenic vistas and shatter the sense of solitude that can be found within the NCA; and
 - Generate noise and air pollution that would be noticed by NCA visitors for miles in every direction and significantly degrade the public’s recreational experience.
33. The proposed Northern Corridor Highway bisects through the heart of the Red Cliffs NCA and by no means "conserves" the established public lands. The high volume of traffic would neither protect nor enhance the public’s use and enjoyment of this high-quality natural area.
34. Zone 6 doesn’t gain any recreational area which is not already available to non-motorized recreation. There is a distinct lack of trailheads with room for parking trailers with horses. Access is currently through residential areas. The increased traffic in these neighborhoods would be highly contentious and unwelcomed by those residents.

The NCH simply takes recreational opportunities away without gaining any new areas. It totally changes the recreational experience of a National Conservation Area. Non-motorized recreation thrives on quiet environment, the beauty of the terrain and the opportunity for equestrians to enjoy our horses in the scenic Red Cliffs NCA.

Issue

35. The BLM failed to address any of the recreational/equestrian concerns made in the scoping comments; including but not limited to what the impacts would be to the Elephant Arch Trail, Mustang Pass, Ice House trail, and Dino Cliffs trails. What kind of mitigation measures would be taken to insulate equestrians and other users from the noise, dust and exhaust generated by a four-lane highway? These particular trails are very unique - showing unusual rock formations, lava fields and beautiful views of the St. George/Washington area. The NCH would negatively impact the enjoyment of all of these trails inasmuch as access would be difficult and the very things that make them unique would be destroyed by the highway.

Interpretation/Visitor Understanding

Impacts of the Project on Community Education and Volunteer efforts within the Red Cliffs NCA include the implications for activities undertaken by CSU staff and its public lands service volunteers, Southern Utah National Conservation Lands Friends (SUNCLF). The two have contributed thousands of hours providing outreach, stewardship, habitat restoration, litter pickups, guided hikes, and community-building events focused on the Red Cliffs NCA and its value to our community. CSU has over 2000 members and SUNCLF over 40 site stewards.

Issue

36. Unfortunately, the entire NCH process, which is not allowing for collaborative community input, undermines great effort to connect our community to stewardship,

education, and appreciation of the NCA. More specifically, the Project would threaten efforts of SUNCLF's site steward program by illustrating BLM's disregard for protecting NHRP-eligible sites including an historic petroglyph panel in the ROW. Stewards volunteer their time to monitor sensitive cultural sites and guard heritage resources protected within the NCA, and their efforts are undermined by this project.

Education & Scientific Resources

37. It is imperative that scientific research on Mojave Desert tortoise populations and impacts is prioritized and fully supported under all alternatives, especially in light of this summer's wildfires.

3.16 Land and Water Conservation Fund Act Lands [Section 6(f) Properties]

Refer to section II, [Legal Issues](#) subsection, item 2.

3.16.1 Affected Environment

The LWCF Act of 1965 established a funding source assisting states and Federal agencies to meet present and future outdoor recreation demands and needs. Section 6(f)(3), as codified in 36 CFR 59.3, is the cornerstone of Federal efforts that ensure Federal investments in LWCF assistance are being maintained for public outdoor recreation use. The LWCF has a Federal agency component and a State and local government component, which have different uses and requirements. For Federal land management agencies such as the BLM, the LWCF may be used to purchase private in-holdings to meet resource management objectives. For State and local governments, Federal assistance from the LWCF is allocated to a state for the planning, acquisition, and development of needed land and water public outdoor recreation projects. Once land has been purchased or developed (partially or entirely) with LWCF assistance from the State side of the LWCF program, it is considered a Section 6(f) property. “No Section 6(f) property may be wholly or partially converted to a use other than public outdoor recreation use(s) without the approval of the National Park Service. These anti-conversion requirements do not apply to the Federal side of the LWCF” (DEIS at 3-135).

Issue:

1. This statement seems to be incompletely stated. The law states that only state-side lands may be converted to non-recreational uses; Federal LWCF lands cannot be converted under any circumstance. The BLM seems to have an incorrect understanding of the law. Note the reference to conversion in the state-side law (54 U.S. Code § 200305(f)(3)) does not apply to the federal side (54 U.S. Code § 200306)

Within the Northern Corridor analysis area, Pioneer Park is the only State LWCF/Section 6(f) property (Map 3.16-1). On Red Hills Parkway just north of downtown St. George, the City of St. George developed the park—proposing a picnic shelter, amphitheater, and parking lot—using a 1989 LWCF grant award. “In addition, within the Northern Corridor analysis area, approximately 69 acres of private in-holdings have been previously acquired by the BLM using LWCF” (DEIS at 3-136).

Issue:

2. This is the land that may not be converted under any circumstance. The ROW through these lands is prohibited, making the granting of the Northern Corridor illegal. See reference in comment 1 above.

3.16.2 Environmental Consequences

3.16.2.1 Analysis Methods and Assumptions

The State and Federal sides of the LWCF program have different impact indicators. A primary indicator for both is direct encroachment on a parcel. However, with the State side of the program, additional indicators of impacts include if the parcel defined as a Section 6(f) property—the boundaries of which are detailed in the grant application—would be wholly or partially converted to a non-conforming use. This includes if construction would terminate the public outdoor recreation use, convey a property interest for a private or non-public outdoor recreational use, or result in the loss of recreational viability of the remaining property if a partial conversion occurs. The following assumptions apply to this analysis:

- If a State LWCF/Section 6(f) property is wholly or partially converted to a non-public outdoor recreational use, land of equal value, location, and usefulness would be identified for mitigation in accordance with 36 CFR 59.
- Reasonable in-kind mitigation can be identified if a conversion of use to a State LWCF/Section 6(f) property occurs.
- “Federal LWCF lands impacted would not require mitigation” (DEIS at 3-136).

Issue:

3. This assumption is invalid: mitigation does not apply since the State LWCF/section 6(f) condition does not apply to Federal LCWF lands; they may not be converted.

3.16.2.4 Direct and Indirect Impacts from Alternative 5

“Alternative 5 would have no impacts to Federal LWCF lands. As shown on Map 3.16-1, construction of the Red Hills Parkway Expressway would require ROW acquisition on approximately 0.9 acre of Pioneer Park, as defined in the State’s original LWCF grant application” (DEIS at 3-136) This would constitute a conversion of use. The acquisition would occur directly adjacent to the existing Red Hills Parkway, and would encroach on areas not actively used for recreation. None of the outdoor recreation facilities would be affected; however, ingress and egress points to the park may require reconfiguration to facilitate the expressway and ROW requirements (see Section 3.15 for further details). For this reason, while a partial conversion of use would occur, the recreational value of Pioneer Park itself would not be terminated or diminished. “If this alternative is selected, mitigation in-kind for the 0.9-acre conversion would be required and is dependent on approval from the National Park Service” (DEIS at 3-137).

Issue:

4. This estimated impact appears to be minor and it is based on an assumption of a specific design of this area of alternative 5 implementation. Design options should be considered under conditions of public engagement in order to minimize or eliminate this impact.

3.16.2.3 Direct and Indirect Impacts from Alternatives 2, 3, and 4

Alternatives 2, 3, and 4 would not wholly or partially convert any State LWCF/Section 6(f) properties to non-recreational use. “However, construction of the Northern Corridor would directly encroach on a number of parcels the BLM had previously used LWCF to acquire and incorporate into the NCA” (DEIS at 3-136). Table 3.16-1 summarizes, and Map 3.16-1 displays these impacts.

Issue:

5. This encroachment is illegal. See reference in comment 1 above.

A June 20, 2020 BLM press release⁵⁷ touts the use of LWCF funding to acquire a parcel inside the Red Cliffs NCA:

“The Bureau of Land Management recently acquired approximately 40 acres within the boundaries of the Red Cliffs Desert Reserve and the Red Cliffs National Conservation Area (NCA) in Washington County, Utah for \$1.7 million. The BLM acquired this parcel with funds

⁵⁷ Bureau of Land Management Continues Conservation Efforts at Red Cliffs, Utah

derived from oil and gas leasing on the outer continental shelf through the Land and Water Conservation Fund.”

BLM Deputy Director William Perry Pendley is quoted in the release saying that the Red Cliffs NCA is an excellent example of what LWCF funding can achieve:

“Today, we are fulfilling President Trump’s vision and Secretary Bernhardt’s commitment to conservation by enhancing world-class recreational opportunities and protecting crucial habitat for multiple native species. The President has boldly called for full, permanent funding of the Land and Water Conservation Fund, and Red Cliffs NCA is an excellent example of what this funding can achieve.” Said BLM Deputy Director for Policy and Programs William Perry Pendley.”

Issue:

6. In forcing the NCH through Red Cliffs NCA (including multiple parcels acquired with LWCF funds), Mr. Pendley and the Bureau of Land Management are undermining the intent of the 2009 Omnibus Public Land Management Act, the 1965 Land and Water Conservation Fund Act, the Great American Outdoors Act, and the Endangered Species Act.

3.17 BLM Transportation and Travel Management

3.17.2.3 Direct and Indirect Impacts from Alternatives 2, 3, and 4

Overall adverse impacts to visitor access from establishing the Northern Corridor would be minor in temporarily closing or altering existing designated trails. The establishment of the Northern Corridor may beneficially impact visitor access by providing more opportunities to access surrounding non-motorized and motorized trails and routes.

Issue:

1. Overall, the Northern Corridor would significantly decrease use of visitor access points by introducing sound and visual pollution into the experience.

Under Alternatives 2, 3, and 4, limitations on future route and trail designations as a result of management decisions associated with Amendment Alternatives B and C and the Washington County HCP would have a generally reductive effect on visitor access. “Alternatives 2, 3, and 4 would be more restrictive to visitor access in proposed Zone 6 as compared to Alternatives 1, 5, or 6” (DEIS at 3-141).

Issue

2. Zone 6 access and experience is further compromised by the planned road penetrations that have not been addressed in the DEIS due to improper limitation of timeframe.

3.18 National Conservation Area

Through the Omnibus Public Land Management Act of 2009 (P.L.111- 11 at Title I, Subtitle O at sec. 1974(a)) Congress defined the purposes for designation of the Red Cliffs NCA as follows: To conserve, protect, and enhance for the benefit and enjoyment of present and future generations the ecological, scenic, wildlife, recreational, cultural, historical, natural, educational, and scientific resources of the National Conservation Area; and

To protect each species that is – located in the National Conservation Area; and listed as a threatened or endangered species on the list of threatened species or the list of endangered species published under Section 4(c)(1) of the Endangered Species Act of 1973 (16 U.S.C. 1533(c)(1))

BLM must conserve, protect and enhance the Red Cliffs NCA's objects and resource values in accordance with the Congressionally-defined purposes identified through OPLMA of 2009. BLM must not site the NCH ROW inside of the NCA.

Issue

1. BLM's analysis shows that UDOT Alignment Alternative 3 cannot be granted under OPLMA of 2009 because it would cause severe adverse and permanent impacts to the Red Cliffs NCA's objects and values, whereas Alternatives 5 and 6 would not for the following reasons:

1. Ecological Resources

A. Vegetation Communities

Alternative 3 would cause adverse direct and indirect impacts to 5 vegetation communities, including native desert scrub vegetation needed by the MDT for food and shelter. Under Alternative 3, exotic invasive species and annual grasses are anticipated to spread up to 1 kilometer outside of the ROW. DEIS at 3-11.

Alternative 3 would directly impact 240 acres in three vegetation groups, including 174 acres of Creosote White Bursage scrub which is critical for MDT survival.⁵⁸ Alternative 3 would indirectly impact 3,879 acres of vegetation groups inside the Red Cliffs NCA, including those that provide food and shelter for the desert tortoise, listed and sensitive species and general wildlife in the NCA.

Alternative 5 would directly impact 4 acres and Alternative 6 would directly impact 1 acre of vegetation groups.

Alternative 5 would indirectly impact 45 acres and Alternative 6 would indirectly impact 9 acres of vegetation groups. DEIS at Table 3.2-2.

B. Special Status Plants

Alternative 3 would cause direct and adverse impacts to 8.6 acres of dwarf bear-poppy suitable habitat and potentially cause indirect adverse impacts to Virgin thistle occupied habitat within the Red Cliffs NCA analysis area.

⁵⁸ Desert Tortoise Annotated Bibliography 1991-2015

DEIS at 3-24.

Alternative 5 could cause potential indirect impacts to Virgin River Thistle and potential direct impacts to 2.9 acres of dwarf bear-poppy suitable habitat, although most of this modeled suitable habitat is adjacent to the existing roadway or other developments and presumably has been previously disturbed. No occupied habitat or critical habitat for Federally listed plants would be directly impacted.

DEIS at 3-28.

Alternative 6 would cause no direct or indirect impacts to special status plants or their critical habitats.

DEIS at tables 3.3-3 through 3.3-5.

C. General Wildlife

Alternative 3 would adversely impact dozens of wildlife species and birds of conservation concern that inhabit the Red Cliffs NCA for all or a portion of the year. Direct and indirect adverse impacts include 287 acres of habitat loss, in addition to habitat degradation, direct mortality and collisions, habitat fragmentation, noise impacts that could cause reproductive failure, and increased spread of exotic invasive species, particularly annual grasses, that reduce the quality of foraging habitat and increase the potential for a wildfire.

DEIS at 3-31.

Conversely Alternatives 5 and 6 would have minimal impacts to wildlife because existing paved roadways with very little wildlife habitat would be converted to the Northern Corridor. Habitat for general wildlife would only be affected at tie-in locations where construction activities would include some areas that are currently unpaved.

DEIS at 3-32.

D. Special Status Wildlife

i. Mojave desert tortoise

Alternative 3 would cause adverse direct and indirect impacts on MDT, including loss of occupied MDT habitats, displacement and short-distance translocation of MDT, and destruction of burrows, including the geologic and edaphic factors that facilitate borrow construction.

DEIS at 3-61 and 3-65.

Indirect impacts include disturbance of MDT adjacent to the ROW from noise and vibrations associated with construction and use of the highway, facilitating human intrusion into MDT habitat, spreading trash and toxins in the environment, influencing predator abundance and distribution, facilitating invasion of nonnative plants, increasing the probability of fire ignition, disrupting home range and landscape movement patterns, and fragmenting habitat **within lands specifically identified for the protection and long-term management of Mojave desert tortoise through the designation of Mojave desert tortoise critical habitat, establishment of the Reserve, and designation of the Red Cliffs NCA.** Mojave desert tortoise habitat within the designated ROW would be destroyed, **including designated critical habitat.** (Emphasis added). Additionally, the concern regarding fragmentation is exacerbated by the presence of tortoise exclusion fencing along Cottonwood Springs Road, forming an absolute barrier to Mojave desert tortoise east-west movement across Reserve Zone 3.

DEIS at 3-62.

“The continued fragmentation compromises the integrity of the entire Reserve (USFWS 2015). As the functional population is reduced in size, the susceptibility to stochastic events increases.”

DEIS at 3-62.

“This reveals there is an important desert tortoise population cluster located within the path of the T-Bone Mesa Alignment, UDOT Application Alignment, and Southern Alignment Alternatives within the Reserve. This may be **the most important high-density cluster of desert tortoises in the recovery unit** (USFWS 2020a).” (emphasis added).

DEIS at 3-63.

Discussion of roadway and habitat fragmentation impacts offers additional information on the threat of Alternative 3 to the MDT, including:

“Habitat loss, predominantly from development has led to reduced populations or loss of Mojave desert tortoise in its range (USFWS 2019a), including in Washington County and the Analysis Area for the HCP. Habitat fragmentation occurs when habitat blocks are broken into small, isolated pieces. Increased development, including buildings, roadways, and utility corridors, leads to an expanding urban footprint that reduces natural Mojave desert scrub habitat and expands the wildland-urban interface. The wildland-urban interface intensifies the potential effects of fragmentation and habitat loss and facilitates human/tortoise interactions. The Reserve borders private and municipal lands in the cities of St. George, Ivins, Washington, and Hurricane. As habitat fragments become smaller and increasingly isolated, **effective population size decreases, species may become more vulnerable to genetic drift and inbreeding, genetic variation declines, and heterozygosity decreases** (Berry and Murphy 2019). (emphasis added).

DEIS at 3-34.

“If a population were to experience a catastrophic decline as a result of drought, wildfire, disease outbreak, or other stochastic event, its recovery may rely heavily on the immigration of new individuals from adjacent populations for recovery (Edwards et. al 2004). The inability to repopulate may be a more important factor in Mojave desert tortoise’s long-term survival than the lack of genetic variability (USFWS 2019b). According to the USFWS, 3,000 adult Mojave desert tortoises may be a realistic management goal for targeting a minimum effective population size to prevent genetic deterioration (USFWS 2019b).”

DEIS at 3-35.

“The placement of roads through Mojave desert tortoise habitat is well understood to cause disruptions by influencing movements, fragmenting habitats, and causing direct mortality during crossing attempts.”

DEIS at 3-35.

“It has been shown that wide, heavily traveled roads, as well as fenced roads, disrupt movement, dispersal, and gene flow of Mojave desert tortoise populations (USFWS 2018).”

DEIS at 3-35.

“Von Seckendorff Hoff and Marlow (2002) identified a direct correlation between higher traffic levels and greater road avoidance distances in Nevada. They reported that the magnitude of the road impact zone for roads without exclusion fencing varied from 2,150 to 4,250 meters for 2-lane to 4-lane highways, and 1,090 to 1,389 meters for graded and maintained electrical-transmission-line access roads. The zone of impact increased

significantly with increasing traffic levels, and populations were found to be depressed from less than 175 meters to up to 4.6 kilometers from a roadway (Von Seckendorff Hoff and Marlow 2002).”

DEIS at 3-35

“Recent research by Peaden et al. (2017) showed that carapace temperatures, which can result in increased thermal stress sometimes leading to death, were greater when animals were within 20 meters of a road or fence compared to when animals were farther away. The same study found that “tortoise movement velocity was greater when animals were near a fence or road than away from them,” which can result in increased energy expenditure and stress (Peaden et. al 2017). Adult tortoises located near high traffic roads were at least 30 percent smaller (and below the typical size for sexual maturity) than tortoises associated with lower traffic volumes or no roads (Nafus et al. 2013). A reduction in the average size of individuals may result in lower population growth rates. Overall, these observations may indicate that habitat near roads used by as few as 300 vehicles per day represents sink habitat for desert tortoises (Nafus et al. 2013).”

DEIS at 3-35

“Therefore, road noise, vibration, and lights have potential adverse effects on desert tortoises and other wildlife species for which the Red Cliffs NCA provides an important habitat.”

DEIS at 3-36.

“Road crossing mortality has been found to impact nesting females, which can skew sex ratios of tortoises, contributing to a decline in population growth and viability (Aresco 2005 as cited in Peaden et. al 2017).”

DEIS at 3-36.

“Roads also provide human access into habitat, magnifying effects such as poaching, predation, and habitat degradation (Latch et al. 2011). Litter and roadkill can attract Mojave desert tortoise predators, such as ravens, coyotes, and golden eagles. An increase in raven populations has been documented when there is easy access to carrion (Berry and Murphy 2019). An increase in the number of ravens is correlated to increased predation on tortoises, especially juveniles whose shells are not yet ossified and are still soft enough to puncture easily (USFWS 2011). During road construction, desert tortoises that remain in the ROW may be crushed or trapped in burrows. In addition, roads and linear corridors add impervious surfaces to the landscape, which concentrate runoff and erosion (Lovich and Bainbridge 1999).”

DEIS at 3-36.

“Roads increase the spread of nonnative plant species (Brooks and Berry 2006, Brooks and Chambers 2011), which reduces Mojave desert tortoise forage quality and increases the risk of fire within Mojave desert tortoise habitat. Roads can be a direct source of fire ignition, increased litter, increased presence of predators, and increased toxicants into the environment (Forman and Sperling 2003). Herbicide use and weed control, as part of a long-term plan, may reduce the spread of invasive species during road construction, maintenance, and use; however, the presence of nonnative species, and nonnative grasses in particular, is pervasive.”

DEIS at 3-37.

MDT have not been documented reliably using culverts in the Red Cliffs NCA or across the range, and the BLM must not trust that culverts will mitigate the habitat fragmentation caused by the NCH.

“Red Hills Parkway and Tuacahn Drive in the Reserve have culverts designed to serve as under-roadway crossing structures to reduce the effects of habitat fragmentation;

however, no tortoises have been documented crossing or have been recaptured on the other side of Red Hills Parkway, and only one tortoise has been documented crossing Tuacahn Drive (USFWS 2020a). Ongoing studies by the USFWS and the BLM in Nevada along highway US 93 and US 95 find that at least one adult tortoise has crossed back and forth using under-roadway culverts (Deffner 2020). However, more research is needed to determine whether tortoises are motivated to use culverts in all environmental and density conditions to access or expand their home ranges, and if passage would support desert tortoise population recovery or demographic needs (USFWS 2020a).”

DEIS at 3-36.

Alternative 3 would destroy 285 acres of critical MDT habitat, indirectly impact 1,857 acres, and fragment 1,654 acres south of the highway. Total indirect impacts would impact 2,652 acres of MDT habitat.

DEIS at Table 3.5-10.

This land was expressly set aside for the purpose of protecting the threatened MDT and its critical habitat under the Endangered Species Act and OPLMA 2009.

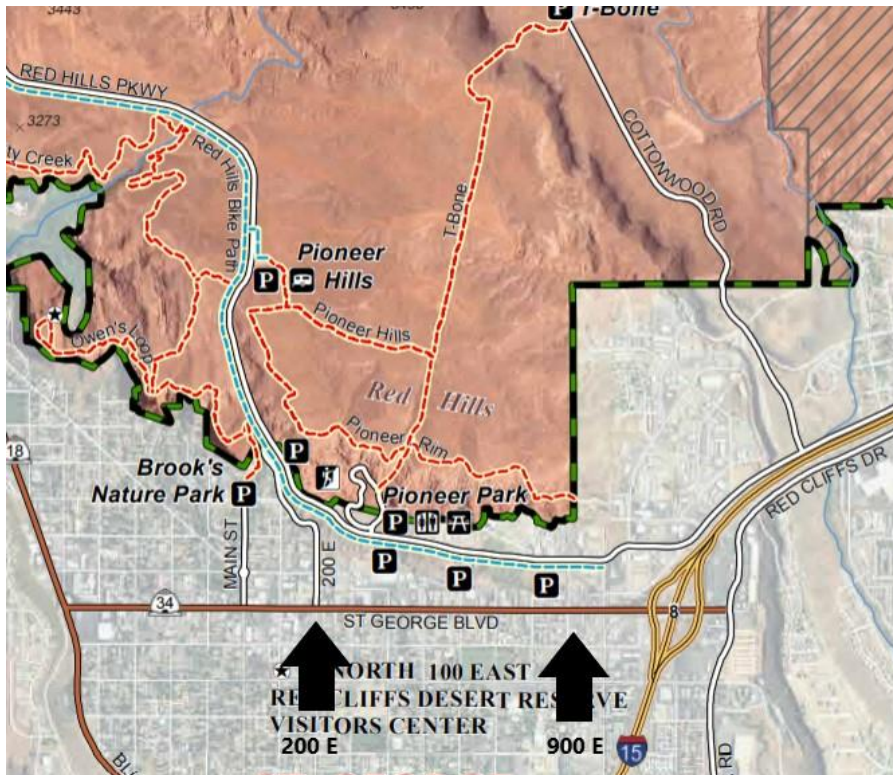
Importantly, the indirect impacts were not correctly calculated because they used a 508-meter buffer based on the annual home range size of an adult male Mojave desert tortoise of 200 acres. DEIS at 3-56.

Studies suggest that over its lifetime, a MDT may use more than 3.9 square kilometers (1.5 square miles) of habitat and may make periodic forays of more than 11 kilometers (7 miles) at a time (Berry 1986). This calculation also fails to incorporate the Von Seckendorff Hoff and Marlow 2002 study referenced in the DEIS at 3-35 which found that the zone of impact increased significantly with increasing traffic levels, and populations were found to be depressed from less than 175 meters to up to 4.6 kilometers from a roadway.

Conversely, Alternative 5 would indirectly impact 170 acres: 93 north of the ROW and 77 south of the ROW.

DEIS at Table 3.5-10.

However, this information should be corrected to show that Alternative 5 would indirectly impact only 93 acres because the DEIS shows that widening of Red Hills Parkway for Alternative 5 would only occur between 200 and 900 East (DEIS at 3-168). There are zero acres of MDT habitat south of the ROW at this location as the map below shows:



Likewise, Alternative 6 would impact zero acres of critical MDT habitat. Alternative 3 would cause the take of 20 MDT, indirectly impact 185 MDT, and disturb 287 acres of critical habitat causing a 0.61% loss of critical habitat in the Reserve.

DEIS at Table 3.5-11. For discussion of why these estimates of take and indirect impacts are inappropriate, [see comments at 3.5](#) The DEIS fails to take a hard look at the impacts to MDT critical habitat”).

Note that the estimate of MDT take is very conservative given that a 2018 pre-survey of the Alternative 3 Alignment led by Washington County revealed the presence of more than 50 MDT. Conversely, Alternative 5 would take zero MDT, indirectly impact 12 MDT, and disturb zero acres of critical habitat within the Reserve. Alternative 6 would take zero MDT, indirectly impact zero MDT, and disturb zero acres of critical habitat within the Reserve. DEIS at Table 3.5-11.

ii. Other Special Status Species

Alternative 3 would cause direct and indirect adverse impacts to tens of thousands of habitat acres used by 23 different special status species including reptiles, amphibians, birds, mammals, and invertebrates. Direct and indirect adverse impacts include habitat loss, habitat degradation, direct mortality and collisions, habitat fragmentation, noise impacts that could cause reproductive failure, and increased spread of exotic invasive species, particularly annual grasses, that reduce the quality of foraging habitat and increase the potential for a wildfire. DEIS at 3-68.

Alternative 3 would cause direct adverse impacts to 1,250-1,265 acres of habitat that supports 7 reptiles and amphibian species; 116-1,428 acres of habitat that supports 5 bird species; 1,265-

1,327 acres of habitat that supports 7 mammal species; and 1-574 acres that support 3 invertebrate (butterfly) species.

Conversely, Alternatives 5 and 6 cause adverse direct impacts to zero special status reptiles, amphibians, birds, and mammals. Alternative 5 causes direct impacts to 2 acres of Mojave poppy bee habitat and 16 acres of Western bumblebee habitat. Alternative 6 causes direct impacts to 17 acres of Mojave poppy bee habitat, although this calculation seems incorrect given that Alternative 6 is located entirely within the bounds of urbanized, downtown St. George. DEIS at Table 3.5-12.

Alternative 3 would cause indirect adverse impacts to 162 - 31,479 acres of habitat that supports 8 reptiles and amphibian species; 162-36,841 acres of habitat that supports 5 bird species; 1,224-3,4699 acres of habitat that supports 7 mammal species; and 320-16,004 acres that support 3 invertebrate (butterfly) species.

Conversely, Alternatives 5 and 6 cause adverse indirect impacts to 0-24 acres of habitat that supports reptiles and amphibians; 0-24 acres of habitat that supports 5 bird species; 0-24 acres of habitat that supports 7 mammal species; and 1-236 acres that support 3 invertebrate (butterfly) species.

DEIS at Table 3.5-13.

E. Wetlands, floodplains and waters of the U.S.

Alternative 3 would cause direct impacts to 2.2 acres of Wetlands, Waters of the United States, and Floodplains within the Red Cliffs NCA.

Conversely, Alternatives 5 and 6 would cause direct impacts to 1.0 and 0.1 acres of Wetlands, Waters of the United States, and Floodplains within the Red Cliffs NCA.

DEIS at Table 3.10-1.

Indirect impacts from Alternative 3 include reduction or loss of hydrological connection between WOTUS features, reduction or loss of floodplain function, increased sedimentation, and potential for oil, fuel, or construction materials to be spilled into WOTUS during construction. Impacts on WOTUS and floodplain features can be correlated with increased flood flows, sedimentation, and decreased biological diversity within the watershed.

DEIS at 3-88.

F. Water Resources

Alternative 3 would cause increased runoff from impervious surfaces, and adjusted flow patterns to accommodate collection and conveyance of additional runoff to detention facilities equipped with outlet devices that trap floatables, oils, and other impurities.

DEIS at 3-93.

Alternative 3 would result in an additional 39.9 cfs of proposed 50-year runoff, requiring storage of 346,465 cubic feet of water in a 2.65-acre detention area within the ROW, but requiring an assumed 3-foot storage depth.

Conversely, Alternatives 5 and 6 would have zero impacts on runoff.

DEIS at Table 3.11-3.

G. Fire and Fuels Management

Alternative 3 would cross 41-53 acres of a previously burned area and would increase land accessibility to areas within the Red Cliffs NCA and the Reserve that are currently difficult to reach by vehicle.

DEIS at 3-154.

“Construction activities or vehicles traveling along the highway may potentially introduce new ignition sources to the area, increase the likelihood of fire occurrence, and reduce fire-return intervals. The areas burned by these fires may give invasive grasses and other nonnative plant species an opportunity to establish themselves in the affected area and alter the VCC of lands surrounding the highway.”

DEIS at 3-154.

“The presence of the Northern Corridor may also affect the prioritization of wildfire suppression activities and associated costs in the Red Cliffs NCA and the Reserve. The construction of the highway would result in the construction of a new piece of public infrastructure that may warrant prioritization for allocation of suppression resources and protection of life and property during active wildfires. The allocation of resources to protect the Northern Corridor may reduce the resources available to protect other resources from actively spreading wildfires.”

DEIS at 3-154.

Conversely, Alternatives 5 and 6 would not designate a new ROW and current fire and fuels management and wildfire suppression practices within the Red Cliffs NCA and the Reserve would be maintained.

DEIS at 3-154.

The Draft EIS was published prior to the Turkey Farm Road and Cottonwood Trail Wildfires which burned over 14,000 acres, or 20% of the NCA and Reserve. Roads and highways that travel through or adjacent to Red Cliffs functioned as the ignition sources for both fires, demonstrating the great risk that highways pose to the sensitive habitats within the Red Cliffs NCA.

The DEIS discloses extreme risk for wildfire in the Red Cliffs NCA and the devastating consequences of past fires, but fails to adequately discuss highways functioning as ignition sources for wildfire:

“Warmer annual temperatures, prolonged droughts punctuated by years of above-average fall-winter precipitation, and the proliferation of invasive annual grasses are fueling an annual burn-reburn wildfire cycle in the Red Cliffs NCA, the Reserve, and other portions of the Mojave Desert. Mojave Desert species are not adapted to frequent large-scale wildfires, and do not recover quickly or successfully from the effects of fires. Conversions of native communities from desert shrublands to invasive grasslands have already occurred in areas of the NCA and the Reserve.”

DEIS at 3-152.

“The 2005 and 2006 fire seasons were indicative of what has become the “new” fire regime in the area, demonstrating the cause-and-effect relationship between above-average fall-winter precipitation that triggers increased production of invasive annual brome grasses and uncharacteristically large wildfires during the summer months (BLM 2015a). During these 2 years, 11 fires burned in the Red Cliffs NCA and the Reserve and

consumed 14,433 acres (acres that were re-burned by multiple fires are not double-counted in this total). More recently, 2012 was another severe fire season with two fires burning 4,200 acres (1,203 acres were in previously unburned areas). Recent localized analysis suggests high fire danger days are likely to increase (Rangwala 2020).”

“In total, 22 fires have burned 15,913 acres within the Red Cliffs NCA and the Reserve since 1976 (acres that were re-burned by multiple fires are not double-counted in this total), with over 3,808 acres burning multiple times (24 percent of all burned areas; Map 3.22-1). Five wildfires were caused by unknown ignition sources, with nine occurring as a result of natural causes and eight as a result of human ignition.”

DEIS at 3-153.

2. Scenic Resources

Alternative 3 would cause significant adverse visual impacts to the Red Cliffs NCA that are not permitted under the current VRM Class III. It is concerning that under BLM’s preferred alternative B for Red Cliffs NCA RMP Amendment, BLM would arbitrarily drop the VRM class from III to IV for 130 acres to accommodate the highway.

DEIS at Table 3.13-7.

Legally, BLM cannot reduce the VRM class for the NCA because scenic resources and scenic quality are NCA resources requiring protection. The proposed plan would harm these objects by classifying much of the planning area as VRM Class IV. In the DEIS, VRM Class IV is applied to a large portion of the planning area, when currently *none* of the entire planning area is managed as Class IV, which allows for significant change to landscape character. Classifying areas with Class IV does not adequately protect NCA scenic resources as required by law.

The DEIS describes Alternative 3 as causing long-term primarily adverse visual impacts that would harm recreational users and nearby residents.

“Road cuts and fills would alter the landscape’s landform and vegetation, and the road would interject contrasting textures and colors into the landscape, creating a strong linear feature that would become a focal point depending on proximity of these features to viewers (distance zone) and angle of views (many viewpoints have a superior viewing angle). In addition, moving vehicles would introduce motion into a primarily static landscape, calling attention to the road. A bridge likely to be required on the east side of Cottonwood Springs Road would be only minimally visible to sensitive viewers. The intensity of impacts would vary based on viewing distance, angle of view, and activity, because the road may be completely or partially screened by vegetation, land formations, and viewing angle as sensitive viewers move through the landscape.”

DEIS at 3-108.

“Long-term, primarily adverse visual impacts would occur from construction of the Northern Corridor under Alternative 3, similar to Alternative 2. However, because the UDOT Application alignment used for Alternative 3 would be located farther south than the T-Bone Mesa Alignment used for Alternative 2, this route would be more visible to some residents and trail users at the north end of the Green Springs residential area but less visible to others.”

DEIS at 3-111.

“Alternative 3 would adversely impact areas with high scenic quality and high visual sensitivity to a greater degree than Alternative 2 as a result of the additional bridges.”

Alternative 3 would adversely impact 3 VRI components, including 263 acres of Grade A Red Cliff Sandstone; 24 acres of Grade C Young Basalt Flows; and would impact 287 acres within the NCA rated as highly sensitive.
DEIS at Table 3.13-9.

It is concerning that the DEIS claims that Alternative 5, located outside of the NCA would have long-term adverse visual impacts (DEIS at 3-113), when Alternative 3 which travels through portions of the Red Cliffs NCA with VRM Class II scenery is characterized as having only long-term “primarily” adverse visual impacts. The statement that Alternative 5 would have long-term adverse visual impacts appears to be biased in favor of Alternative 3, and does not correspond with analysis showing that Alternative 5 would adversely impact only 24 acres of Grade A Red Cliff Sandstone rated as highly sensitive.
DEIS at Table 3.13-12.

Additionally, Alternative 5 has zero issues with VRM class conformance.

“Most of the roadway would follow the existing alignment, and the largest interchange would be located in a transportation setting within commercial and industrial areas. Although the interchanges would be visible from viewpoints within nearby BLM-administered lands, no change to the BLM VRM Class III objectives would occur because the interchanges would be within an existing transportation ROW.”

DEIS at 3-114.

Alternative 6 would cause no impact on scenic values within the Red Cliffs NCA.

“There would be no impact on existing BLM VRM designations within the Red Cliffs NCA (Table 3.13-7). This alternative would affect fewer sensitive viewers than Alternatives 2 through 5 because no new roadway alignment would be constructed and no recreational facilities would be affected; residential viewers would be affected under all action alternatives.”

DEIS at 3-115.

3. Recreational Resources

Alternative 3 would adversely impact 138 acres of an SRMA that would be arbitrarily downgraded to accommodate the NCH.
DEIS at Table 3.15-7.

The SRMA would be dropped from Front County RMZ to Rural RMZ, resulting in adverse changes to the recreation experience in the Red Cliffs NCA.

“Within the Frontcountry RMZ, there would be a more stark or obvious visual change to the natural setting as a result of constructing a new, 4-lane, paved road. Users would also experience more frequent highway noise and, with potentially easier access to trails from the new highway, are likely to experience increased contact with people on trails and the ability to hear groups of people on a more constant basis. Depending on the user type, these changes could be perceived as degrading the user experience, because recreational users, especially non-motorized users, may expect a more natural desert setting in the Frontcountry RMZ compared to the Rural RMZ.”

DEIS at 3-130.

A 600-foot-wide swath along Alternative 3 would be managed as part of the Rural RMZ, “which allows for operational components such as paved roads where visitors “can expect a steady stream of highway auto and truck traffic” (BLM 2016b).”
DEIS at 3-132.

Alternative 3 would adversely impact 0.6 miles of 4 existing trails and 1.4 miles of 4 proposed trails.
DEIS at Table 3.15-5 and 3.15-6.

Alternative 3 would cause the alteration or closure of portions of trails and restricting access to users in areas where trail crossings would not be accommodated.

“All alternatives would require alteration or closure of portions of the existing trails and consideration during design on how to or if to accommodate trail crossings...In areas where trail crossings would not be accommodated, access to users would be restricted from the roadway because of fencing for Mojave desert tortoise. Similarly, final design would need to consider trailhead impacts and the need for relocation or, if the size of parking at the trailhead.”

DEIS at 3-131.

Concerningly, the Draft EIS failed to analyze indirect impacts to 11 nearby trails from which Alternative 3 could be seen and heard.

The Draft EIS claims that Alternative 5 would impact 0.3 miles of 5 existing trails.
DEIS at Table 3.15-8.

This analysis does not make sense because the DEIS also states that:

“The Red Hills Parkway Expressway environmental analysis is based on a conceptual roadway design that assumes no additional ground disturbance outside the current fencing would be necessary.”

DEIS at 3-57.

Thus, the only direct impact from Alternative 5 would be to the Red Hills Parkway Path, which could be fully retained with appropriate modeling of the Alternative 5.
Alternative 6 would impact zero trails in the Red Cliffs NCA.

4. Cultural and Historical Resources

Alternative 3 would cause adverse effects to 8 cultural and historic properties.

“The UDOT Application Alignment...would result in adverse effects to historic properties under Section 106 of NHPA and would directly impact cultural resources under NEPA, causing permanent or long-term effects to NRHP eligible archaeological sites, through physical damage or alteration resulting in the loss of information important in history or prehistory contained within archaeological sites and historic structures within each highway alternative. Construction activities for the potential T-Bone Mesa, UDOT Application, and Southern Northern Corridor alignments could also result in temporary or short-term effects including, dust, noise and vibration that would affect archaeological resources and stockpiling of construction materials and equipment could cause surface damage to cultural resources.”

DEIS at 3-122.

“The potential UDOT Application and Southern alignments would result in a direct impact to a prehistoric petroglyph panel in the APE through the introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features by altering the resources setting, feeling, and association. Context and setting can be a key character defining feature for a petroglyph panel, thus there is a greater potential for direct effects with the introduction of visual or auditory elements. A potential increase in access and visitation to the site may lead to indirect impacts from vandalism.”

DEIS at 3-122.

Alternative 3 would directly impact 8 National Register Eligible Cultural Resources.

DEIS at Table 3.14-1.

Conversely, Alternative 5 would directly impact only 1 historic structure and Alternative 6 would directly impact zero cultural resources.

DEIS at Table 3.14-5.

Section 106 of the National Historic Preservation Act (NHPA) requires BLM to account for the effect of its actions on historic properties. 16 U.S.C. § 470(f). Specifically, a federal "undertaking" triggers the Section 106 process, which requires the lead agency to identify historic properties affected by the action and to develop measures to avoid, minimize, or mitigate any adverse effects on historic properties. 16 U.S.C. § 470(f); 36 C.F.R. §§ 800.4, 800.6. NHPA regulations provide that an agency "shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey." 36 C.F.R. § 800.4(b)(1). Prior to authorizing a proposed action, BLM must determine whether the proposed action is an undertaking under the NHPA. 36 C.F.R. § 800.3; *Mont. Wilderness Ass'n v. Fry*, 310 F. Supp. 2d 1127, 1152 (D. Mont. 2004).

BLM carried out a Class III intensive survey of NCH routes inside the NCA. (DEIS at 3-119). However, the DEIS does not indicate that BLM consulted with the Shivwits Band of the Paiute Indian Tribe of Utah who claim cultural affiliation to this land. BLM failed to consult or conduct oral history interviews prior to the Class III surveys. This consultation could have resulted in more cultural resources being identified during the survey, perhaps even the “three previously recorded resources that could not be relocated during the field inventory” (DEIS at 3-119).

Section 106 review must occur prior to approving the designations of routes in the record of decision since the designation of routes in a RMP is an “undertaking,” BLM’s regulations indicate that formal designation of ORV routes occur not at the implementation level but with “[t]he approval of a resource management plan. . . .” 43 C.F.R. 8342.2(b); *see also, Norton v. S. Utah Wilderness Alliance (SUWA)*, 542 U.S. 55, 69 n.4 (2004) (holding the “affirmative decision” to open or close a specific ORV route occurs through land use planning.) The *SUWA* Court’s interpretation is consistent with national guidance from the Interior Department stating that “[p]roposed decisions to designate new routes or areas as open to OHV use. . . are subject to section 106 compliance” *See* BLM IM 2007-030. Therefore, it is clear that road and route designations made during the land use planning process are undertakings requiring review under Section 106 of the NHPA prior to approval of the RMPs.

BLM should prioritize cultural resource inventories in the NCA to have the best information available for planning for and managing cultural resources. In accordance with NHPA, BLM must initiate and complete the Section 106 process during the NEPA review process and prior to the granting of ROWs located within Red Cliffs National Conservation Area BLM should not designate any ROWs without a proper cultural survey, involving consultation with Native American Tribes and Bands with strong affiliation to the land, along those ROWs.

5. Natural Resources

Impacts to natural resources includes analysis of vegetative communities including noxious weeds and invasive species; special status plants; general wildlife; special status wildlife; wetlands, floodplains, and waters of the U.S.; water resources; and fire and fuels management. See this above at “1. Ecological Resources.”

It also includes analysis of geology, mineral resources and soil; and paleontology impacts. See below.

i. Geology, mineral resources and soil

Alternative 3 would cause direct and indirect adverse impacts to sensitive soils.

“Construction of Alternatives 2 through 4 would disturb sensitive soils, soil crusts, and topsoil as a result of grading and fill activities...Erosion is both a short-term impact that would occur during construction when bare soil is exposed and also a long-term impact extending beyond construction until soils are stabilized...The use of heavy equipment and grading and fill activities can change soil structure, infiltration, and water capacity as a result of soil compaction and changes to pH and soil nutrients. Removing topsoil and adding fill and aggregate for highway construction removes soil organic matter and decreases the reactive carbon content of the soil. Reduced reactive carbon content adversely impacts soil stability, water infiltration and capacity, microbial activity, and nutrient availability (NRCS 2014).”

DEIS at 3-82.

Alternative 3 would disturb 287.1 acres of soil within the Red Cliffs NCA and cause 114 acres of soil erosion outside the ROW area.

Conversely, Alternative 5 would disturb only 8.3 acres of soil only partially within the Red Cliffs NCA, and would cause 75 acres of soil erosion outside the ROW area and outside of the Red Cliffs NCA.

Alternative 6 would disturb 31.5 acres of soil *outside* of the Red Cliffs NCA and cause 17 acres of soil erosion outside the ROW area outside of the Red Cliffs NCA.

DEIS at Table 3.7-1.

ii. Paleontology

Alternative 3 would disturb geologic units within the Red Cliffs NCA classified as PFYC Classes 1 and 2 that have a lower probability to contain scientifically important fossil resources, but still could contain them. Construction of the highway would preclude discovery of any potential fossil records within the highway footprint for future scientific research.

DEIS at 3-85.

However, the Draft Red Cliffs NCA RMP shows that there are known paleo locations within 1 mile of Alternative 3, suggesting that the PFYC Classes impacted by the highway could, in fact, contain paleo resources.

DRMP at 483.

Conversely, Alternatives 5 and 6 would include converting intersections and modifications to existing roadways. Therefore, it is unlikely that construction of these alternatives would impact potential paleontological resources that have not already been disturbed or destroyed from construction of the existing roadways. No geologic units classified as PFYC Classes 3 through 5, with a higher probability to contain scientifically important fossil resources, would be affected by the construction of these alternatives.

DEIS at 3-85.

6. Educational Resources

The DEIS notes that educational values are associated with all resources.

DEIS at Table 3.18-1.

DEIS analysis shows that Alternative 3 would adversely impact the ecological, scenic, wildlife, recreational, cultural, historical and natural values of the NCA, thus adversely impacting educational resources as well.

Undermining and violating these congressionally-established purposes and values will adversely impact Washington County residents and visitors who benefit from educational experiences in the NCA. The following groups would be adversely impacted: students, trail stewards, equestrians, site stewards, members of hiking, birding, and history clubs, families and youth, visitors, and the general public.

The DEIS shows that Alternative 3 will cause severe ecological impacts to the NCA that could prevent future visitors and residents from having quality educational experiences in the NCA due to the infiltration of exotic grasses, increased risk of catastrophic fire, and loss of special status wildlife species, cultural resources and recreation opportunities.

7. Scientific Resources

The DEIS notes that scientific values are associated with all resources.

DEIS at Table 3.18-1.

DEIS analysis shows that Alternative 3 would adversely impact the ecological, scenic, wildlife, recreational, cultural, historical and natural values of the NCA, thus adversely impacting scientific resources as well.

8. Species Protection including those listed as threatened or endangered under the ESA

DEIS analysis shows that Alternative 3 would adversely impact vegetative communities including noxious weeds and invasive species, special status plants, general wildlife, and special status wildlife.

Impacts to the threatened Mojave desert tortoise and its critical habitat are especially significant given the steady population declines documented in the DEIS at 3-48, and because Alternative 3

undermines the federal laws that established and provided protections for the tortoise in the Red Cliffs NCA and Red Cliffs Desert Reserve.

Protections for Zone 6 cannot mitigate damage to the NCA’s objects and values.

National Conservation Areas are established by Congress or the President. The DEIS does not discuss any plan or mechanism for achieving NCA status for Zone 6. The DEIS fails to show that the resources present in Zone 6 are comparable with the regionally and nationally-significant “objects and values” of a National Conservation Area.

Zone 6 consists of private, state, BLM, and BLM-ACEC lands. The SITLA lands may slowly be brought into federal ownership, but zero percent of Zone 6 would be managed as a National Conservation Area. Thus, management for resources in Zone 6 would not be equal to management of objects and resource values in the Red Cliffs NCA.

The highest level of protections in a portion of Zone 6 is afforded by the ACEC designation, but even this offers weaker protections than the Red Cliffs National Conservation Area. An ACEC designation provides no assurance that the land will be managed effectively for the Mojave desert tortoise, or for the long term. The ACECs for tortoise conservation in California allow for many incompatible uses. There are declining trends for tortoise in ACECs, and many are below the viability threshold calculated in the 1994 Recovery Plan. Thus, BLM has a history of not effectively managing for tortoise conservation in ACECs. ACEC designation can be changed at any time by amending a Resource Management Plan. This was recently done by BLM in the California Desert Conservation Area to designate more OHV routes in tortoise ACECs (Tortoise Conservation Areas), despite declining numbers.

Conclusion

BLM analyzed the impacts of Alternative 3 to 10 objects and values protected in the Red Cliffs NCA, and found that the highway will adversely impact all of them. BLM’s own analysis shows that Alternative 3 will not serve or be consistent with the NCA’s statutory purposes. Therefore, BLM cannot legally grant the ROW under OPLMA 2009.

The DEIS shows that tortoise populations have declined in the NCA and Reserve by 41% since 1999, and that abundance in Zone 3 (where all highway alternatives inside the NCA are located) has declined by 31% in only a two-year period between 2017 and 2019.

DEIS at 3-48.

BLM’s own analysis demonstrates that Alternative 3 would imperil the survival of desert tortoises in the NCA and Reserve, so BLM cannot legally grant the ROW under the ESA. And this analysis also demonstrates that FWS cannot legally render a no jeopardy BO for Alternative 3, nor grant the county an ITP that is based on a HCP improperly conditioned upon Alternative 3’s approval.

If BLM decides to grant a ROW to UDOT for Alternative 3, or any Alternative inside the NCA, BLM would violate BLM’s mandatory obligation to conserve, protect, and enhance the ecological, scenic, wildlife, recreational, cultural, historical, natural, educational, and scientific resources of the National Conservation Area and to protect the Mojave desert tortoise as required under the OPLMA of 2009.

3.20 BLM Lands and Realty

3.20.1 Affected Environment

3.20.1.1 Land Tenure

Red Cliffs NCA

“The actions analyzed in this Draft EIS will not change BLM land tenure decisions in the Red Cliffs NCA RMP. “However, lands previously acquired by the BLM would be impacted by the Northern Corridor alternatives, and the BLM’s issuance of a ROW could impact future land tenure actions including acquisitions of non-Federal lands crossed by an alternative” (DEIS at 3-145). No Federal lands within the Red Cliffs NCA are available for disposal. Subject to valid existing rights, all Federal land located in the Red Cliffs NCA is withdrawn from all forms of entry, appropriation, and disposal under the public land laws; location, entry, and patenting under the mining laws; and operation of the mineral leasing, mineral materials, and geothermal leasing laws (BLM 2016b).”

Issue:

1. BLM investments of taxpayer money in property to preserve as habitat should not be violated by the Northern Corridor. That would represent a mis-use of funds.

Proposed Zone 6

BLM-administered lands comprise 51 percent of land ownership within proposed Zone 6, with the remaining land being owned by State agencies and private owners (Table 3.20-1). The SGFO RMP has not identified any lands within proposed Zone 6 for acquisition. Decision FW-13 in the SGFO RMP specifies that, “public lands supporting Federally listed or sensitive animal species will be retained in public ownership unless exchange or transfer will result in acquisition of better habitat for the same species or provide for suitable management by another agency or qualified organization” (BLM 1999). All BLM land tenure adjustments require site-specific environmental review including NEPA analysis and compliance with other laws including the ESA.

3.22 Fire and Fuels Management

3.22.1 Affected Environment

“Large-scale or frequent wildland fires are not part of the natural fire regime of the Mojave Desert, because desert shrublands are not fire-adapted species (Paysen et al. 2000). Historically, wildfire has been a rare occurrence because Mojave Desert ecozones do not produce enough vegetation to “carry” a fire. “Warmer annual temperatures, prolonged droughts punctuated by years of above-average fall-winter precipitation, and the proliferation of invasive annual grasses are fueling an annual burn-reburn wildfire cycle in the Red Cliffs NCA, the Reserve, and other portions of the Mojave Desert. Mojave Desert species are not adapted to frequent large-scale wildfires, and do not recover quickly or successfully from the effects of fires” (DEIS at 3-152). Conversions of native communities from desert shrublands to invasive grasslands have already occurred in areas of the NCA and the Reserve. Some of these areas have burned repeatedly—two, three, or even four times during the past 20 years (BLM 2015a).”

Issue:

1. Highways such as the Northern Corridor exacerbate the invasion of invasive species by providing a clear pathway for seeding.

3.22.1.1 Vegetation Condition Class

“If these areas were re-evaluated today, they would likely be rated with a higher degree of departure from historic conditions (i.e., be rated a higher VCC). In addition, ongoing encroachment of annual grasses into the Red Cliffs NCA, the Reserve, and proposed Zone 6 is likely to promote higher degrees of vegetation departure in the future” (DEIS at 3-152).

Table 3.22-1 displays VCCs for all lands within the Red Cliffs Desert Reserve”

Issue:

2. Most certainly vegetation in the area of the proposed Northern Corridor should be rated as very high, in contrast to Table 3.22-1 which indicates the whole NCA is relatively low.

3.22.1.2 Fire Occurrence

“In total, 22 fires have burned 15,913 acres within the Red Cliffs NCA and the Reserve since 1976 (acres that were re-burned by multiple fires are not double-counted in this total), with over 3,808 acres burning multiple times (24 percent of all burned areas; Map 3.22-1). Five wildfires were caused by unknown ignition sources, with nine occurring as a result of natural causes and eight as a result of human ignition. No fires have burned within proposed Zone 6” (DEIS at 3-153).

Issue:

3. The citing of the number of fires and acres burned must be updated to include the [July 2020 Turkey Farm Road and Cottonwood Trail fires](#). Note that these devastating fires were started due to the proximity of roadways such as the proposed Northern Corridor.

Ann McLuckie, a wildlife biologist with the Division of Wildlife Resources McLuckie, in her separate surveys of the Turkey Farm Road Fire damage, has also found dead and injured tortoises amid a dry and damaged landscape. After witnessing the aftermath of the 2005 fire in the same area, she expects this blaze

to have "devastating impacts on the tortoise population."⁵⁹ These fires cost approximately \$2,000,000 to extinguish.

4. It is a miracle that the proposed Zone 6 has not seen a fire in recent years. With the roads and highways planned for that area, this record is bound to be broken, as highways, such as the Northern Corridor, bring fire. Zone 6 will not present acceptable mitigation

3.22.1.3 Wildfire Suppression

"All fires within the Red Cliffs NCA, the Reserve, and proposed Zone 6 are targeted for full suppression (BLM 2004). "

Issue:

5. As demonstrated by the 2020 fires in Zone 3, these fire suppression efforts do not stop widespread damage, and fires are enabled by roads, such as those planned in Zone 6.

3.22.2 Environmental Consequences

3.22.2.3 Direct and Indirect Impacts from Alternatives 2, 3, and 4

"The construction of the highway would increase land accessibility to areas within the Red Cliffs NCA and the Reserve that are currently difficult to reach by vehicle. "This increased accessibility would improve response for wildfire suppression, and provide easier access for fuel evaluation and management in areas adjacent to the Northern Corridor. The roadway itself may also act as a fire break, providing a barrier to the spreading of active wildfires and the spreading of nonnative plant species" (DEIS at 3-154).

Issue:

6. The DEIS assessment is incredibly one-sided. The fire risk caused the Alternatives 2, 3 or 4 would be significantly increased, and the benefit as a fire break would be zero. 80% of Utah's wildfires are human-caused, and most occur due to road access, either directly from vehicular operation or due to giving humans easy access to fire starting situations. This is an extremely biased and one-sided evaluation of the fire-benefit of a highway.
7. It is demonstrated on a frequent basis that highways are not effective fire barriers as wind-driven sparks easily hop a highway.
8. Any highway through the NCA would dangerously increase the risk of fire and extreme danger to tortoises and their habitat. It cannot be allowed.
9. From Bill Mader, PhD (former smokejumper and Washington County HCP administrator), "The vast majority of people who talk about fire breaks, including using highways, have never been on a fire line and don't understand fire behavior. They should talk with the people in Paradise CA and other cities that were leveled by fire and had road "fire breaks." Some of these CA residents can't discuss it because they're in graveyards. The proposed Northern Corridor (NC) will not work as an effective fire break in today's era of mega fires, high temperatures and invasive plants. It is a good story line by those proposing the NC, but it's fiction-driven by an agenda to line the pockets of connected developers and cities and to destroy what is left of a magnificent place for wildlife and people. This level of biotic destruction has to be included along with other significant cumulative impacts. In effect, another piece of the reserve as we knew it, is gone, and it will not return."

⁵⁹ St George Spectrum Article 9-3-2020, "The tortoise and the fire: Surveys search for signs of life on Red Cliffs NCA" by Joan Meiners

10. A GIS fire map should be prepared that depicts the final fire boundaries for the Turkey Farm Road Fire. The fire map should be compared with other existing GIS data layers, including the NCH alignments, past fire scars, and known occupied tortoise habitat. Where the Turkey Farm Road Fire occurred in a previous fire scar, the prospects for habitat restoration are bleak. The Northern Corridor Highway cannot be routed through a burned or re-burned area."

St. George Field Office RMP Amendments and Washington County HCP

"The amendments to the SGFO RMP in proposed Zone 6 under Alternatives 2, 3, and 4 would result in similar management of fire and fuels resources as would occur under Alternatives 1, 5, and 6" (DEIS at 3-155).

Issue:

11. This appears to be incorrect, due to the fact that the DEIS uses an inappropriately short time period, ignoring the planned road developments in and near Zone 6, which would greatly increase the fire danger.

"The amendments to the SGFO RMP under Alternatives 2, 3, and 4 would also further restrict authorized and casual uses of proposed Zone 6, including utility ROWs, mining and mineral activities, and recreation including camping, campfires, and competitive events. These activities can result in increased fire ignition sources, especially recreational camping and campfires. The restrictions on these activities under Alternatives 2, 3, and 4 would reduce ignition sources and promote a natural fire regime in proposed Zone 6" (DEIS at 3-155).

Issue:

12. As in the comment above, the planned road developments greatly increase the fire danger.

"Finally, under Alternatives 2, 3, and 4, additional resources would be available to land managers to manage wildfire in the Reserve, including proposed Zone 6. These additional resources and adaptive management funding are described in Section 1.4.2.5 and would provide opportunities to support fire management of SITLA lands in proposed Zone 6 and restore fire-damaged lands" (DEIS at 3-155).

Issue:

13. As evidenced by the 2020 fires in Zone 3, fire management is woefully insufficient.

Relating to "fire" references throughout the DEIS

Issue

14. The DEIS fails to adequately assess and mitigate potential impacts of the Alternatives to wildfire risk.

Wildfire is not a natural disturbance in desert and Great Basin ecosystems. Roads, as proposed in Alternatives 2 through 4 in existing conserved natural open space, are documented fire ignition sources (Van Linn et al. 2013; Hegeman, Dickson, and Zachmann 2014; Brooks and Berry 2006) and the DEIS recognizes that the new highway alternatives (Alternatives 2-4) will have the potential for more fire on the landscape in the DEIS, stating:

"Construction of the new highway would be expected to increase the spread of exotic invasive species, particularly annual grasses, that reduce the quality of foraging habitat and increase the potential for a wildfire."

DEIS at 3-31 – emphasis added.

Numerous fires have occurred in the analysis area of the HCP, and in some cases repeatedly burning the same areas.

“Since 1976 there have been 207 fires within the Analysis Area for the HCP covering 266,196 acres, with 56,672 acres double burned; ... Twenty-two fires burned 15,913 acres within the Reserve since 1976, with over 3,808 acres burning multiple times (24 percent of all burned acres).”

DEIS at 3-42.

Unfortunately, in July 2020, a human-caused fire burned over 12,000 acres in the Reserve, although it is currently unclear how much of that acreage has burned previously. This tragic fire clearly falls under “changed circumstances” as identified in the DEIS (at 2-18 - emphasis):

“USFWS regulations define changed circumstances as “changes in circumstances affecting a species or geographic area covered by a conservation plan or agreement that can reasonably be anticipated by plan or agreement developers and the Service [USFWS] and that can be planned for (for example, the listing of new species, or a fire or other natural catastrophic event in areas prone to such events)” (50 CFR 17.3).”

Therefore, the DEIS and HCP must reanalyze the impact from this most recent fire which almost burned more acres of conserved habitat than the prior 44 years combined (1976-2020).

For years, the impact of non-native grasses fueling too-frequent fire returns has become apparent to the land-managing and responsible agencies of the Red Cliffs Desert Reserve.⁶⁰ Cameron Rognan, the Red Cliffs Desert Reserve administrator, was recently quoted in the Saint George News⁶¹ about the exacerbated threat due to invasion of cheatgrass, which reported that “he [Rognan] was worried about dealing with what he felt was the major threat to those restoration efforts – invasive cheatgrass. Cheatgrass dries out quickly, is highly flammable and burns fast. If that problem isn’t dealt with somehow, Rognan said he wasn’t optimistic about the ultimate outcome. ‘We can restore only as much as we can restore, but if it’s going to burn every five to 10 years, it seems like it’s a losing battle,’ Rognan said, referring to the 2005 and 2006 fires. ‘We’re at the point we need to look at other options.’”

The Red Cliffs Desert Reserve Habitat Management Plan – Revised April 2019 (Appendix D of HCP) recognizes the threat that fire poses to the Red Cliff Desert Reserve, stating “In 2018, wildfire continues to be one of the greatest threats to tortoise habitat.” and “The proliferation of nonnative annual grasses and resulting wildfires has raised concerns about long-term management of the habitat and recovery of tortoises within the RCDR.” (HCP Appendix D at D-1). However, the Seven Priority RCDR HMP Action Items presented in Table 1 (at D-2) are non-quantitative and appear aspirational. No targeted minimum acreage for revegetation or weed abatement are included. With the recognition that the Reserve is being overrun with non-natives grasses in particular, the Management Plan needs to include quantifiable goals/targets for non-

⁶⁰ Habitat restoration project underway in fire-ravaged tortoise habitat

⁶¹ Wildlife officials say impact of recent fires on desert tortoises may not be known for years

native reductions annually. How can effective management be measured otherwise? Frankly, it is unimaginable that 25 years after the original HCP was signed, no quantitative goals have yet been put in place.

Action Items presented in Table 1 (at D-2) are primarily aspirational without any required commitment to actually achieving or implementing them:

- The BLM is working on getting Indaziflam/Esplanade approved for ROW application.
- The BLM SGFO is working on new permitting stipulations regarding ROW maintenance and exotic nonnative plant control/effectiveness monitoring within existing ROWs.
- Continue to research (and plan to implement) outplanting or reseedling of warm season fire-resistant grasses
- There are ongoing plans to manually remove invasive species
- The TC and RCDR stakeholders are planning to create two or more Esplanade herbicide study plots in different vegetation types within the RCDR.
- Research native specific species to compete with exotic nonnatives.
- The TC and RCDR stakeholders are planning to create two or more Esplanade herbicide study plots in different tortoise habitat types within the RCDR.
- The BLM SGFO plans to conduct an environmental assessment (EA) for the targeted use of herbicides to control invasive-nonnative plant species within the Red Cliffs NCA that follows best available science...

(Appendix D at D-2 – emphasis added)

Planning on an action (aspirational) is very different from implementing the action (actionable). Non-native invasive grasses have been a problem since at least the 2005-2006 fires that ravaged the Reserve (and the desert tortoise population) and yet, the “management” of the Reserve (and NCA) seems to have resulted in more non-native invasions (including greater cover) and more acres burned. Until this difficult issue is met with action items that result in tangible results to move the habitat back towards suitable habitat for desert tortoise and other native species, the Reserve and the NCA will continue to degrade to the detriment of the native species that the Reserve purports to protect including the desert tortoise.

In addition to clear quantitative goals and non-aspirational Action Items, the Implementing Agreement needs to be drastically revised to substantially increase development fees so that the costs of managing to control non-native plant species and aggressive fire prevention and control are covered. Without equitable mitigation for impacting desert tortoise and its critical habitat, the HCP fails the purpose of the Endangered Species Act which is “to protect and recover threatened and endangered species and the ecosystems upon which they depend” (USFWS 2016).

Shockingly, the plan includes objectives that appear to promote not only fragmentation of the habitat, but create additional opportunities for non-native introductions via new roads

and fire breaks. For example, Strategy 1.2 calls for “Establish and/or maintain firebreaks in priority areas” with Action Item 1.2.1 (B) stating “Continue prioritizing roads and ROW’s that can serve as firebreaks;” (Appendix D at D-3). This Strategy and Action disregard the best available science which clearly documents that roads and rights-of-way are not only ignition sources for fire, but also are vectors for introductions of non-native invasive species (see literature above).

It is likely that as climate change progresses and absent efforts to control invasive species, including brome grasses in particular, that fire will increase in size and frequency. Areas where fires have historically burned will likely burn again. Neither the DEIS or the HCP adequately address the linked issues of fire and invasive exotics, despite significant published science on the matter (Brooks and Pyke 2001; Brooks and Berry 2006; Bradley et al. 2018; Balch et al. 2013; Chambers et al. 2014) For example Brooks and Pyke (2001) recognize that “The management of fire and invasive plants must be closely integrated for each to be managed effectively”.

The DEIS (at 3-155) states:

“Finally, under Alternatives 2, 3, and 4, additional resources would be available to land managers to manage wildfire in the Reserve, including proposed Zone 6. These additional resources and adaptive management funding are described in Section 1.4.2.5 and would provide opportunities to support fire management of SITLA lands in proposed Zone 6 and restore fire-damaged lands.”

Section 1.4.2.5 does not occur in the DEIS or the HCP. We were unable to locate any discussion of the additional resources in the documents beyond the statement above. Based on the problematic and aspirational issues identified in Appendix D of the HCP, the referenced additional resources are a key in the public and decision-makers ability to evaluate the effectiveness of the DEIS and HCP. Therefore, a revised or supplemental DEIS must include a robust discussion of those additional resources.

3.23 Noise

Evaluating and protecting natural soundscapes is essential to the land use planning process. For example, many communities and wildlife in and around the planning area depend on undisturbed, natural soundscapes, which requires BLM to consider how other activities might interfere with the quiet enjoyment sought by visitors and wildlife. BLM's attention to protecting the acoustical character of the managed landscape is increasing, especially as BLM gains broader understanding of how ecosystems and visitor experiences are impacted by changing noise levels. Research shows that for many people, especially quiet recreationists, the primary reason for visiting primitive landscapes is to attain a sense of solitude and tranquility, which are interrupted by non-natural noises. In addition, a study performed by psychologists at Colorado State University also found that acoustic stressors also impact visual landscape quality, meaning non-natural noise actually affects the perceived naturalness of a landscape⁶², and ultimately the visitor's experience. Therefore, to better maintain the naturalness of an area, BLM cannot protect the views alone, but must also preserve its natural soundscape.

Further, the authors of the study note that the ideas of "tranquility" and "solitude" explicitly addressed in the Wilderness Act are values that must be preserved by land management agencies elsewhere as well. BLM guidance directs the preservation of "naturalness" in Wilderness Study Areas, Visual Resource Management class zones, and other areas managed to protect wilderness qualities. As a result, BLM is obligated to manage its public lands to better understand the acoustical environment therein and to manage human-caused sounds to prevent negative impacts on visitors' opportunities to experience the natural tranquility and feelings of solitude normally present in backcountry and pristine settings. When the natural soundscape is compromised, unfortunately, the visitor experience is, too. Therefore, prescriptions in the RCNCA RMPA and the St. George RMPA should strive to preserve the natural soundscapes as much as possible.

A. BLM's Obligation to Preserve Natural Soundscapes

Under FLPMA, BLM is required to manage the public lands "in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values; that, where appropriate, will preserve and protect certain public lands in their natural condition." 43 U.S.C. § 1701(8) (emphasis added). Like viewsheds and air quality, changes to natural soundscapes can heavily impact other uses, such as opportunities for quiet recreation. To ensure BLM gives meaningful effect to FLPMA's mandate, the agency must thoroughly consider how actions proposed in its draft management plans will impact the natural soundscapes across all areas.

This planning requirement has also been reinforced by federal court decisions confirming that agencies are obligated to evaluate activity impacts on the natural soundscapes of the area. *See Izaak Walton v. Kimbell*, 516 F.Supp.2d 982, 985,995-96 (D.Minn.2007) (EA prepared by USDA Forest Service for plan to construct snowmobile trail adjacent to Boundary Waters Canoe Area Wilderness failed to properly analyze noise impacts from snowmobile use, as required by NEPA; EPA provided no quantitative evidence of analysis of decibel levels to be projected by snowmobile use of the trail into adjoining wilderness).

⁶² Britton L. Mace et al., *Aesthetic, Affective, and Cognitive Effects of Noise on Natural Landscape Assessment*, Society & Natural Resources, 12: 225-242, 1999.

In addition, noise is recognized as another important consideration under Executive Order 11644 (1972), as amended by Exec. Order 11989 (1977), which orders the BLM to locate recreation areas and trails to: “[m]inimize conflicts between off-road vehicle use and other existing or proposed recreation uses of the same or neighboring public lands, and to ensure the compatibility of such uses with existing conditions in populated areas, taking into account noise and other factors.” 43 C.F.R. §8342.1 (emphasis added). The need to minimize conflicts between user groups, including noise conflicts, supports BLM’s management decisions to create specific recreation management zones that cater to quiet uses, and support activities like: hiking, biking, horseback riding, birdwatching, hunting, etc.

Many visitors to BLM managed lands, particularly the National Conservation Lands, are often seeking a quiet, outdoor recreation experience. To satisfy its FLPMA mandate, among others, BLM must consider and develop management strategies that support numerous uses, while also protecting public lands in their natural condition whenever possible.

B. Developing Natural Soundscapes Data Inventory, Analysis and Planning Strategies

There are numerous factors that can have a lasting impact on the environmental features and elements of a particular landscape. Things like climate, vegetation, topography, and human-induced changes to the landscape can all affect an area’s natural soundscape. As a result, it is essential that BLM both survey an area for its baseline natural soundscape while also adequately gaging the possible impacts caused by new or increased use allocations in the managed landscape. To adequately protect local resources against damaging and disruptive noise impacts, BLM must measure existing natural soundscapes and continue to monitor them for changes in sounds, especially those with potentially harmful impacts to wildlife and those that reduce visitor enjoyment to the area.

There are several ways BLM can effectively and accurately measure noise impacts on the areas it manages, which will in turn help the agency to set the right management prescriptions and prevent avoidable impacts to the natural setting. To do so, BLM must first quantitatively measure the decibel (dB) levels of the natural soundscape against any dB levels of motorized vehicles to properly analyze use impacts on the natural soundscapes. This is particularly important in areas where the intent is to preserve and enhance the natural soundscape to meet the visitor’s expectation of finding quiet recreation and opportunities for solitude outside of the urban environment.

There are many ways to adequately measure noise impacts and to set prescriptions to prevent negative impacts to natural soundscapes. One way is to use GIS modeling to compare the natural soundscape of a particular area against potential overlapping area uses. We have previously suggested BLM utilize The Wilderness Society’s GIS model, which is based on the Forest Service and EPA workbook called the System for the Prediction of Acoustic Detectability (SPreAD). The intent of the SPreAD tool is to “evaluate potential ... acoustic impacts when planning the multiple uses of an area.” The Wilderness Society adapted the SPreAD model to a GIS format so that potential noise impacts could be integrated with other variables being considered in the planning process, such as recreation area designations, ROW designations, etc.

The SPreAD-GIS can be used to (1) determine the areas within a planning unit where the natural soundscape is predominant and should be preserved during planning; and to (2) model sound propagation from uses such as motorized vehicles in a proposed quiet-use recreation area to determine what planning decisions, such as route closures, could be used to restore and enhance

the natural soundscape. In this way, agencies can ensure recreation management zone designations, among other things, help maximize the opportunities for experiencing naturalness and solitude by limiting uses that may compromise natural soundscapes in particular areas. While there are other models and methodologies available, we highlight SPreAD-GIS because it is available by request from TWS.⁶³

To maximize the usefulness and value of soundscape data and analysis, BLM should adopt a classification system for natural soundscapes similar to that it uses for a visual resources classification system. Using a classification system for management planning will help BLM better manage inventoried and prioritized areas for different natural soundscape levels. Similar to the VRM classification scale, natural soundscape classes would likely range from the most intact natural soundscapes to the most anthropogenically disturbed natural soundscapes. This would help better identify those areas where maintaining the natural soundscape is considered a high priority due to its benefit to quiet-use recreation, wildlife, wilderness characteristics, and other natural values. It would also improve the agency's ability to manage activities with higher impacts to sound quality by clearly defining where and how those impacts should occur.

Natural soundscapes are an important component of all public lands and have a large influence on visitors to the area. To go beyond a simple recreation dichotomy of quiet-zones vs. noise tolerant zones (i.e., non-motorized vs. motorized), BLM needs to fully inventory the existing natural soundscapes of the planning area; complete sound modeling to the extent practicable to assess noise impacts; assign sound classifications to individual management zones, and mitigate noise impacts on recreation and wildlife.

C. BLM Natural Soundscape Analysis for the RCNCA

In addition to guidelines under FLPMA, BLM must also manage the NCAs "in a manner that conserves, protects, and enhances the resources of the national conservation area" and to "conserve, protect, and enhance for the benefit and enjoyment of present and future generations the ecological, scenic, wildlife, recreational, cultural, historical, natural educational, and scientific resources." As a result, BLM is required to assess and develop prescriptions to manage the natural soundscapes of both NCAs. While BLM's local recreation and wilderness planners have been able to document where human-caused noise is considered prevalent or absent, this information is limited and cannot serve as an adequate baseline inventory of natural soundscapes in either planning area. Instead, BLM needs to expand its understanding of current natural soundscape within the NCAs to ensure its final management planning decisions improve or maintain current noise levels in the appropriate areas while restricting anthropogenic dominated soundscapes to select areas.

Issue

1. BLM has failed to adequately inventory and assess Natural Soundscapes in the draft Red Cliffs NCA RMP.

The BLM has not fully assessed the natural soundscapes within its boundaries for the draft RMP amendment for the Red Cliffs National Conservation Area. While agency staff has travelled around the NCA to document where urban noise is or is not audible, BLM has not done a more thorough comparison of natural soundscape dB levels, GIS data, and

⁶³ The tool is free, but installation of SPreAD-GIS requires an ArcInfo-level licensed copy of ArcGIS 9.3 or higher with the Spatial Analyst extension.

proposed uses under Alternatives B, C or D. This is particularly important given the two wilderness areas within the NCA, where natural soundscapes are a principle value of all wilderness areas, and should not negatively impacted by other management planning decisions.

The soundscapes of the RCNCA are inherently challenged by the NCA's proximity to the cities of St. George and Hurricane. Due to this location, it is difficult to escape urban influences even inside the NCA. Vehicle traffic on city streets and highways, plus residential development projects and lighting, heavily disrupt the natural environment even within the NCA. While pristine natural soundscapes are still found in the Red Mountain and Cottonwood Canyon Wilderness areas located within the RCNCA, the rest of the area's soundscapes are largely impacted by the cities. As a result, BLM needs to make a strong commitment in its RCNCA RMP to protect the remaining pristine soundscapes and to mitigate existing damage where feasible. This will continue to be a challenge as Washington County experiences more development pressure and population growth around the NCA.

BLM should complete a thorough analysis of the natural soundscapes within and around the planning area. In order to adequately monitor, mitigate and/or minimize the impact of unnatural, disturbing, and damaging noises from both activities within and outside the NCA, BLM must obtain this baseline information.

3.26 Socioeconomics

3.26.1 Affected Environment

3.26.1.3 Land Use and Value

Issue

1. There appears to be a pre-decisional bias exhibited by the Washington County purchases in September 2019, three months before NEPA scoping starts:
 - \$1.35M purchase by Washington County from Robert Brennan for 29.53-acres inside the Red Cliffs Desert Reserve. This parcel falls within the proposed alignment for the Northern Corridor Highway⁶⁴.
 - \$1M purchase by Washington County from Robert Brennan of 22.73 acres inside the Red Cliffs Desert Reserve adjacent to the proposed alignment for the Northern Corridor Highway⁶⁵.

3.26.2 Environmental Consequences

3.26.2.1 Socioeconomics

Analysis Methods and Assumptions

“The following assumptions apply to this analysis:

- The Northern Corridor action alternatives would improve traffic congestion in preparation of a growing population.
- Long-term impacts to industry are not anticipated.
- Establishing a utility corridor (with Alternatives 2, 3, and 4) would ultimately result in future use of the corridor for utilities that would benefit local populations.
- Construction associated with action alternatives would create jobs and increase expenditures.
- The proposed Zone 6 and SGFO RMP Amendment management prescriptions for greater resource protection would impact social aspects of the area and potential family income related to grazing.
- Denial of the HCP could slow or postpone development in certain areas, though the majority of development in the county would continue.
- An alternative to the HCP would be a General Conservation Plan, which would rely heavily on effective partnerships.”

Issue:

2. The assumptions made in this section are highly dependent on design options for each alternative and as a result cannot be accurate. There are many possible implementations of design concepts for DEIS alternatives 5 and 6 with widely variable impacts.
3. We dispute the assumption that a utility corridor would be beneficial. The route of any alternative inside the NCA would be circuitous. Using existing utility ROWs along Red Hills Parkway would provide the same benefit at less cost and environmental impact.
4. We dispute the assumptions that job, family income and development impacts would be significant. There is no basis presented to support these assumptions.

Direct and Indirect Impacts from Alternatives 2, 3, and 4

⁶⁴ Motion to approve funding on 9-18-19 by Washington County Council of Governments

⁶⁵ Resolution No. R-2019-2516 passed on 10-1-19

“Alternatives 2, 3, and 4, which include highway alignments through the Red Cliffs NCA, would provide minimal or no opportunities for additional business development in the areas that would be affected.” (DEIS at 3-166)

Issue:

5. The conclusion presented addresses only that fact that these alternatives would provide no positive business impacts, but it does not consider the negative long-term tourism and recreation business impact. We contend that the Red Cliffs NCA provides significant opportunity in presenting a community that cares about the outdoors and seeks to protect threatened species and habitat. This is demonstrated by an expansive outdoor experience so close to an urban area that is protected from the impacts of urbanization. Any highway within the NCA dashes this experience and will have long-term impacts on tourism and recreation business, and on the branding of our area in general.
6. The assumption also assumes private inholding adjacent to the highway in the NCA will not be developed. Once access is granted, how can this be insured? Developing these properties would have further major impact on the NCA.

“Because this area of the NCA is undeveloped, no impacts to neighborhoods or community cohesion would occur, although existing housing developments where the highway would tie into other infrastructure would experience increases in traffic and noise compared to the No Action Alternative. No businesses are located within the proposed ROW for these alternatives. The NCA alternatives would serve as an alternative transportation route to mitigate increased traffic expected with the projected population growth (see Section 3.26.2.2 for more information on traffic and transportation).”

Issue:

7. Increase in traffic and noise would be significant for all alternatives inside the NCA, and insignificant for those outside.
8. The traffic mitigation applies to all alternatives

“If the ITP is denied, individual take permits could be required to develop non-Federal land with Mojave desert tortoise habitat, particularly where take may be difficult to avoid. This may slow development and limit economic opportunity. Under the ITP/HCP action, which would establish the proposed Reserve Zone 6 and more restrictive land uses through the SGFO RMP Amendment, ranchers could be impacted if livestock grazing is restricted as detailed in Section 3.21, Livestock Grazing. With Red Cliffs NCA RMP Amendment Alternative C, future utilities could be accommodated within the highway ROW; an indirect effect of added infrastructure, should it occur, is that it may induce growth to an area that might otherwise not be developed. In contrast, the SGFO RMP Amendment would either establish ROW exclusion areas for proposed Zone 6 lands (SGFO RMP Amendment Alternative B) or ROW avoidance areas (SGFO RMP Amendment Alternative C). Most mineral activity in proposed Zone 6 would also be precluded, although the probability for mineral development would be low in this area even if unrestricted” (DEIS at 3-168).

Issue

9. This paragraph is difficult to process. It seems to imply that if alternatives 2, 3 or 4 are not approved, that there will be no ITP and no Zone 6. This is an unnecessary condition imposed by Washington County and should have no bearing on the alternative selected. It is within Washington County’s discretion to create Zone 6 and a new ITP regardless of the alternative approved for the Northern Corridor. There are

many options for the ITP, and certainly having none would be detrimental to development, and would be avoided by the county.

Direct and Indirect Impacts from Alternative 5 (Red Hills Parkway Expressway)

Issue

10. This section describes the development required to implement alternative 5 as defined by the DEIS. While this particular design may provide the best projected traffic congestion relief, it also requires the most disturbance to private property, we contend that the necessary traffic relief can be achieved with much less disturbance. The alternative described by Conserve Southwest Utah provides an example of a design alternative satisfying this condition. There should be a public engagement in developing the specific design alternative to be carried forward.

Table 3.26-6. Alternative 5 Property Impacts

Issue

11. We contend that the impacts outlined in this table can be significantly reduced with a broadened consideration of design alternatives. We further contend that these impacts have been exacerbated by the county's lack of growth planning, driving unnecessary transportation improvements and hampering transportation alternatives.

Direct and Indirect Impacts from Alternative 6 (One-way Couplet)

“However, the one-way couplet may impact the quality, walkability, and social aspects of downtown St. George. One-way streets typically result in higher traffic volumes and lack the traffic calming effects of two-way streets, so drivers tend to go faster than the posted speed limit. One-way streets support more vehicular traffic and discourage pedestrian and bicycle traffic thus deterring walkability in the downtown area (Riggs and Gilderbloom 2015, Walker et al. 2000). One-way streets may lower perceived pedestrian safety and business attention as speeds increase and visibility of people and buildings decrease (Baco 2009, Riggs and Gilderbloom 2015, Walker et al. 2000). Property values may change, and storefront exposure could decrease, impacting business along St. George Boulevard and 100 South (Baco 2009, Riggs and Gilderbloom 2015). It is possible that with an increase in traffic volumes the visibility to businesses on either side of St. George Boulevard could create more economic activity and lead to increased economic opportunity, particularly if traffic calming measures are implemented to help maintain the posted speed limit” (DEIS at 3-169). (emphasis added)

Issue

12. This general description of the couplet and its impacts, with the exception of the last sentence, and the selected references seem to present a biased perspective. Certainly, a one-way couplet could be designed to damage business and hinder walkability, but they can also be designed to improve business access and value, and walkability. There are many references to design that improve downtown businesses and pedestrian experiences (e.g., [Town Center One-Way Couplets](#), [Public Square](#)). There are certainly many contradictory studies, and many design variables. This general description of the couplet and its impacts, with the exception of the last sentence, and the selected references seem to present a biased perspective.

“On 100 South, the one-way couplet will have more negative impacts to residents. Implementation of this alternative could lead to an increase in commercial property values along 100 South as traffic volumes increase, bringing more shoppers and visibility to the area. This, however, would likely decrease residential property values because traffic and noise take away

from the livability of the area. It is also possible that commercial and residential property values *could* suffer *if* traffic speeds are not maintained, and create a dangerous environment for pedestrian shoppers. With faster moving traffic, less driver awareness of pedestrians, and potentially higher property taxes, residential properties on 100 South may convert to business uses. In addition, the neighborhood cohesion between residents that align 100 South would be negatively impacted by the alternative. The increase in traffic volumes and the additional through lane associated with the one-way couplet would deter residents from crossing 100 South without implementation of designated pedestrian crossings and traffic calming design features” (DEIS at 3-170).”

Issue

13. The conclusion that the couplet “will have more negative impacts to residents” is not substantiated. Which residents? Certainly, the plan is for downtown St George to be a high-density residential and commercial mixture. As the city grows, single-family residences in the downtown core will convert to multi-family and commercial uses. The couplet will not be the reason for this, but rather the couplet would support it. Property values will change independently.
14. The DEIS seems to assume the couplet would be designed for high-speed, but it could and should be designed for mid-speed (35 mph?), high thru-put and safety.

“Dixie State University, located on 100 South, initiated a Student Pedestrian Emphasis Area with the assistance of the City of St. George in 2014. This Pedestrian Emphasis Area allows certain uses and densities to support the university’s growing student population and strives to provide study housing, and encourage walking and biking to campus. The one-way street conversion *may* impact this area with increased traffic speeds and volumes, which *can* negatively impact the walkability of the area without traffic calming, and safety design features along 100 South for pedestrians and bicyclists. The BLM is coordinating with the City of St. George regarding potential inconsistencies between the roadway alternatives and the land use plans, policies, and controls adopted by the City of St. George. Findings are documented in Appendix H” (DEIS at 3-170).

Issue

15. Again, the emphasized text in the DEIS reflects a bias, stating issues that could arise if not correctly designed, rather than benefits if correctly designed.

“Land acquisitions and relocations would be needed with the eastern portion of this alternative where St. George Boulevard and 100 South tie in with I-15. These acquisitions are limited to 100 South from 1000 East to South River Road. Table 3.26-7 shows that no full acquisitions or relocations would be needed. Partial acquisitions will not impact property access.”

Table 3.26-7. Alternative 6 Property Impacts

Issue

16. The design of the couplet as described in the appendix and as addressed in the table of property impacts is perhaps one that would maximize traffic flow as well as maximize negative community impact. A design is possible that both significantly improves traffic flow, relieving congestion at key intersections, and significantly improves business access, active transportation, walkability, and the overall livability of the downtown area, substantially enhancing it. The design should be addressed by

engaging the community in solving traffic problems in a way that enhances the community and the environment.

3.26.2.2 Traffic and Transportation

Analysis Methods and Assumptions

“Traffic and transportation effects are only related to the Northern Corridor highway alternatives. It is assumed that there are no effects to traffic and transportation directly associated with Red Cliffs NCA RMP Alternatives B or C, SGFO NCA RMP Alternatives B or C, and the Amended HCP.

Traffic analyses were performed based on standard FHWA traffic analysis methodologies using industry-accepted traffic analysis software programs. Results are presented by reporting the projected 2050 evening peak hour (highest hour volume) intersection level of service, which is a measurement of average intersection delay and travel time” (DEIS at 3-170).

Issue

17. Evening peak hour assumes no technological improvements in traffic flow and no human adaptation to traffic. Although these assumptions are understandable from a very simplified modeling perspective, neither of which are realistic assumptions.

The Value of Protected Public Lands

While market considerations from extractive uses are important in land use planning decisions, the non-market services found on public lands are equally valuable, and BLM must consider them. Opportunities for solitude, quiet outdoor recreation, clean air, clean water, biodiversity, the preservation of wilderness areas, among other things, bring ample benefits to the landscape and visitors’ experiences. Unfortunately, BLM typically prioritizes market services like hard rock mining or oil and gas over non-market values because their benefits are typically monetary and easier to estimate.

However, Congress crafted FLPMA to require the BLM to consider non-market values in all land use planning decisions. As a result, BLM is required to, among other things, consider “the long-term needs of future generations” for things like recreation and “natural scenic, scientific and historical values” when developing management plans. 43 U.S.C. § 1702(c). Specifically, the BLM must ensure:

[The] harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or the greatest unit output.

FLPMA, 43 U.S.C. § 1702(c) (emphasis added).

BLM’s Instruction Memorandum (IM) 2013-131 also directs the agency to, where feasible, “utilize estimates of nonmarket environmental values in NEPA analysis supporting planning and other decision-making.”⁶⁶ IM 2013-131 also describes nonmarket values as those that “reflect

⁶⁶ IM 2013-131, available at:

http://www.blm.gov/wo/st/en/info/regulations/Instruction_Memos_and_Bulletins/national_instruction/2013/IM_2013-131_Ch1.print.html. (accessed on 10/9/15).

the benefits individuals attribute to experiences of the environment, uses of natural resources, or the existence of particular ecological conditions that do not involve market transactions and therefore lack prices.” Things like “the perceived benefit of hiking in wilderness” would be considered a non-market value. *See* IM 2013-131. In addition, when possible, BLM should calculate the quantitative non-market environmental values to better assist the agency in its analysis of action impacts. However, at the very least, BLM must develop a qualitative description of the most relevant non-market values in the NEPA analysis process. *See* IM 2013-131.

Further, while FLPMA and other BLM agency policies require non-market values to be evaluated during all land use planning, non-market value considerations are twice as important when developing management plans for National Conservation Lands. Since the central purpose for establishing areas like the Red Cliffs National Conservation Areas is “to conserve, protect, and enhance for the benefit and enjoyment of present and future generations the ecological, scenic, wildlife, recreational, cultural, historical, natural, education, and scientific resources” of these areas, actions that preserve these nonmarket values should be prioritized.

BLM must analyze the socioeconomic impacts of multiple factors, including both market-based and non-market-based benefits, when developing management alternatives. This action is not only required, but will help ensure that the costs of other uses, like the Northern Highway Corridor do not permanently harm other important, non-market benefits of greater conservation areas.

The benefits generated from protecting wild lands also extend to surrounding communities. In St. George, people are often drawn to the area for its spectacular views, ample recreational opportunities, and wonderful winter climate. The public’s easy access these experiences is a core feature of what people love about the area. Many local residents agree that southern Utah’s unique natural environment “is central to our quality of life and helps drive our economic engine, drawing residents, businesses, and tourists to Washington County.”⁶⁷ The beautiful and unique natural environment surrounding the St. George urban area is one reason for the regions rapid growth in recent years.

As other extractive industry interests in St. George taper, the importance of quality and accessible wildland experiences will become increasingly more important to support the local economy. Hikers, bikers, campers, hunters, and climbers, among others, flock to this region to experience a natural landscape unlike most others, and their presence in the community brings important and more sustainable revenue to the area. Consequently, well-conserved landscapes not only produce billions of dollars of natural services for local communities annually, such as air and water filtration and climate regulation, but they also generate financial value for the local economy by drawing people into the region to experience them.

Issue:

18. The DEIS failed to determine the long-term economic value of protecting the Red Cliffs NCA against damaging infrastructure projects like the Northern Corridor Highway.

⁶⁷ Vision Dixie. 2005. Land Use and Transportation Vision. Available <http://visiondixie.org/pdf/VisionDixie-Book-SM.pdf>.

3.28 Cumulative Effects

Issue

1. In general, this section does not describe and qualify the cumulative impacts of the alternatives as required, addresses only anticipated future impacts, incorrectly equates the impacts of all alternatives, and incorrectly assumes that private property within the NCA/Desert Reserve could be developed as a practical matter and that the impact of that would be much greater than any of the alternatives' impacts (private in-holdings could not be practically developed without the access that would be granted by implementation of alternatives 2, 3 or 4). The impacts of past events combined with anticipated future events, for alternatives 2-4, would be significant and should be at least qualified if not quantified in the DEIS.

3.28.1 Impact Assessment Methodology

“Past, present, and reasonably foreseeable future actions, other Federal actions, and non-Federal actions were obtained using readily available public sources.”

Issue

2. Previous versions of the [Dixie Metropolitan Planning Organization plans](#) through 2050 have been publicly available and show planned roads in the proposed Zone 6. This source should have been used to determine cumulative effects. Table 3.28-1 should but does not list these planned road developments. They have significant impact on reasonably foreseeable future cumulative effects.
3. It is divulged in several places in the DEIS that private in-holdings in Zone 3 could be developed in the future. Alternatives 2-4 route through or near these properties, enabling development access. The effects of these reasonably foreseeable future actions should be addressed in the DEIS, yet Table 2.28-1 does not list them.

3.28.1.1 Vegetative Communities, Including Noxious Weeds and Invasive Species

The HCP, which addresses development on Mojave desert tortoise habitat on non-Federal, non-Tribal land in most of Washington County involves a substantial amount of acreage that would lead to vegetation loss both with the action alternatives and No Action Alternative. The project-related effects discussed in Section 3.2, combined with any additional ground-disturbing activities within land supporting native vegetation communities, would create cumulative effects to native vegetation communities. Because development on private lands could occur under all alternatives, cumulative effects are relatively similar for each alternative.

Issue

4. The first highlighted statement above is untrue: the loss of vegetation is only substantial for alternatives 2-4. In addition, the highway implemented in those alternatives, as well as several of the other planned projects in or near zone 3 and the proposed zone 6 would provide a pathway for invasive species.
5. The second highlighted statement above is untrue: without the implementation of one of the alternatives 2-4, the private lands would have no access and would not be able to be developed.

3.28.1.2 Special Status Plants

The HCP addresses a substantial amount of acreage that could be developed with both the action alternatives and No Action Alternative, as discussed in Section 3.3. Any additional ground-disturbing activities within suitable and occupied habitat, combined with project-related ground disturbance such as new ROW, will have cumulative effects on the special status plants

described in Section 3.3. Because potential development on private lands could occur under all alternatives, cumulative effects are relatively similar for each alternative.

Issue

6. The first highlighted statement above is untrue: it only holds true for alternatives 2-4.
7. The second highlighted statement above is untrue: without the implementation of one of the alternatives 2-4, the private lands would have no access and would not be able to be developed.

3.28.1.3 General Wildlife

Approval of the Washington County HCP and Amendments to the SGFO RMP designating Zone 6 as part of the Reserve would result in the beneficial effect of protecting general wildlife habitat, offsetting and reducing the overall effect of development, especially on private lands. Therefore, to varying degrees, all alternatives would result in incremental minor cumulative impacts to general wildlife within the analysis area.

Issue

8. The highlighted statement is not backed by a factual reference, and we contend it is incorrect due to the future planned projects that have been omitted from table 3.28-1. We contend the effects would be significant.

3.28.1.4 Special Status Wildlife

All alternatives, together with other reasonably foreseeable future land development and transportation projects, would contribute to the incremental loss of habitat important to special status wildlife species in the analysis area. The incremental cumulative impact of roadway improvements associated with Alternatives 5 and 6 would be negligible, but the loss of habitat with Alternatives 2, 3, and 4 could lead to a moderate adverse contribution to the cumulative impacts on special status wildlife.

Issue

9. We disagree that the effect would be moderate (see von Seckendorff, Hoff and Marlow, 2002)

The designation of proposed Zone 6 would result in the beneficial effect of protecting special status wildlife habitat, offsetting and reducing the overall effect of this and other projects, though to varying degrees, the implementation of the proposed project combined with the ground-disturbing projects listed in Table 3.28-1 would result in incremental cumulative impacts to special status wildlife within the analysis area.

Issue:

10. We disagree that this is a significant offset. Much of the habitat is already protected by an ACEC status, and the planned road intrusions and continued allowance of damaging human activities will erode this already questionable area.

3.28.1.5 Endangered Species Act Section 6 Land Acquisition Grants

No reasonably foreseeable actions identified in Table 3.28-1 would affect ESA Section 6 lands within the analysis area with the exception of a potential increase in Section 6 lands within the Reserve.

Issue

11. The DEIS has an incorrectly shortened future view and thus inappropriately omits consideration of several planned road developments within the proposed zone 6. The projects should be added to table 3.28-1 and their impacts should be included.

3.28.1.12 Visual Resources

In the Proposed Zone 6 Analysis Area, under Alternatives 2, 3, and 4, the proposed BLM RMP amendments combined with the reasonably foreseeable future actions, such as land managers focusing on the long-term conservation of the area, would cumulatively have beneficial impacts on the visual resources by limiting future cultural modifications that could degrade scenic quality. While planned residential developments adjacent to the proposed Zone 6 (such as the DiVario Development master planned community) would bring new residential development closer in view of adjacent trail users, the visual character within the proposed Zone 6 would generally be preserved for the foreseeable future.

Issue

12. As noted earlier, the unusually short analysis time window misses the planned roadway development in Zone 6, making these conclusions incorrect.

3.28.1.13 Cultural Resources and Native American Concerns

Alternatives 2, 3, 4, and 5 in addition to other reasonably foreseeable future land development and transportation projects, would contribute to the incremental loss of cultural resources in the cultural resources analysis area.

Issue

13. The DEIS should address the potential for development of private inholdings enabled by alternatives 2-4, and the damage to cultural resources that would ensue.

3.28.1.14 Recreation and Visitor Services

Under Alternatives 2 through 5, reasonably foreseeable future actions that may cumulatively affect recreation and visitor services in the recreation analysis area include granting special use permits for a variety of recreational tours and events throughout the SGFO, ongoing BLM travel management planning, and BLM acquisition of non-Federal lands within the Red Cliffs NCA. BLM acquisition of non-Federal lands within the Red Cliffs NCA would be entirely beneficial for recreation and visitor services because it would help preserve the existing recreation setting. BLM approval of special use permits would not permanently impact recreation and visitor services but could temporarily limit visitor access to recreation facilities during events or tours. During special events or tours, visitor experience could be altered by the increased use and presence of people, but these activities are subject to BLM approval and therefore are assumed to be consistent with the BLM's recreation management objectives. For these reasons, cumulative impacts to recreation and visitor services from issuance of special use permits is expected to be minor and temporary.

Issue

14. Alternative 5 should not be lumped with alternatives 2-4 in the assessment of impact since it is much less.
15. The potential future development of private in-holdings in zone 3 would have major impacts.

Alternative 6 could result in cumulative effects to recreation opportunities along 100 South as a result of a proposed restriping project between 700 East and Bluff Street. However, both Alternative 6 and the proposed City of St. George improvements would have minor impacts on recreation, such as opportunities at Town Square and the Dixie Sun Bowl. Any cumulative impacts would therefore be minor and recreation and visitor services on Federal lands would not be impacted.

Issue

16. Alternative 6 could be designed to significantly benefit visitor experience

3.28.1.15 Land and Water Conservation Fund Act Lands [Section 6(f) Properties]

Land tenure adjustments and land use authorizations would offset some of the loss from Federal LWCF impacts by incorporating private in-holdings into the NCA. No reasonably foreseeable actions identified in Table 3.28-1 would affect State LWCF lands within the analysis area.

Issue

17. Two key points are not addressed: Federal LWCF are not allowed to be impacted, therefore these private in-holding offsets cannot be considered, and, if they were, they are more likely to be developed if any alternatives 2-4 are selected.

3.28.1.18 Areas of Critical Environmental Concern

Alternatives 2, 3, and 4 would result in entirely beneficial effects on the Red Bluff ACEC, while Alternatives 1, 5, and 6 would not impact ACECs

Issue

18. As stated earlier, the DEIS has an inappropriately shortened future view and thus omits consideration of several planned road developments within the proposed zone 6. These developments should be considered and would have an adverse effect on the ACEC.

3.28.1.19 BLM Lands and Realty

Alternatives 2, 3, and 4 would result in impacts on BLM lands and realty in both the Red Cliffs NCA and proposed Zone 6, including the ability to accommodate future demand for land use authorizations, impact on existing authorizations, and future land tenure adjustments. Under these alternatives, the BLM would continue to manage the areas outside of designated ROW corridors within the Red Cliffs NCA as an avoidance or exclusion area for new ROWs. The only reasonably foreseeable future actions in Table 3.28-1 with the potential to impact BLM lands and realty in the Red Cliffs NCA and proposed Zone 6 are the BLM parcel acquisitions in the Red Cliffs NCA. The authorization of a ROW for the Northern Corridor under Alternatives 2, 3, and 4 would likely result in reduced opportunities for these types of land tenure adjustments, because some of the lands targeted for acquisition could become encumbered with a ROW for the Northern Corridor. There are no other reasonably foreseeable future actions in the BLM lands and realty analysis area that would impact lands and realty.

Issue

19. Alternatives 2-4 would greatly increase the complexity of BLM lands and realty in that they would enable private in-holding development and reduce the opportunity for their incorporation into the NCA. This more complex condition is not addressed in the DEIS.
20. The BLM has demonstrated that an avoidance or exclusion area does not preclude development, as alternatives 2-4 route through such areas. The DEIS seems to overstate the impact of these areas.

3.28.1.21 Fire and Fuels Management

Issue

21. As stated earlier, the DEIS has an inappropriately shortened future view and thus omits consideration of several planned road developments within the proposed zone

6. These developments should be considered and would have an adverse effect on fire and fuels management.

3.28.1.22 Noise

Issue

22. As stated earlier, the DEIS has an inappropriately shortened future view and thus omits consideration of several planned road developments within the proposed zone 6. These developments should be considered and would have an adverse effect on noise in zone 6.

3.28.1.23 Hazardous Materials and Solid Waste

Issue

23. As stated earlier, the DEIS has an inappropriately shortened future view and thus omits consideration of several planned road developments within the proposed zone 6. These developments should be considered and would have an adverse effect on Hazardous Materials and Solid Waste in zone 6.

3.28.1.24 Human and Health Safety

The proposed recreation projects identified in Table 3.28-1 and ongoing recreation activity and interest in the area could increase the need for emergency response. The projected population growth would also increase the need for emergency response. Construction and operation of the Northern Corridor, together with other reasonably foreseeable future new and improved roadways, would temporarily change traffic patterns, and construction equipment could present a risk to drivers and potentially delay emergency services. In the long term, however, these same roadway projects provide emergency responders additional travel routes and access to new areas that could benefit public safety.

Issue

24. We disagree with the highlighted statement. The benefit of emergency response is offset by the danger inherent in a highway.

The cumulative effects related to changes in air quality, noise, or the generation and transport of hazardous waste are not expected to have notable impacts to human health and safety because the adverse effects would be minor and controlled by regulatory processes.

Issue

25. We disagree with the highlighted statement. Alternatives 2-4 introduce air quality, noise and hazardous waste to an area that would not otherwise have it. Regulatory processes have a limited impact.

3.29 Climate-Related Impacts

Climate-related impacts are addressed in the DEIS in several places. This section integrates those inter-related impacts and addresses their cumulative effects.

Issue

1. The DEIS fails to take a hard look at the impacts of climate change and consider recent climate science regarding the proposed alternatives and is therefore arbitrary and capricious.

The 2016 Red Cliffs NCA ROD and Approved RMP acknowledges that management for fish and wildlife habitat must occur in the context of predicted changes in climate, stating (emphasis added in *italics*):

The Approved RMP will manage fish and wildlife habitat to provide high quality forage or a high-quality prey base, as well as water, space, cover, and breeding areas, thereby sustaining viable populations and overall ecosystem biodiversity and resilience. Multi-species habitat connectivity, migration routes, and movement corridors are conserved and protected between ecological Zones to facilitate species persistence, adaptation, and overall biodiversity *under predicted climate change scenarios*.⁶⁸

BLM and USFWS have an obligation to use the best available science in assessing the climate impacts that will result from its decisions and that must inform current and future management.

To fulfill the goals of NEPA, federal agencies are required to analyze the “effects,” or impacts, of their actions to the human environment prior to undertaking their actions,⁶⁹ holding that NEPA imposes action forcing procedures . . . requir[ing] that agencies take a *hard look* at environmental consequences”. To this end, an agency must analyze the “direct,” “indirect,” and “cumulative” effects of its actions, and assess their significance.⁷⁰ Direct effects include all impacts that are “caused by the action and occur at the same time and place.”⁷¹ Indirect effects are “caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable.”⁷² Cumulative effects include the impacts of all past, present, and reasonably foreseeable actions, regardless of what entity or entities undertake the actions.⁷³

The entirety of the climate change section states:

“Climate change is predicted to affect the American Southwest with increased drought events and increased temperatures (The Global Change Research Program as cited in Berry and Murphy 2019). Locally, most models predict that the frequency of severe drought will increase over the next 50 years. In the past 25 years, Washington County has seen average annual temperatures above the mean of 61°F and precipitation has generally been lower than the annual mean of 12 inches (NOAA 2020a, Rangwala 2020). Historically, the hottest summer day had a temperature of 105°F, and it is anticipated that the number of higher temperature summer days will continue to increase, while precipitation is predicted to fluctuate within 10 percent above or below the mean. Under drought conditions, nonnative grasses would proliferate, which would also increase fuel loads, thereby making habitat more

⁶⁸ U. S. Department of the Interior, Bureau of Land Management, St. George Field Office. 2016. Red Cliffs National Conservation Area Record of Decision and Approved Resource Management Plan. Available at: https://eplanning.blm.gov/epl-front-office/projects/lup/64251/93615/112935/RCNCA- ROD-RMP_ePlanning.pdf (emphasis added).

⁶⁹ *Ctr. for Biological Diversity v. Nat’l Highway Traffic Safety Admin.*, (9th Cir. 2008) 538 F.3d 1172, 1217 (“the impact of greenhouse gas emissions on climate change is precisely the kind of cumulative impacts analysis” that agencies must conduct). § 1502.16(d); *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989)

⁷⁰ *Id.* §§ 1502.16(a), (b), and (d).

⁷¹ *Id.* § 1508.8(a).

⁷² *Id.* § 1508.8(b).

⁷³ *Id.* § 1508.7.

susceptible to wildfires, and could cause direct mortality and loss of habitat for Mojave desert tortoise (Berry and Murphy 2019, Drake et al. 2016). Because this species' sex determination is temperature dependent, a predicted increase in ambient temperatures could skew sex ratios toward more females." DEIS 3-43

For the HCP, the DEIS states:

"The effects of climate change and the growing threat of wildfire exasperates the cumulative effects on the increase of noxious and invasive species. The transportation and development projects listed in Table 3.28-1 will remove, destroy, or degrade native vegetation communities and soil. Soil disturbance can create conditions that allow exotic invasive weeds to become established into an area and spread the existing seedbank of exotic invasive species." DEIS 3-182

Issue:

2. The DEIS fails to analyze how each of the alternatives could exacerbate direct, indirect and cumulative impacts of expected climate change.

Despite the obligation to use best available science and take a hard look at project impacts, the analysis of climate change in the DEIS is woefully inadequate, consisting of the paragraphs cited above and few isolated mentions of climate change. Specifically, the DEIS fails to analyze how each of the ROW alternatives would interact with climate change, including creating multiplier effects on existing stressors such as invasive species and fire, and what the direct, indirect and cumulative impacts would be. Failure to conduct this analysis is arbitrary and capricious under the requirements of NEPA and a fatal flaw of the DEIS.

The DEIS points out that NCA Reserve is already experiencing environmental stress and degradation from establishment of invasive plants, which in turn creates a feedback loop for increased wildfires and loss of native plants in the Reserve.

The DEIS acknowledges Fish and Wildlife Service's threats to desert tortoise as follows:

"the most apparent threats to the desert tortoise are those that result in mortality and permanent habitat loss across large areas, such as urbanization and large-scale renewable energy projects, and those that fragment and degrade habitats, such as proliferation of roads and highways, OHV activity, and habitat invasion by nonnative invasive plant species" (USFWS 2019a). The USFWS has also indicated that predation, disease, drought, fire, and climate change threaten Mojave desert tortoise populations (USFWS 2019a)." DEIS at 3-34

It is well known that ecosystems already under stress are likely to have more rapid and acute reactions to climate change.⁷⁴ A stressor is defined as an activity that induces an adverse effect and therefore degrades the condition and viability of a natural system. The stressors that have most damaged natural systems fall into four general categories: (1) land-use and land-cover change ([LULCC], including habitat fragmentation and degradation, urbanization, and infrastructure development), (2) biological disruptions (introduction of non-native invasive species, diseases, and pests), (3) extractive activities

⁷⁴ A. Staudt, et. al. The added complications of climate change: understanding and managing biodiversity and ecosystems. *Frontiers in Ecology and the Environment*. November 2013. <https://doi.org/10.1890/120275>

(such as fishing, forestry, and water withdrawals), and (4) pollution (including chemicals, heavy metals, and nutrients).

Under any interpretation, constructing a 4-lane divided freeway through the NCA and the other planned projects in the analysis area are stressors.

As the DEIS correctly states, bisecting the Reserve will destroy and fragment habitat into smaller disconnected segments, inhibiting gene-flow exchange, increase the proliferation of invasive species and resulting wildfire, physically crush tortoises in their burrows and increase temperatures to dangerous levels in the area that would parallel the freeway. DEIS at 3-35, 3-62

Yet, the DEIS completely fails to analyze how each of the alternatives would interact with climate change, including creating multiplier effects on existing stressors such as invasive species and fire, and what the direct, indirect and cumulative impacts might be. Failure to conduct this analysis is arbitrary and capricious under the requirements of NEPA and a fatal flaw of the DEIS. The DEIS should have analyzed specific threats to the desert tortoise and other wildlife species and how each of the proposed highway alternatives would interact with those stressors directly, indirectly and on a cumulative basis. Specific stressors the DEIS failed to analyze under a climate change scenario include: effects of habitat fragmentation, proliferation of invasive species, predation, wildfire frequency and intensity, thermal stress, water sources and drought, food source availability and effects on longevity, reproduction and health.

Despite the lack of analyses for each of the ROW alternatives, the DEIS acknowledges that the effects of climate change and the growing threat of wildfire exasperates the cumulative effects on the increase of noxious and invasive species, a known threat to the desert tortoise. A logical extension of this certainty and impacts from ROW alternatives would be that to minimize the impacts of climate change on the desert tortoise, Alternatives 5 and 6 would have the least direct, indirect and cumulative impacts.

Issue:

3. The DEIS fails to take a hard look at the direct, indirect and cumulative impacts of each alternative on the ability of tortoises to migrate to higher elevations.

The DEIS offers just two specific sentences regarding climate change and the NCA ROW, stating:

“Most documented Mojave desert tortoises in the Reserve are found below 4,000 feet elevation. The approximately 2,360 acres of potential habitat on the Reserve between 4,000- and 5,000-feet elevation would not be restricted by any project- related actions.” EA at 3-56

The DEIS provides no analysis or proof that this statement is true. The DEIS does not even include an elevation map. More importantly, this claim is not accurate because the T-Bone Mesa, UDOT Application and Southern Alignment alternatives would all create impenetrable barriers inhibiting the migration to higher elevation northern latitudes for some of the most dense desert tortoises populations in the NCA.⁷⁵ Only the St. George

⁷⁵ See Map 3.5-5. Mojave Desert Tortoise Relative Density DEIS at B-53

Boulevard, alternative #6, would not create a new barrier to tortoise migration because it would not be constructed in the NCA. See map in DEIS at B-53. Not only does the DEIS fail to provide a hard look analysis, the one statement the DEIS does make regarding potential migration to potential habitat at a higher elevation is not accurate. Three of the alternatives, would create a major barrier for tortoises, thereby restricting migration as a direct result of project-related actions.

Additionally, the DEIS provides no analysis or discussion of: a) whether tortoises could even successfully migrate to the 2,360 acres of potential habitat located between 4,000-5,000 feet elevation, or b) whether that relatively small patch of potential habitat could even support a significant portion of the tortoise population.

Issue

4. The DEIS Fails to take a hard look at how each alternative would impact water resources under climate change scenarios.

Impacts to Wetlands and WOUS

The DEIS states:

“A formal wetland delineation was completed to identify and delineate wetlands and WOUS along each Northern Corridor alternative route. Ephemeral washes were the only features identified within the potential ROW for each alternative, and additional data can be found in the Northern Corridor Aquatic Resources Delineation Report (SWCA 2020)” DEIS at 3-87.

“Construction of the Northern Corridor under Alternatives 2, 3, or 4 would result in permanent loss or temporary construction impacts to floodplains and WOUS (Table 3.10-1). Indirect impacts to WOUS and floodplains may include reduction or loss of hydrological connection between WOUS features, reduction or loss of floodplain function, increased sedimentation, and potential for oil, fuel, or construction materials to be spilled into WOUS during construction. Impacts on WOUS and floodplain features can be correlated with increased flood flows, sedimentation, and decreased biological diversity within the watershed. However, the majority of WOUS and floodplains within the Red Cliffs NCA and the Reserve would not be impacted by the Northern Corridor.” DEIS at 3-88 (Table 3.10-1). Wetland delineation results can be found in Map 3.10-2.

The DEIS also states that:

“Groundwater patterns are not known within the analysis area. No known springs or seeps are identified within the analysis area.” DEIS at 3-91.

The DEIS found that “Alternative 6 would result in no impacts to wetlands or WOUS.” DEIS at 3-90.

Regarding the Red Cliff National Conservation RMP Amendments, the DEIS states:

“Red Cliffs NCA RMP Amendment Alternative B would result in the same direct and indirect impacts to WOUS and floodplains as described for the Northern Corridor. However, if Red Cliffs NCA RMP Amendment Alternative C is

selected, the floodplains and WOUS within the designated ROW corridor could be impacted by future above- and belowground utility construction. These activities would result in the same type of direct and indirect impacts on WOUS and floodplains as the construction of the Northern Corridor, including the potential to permanently fill or temporarily disturb WOUS and floodplain features. These impacts would occur to the same features and in the same physical areas as those impacts quantified in Table 3.10-1 for the Northern Corridor; however, impacts from future utility construction would likely occur later in time.” DEIS at 3-89.

The DEIS failed to analyze how each of the ROW alternatives for the NCA would interact with and exacerbate the effects of climate change on the impacts to wetland and waters of the United States. The DEIS does state that Alternative 6 would result in no impacts to wetlands or WOUS, and therefore, extending that logic, alternative 6 would have the least multiplier effects of climate change and should be the alternative selected.

Impacts to water resources

The DEIS indicates that alternatives 2, 3 and 4 would have impacts to water resources while alternative 5 and 6 would not impact water resources except where modifications are made to the roadways, particularly at tie-ins to I-15.

“Impacts to water resources from Alternatives 2, 3, and 4 are similar in nature but vary based on topographical impacts, on flow patterns, and overall length of alignment. All three of these alternatives would result in increased runoff from impervious surfaces, and adjusted flow patterns to accommodate collection and conveyance of additional runoff to detention facilities equipped with outlet devices that trap floatables, oils, and other impurities; this would be used to provide water quality treatment and detain outflow rates to existing conditions. It is anticipated that major drainage crossings will be conveyed across the ROW without detainment.” DEIS at 3-93

The DEIS was required, but failed to, also address how each proposed alternative would fair under climate change scenarios. However, one can extend the logic of the impacts of ROW alternatives and conclude that alternatives 5 and especially 6 would have the least impacts under a climate change scenario and should be the recommended alternatives.

Issue

5. The DEIS Fails to Fully Quantify Direct, Indirect, and Cumulative Greenhouse Gas Emissions.

The DEIS projects the amount of daily vehicle miles traveled (VMT) would increase from the current daily VMT of 4,367,738 to between 10,287,036 daily VMT for the no action alternative to a high of 10,311,945 daily VMT for the Red Hills Parkway Expressway alternative by 2050. DEIS at 3-97 Table 3.12.1

Regarding GHG emissions, the DEIS states:

“According to *The Utah Roadmap Technical Supplement* (Gardner 2020), GHG emissions are projected to increase to approximately 95 MMT CO₂e by 2050, an increase of approximately 37 percent above current emissions. However, if emission reductions from the closure of coal power plants and the increased use of electric vehicles are accounted for, GHG emissions are projected to decrease to approximately 32 MMT CO₂e by 2050, a decrease of approximately 66 percent below current emissions.” DEIS at 3-186.

“In April 2020, the agencies issued a final Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021 – 2026 Passenger Cars and Light Trucks. This final rule amends and establishes carbon dioxide and fuel economy standards and is effective on June 29, 2020. The climate effects of the final standards as compared to the 2012 standards are extremely small – less than 1/1000th of 1°C in 2040 (NHTSA 2020). Therefore, these standards should still be sufficient to reduce vehicle emissions. Increasing use of technological innovations that can improve fuel economy, such as gasoline- and diesel-electric hybrid vehicles, also will improve air quality and reduce carbon dioxide emissions in future years.” DEIS at 3-186

“Another factor in mitigating increases in VMT is EPA GHG emissions standards implemented in concert with national fuel economy standards. The U.S. Energy Information Administration projects that vehicle energy efficiency (and thus, GHG emissions) on a per-mile basis will improve by 55 percent by the year 2050 (EIA 2020). This improvement in vehicle emissions rates is more than sufficient to offset the increase in VMT.” (DEIS at 3-97 Table 3.12-1)

“Also, regardless of the alternative chosen, emissions would likely be lower than present levels in the design year as a result of the EPA's national control programs that are projected to reduce annual MSAT emissions by over 90 percent between 2010 and 2050 (FHWA 2016).” DEIS at 3-98

“In sum, direct impacts under all action alternatives in the 2050 design year are expected to be reduced via lower GHG emissions relative to the No Action Alternative, as a result of the reduced VMT associated with more direct routing, and improved operational speeds and less stop-and-go traffic (speeds of 0 to 25 miles per hour). Indirect impacts would result from a potential rerouting of traffic accessing the new highway, potentially creating additional points of conflict and reduced speeds at alternate locations, leading to increased CO₂ emissions and GHG emissions.” DEIS at 3-99.

The DEIS fails to recognize the critical importance that land use planning and this proposal in particular plays in greenhouse gas (GHG) emissions from the proposed project and how it exacerbates GHG emissions. Although GHG emissions from the proposed project may seem insignificant, climate change is a problem with cumulative impacts and effects.⁷⁶ One source or one project may not appear to have a significant effect on climate change, but the combined impacts of many sources can drastically damage Utah's climate as a whole. Therefore, project-specific GHG emission disclosure, analysis and mitigation is vital to meeting climate goals and maintaining our climate.

The DEIS appears to only have reported GHG emissions from increased daily vehicle miles traveled, but not GHG emissions resulting from the total projected

⁷⁶ *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin.*, (9th Cir. 2008) 538 F.3d 1172, 1217 (“the impact of greenhouse gas emissions on climate change is precisely the kind of cumulative impacts analysis” that agencies must conduct).

planned development. As such the DEIS failed to analyze the indirect and cumulative impacts of growth on GHG emissions.

Further, the BLM and USFWS failed to conduct a GHG emissions analysis for both the construction and operation of the Northern Corridor. Instead the DEIS states, “There are no Federal or State ambient concentrations or emissions standards for greenhouse gas (GHG).” DEIS at 3-94.

The DEIS projects increased daily vehicle miles traveled but does not include an analysis of GHG emissions from those increased vehicles. Rather, they sweep projected increases in vehicle emissions under the rug but claim that the increase in daily VMTs will be offset by future vehicle energy efficiency stating “that is more than sufficient to offset the increase in VMT.” Yet, the DEIS provides no quantitative analysis to back up this point.

Regarding the DEIS claim that the climate change effects of the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021 – 2026 Passenger Cars and Light Trucks are only “extremely small,” that claim is not true. The 2012 standards would have cut emissions and improved gas mileage roughly 5 percent a year from 2021 to 2025. The Trump Administration’s SAFE Rule would slash required fuel-efficiency improvements to just 1.5 percent a year beginning in 2021.⁷⁷ Even that significantly reduced standard won’t be achieved because of various credits automakers can receive for making vehicles that run on gasoline or employ more efficient air-conditioning refrigerant, even if emissions aren’t reduced. In fact, according to Consumer Reports, the new vehicle fleet would average 31.8 real world miles per gallon, compared with 37.5 miles per gallon under the Trump Administration rule.⁷⁸ To put a finer point on it, under the Trump rule, vehicles will burn 142 billion additional gallons of gasoline and emit as much as 1.5 billion more tons of pollutants. That’s the equivalent of the pollution from 68 coal fired power plants operating for five years⁷⁹ and under any scenario, a significant difference, and by no measure “extremely small.”

The DEIS failed to compare and contrast the effects of the Northern Corridor alternative with the potential GHG emissions effects of all other alternatives, including the package of possible transportation alternatives that have been conveyed to the DMPO by CSU (a full discussion of those alternatives can be found in the Community Alternatives section of these scoping comments). The analysis must include cumulative impacts for each resource area and include the carbon sequestration provided by intact arid lands ecosystems, and the loss of carbon sequestration ability, that will be impacted by the proposed alternatives. The GHG emissions must be disclosed to the public and decision- makers, so the

⁷⁷ Environmental Defense Fund “Trump Administration moves ahead with harmful Clean Cars Rollback” Fact Sheet. https://www.edf.org/sites/default/files/Cars_Final_Rollback_Factsheet.pdf

⁷⁸ Consumer Reports, New Consumer Reports analysis shows near-freeze of fuel economy rules would cost consumers \$300 billion November 13, 2019 https://advocacy.consumerreports.org/press_release/new-consumer-reports-analysis-shows-near-freeze-of-fuel-economy-rules-would-cost-consumers-300-billion/

⁷⁹ Ibid

implications of the proposed alternatives to affect our climate are clear. The DEIS failed to identify the alternatives with the greatest reductions to GHG emissions.

Lastly, the DEIS failed to put climate change and the projected GHG emissions of the increase in vehicle miles and total GHG emissions from the related growth scenarios into the relevant context of required science-based steps needed to avoid the worst impacts of climate change. Specifically, the 2018 International Panel on Climate Change (IPCC) “Special Report on Global Warming of 1.5°C made clear that global emissions must be cut by half by 2030 to limit warming to 1.5 °C.⁸⁰ The United Nations’ November 2019 “Emissions Gap” report reiterated the need for urgent action citing that countries must cut emissions by at least 7.5% per year over the next decade for a total emissions reduction of 55% between 2020 and 2030.⁸¹

The DEIS failed to provide the total GHG emissions in the context of necessary reductions by the crucial interim timeframe of 2030 and 2050 goal of achieving net zero emissions. Rather, the DEIS attempts to explain away any increase in emissions by speculative promises of other future reductions. As such the DEIS is fatally flawed and arbitrary and capricious.

⁸⁰ INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, GLOBAL WARMING OF 1.5°C, AN IPCC SPECIAL REPORT ON THE IMPACTS OF GLOBAL WARMING OF 1.5°C ABOVE PRE-INDUSTRIAL LEVELS AND RELATED GLOBAL GREENHOUSE GAS EMISSION PATHWAYS, IN THE CONTEXT OF STRENGTHENING THE GLOBAL RESPONSE TO THE THREAT OF CLIMATE CHANGE, SUSTAINABLE DEVELOPMENT, AND EFFORTS TO ERADICATE POVERTY (2018), available at: <https://www.ipcc.ch/sr15/>.

⁸¹ United Nations Environment Program (2019). EMISSIONS GAP REPORT 2019, available at: <https://wedocs.unep.org/bitstream/handle/20.500.11822/30797/EGR2019.pdf>.

DEIS Chapter 4. Consultation and Coordination

This chapter describes efforts by the BLM and the USFWS to comply with legal requirements to involve the public in the development of the Draft EIS, and consult and coordinate with various government agencies. These efforts include the following:

- Public scoping.
- Identifying, designating, and working closely with cooperating agencies.
- Consulting with applicable Federal agencies and State, local, and Tribal governments.
- Working with State and local governments and Tribes to identify “any known inconsistencies with State or local plans, policies or programs” (43 CFR 1610.3-2(e)).

Issue:

1. While the public was engaged, although during a very short time window, in the scoping, it was not engaged at all in the DEIS development: no chance to give input on scoping comments that were dismissed, no chance to give input on the alternatives to be analyzed. As a result, assumptions and decisions about the alternative to be considered could not be questioned.
2. Washington County has proclaimed that the Northern Corridor Highway is “essential” for the county’s economy, has sold this idea to the municipalities in the county, to the state legislature and to Utah’s Congressional delegation, without proof or engagement of the public in alternatives. Indeed, that proof is proven wrong in this DEIS’s conclusion, showing alternatives outside the NCA are better in terms of both environmental impacts (see summary of environmental impacts in the Executive Summary) and traffic relief (see analysis results in the tables in Appendix J). This DEIS should have been stopped due to an invalid purpose and need.

Issues with DEIS Appendices

H. Inconsistencies between the Northern Corridor Project and the Land Use Plans, Policies, and Controls of Washington County and the City of St. George

H.2 Washington County – Item 2 (Applicable under Environmental Impact Statement Alternatives 2, 3, and 4)

H.2.1 Washington County Resource Management Plan: Land – Livestock Grazing 3.a.ii

“Washington County opposes any loss of AUMs absent scientific proof of resource degradation.”

Alternatives for livestock grazing management on BLM-administered lands within Zone 6 range from maintaining all allotments as available for livestock grazing to designating all allotments as unavailable. There is no current “scientific proof of resource degradation” specifically due to livestock grazing within Zone 6. If allotments are made unavailable through the St. George Field Office RMP amendment, it would be inconsistent with the Washington County RMP. However, HCP Section 9.1.1.1, Add Reserve Zone 6, states:

“Washington County and the HCP Partners will coordinate with the holders of active grazing permits applicable to Reserve Zone 6 and negotiate the acquisition of such grazing permits from willing sellers. However, like Reserve land acquisitions, no entity will be required or compelled to sell, donate, transfer, purchase, or receive interest in lands for the purpose of this Amended HCP. Nor does this establish a timetable for completing grazing permit acquisitions for Reserve Zone 6. Nevertheless, Washington County and the HCP Partners have demonstrated the ability to successfully and expeditiously negotiate such transactions. This conservation action will benefit both MDT and listed plants within Reserve Zone 6. Estimated cost over 25 years = \$259,540.”

While a reduction in the per animal unit month (AUM) that is not linked to resource degradation may be inconsistent with the Washington County RMP, an exception by the County Commission would officially be documented through the approval of the Amended HCP it has prepared and the Chairperson’s signature on the accompanying Implementation Agreement.

Issue

1. Reference the scientific studies that have been conducted. If the studies exist, reference the evidence of no degradation. If they do not exist, their lack of existence cannot be used to demonstrate Zone 6 mitigation ability.
2. There should be but there is not plan to reduce grazing that damages habitat. This indicates Zone 6 cannot be used for mitigation.

H.3 Washington County – Item 3 (Applicable under Environmental Impact Statement Alternatives 2, 3, and 4)

H.3.1 Washington County Resource Management Plan: Land – Livestock Grazing 3.b.iv

“AUMs within the county remain at or above current levels unless a scientific need for reduction is demonstrated to the satisfaction of the county.”

See response to Washington County – Item 2.

Issue

3. There apparently is no plan to perform the necessary scientific studies and even if there were, and if damage was shown, the county is under no obligation to correct it. This is another proof of Zone 6 being incapable of mitigating damage to the RCNCA.

H.8 City of St. George – Item 3 (Applicable under Environmental Impact Statement Alternative 6)

H.8.1 St. George General Plan: Section 7.2.1., Downtown Strategies

“15. Develop a landscaped median in the core section of St. George Boulevard.”

The conversion of St. George Boulevard from its existing two-way configuration to a one-way street would not accommodate medians between the travel lanes. Existing landscape medians would likely be removed as part of the reconstruction. The final design of the one-way couplet, if implemented, would be completely outside the jurisdiction of the Federal agencies, and the City of St. George would resolve any potential inconsistencies as it sees fit.

Issue

4. We disagree with this assertion. There are design alternatives that would accommodate medians.

J. Highway Alternatives Development Technical Report

1. Introduction

1.1 Background and Previous Studies

“The Utah Department of Transportation (UDOT) applied to the Bureau of Land Management (BLM) for a right-of-way (ROW) grant on September 18, 2018, to construct a multi-lane, divided highway (referred to as the Northern Corridor) across the Red Cliffs National Conservation Area (NCA). The Red Cliffs NCA was designated by Congress through the Omnibus Public Land Management Act of 2009 (OPLMA) (16 USC 460www; Public Law 111-11, Title 1, Subtitle O, Section 1974). The Congressionally defined purpose of the 45,000-acre NCA is to conserve, protect, and enhance for the benefit and enjoyment of present and future generations the ecological, scenic, wildlife, recreational, cultural, historical, natural, educational, and scientific resources of the Red Cliffs NCA and to protect each species that is located in the NCA and listed as a threatened or endangered species under the Endangered Species Act. Section 1974 states that the NCA shall be managed by the Secretary of the Interior through the BLM and that the Secretary shall only allow uses of the NCA that the Secretary determines would further a purpose for which the NCA was designated.

OPLMA Subtitle O, Section 1977 also directs the Secretary to develop a comprehensive travel management plan for the land managed by the BLM in Washington County and, in accordance with the Federal Land Policy and Management Act of 1976 (FLPMA) (43 USC 1701 et seq.), “in developing the travel management plan, the Secretary shall—(A) in consultation with appropriate Federal agencies, State, tribal, and local governmental entities (including Washington County and St. George City, Utah), and the public, public, identify one or more alternatives for a northern transportation route in the County.””

Issue:

1. The DEIS fails to conclude that any highway in the NCA satisfied the purpose of the NCA. It cannot be allowed.
2. The OPLMA does not require a northern transportation route inside the NCA; it merely has to be inside the county. Highways inside the NCA are not compatible with the purpose and therefore cannot be allowed. This especially true when there are superior viable alternatives outside the NCA.

“Planning for the Northern Corridor has been ongoing for two decades and has been led by the Dixie Metropolitan Planning Organization (DMPO), the governmental agency responsible for regional transportation planning in Washington County. The DMPO has conducted these efforts in coordination with the County, the City of St. George, Washington City, City of Ivins, City of Santa Clara, City of Hurricane, UDOT, and other communities in the St. George and Hurricane urbanized area.”

Issue

3. None of these studies have engaged the community in dialog about appropriate solutions, and none have studied solutions outside the NCA. These planning activities have not been conducted in good faith.

“Red Cliffs National Conservation Area Resource Management Plan (2016): Completed by the BLM, the document analyzes all potential ROW within the NCA at a land management planning level and chooses an alternative management strategy that best

achieves the purpose and requirements of the guiding legislation and regulations found in FLPMA and OPLMA. The Red Cliffs NCA RMP includes the Northern Corridor as a new ROW under Alternative D. Alternative D planned for a ROW to be granted within the NCA and higher intensity of access and resource use across the NCA. Alternative D was not chosen as the Preferred Alternative as it did not satisfy the planning and land management criteria set forth in guiding legislation and public scoping.”

Issue:

4. Nothing has changed since this ruling, upheld by the Interior Department Appeal. The highway ROW still should not be granted.

2. Purpose and Need for Right-of-way Application

“UDOT has applied for a ROW to construct a multi-lane, divided highway on BLM-administered lands within the Red Cliffs NCA and the overlapping Red Cliffs Desert Reserve with the objective of reducing congestion, increasing capacity, and improving east-west mobility on arterial and interstate roadways between State Route 18 (SR 18) and I-15 at milepost 13.”

Issue:

5. UDOT’s purpose is incorrectly defined in that it assumes that the best or only solution is through the NCA. The DEIS proves this is not the case. The application should be rejected on that basis.

“In particular, under OPLMA Subtitle O, Section 1977, the BLM is required to develop a comprehensive travel management plan for the land managed by the BLM in Washington County and, in doing so, to “identify one or more alternatives for a northern transportation route” in the county.”

Issue:

6. Again, OPLMA talks about a route in the county, not necessarily in the NCA. Any route in the NCA should be denied, especially since there are superior alternatives outside the NCA.

“Responding to UDOT’s ROW application also furthers the Department of the Interior’s policy goals, as stated in the Strategic Plan for Fiscal Years 2018-2022, to “enhance conservation stewardship whereby all levels of government and private landowners work cooperatively together in an atmosphere of mutual respect to achieve shared natural resource management goals across landscapes” and to “[develop] and [maintain] strong partnerships with State, local, and private stakeholders in shared conservation stewardship.” UDOT is seeking to meet the transportation demands of Washington County’s anticipated continued growth through 2050 and Washington County is also seeking a renewed Incidental Take Permit in order to meet the needs of its increasing population. Washington County’s current transportation infrastructure may not accommodate the County’s projected growth, and it is trying to balance that future growth with the statutory and regulatory provisions governing the Red Cliffs NCA and larger Red Cliffs Desert Reserve, and the protected wildlife that resides on those lands.”

Issue:

7. It’s fine to work cooperatively so long as the result is not a violation of laws. Granting the highway ROW inside the NCA is a violation of OPLMA.
8. The balance cannot violate laws, especially when superior solutions exist outside the NCA.

2.1 Right-of-Way Applicant's Objectives and Transportation Need

“UDOT submitted a ROW application for construction, operation, and maintenance of a new highway with the objective of reducing congestion, increasing capacity, and improving east-west mobility on arterial and interstate roadways between SR 18 and I-15 at milepost 13. This objective is driven by the current and forecasted population growth within the county, which will continue to increase demand on the transportation network. Currently, the existing transportation network between SR 18 and I-15 is not adequate to meet future (2050) travel demand in the northeastern and northwestern areas of St. George based on traffic projections from the DMPO's Regional TDM (Horrocks Engineers 2020a).

The transportation need for the applicant's proposed action is the result of the growing population and increased future travel demand on the transportation system within the northern City of St. George, Washington City, City of Santa Clara, and the City of Ivins metropolitan areas, hereinafter referred to as the St. George urbanized area, and is what the proposed action is intended to address. The need for the applicant's proposed action is based on the following transportation deficiencies and is further described below:

- Lack of east-west corridors that cross within the St. George urbanized area, resulting in travel delay and decreased mobility (Appendix J at 5). (see issue 9)
- Increased traffic congestion along key regional roadways, including Red Hills Parkway, St. George Boulevard, and Bluff Street.
- Increased traffic congestion and decreased mobility at key intersections and interchanges within the St. George urbanized area.”

Issue:

9. This statement is untrue. Red Hills Parkway is the east-west corridor. It merely needs to be improved to handle increased traffic. The DEIS alternatives analysis makes this clear, and should result in the rejection of UDOT's assumption that a new highway, through the NCA, is required. It is not.

2.1.1 Regional Travel Demand Model Overview

“The following summarizes key aspects of the travel modeling conducted for the Northern Corridor project; further details are included in the Northern Corridor Traffic Analysis Memorandum (Horrocks Engineers 2020a). The transportation need is based on future travel demand forecasts for the county that were developed using the DMPO TDM. The TDM predicts future travel demand based on projections of land use, socioeconomic patterns, and transportation system characteristics.”

Issue:

10. The projections were overly limited. For example, it did not anticipate any socioeconomic pattern involving working and shopping from home, typical human adaptability to traffic with staggered travel times and combining of trip purposes; nor did it include transportation system changes due to self-driving vehicles or smart traffic control. Changes in these areas over the next 40-50 years will have large impacts on traffic modeling. It also did not consider the option for Washington County to actually manage its growth to minimize transportation issues, assuming instead that the county will continue its current traffic-inducing sprawl growth. Rejection of the highway ROW could result in incentivizing the county to actually implement growth planning integrated with transportation planning. Any traffic

engineer would advise that this is a necessity. The current travel demand merely extrapolated current conditions. This makes the congestion appear much worse than it likely will be.

3. Alternative Development

Per the BLM NEPA Handbook H-1790-1, “In determining the alternatives to be considered, the emphasis is on what is ‘reasonable’ rather than on whether the proponent or applicant likes or is itself capable of implementing an alternative. “Reasonable alternatives include those that are *practical* or *feasible* from the technical and economic standpoint and using common sense, rather than simply *desirable* from the standpoint of the applicant””(BLM 2008).

“When preparing an EIS, the BLM analyzes a range of reasonable alternatives, including those that are technically and economically practical or feasible and that satisfy the purpose and need of the proposed action. The BLM may eliminate an action alternative from detailed analysis if one or more of the following is true:

- 1) It does not respond to the purpose and need.
- 2) It is not technically or economically feasible.
- 3) It is not consistent with the overall policy objectives for the area.
- 4) Its implementation is remote or speculative.
- 5) It is not substantively different in design from an alternative being analyzed in detail.
- 6) It would have substantially similar effects from an alternative being analyzed in detail.”

Issue

11. And yet, in preferring Alternative 3, the highway through the NCA, the BLM violates its own guidance, choosing the alternative the applicant likes rather than the one that is most reasonable (the alternatives outside the NCA).

4. Alternatives Considered

4.11 Increased Use of Mass Transit

“Comments received during the scoping process suggested the increased use of mass transit as a Northern Corridor alternative for consideration. Transit usage in the St. George urbanized area is currently limited by the size of the area, the number of routes, and the locations served. With full implementation of the transit improvements shown in the DMPO RTP, 2050 transit use accounts for less than 1 percent of all trips (DMPO 2019). Based on local planning and available funding, it is unreasonable to assume the St. George urbanized area could develop a robust transit system within the planning horizon represented by the Draft EIS that would eliminate a substantial amount of vehicle trips from the transportation system. The Increased Use of Mass Transit Alternative would be substantially similar to the No Action Alternative and was not carried forward for detailed analysis in the Draft EIS.”

Issue:

12. The dismissal of this alternative is based on the assumption that the county must continue its current development concept that enables urban sprawl. This assumption should not be considered valid, and certainly it is not a valid reason to violate protected lands.

4.13 Land Use/Growth Regulation

“Comments received during the scoping process suggested limiting development in Washington County, or setting growth regulations as a Northern Corridor alternative for consideration. Land

use planning, including existing and planned development, is controlled by the local municipalities within Washington County as outlined in city general planning documents. Limiting development in Washington County, or setting growth regulations, is inconsistent with current local government general land use and zoning plans. The Land Use/Growth Regulation Alternative would be inconsistent with the managing objectives of the local municipalities over land use planning and its implementation is remote or speculative. Therefore, the alternative has been eliminated from detailed analysis in the Draft EIS.”

Issue:

13. It is and must be untrue that” setting growth regulations is inconsistent with current local government general land use and zoning plans”. It is local governments’ job to manage development and growth. Zoning is one of the primary methods of doing this. It is completely within local government authority to define through regulations how the area is to grow. If those growth plans adopted Vision Dixie principles as directed by the citizens of the county, the traffic problems sought to be solved by the Northern Corridor could have been averted. It is disingenuous to assume improved growth planning cannot impact the projected traffic issues addressed by this DEIS.

4.14 Conserve Southwest Utah Community Transportation Alternative(s)

“During the scoping process, the nonprofit organization Conserve Southwest Utah presented its proposed “Community Transportation Alternative,” which includes the following alternatives, ranging from roadway, land use, and transit to active transportation options:

Alternative 1: Red Hills Parkway – I-15 Viaduct/Flyover Connection.

Alternative 2: Improvements to Red Hills Parkway between I-15 Exits 8 and 13.

Alternative 3: More Porous I-15 to Move Traffic North-South around Congestion Areas. This sub-alternative suggests new I-15 underpass crossings on 400 East, 700 East and 1240 East.

Alternative 5: Implement/Plan for Technological Improvements (i.e., traffic management using technology).

Alternative 6: Implement Congestion Reduction Land Use Principles (Vision Dixie).

Alternative 7: Downtown St. George Loop.

Alternative 8: Address Moving People Rather than Vehicles Transit Options.

Alternative 9: Long-term Thru-Traffic St. George Bypass.

Alternative 10: Industrial Park Reuse.

Several of the alternatives suggested as part of the Conserve Southwest Utah’s Community Transportation Alternative are similar to other alternatives that have been considered as part of the alternative development in the planning process for the Draft EIS. Based on the following conclusions, the Community Transportation Alternative has been eliminated from detailed analysis in the Draft EIS:

Alternatives 1, 2, and 7 include suggested roadway projects that are being considered as standalone Northern Corridor alternatives, including the Red Hills Parkway Expressway, Widen Red Hills Parkway Alternative, and the St. George/100 South One-way Couplet Alternative, as previously described. “

Issue:

14. While it is true that these alternatives are being considered, their design concepts have been altered in a manner that increases business impacts and implementation costs without providing the commensurate increase in traffic flow. For example,
 - a. DEIS alternative 5, the Red Hills Parkway Expressway, involves limiting business/institution access to the Parkway without considering directing

local traffic to 1000E from behind those properties, on both the north and south sides of the Parkway.

- b. DEIS alternative 6, the One-Way Couplet in downtown St George, proposes to remove the median on St George Boulevard rather than seeking a design that both enables traffic flow and enhances the pedestrian and business experience in downtown. Instead, consider leaving the median, provide efficient traffic flow on one side and parking/shopping traffic and bicycle flow on the other side.

Design concepts should be re-evaluated with community engagement prior to cost-benefit analysis. Options within the basic design concept for each alternative should be explored in depth before committing to a specific solution. This is part of the normal engineering process, which the time constraints of the DEIS did not accommodate.

“Land use planning, including existing and planned development, is controlled by the local municipalities within Washington County as outlined in each city’s general planning documents. Alternatives 5, 6, and 10 of the Community Transportation Alternative, as it relates to land use planning and traffic management, are not in the decision space of this planning process. Land use planning and traffic management are under the decision authority of the local jurisdictions and are outside the decision space for this Draft EIS; therefore, this alternative has not been carried forward for detailed analysis in the Draft EIS.”

Issue:

15. We disagree with the assertion that consideration of these alternatives is outside the scope of this DEIS, any more than any of the alternatives outside of the NCA are outside the scope. Poor growth and transportation planning by local governments cannot be used as the excuse to violate protections on public lands.

“Alternatives 3, 8, and 9 are suggested roadway and transit improvements that would not considerably improve east-west travel demand in the St. George urbanized area when compared to other alternatives analyzed in the Draft EIS and would be substantially similar to the No Action Alternative. Therefore, these alternatives were not carried forward for detailed analysis in the Draft EIS.”

Issue:

16. We disagree with the assertion that these alternatives would not significantly improve traffic flows at the projected congested intersections. On the contrary, they would remove significant traffic from those intersections. The analysis forming the basis for their dismissal should be presented for public review.

5. Transportation and Resource Considerations

5.1 Transportation Analysis

5.1.1 Transportation Results

Table 4. Transportation Analysis: 2050 Evening Peak Hour Intersection LOS Results

Table 5. Transportation Analysis: 2050 Evening Peak Hour Travel Time Results

Issue:

17. Just stating the obvious conclusion from tables 4 and 5: alternatives outside the NCA perform as well or better than those inside the NCA. The purpose of the NCA does not have to be violated in order to accommodate projected traffic.

5.2 Resource Impact Assessment

5.2.1 Resource Comparison Results

Table 7. Mojave Desert Tortoise Impact Assessment Results

Issue:

18. Another obvious conclusion: alternatives inside the NCA fail to protect the tortoise and its habitat, while those outside accommodate that protection.

Table 8. Property Impact Assessment Results

Issue:

19. As stated in Issue 14 above, we contend that the alternatives evaluated are defined in a manner that causes more impacts to business than necessary to adequately improve traffic. These impacts can be significantly reduced without sacrificing traffic relief.

5.2.2 Alternatives Considered but Not Analyzed in Detail

L. Traffic Analysis Memorandum

“The purpose of this memo is to describe analysis performed with respect to the purpose and need and alternatives development of the Northern Corridor in support of the Northern Corridor Draft Environmental Impact Study (DEIS).”

Issue:

1. Technical papers describing methodologies used in engineering design and/or analysis, including modeling, typically include a description of assumptions. The memorandum includes a mention of some factors that are assumptions (e.g., project population growth), but does not mention many critical factors for which assumptions must have been made in order to create the analysis/modeling results. These assumptions should be listed in the DEIS to enable public review of the appropriateness and adequacy of the assumptions. Examples of apparent assumptions that may or should not be valid:
 1. No traffic management technology improvements over the next 30 years (e.g., traffic sensing and control).
 2. No driving technology improvements over the next 30 years (auto-drive/navigation systems enabling faster speeds and shorter spacing between vehicles).
 3. No changes in growth management policies over the next 30 years (e.g., implementation of Smart Growth principles).

4. Issues with Related Plans

4.1 Issues with Draft Amended Washington County Habitat Conservation Plan (HCP)

1. The Draft HCP Violates the ESA Best Available Science Requirement And NEPA's Requirement to Address Significant New Information

Issue:

1. **The draft HCP tortoise population and habitat information, especially as it relates to RCDR Zone 3, is not reliable or accurate because it does not include massive recent fire damage and significant associated tortoise mortality and habitat loss.**

In light of the Turkey Farm Road and Cottonwood Trail Wildfires that burned approximately 14,000 acres inside the Red Cliffs NCA and Desert Reserve, BLM and FWS must temporarily pause preparation of all required environmental analysis and review under the National Environmental Policy Act, 42 U.S.C. §§ 4321 et seq. ("NEPA"), the Endangered Species Act, 16 U.S.C. §§ 1531 et seq. ("ESA"), the Federal Land Policy and Management Act, 43 U.S.C. §§ 1701 et seq. ("FLPMA"), and the Omnibus Public Land Management Act of 2009, P.L. 111-11, 123 STAT. 991 (March 30, 2009), regarding the Northern Corridor Highway until BLM and FWS assess and examine the full ecological impacts of these fires and complete burned area assessments, BLM adopts Emergency Stabilization/Burned Area Emergency Response (ES/BAER) Plans and a Burned Area Rehabilitation (BAR) Plans, and BLM and FWS prepare and submit for public review and comment a supplemental draft environmental impact statement and habitat conservation plan.

In 2005 and 2006, major wildfires burned 25% of the Red Cliffs NCA and Desert Reserve. These fires had a population level effect on MDT, impacting reproduction and survival rates. Following the fires, MDT populations across the Reserve declined from 26.1 tortoises/km² in 2005 to 14.2 tortoises/km² in 2009 (Regional Desert Tortoise Monitoring in the Red Cliffs Desert Reserve, 2017, McLuckie et. all). Populations never fully recovered. In 2019, MDT populations had crept up to 17.2 tortoise/km², approximately half of what they were in 2000 at 29.6 tortoises/km². The agencies should expect a similar population level effect following the 2020 wildfires.

An article published in the Spectrum on September 3, 2020 called "The tortoise and the Fire: Surveys search for signs of life on Red Cliffs NCA" quotes two Washington County tortoise biologists who are concerned about the devastating impacts these fires have had on MDT:

"It might be two, three, four years before we really know the full impacts of the fire," Schijf said. "We can come out and find direct mortality and do some calculations on the immediate impacts of the fire, which may end up being significant. But when you look at the landscape around us: the lack of shrub cover that was once here, the lack of food from the fact that we haven't had rain in a long time, these are going to be some of the more direct impacts that can last for a really long time."

McLuckie, in her separate surveys of the Turkey Farm Road Fire damage, has also found dead and injured tortoises amid a dry and damaged landscape. After witnessing the aftermath of the 2005 fire in the same area, she expects this blaze to have **"devastating impacts on the tortoise population."**

Without a better understanding of the ecological impacts of the Turkey Farm Road and Cottonwood Trail wildfires, together with formalized and adopted plans to protect, remediate and rehabilitate the lands subject to these wildfires, BLM and the Service cannot adhere to their respective requirements under NEPA, FLPMA, ESA and the Omnibus Public Land Management Act of 2009.

Issue:

2. The DEIS analysis is inadequate because it fails to address the “significant new circumstances or information” relating to massive recent fire damage and significant associated tortoise mortality and habitat loss.

See discussion above: #1 The draft HCP tortoise population and habitat information, especially as it relates to RCDR Zone 3, is not reliable or accurate because it does not include massive recent fire damage and significant associated tortoise mortality and habitat loss.

It is insufficient to consider this new information only in the final environmental impact statement (EIS), as BLM asserted during its July 21, 2020 public meeting. Deferring the consideration of significant new information – like the impacts of the Turkey Farm Road and Cottonwood Trail wildfires – until the final EIS will unavoidably taint the final product by ignoring key baseline information needed to inform the analysis of the affected environment and environmental consequences, and otherwise limiting consideration of reasonable alternatives and appropriate public engagement.

In these circumstances, NEPA requires an agency to consider significant new circumstances or information regarding the impacts of the Turkey Farm Road and Cottonwood Trail wildfires by preparing a supplemental draft environmental impact statement, and submitting this supplemental draft EIS for public notice and comment. See 40 C.F.R. § 1502.9(c).

Issue:

3. The county cannot carry forward any so-called “unused authorized incidental take” from the original HCP.

In its Draft HCP, Washington County claims that its application for a renewed or amended Incidental Take Permit will only “extend . . . previously authorized but as yet unutilized incidental take.” Draft HCP at 51. This is wrong as a legal and factual matter.

First, the 1995 ITP allowed for the take of 1,169 MDT between March 1996-March 2016. Under the terms of the earlier HCP and ITP, incidental take of MDT was limited both numerically (1,169) and temporally (through March 2016). Thus, upon the expiration of the IT timeframe and/or the meeting of the IT upper limit, the ITP limit was reached and no further take is authorized or permitted. There is simply no accounting for authorized but unutilized take. In addition, Washington County’s application to carry forward its so-called “unused” incidental take makes no logical sense. The Draft HCP states that the county is applying for the incidental take of MDT across 66,301 acres of occupied and potential MDT habitat, a full 22,755 *more acres* than were authorized in the 1995 HCP/ITP which permitted the incidental take of 1,169 MDT across 12,264 acres of occupied desert tortoise and 31,282 acres of potential habitat. 1995 HCP at vi.

The Draft HCP notes that development activities in and around the HCP take areas accounted for the take of 776 MDT, which represents almost 67% of incidental take permitted under the 1995

HCP/ITP. Draft HCP at 51. The Draft HCP then contorts this data in two ways in supporting its claim that there is “unused” incidental take.

First, the Draft HCP downplays the significance of the 776 MDT already subject an incidental take, by arguing, for the first time, that this IT limit was intended to only apply to “adult individuals,” and not juvenile or hatchlings. Draft HCP at 51. According to this argument, since 35% of the MDT taken were juvenile and hatchlings, these should not be applied to the take limit under the 1995 HCP/ITP. This claim is easily countered by the fact that the 1995 HCP applied this take limit to 1,169 desert tortoise individuals or “animals,” and nowhere does the HCP or ITP expressly exclude juveniles or hatchlings as the Draft HCP now claims. 1995 HCP at vi and 130. *See also* ITP at 2 (unpaginated) (“The Permittee is authorized to take . . . up to 1,169 desert tortoises . . .”). Indeed, nowhere in either the 1995 HCP or the ITP does Washington County expressly limit the incidental take limit to adult MDT, and it is arbitrary and capricious for Washington County to seek to reinterpret its take threshold now. Thus, at best, the starting point for defining any unused or unutilized incidental take starts at the fact that 67% of the permissible incidental take limit of 1,169 MDT has been used.

Second, the Draft HCP fails to show that the conservation program can fully offset the impacts of the taking despite the county’s claim:

“The impacts of take authorized with the Original ITP and reauthorized with the Extended/Amended ITP are fully offset by the conservation program of the 1995 HCP (see Chapter 6.2.1). This conservation program is carried forward and expanded in this Amended HCP.”

(Draft HCP at 99).

The Draft HCP facilitates development of the Northern Corridor, which undermines conservation of MDT within the Red Cliffs Desert Reserve. Unutilized take cannot be carried forward based on continued implementation of a conservation program that is degraded and jeopardized by development of a highway through the Reserve in exchange for a promised satellite reserve of questionable condition. Washington County cannot carry forward unutilized take because the county has failed to demonstrate that the conservation program envisioned in the 2020 HCP can fully offset the impacts of the take.

Third, the FWS previously found that the NCH would violate the HCP. In June 2007, FWS sent a letter to the Washington County Commission clearly stating that the Northern Corridor Highway was incompatible with the Washington County HCP and Desert Tortoise Recovery Plan:

“As a result of these existing pressures and the already small size of the reserve, current proposals in the Vision Dixie process to construct a “Northern Corridor” transportation route through the RCDR would severely threaten the survival and recovery of the desert tortoise within this recovery unit. Any transportation corridor would further increase the risk to the desert tortoise population and accelerate its decline by increasing fire frequency, noise disturbance, increased human access, and direct mortality along the corridor.

We appreciate Washington County's need to plan for and steer the direction of urban growth. However, scenarios routing transportation corridors through the RCDR were considered and eliminated during the original development of Washington County's Habitat Conservation Plan due to their incompatibility with maintaining the tortoise population within the reserve. Construction of a new road or highway through the RCDR

conflicts with the desert tortoise recovery plan and is inconsistent with the terms of the county's Habitat Conservation Plan and incidental take permit. Therefore, it will be important to develop alternatives that avoid the need for a northern corridor through the reserve.”

FWS 2007 Letter – “Fragmentation of the Red Cliffs Desert Reserve”

Therefore, the county cannot attempt to support an application for unutilized take with an HCP that is violated by a four-lane highway.

Issue

4. Washington County Cannot Rely on a 25-year old EIS and BO to support its new incidental take limit.

The Draft HCP falsely claims that it remains consistent with the 1995 EIS and 1996 BO:

“This Amended HCP adopts, with clarifications, the Covered Activities of the 1995 HCP. This Amended HCP also adopts the conservation measures as the 1995 HCP, thereby extending (with clarifications, as appropriate) the implementation of the Washington County HCP through the Renewed/Amended ITP Term. Therefore, the implementation of this Amended HCP remains consistent with the analysis in the 1996 Biological Opinion (FWS) 1996) and 1995 Environmental Impact Statement (FWS 1995).”

Draft HCP at 60. But, much has changed in the Red Cliffs Desert Reserve and UVRU since the 1995 Environmental Impact Statement and 1996 Biological Opinion were issued, and Washington County cannot rely on this now long-outdated and stale analysis.

First, new science on the impacts of development to MDT has been released. Rapid growth in Washington County since 1995 has led to somewhere between 26% and 46% of the occupied MDT habitat identified in the 1995 HCP being developed (Draft HCP at 52). New studies show MDT populations are depressed near areas with even relatively small percentages of development. In “Quantifying development to inform management of Mojave and Sonoran desert tortoise habitat in the American southwest,” Carter et. al (2020) considered the impacts of development on the MDT:

“Development results in the direct loss of habitat for desert tortoises and other wildlife species as well as multiple indirect effects (Dale et al. 2005, Hansen et al. 2005, Leu et al. 2008). Housing development and associated infrastructure remove and alter soil and vegetation, increase noise and light (Barber et al. 2011, Kight & Swaddle 2011), subsidize predators (McKinney 2002), alter nutrient and disturbance regimes, and expand diffuse human activities into surrounding natural areas (Leinwand et al. 2010). Roads fragment habitat (Ibisch et al. 2016), lead to direct wildlife mortality (von Seckendorff Hoff & Marlow 2002, Boarman & Sazaki 2006, Colino-Rabanal & Lizana 2007), are a vector for the spread of nonnative invasive plants (Davies & Sheley 2007, GavierPizarro et al. 2010), increase the presence of subsidized predators (Boarman et al. 2006, Esque et al. 2010), and provide access to previously remote areas.”

Carter et. al (2020)

The authors generated a development index for MDT habitats and found that very few MDT are found within 1 kilometer of areas that are 10% developed:

“We used 13 years of Mojave desert tortoise monitoring data (4732 observations) to inform the levels and spatial scales at which tortoises may be affected by development. Most (66–70%) desert tortoise habitat has some development within 1 km.... There were few detections of either live or dead animals above a development index value of 10% (meaning that 10% of the area within 1 km of that location has been altered by

development, Fig. 1). While there was a mix of low encounter rates across all levels of the development index (Fig. 1), the maximum encounter rates were negatively associated with development level, becoming essentially zero for live animals above an index value of 10% (Fig. 2).”

Id. at 172.

This study has major implications for MDT in the UVRU and must be considered in the Draft HCP and associated EIS and BO. The Reserve is encircled by the cities of Ivins, St. George, Washington, Leeds and Hurricane. What are the impacts of this development to designated critical habitat for MDT within 1 km of the Reserve boundary? Second, much of the MDT habitat in the proposed Zone 6 is located within 1 km of areas that are 10% or more developed. How are the large developments on the eastern edge of Zone 6, and the 150-mile network of roads and trails within Zone 6, impacting MDT? Third, what are the impacts of development in the larger permit area to MDT? The 1995 Environmental Impact Statement and 1996 Biological Opinion do not address any of these impacts. To ensure that take is fully offset, the Draft HCP must address the impacts of development on MDT in the permit area since 1995.

Second, Mojave desert tortoise populations have declined steadily since 1995:

- MDT have declined by 37% range wide between 2004 and 2014. (DEIS Table 3.5-2).
- MDT in the UVRU declined by 24.3% between 2004 and 2014. (DEIS at 3-47).
- MDT in the Reserve declined by 41% between 1999 and 2020. (DEIS at 3-48).

The 1995 Environmental Impact Statement and 1996 Biological Opinion do not account for these declines. Neither do they account for the catastrophic wildfires (nearly half of all wildfires in the Reserve have been human caused, including the recent Turkey Farm Road and Cottonwood Trail Fires, DEIS at 3-153), predation, roadkill mortalities, poaching, disease, and other factors that have led to the sharp decline of MDT in the Reserve.

The 1995 Environmental Impact Statement and 1996 Biological Opinion incorporated the conservation program outlined in the 1995 HCP- a program that failed to prevent the declines described above, and one that is now being undermined by a four-lane highway. The Draft HCP includes provisions for the Northern Corridor as a changed circumstance that would undermine the central mitigation feature of the 1995 HCP:

“The central element and primary mitigation measure in Washington County’s HCP is the establishment and management of the Red Cliffs Desert Reserve.”

Red Cliffs Desert Reserve Public Use Plan at 9.

The current ITP is flawed because it is not consistent with analyses in the 1995 Environmental Impact Statement and 1996 Biological Opinion. New analysis of the impacts of the reauthorized take must be completed and stronger conservation measures must be implemented.

Issue

5. The DEIS and draft HCP improperly ignore new scientific information on possible genetic connections between MDT populations and cumulative effects on these connected populations.

The Draft EIS and HCP never discuss and examine the possible genetic connections between the MDT in and around the Red Cliffs NCA and other un-surveyed tortoise populations and habitats on nearby BLM Arizona Strip and Arizona State lands immediately south of the county and state lines, and how the proposed HCP and ITP may impact these populations.

Section 10(2)(A) of the Endangered Species Act obligates the applicant to minimize and mitigate to the maximum extent practicable the impacts of any taking. The draft HCP must implement measures that will establish and maintain connectivity, especially given the documented MDT declines in the UVRU, the small size and isolation of the UVRU, the existing fragmentation of the UVRU, and the fact that only 78% of the designated critical habitat in the UVRU remains suitable for MDT occupation⁸². Per the HCP at 45. “A widely distributed species such as the MDT is impacted by the fragmentation of surrounding habitat and loss of connectivity to neighboring populations that can facilitate repopulation and recovery (Allison and McLuckie 2018; Fahrig 2007).”

The Draft HCP at 23 notes that connectivity between the UVRU and Northeastern Mojave Recovery Unit is limited to two potential corridors:

“Potential habitat connectivity between the UVRU and the Northeastern Mojave Recovery Unit is limited to approximately a 1.5-mile-wide area along the boundary between these Recovery Units within the County (see Chapter 5.4.2 for the description of the updated MDT Habitat Mapping; potential habitat connectivity is illustrated in Figure 5). The U.S. Geological Survey (USGS; Nussner et al. 2009) also maps potentially suitable MDT habitat to the south, which connects to the Northeastern Mojave Recovery Unit and is limited to an area approximately 2 miles wide within the Virgin River floodplain in Mohave County, Arizona (see inset Figure 2).”

The Draft HCP also discusses the potential value of the MDT habitat in Arizona:

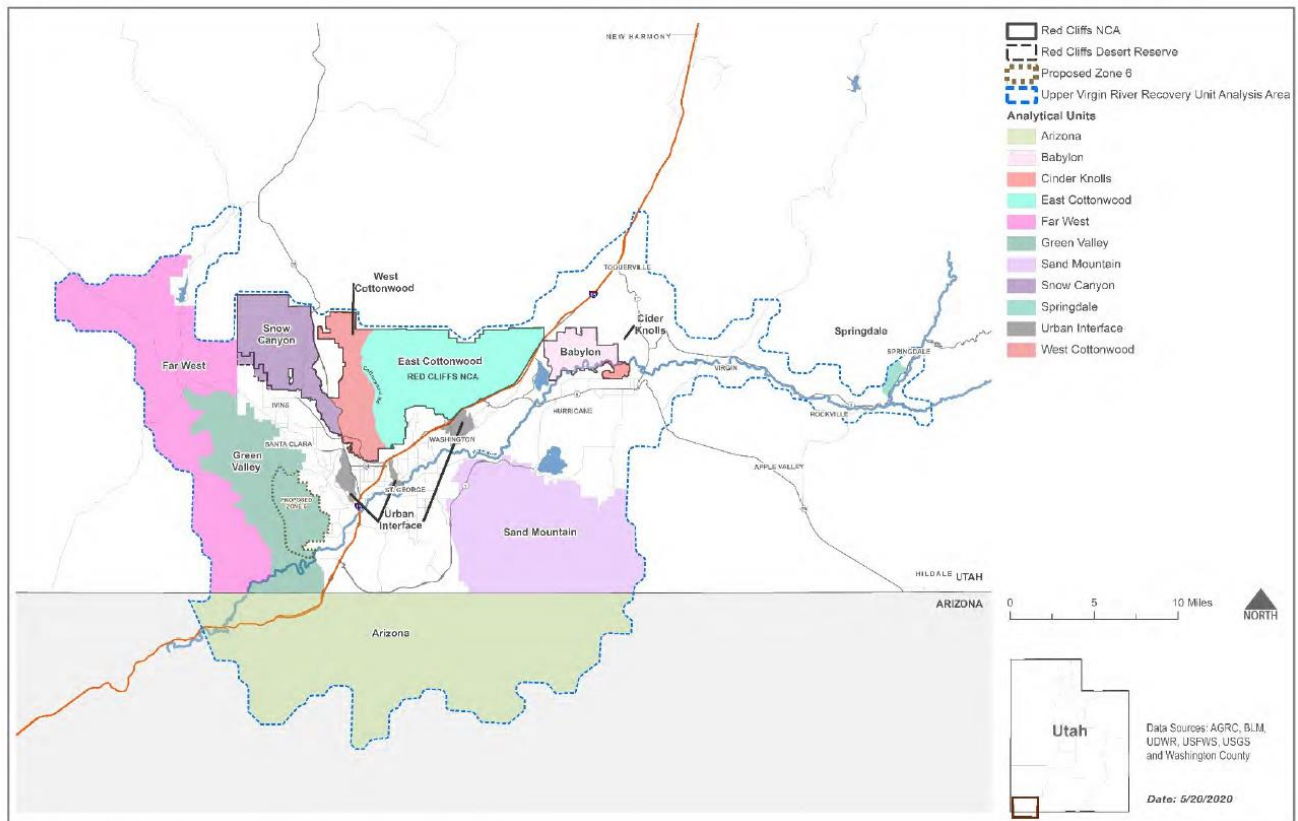
“The Arizona Analytical Unit is jurisdictionally outside of the original UVRU boundaries (FWS 1994 and 2011), but predicted habitat extends continuously south of the Utah-Arizona state line (Nussner et al. 2009). This area may provide linkages between Utah and Arizona desert tortoises in the UVRU, and linkages between the UVRU and nearby Northeastern Mojave Recovery Unit.”

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Additionally, Map 3.5-3 in the DEIS shows three analytic units (Far West, Sand Mountain and Green Valley) that border with the Arizona Analytic Unit. Connectivity between these units must be analyzed and considered, in addition to the role that Zone 6 may play at enhancing these connections, but only independently of the Northern Corridor Highway.

⁸² Draft Biological Report at 14.

Map 3.5-3. Analytical Units



The Draft HCP must address the biological and ecological connections that occur across the Utah/Arizona state line, and must implement conservation measures that provide connectivity between MDT recovery and analytic units such as the Far West, Sand Mountain, Green Valley and Arizona Analytic Units, independently of the quid-pro-quo Zone 6 in exchanged for the Northern Corridor Highway scenario.

2. The Draft HCP Fails to Minimize and Mitigate Impacts of Take

Issue

6. The draft HCP improperly seeks Zone 6 mitigation credit for the NCH by using BLM authority and funds to compensate for NCH related harm to BLM lands in the RCDR and NCA. Federal lands and funds should not be used to “mitigate” UDOT and county NCH related damage on federal lands and to a federally protected species.

In determining if the adequacy of the mitigation in the HCP/ITP meets the 10(a)(2) mitigation standards, the FWS may only examine the mitigation and conservation measures provided by the applicant. 16 U.S.C. § XX (requiring “steps **the applicant** will take to minimize and mitigate such impacts, and the funding that will be available to implement such steps.”) Washington County is the applicant for the ITP and HCP.

Washington County proposes Zone 6 as mitigation for the Northern Corridor, but cannot offer this mitigation independently. First, Zone 6 is comprised of lands neither owned by, nor under the jurisdiction of the County. The addition of Zone 6 to the Reserve, then, hinges on HCP partners including SITLA and BLM to provide the bulk of this mitigation:

“The proposed Zone 6 area comprises 6,813 acres. These lands are owned or managed by SITLA (3,225 acres), the BLM (3,471 acres, of which 2,345 acres are designated as an ACEC), UDOT (71 acres), and local government and private landowners (45 acres) (refer to Map 2.5-15).”

DEIS at 3-48.

Second, the Draft HCP shows that the county is only committing to a small portion of the management, restoration and land acquisition in Zone 6:

- The County will fund the acquisition of approximately 450 acres of SITLA-owned lands within proposed Reserve Zone 6 prior to the start of construction of the Northern Corridor. The actual acquisition acreage will depend on the final size of the ROW approved for the Northern Corridor. (Draft HCP at xiv). There are 3,225 acres of SITLA land in Zone 6, meaning that the county is leaving at least 2,775 acres for BLM to bring into federal ownership. This is a large, \$14 million undertaking given that the county estimates a single SITLA acre is worth \$5,000 (Draft HCP at 120).
- The County only commits to paying \$55,000 more per year on law enforcement to combat a wide variety of illegal uses and damaging recreational uses in Zone 6 if the changed circumstance is triggered. This funding may be enough to support one full-time officer, when many more are needed. (Draft HCP at 120).
- The County only commits to paying \$12,000 more per year on community outreach and education efforts in Zone 6 if the changed circumstance is triggered. This funding will not be enough to provide outreach to the tens of thousands of annual visitors to Zone 6.
- The County only commits to paying \$3,000 more per year for recreation management in Zone 6 if the changed circumstance is triggered. Zone 6 has a network of 150 miles of roads and social trails, many of which will need to be closed. This budget cannot support substantial trail closures, or the necessary restoration following them.

The Draft HCP shows that the county is only committing to a portion of the effort it would take to add Zone 6 to the Reserve. The document fails to discuss the contributions BLM and UDWR would need to make each year to support Zone 6, or if these agencies even have the ability to do so. Washington County is not able to provide the questionable Zone 6 mitigation independently of its HCP partners. From a BLM perspective, this is the county attempting to “rob Peter to pay Paul.”

Issue

7. The draft HCP cannot rely on voluntary conservation measures to mitigate and minimize the impacts of its proposed incidental take of MDT.

In the Draft HCP, Washington County cannot rely on a series of voluntary conservation measures to meet its ESA obligations. Many of the new conservation measures provided under the Draft HCP are neither mandatory nor enforceable. For example, Washington County **voluntarily** commits in the Draft HCP to continue its public education and outreach programs, including the continued operation of the Red Cliffs Visitor Center and ongoing coordination with the HCP Partners through the deliberations of the HCAC on the content and distribution of education and outreach materials. Draft HCP at viii. The county also **voluntarily** commits to establishing an adaptive management fund to help support planning, monitoring, and responses for fire management within the Reserve boundary; and **voluntarily** commits to supporting recreation impact monitoring, raven monitoring and a trail steward program. *Id.* at x-xi.

Conservation actions including public education and community outreach, adaptive management, fire response, raven monitoring, and recreation impact monitoring\ are crucial to the survival of the MDT in the Reserve and UVRU. These actions cannot be merely “voluntary.” They must be commitments monitored and enforced by FWS.

Issue

- 8. The draft HCP makes SITLA a new participating agency and commits SITLA Zone 6 land as a mitigation credit for the NCH without addressing that SITLA may lack the proper legal authority to make these long-term conservation commitments given its primary legal duty to optimize revenue for its beneficiaries. The DEIS analysis and draft HCP fail to acknowledge this concern nor provide any assessment of risk that the SITLA conservation commitments may be changed or overturned.**

FWS cannot credit any mitigation efforts provided by SITLA, since FWS is limited to considering only the mitigation measures provided by the applicant. See #2 above: The draft HCP improperly seeks Zone 6 mitigation credit for the NCH by using BLM authority and funds to compensate for NCH related harm to BLM lands in the RCDR and NCA. Federal lands and funds should not be used to “mitigate” UDOT and county NCH related damage on federal lands and to a federally protected species.

Furthermore, the HCP ignores the public scoping comments raising concerns and questions about SITLA’s legal ability to make binding, long-term conservation commitments. As the RCDR, NCA, and proposed Zone 6 become increasingly encircled by developments, rising property values and prospects for lucrative development may compel SITLA to renege on at least some of their conservation commitments. SITLA officials may decide to do so, or the beneficiaries may sue to force that result. As such, the DEIS analysis, and BLM and FWS, improperly rely on these SITLA conservation commitments without any acknowledgement of these substantial risks.

Until, and if, SITLA lands in proposed Zone 6 are brought into federal ownership, they are owned by the state on behalf of the trust. The slow pace of acquisition of SITLA lands in the Reserve does not suggest that acquisition will occur quickly in Zone 6, leaving these lands vulnerable to increasing development pressures.

Issue

- 9. The draft HCP is clearly inadequate because the proposed conservation measures to address the “changed circumstances” of future fires and severe drought would not be sufficient to compensate for the large scope of these harmful effects on tortoises. Indeed, most of the tortoise habitat destroyed in the 2005 RCDR fires was not successfully rehabilitated, and, thus far, there is little confidence that the significant damage from massive recent fires may likewise be adequately mitigated.**

Fires will continue to be a major issue in the Red Cliffs Desert Reserve due to climate change and increasing human access. More MDT habitat must be protected to ensure MDT redundancy, representation and resilience when future fires do occur. Additionally, the fuel load must be reduced and non-native invasive species eliminated. FWS must expect human-caused and

lightning-caused fires to continue because of climate change, the pervasiveness of invasive species in the Reserve and the failure of HCP partners to suppress their growth and spread:

“As reported in the 2016 Red Cliffs NCA Resource Management Plan, exotic annual grasses and forbs reach almost every area inside the Red Cliffs NCA ranging from 5 to 30 percent coverage within the landscape (BLM 2016a).”

DEIS at 3-8.

“A modeling and mapping effort by The Nature Conservancy (TNC 2011) discovered that vegetation communities within the Red Cliffs NCA are 90 to 100 percent departed ecologically from what their original reference community was described to be (TNC 2011). This is because of the infestation of exotic, invasive annual grasses and forbs and the destruction of native shrubs that are slow to recover from fire.”

DEIS at 3-9.

Ongoing human activities in the Reserve, including vehicle access, camping, recreation, and illegal use of fireworks exacerbates the risk of catastrophic wildfire in an already highly-departed landscape:

“In total, 22 fires have burned 15,913 acres within the Red Cliffs NCA and the Reserve since 1976 (acres that were re-burned by multiple fires are not double-counted in this total), with over 3,808 acres burning multiple times (24 percent of all burned areas; Map 3.22-1). Five wildfires were caused by unknown ignition sources, with nine occurring as a result of natural causes and eight as a result of human ignition.”

DEIS at 3-153.

After including the recent Turkey Farm Road and Cottonwood Trail Fires that devastated 14,000 acres of critical MDT habitat, there have been a total of 24 fires within the Reserve since 1976, and 10 were the result of human ignition. Nearly half of all wildfires that have ravaged the Reserve have been human-caused, yet the Reserve Fire and Habitat Management Plan does not provide concrete actions that can reduce the risk of human-caused wildfires in the Reserve. These may include:

- Closure of both the upland *and lowland* zones of the Reserve to campfires under the Public Use Plan during times of high fire risk.
- Closure of roads in the Reserve to public use vehicle traffic during times of high fire risk because roads can act as “Ignition Point Locations” (Brooks and Matchett, 2006).
- Increased presence of law enforcement during times of high fire risk.
- Increased presence of trail stewards and outreach technicians during times of high fire risk.
- Increased community outreach, including materials emphasizing the fines and other repercussions associated with illegally starting fires.

Important discussion is missing from the Reserve Habitat and Fire Management Plan:

- Information on the success of restoration efforts following the 2005 wildfires. For example, how many acres have been successfully restored, and at what cost? What funding is required in the future to facilitate the restoration?
- Discussion of protecting new MDT habitats as mitigation for future fires in the Reserve. For example, where are quality MDT habitats located in the UVRU, and how could they be protected independently of damaging projects like the Northern Corridor?
- Accurate discussion of the effectiveness of fire breaks in the southwestern US. Fire breaks are *not* effective in environments where fires are fueled by dry annual grasses and high winds.

- Plans to consult with experts, such as the USGS Wildland Fire Science team to learn about the best methods for preventing fires and restoring Mojave desert ecosystems.

Issue

10. The draft HCP and DEIS improperly fail to consider implementing any seasonal or permanent closure on public use of the popular Cottonwood Road (aka Turkey Farm Road) that bisects RCDR Zone 3.

If the NCH is constructed, it would have its own intersection on Cottonwood Road to increase public access and use (DEIS at 2-5). In addition, the county and Dixie Metropolitan Planning Organization support a proposed project to improve this road, and that could not only add to the NCH's cumulative adverse impacts, but also directly impact tortoise critical habitat.

Cottonwood Road is steep, narrow and winding below its intersection with the proposed NCH. To have this section of the road function as a major artery funneling traffic into downtown St. George, approximately 1 mile of road south of the NCH would have to be straightened and widened. The impacts of this project to MDT and their designated critical habitat in Zones 2 and 3 would be detrimental, substantially increasing the road impact zone, human access, and the risk of catastrophic wildfire.

The massive recent Turkey Farm Road fire that devastated a large portion of Zone 3 tortoise habitat originated from illegal fireworks use off this road. Previous human-caused destructive fires likewise were associated with public use of this road. Restricting public use of this road, especially during fire season, would greatly reduce the risk of future human-caused fires in Zone 3. It is unfortunate that BLM and FWS chose to bow to the county's pro-development bias by failing to consider this obvious tortoise conservation measure in the DEIS and Draft HCP analysis.

By ignoring this reasonable alternative conservation measure, the FWS failed to adhere to its obligation to minimize and mitigate to the maximum extent practicable the impacts of the taking under the Endangered Species Act 10(a)(2).

Issue

11. The draft HCP improperly fails to commit to any consistent mowing of highway rights of way in tortoise habitat despite the clear threat posed by dried cheatgrass and other plants in these rights of way, and the obvious benefit that such mowing would provide in terms of reducing the risk of future road-related fires spreading into tortoise habitat.

Indeed, the two massive recent fires in Zone 3 tortoise habitat occurred near roads, with the Cottonwood Trail Fire reportedly caused by a blown tire on Interstate 15 that ignited fuels in the right of way. The Habitat Conservation Advisory Committee, appointed by the Washington County Commission to oversee and provide guidance on the implementation of the Washington County HCP, has recently recognized the importance of such mowing:

"Many fires are started along roadways, and for that reason [Hurricane Fire Chief Khulmann] suggested the HCAC committee look into mowers. To the best of his understanding, the County and UDOT do not own a tractor and are required to wait for one to become available on lease. However, they are usually hard-pressed to get one in time to mow before growth becomes tall and brittle. Chief Khulmann suggested entering

Interlocal Agreements with the County and UDOT to jointly acquire mowing equipment so that the bromes can be addressed in a timelier manner.”

“Chris Blake suggested the HCAC committee consider the purchase of a tractor/mower so that mowing can commence in early April and whenever needed. Cameron Rognan agreed and wondered how much the equipment would cost. John Bramall speculated that a 15 ft. deck mower would cost between \$18,000-\$22,000, and should last 20 years. A used 90 horse power tractor to pull the mower could be procured from State Surplus for about \$78,000 (25-35% off of standard price). We could expect to pay \$100,000 for the deck and tractor.”

HCAC Meeting Minutes – July 28, 2020

However, the county has not yet figured out how or whether this may be done, nor included mowing in its draft HCP commitments. Given the county’s \$7 million surplus in the HCP Trust Fund (Draft HCP at xi), the purchase of a mower for \$100,000 is well within reach.

By ignoring this reasonable alternative conservation measure, the FWS failed to adhere to its obligation to minimize and mitigate to the maximum extent practicable the impacts of the taking under the Endangered Species Act 10(a)(2).

Issue

12. Existing conservation efforts have failed to arrest the decline in MDT populations and habitat.

Existing conservation actions have failed to prevent the 41% decline of MDT in the RCDR over the duration of the 1995 HCP, and Washington County cannot rely on these same measures to minimize and mitigation the impacts of future taking. These unproven and speculative conservation measures include reserve fencing, law enforcement; community Outreach and Education; Utility Development Protocols; Recreation Management; Reserve Habitat and Fire Management Guidelines; and Adaptive Management and Monitoring

In fact, the DEIS captures in detail the following examples of how the existing HCP’s conservation program has failed, including:

- High levels of MDT mortality on roads and trails inside and adjacent to the Reserve, with 146 roadkill mortalities recorded, as documented on pg. 3-36 in Vol. 2 of the Draft EIS.
- A vicious burn-reburn fire cycle in the Reserve in which 22 fires have burned 15,913 acres within the Red Cliffs NCA and the Reserve since 1976; 3,808 acres have burned multiple times; and 8 out of 22 fires were human caused, as documented on pg. 3-153 in Vol. 2 of the Draft EIS. These numbers do not include the recent Turkey Farm Road and Cottonwood Trail Fires that burned 14,000 acres. Therefore, the Reserve has experienced 24 wildfires since 1976; with as many as 30,000 acres having burned (the proportion double-burned acres is unknown at this point); and 10 out of 24 of these fires were human caused.
- The proliferation of exotic annual grasses and forbs that reach almost every area inside the Red Cliffs NCA ranging from 5 to 30 percent coverage as documented on pg. 3-8 in Vol. 2 of the Draft EIS. Note that current percent coverage is likely much higher than it was in 2016 when these conditions were documented.

- The proliferation of social trails and trampling of critical habitat in the Reserve as documented on pg. 3-38 in Vol. 2 of the Draft EIS. There are 53 miles of social trails in critical habitat on BLM lands in the Reserve and somewhere between 0 and 71 miles of social trails in critical habitat on non-Federal lands in the Reserve.
- Raven predation and the spread of ravens across the Reserve documented on pg. 3-40 in Vol. 2 of the Draft EIS. Since monitoring began in 2015, 28 mortalities associated with raven predation have been recorded. This is likely a fraction of the actual number of raven predation mortalities in the Reserve.
- Dogs-off-leash in the Reserve and the resulting harassment and death of tortoises as documented on pg. 3-41 in Vol. 2 of the Draft EIS. There have been 9 recorded instances of mauling or predation of MDT by dogs in recent years.
- High levels of poaching as documented on pg. 3-41 in Vol. 2 of the Draft EIS. There have been 38 incidents of suspected or confirmed illegal take of Mojave desert tortoises from the Reserve and surrounding areas.
- Undisclosed, but increasing, rates of disease. Pg. 3-41 in Vol. 2 of the Draft EIS says that “shell disease was observed in relatively high-density Mojave desert tortoise areas. In addition, URTD has been observed throughout the Reserve, and the presence of Mojave desert tortoise with URTD clinical signs has increased since 2013 (UDWR 2018).”
- Loss of habitat and fragmentation caused by utilities. Pg. 3-37 in Vol. 2 of the Draft EIS discloses that there are at least 38 existing ROWs in the Reserve, but does adequately discuss the impacts of this fragmentation to the MDT.

These documented impacts undermine the success of the existing HCP, and it is arbitrary and capricious for the county to again rely on these same conservation measures to ensure that it will minimize and mitigate the impacts of incidental take of MDT.

These numbers suggest that fencing is failing to prevent MDT from entering roadways; that law enforcement is failing to prevent human caused fire, poaching, and dogs-off-leash; that community outreach and education is failing to reach the right audience or find the right conservation message needed help to prevent behaviors that harm tortoises inside and outside of the Reserve; that Utility Development Protocols are failing to prevent habitat loss, fragmentation, and raven perches; that recreation management is failing to curb illegal social trails; that Reserve Habitat and Fire Management Guidelines are failing to combat the devastating fire cycle in the Reserve; and that Adaptive Management and Monitoring is failing to adequately respond to uncertainty in conservation programs, including events like disease, drought, and wildfire. It is concerning that these impacts were not thoroughly analyzed in the draft HCP, and only in the DEIS. Since these impacts contribute to the steady decline of MDT in the Reserve, they should inform the plan for strengthening protections for MDT in the future.

Issue

13. Construction of the NCH would violate previous conservation measures, designed to minimize and mitigate impacts on MDT.

The draft HCP proposes to accommodate the Northern Corridor Highway as a “changed circumstance,” and in so doing would violate the following conservation measures, each central to off-setting the take of both the 1995 ITP and the proposed 2020 ITP:

- **The Red Cliffs Desert Reserve.** “The establishment of the Red Cliffs Desert Reserve is the primary conservation measure of the 1995 HCP.” (Draft HCP at 78). The Reserve has functioned to mitigate the take of 22,822 MDT acres and 776 MDT since 1995. Impairing the functioning of the Reserve would mean that both the take authorized in 1995 *and* the re-authorized take the County is applying for in 2020 will not be off-set.
- **Reserve Zones.** To facilitate management, the Reserve is divided into 5 zones. Zone 3 “contains the largest block of contiguous MDT Habitat and is considered the core of the Reserve” (Draft HCP at 81). The 1995 HCP specified that “the largest block of habitat which **will remain roadless** is within Zone 3 of the reserve which is between the Cottonwood Road, Interstate 15, the Dixie National Forest, and Red Cliffs, an area of approximately 28,147 acres” (emphasis added. 1995 HCP at 123).
- **Long-term Reserve use and management.** “The County and the HCP Partners acknowledge that the long-term management of the Reserve is an ongoing commitment for addressing the permanent impacts of habitat loss from the Covered Activities” (Draft HCP at 84). Direct, indirect, and cumulative adverse impacts caused by the NCH would prevent the Reserve from functioning to off-set permanent impacts of habitat loss from covered activities.
- **Translocation.** “Translocation preserves the life and reproductive potential of many MDT removed from areas subject to Covered Activities, thereby minimizing the impact of authorized take. Translocated MDT in Reserve Zone 4 effectively repopulated unoccupied habitat with a “persistent and viable population.” This program repopulated approximately 3,754 acres of previously unoccupied MDT habitat in Reserve Zone 4” (Draft HCP at 91).

FWS must not assume that the translocation program can offset the impact of take in the ITP. First, the Draft HCP does not indicate that MDT in Zone 4 are monitored after release, so the extent that tortoises have dispersed within Zone 4 is unknown, and the number of acres repopulated cannot be identified with certainty. MDT may be clumped within a portion of Zone 4 or could be evenly distributed. Second, the relative success of the translocation program in Zone 4 is threatened by construction of the Babylon Highway⁸³ which would travel north to south through Zone 4, fragmenting MDT populations. Finally, the carrying capacity of Zone 4 is unknown and communications with Washington County HCP staff suggest that HCP partners are scrambling to find the next translocation zone.

- **Biological Monitoring Program.** Bi-annual monitoring by UDWR in the RCDR provides crucial MDT density and abundance estimates that monitor progress toward recovery and inform management decisions. In 1995, the county budgeted \$1 million for Reserve monitoring (1995 HCP at 110), but in 2020, they’re only budgeting \$500,000 (not factoring in inflation). However, if the NCH changed circumstances are triggered, the county will spend \$1.75 million for monitoring, not factoring in inflation (Draft HCP at 122). The county is both conditionally linking continued monitoring of the Reserve, which is absolutely necessary for conservation of the MDT, to the NCH *and* prioritizing Zone 6 monitoring over Reserve monitoring.

⁸³ Dixie MPO 2019-2050 Regional Transportation Plan at 21.

- **Reserve design.** The NCH would forever alter the Reserve design agreed upon in the 1995 HCP, impairing its function and ability to off-set the take of 66,301 acres of MDT habitat in the permit area. The reserve design proposed in the draft HCP design does not meet the criteria for Reserve design envisioned by the 1994 MDT Recovery Plan.

“The 1995 Reserve boundary met substantively the recovery recommendations for establishing the Upper Virgin River DWMA contemplated in the 1994 and 2011 MDT Recovery Plans (USFWS 1994a, 2011; see Chapter 6.1.2). The 1994 MDT Recovery Plan describes the DWMAs as those areas “in which **recovery actions will be implemented to provide for the long-term persistence of viable desert tortoise populations and the ecosystems upon which they depend**” (USFWS 1994a:31).” (emphasis added).

Draft HCP at 78.

“The overarching intent of the Washington County HCP is to create a conservation program, compatible with the County’s community goals and objectives, **for conserving the Upper Virgin River population of MDT in its native habitat in perpetuity.** The 1995 HCP identified several biological goals and objectives for the conservation program, restated with some modifications here as follows:

- To the maximum extent practicable, conserve the Upper Virgin River population of MDT within the Plan Area by meeting substantively the recovery recommendations for establishing the Upper Virgin River DWMA (i.e., the Reserve) **contemplated in the 1994 and 2011 MDT Recovery Plans.**” (emphasis added).

Draft HCP at 66.

The NCH changed circumstance violates 5 of the 7 guidelines outlined in the 1994 MDT Recovery Plan for establishing appropriate boundaries and prescribing appropriate management goals for the DWMA or Reserve:

- Large blocks of habitat, containing large populations of the target species, are superior to small blocks of habitat containing small populations.
- Blocks of habitat that are close together are better than blocks far apart
- Habitat that occurs in less fragmented, contiguous blocks is preferable to habitat that is fragmented.
- Interconnected blocks of habitat are better than isolated blocks, and linkages function better when the habitat within them is represented by protected, preferred habitat for the target species.
- Blocks of habitat that are roadless or otherwise inaccessible to humans are better than blocks containing roads and habitat blocks easily accessible to humans.

1994 MDT Recovery Plan at 48.

The Reserve design envisioned in the draft HCP, by incorporating the NCH, would fragment the largest contiguous block of MDT habitat in the Reserve- one that is home to the largest population of MDT in the Reserve (Zone 3). Proposed Zone 6 mitigation provides a block of habitat that is not contiguous with the rest of the Reserve and is highly fragmented by existing roads and trails. Opportunity for linkage between Zone 6 and the larger Green Valley Analytic Unit is prevented by the Western Corridor, a four-lane highway that would follow the western

boundary of Zone 6. The NCH would increase human and vehicle access to the Reserve, drastically increasing the proliferation of invasive weeds and the risk of catastrophic wildfire. With over 150 miles of trails and routes, Zone 6 is already adversely impacted by high levels of human visitation. Three future highways⁸⁴ planned for Zone 6 will only increase the level of human access and corresponding adverse impacts. Furthermore, pg. B-75 in Vol. 3 of the Draft EIS shows that there are plans for 6 to 10 miles of new trail adjacent to the highway that will further increase human access to critical habitat in the Reserve.

Additionally, the Draft HCP fails to show how its conservation program- which has failed to reverse steady declines of MDT in the Reserve and UVRU and includes provisions to adversely modify critical habitat in and take MDT in the Reserve- is accordance with the 2011 Revised Recovery Plan for the Mojave Population of Desert Tortoise. This conservation program violates the following objectives and criteria from the Recovery 2011 MDT Recovery Plan:

- Recovery Criterion 1. Rates of population change (λ) for desert tortoises are increasing (i.e., $\lambda > 1$) over at least 25 years (a single tortoise generation), as measured
- Recovery Criterion 2. Distribution of desert tortoises throughout each tortoise conservation area is increasing over at least 25 years (i.e., ψ [occupancy] > 0).
- Objective 3. Ensure that habitat within each recovery unit is protected and managed to support long-term viability of desert tortoise populations.
- Recovery Criterion 3. The quantity of desert tortoise habitat within each desert tortoise conservation area is maintained with no net loss until tortoise population viability is ensured. When parameters relating habitat quality to tortoise populations are defined and a mechanism to track these parameters established, the condition of degraded desert tortoise habitat should also be demonstrably improving.

Finally, it appears that the county recognizes the adverse impacts a conservation program that facilitates a four-lane highway will have on the Reserve:

“Nonetheless, the County acknowledges that approval and subsequent construction of the Northern Corridor would affect the use, management, and conservation value of the Reserve; affect individual MDT and their population dynamics.”

Draft HCP at 2.

Issue

14. Uncompleted Reserve Acquisition Strategy leave the MDT and critical habitat at significant risk.

Facilitating acquisition of private and state lands in the Reserve for the conservation of MDT has been an important conservation action of the 1995 HCP. “As of February 2020, approximately 665 acres of private land (of the total 2,981 acres of privately owned lands) and 6,426 acres of SITLA-owned land (7,091 acres total) occur within the Reserve and remain to be acquired for the purposes of this Amended HCP (Table 17). Draft HCP at 82.

All NCH alternatives considered in the DEIS travel through private lands in the RCDR. This is concerning given the slow pace of acquisitions over the last 25 years; the fact that the NCH would increase access to these private inholdings; and the fact that the draft HCP explicitly covers development inside the Reserve as a changed circumstance:

“Landowners have been consulted throughout the HCP process and have been encouraged to participate in these land exchanges [for Reserve acquisition]. In the event they do not, the HCP will have no legal effect on their property and the HCP will place no restrictions on land use within the reserve.”

⁸⁴ Draft Dixie MPO Regional Transportation Plan Map, see projects 77, 132 and 133.

Draft HCP at 84.

“It is possible that a private landowner or SITLA may seek alternative means of ESA compliance, other than through this Amended HCP, and ultimately develop lands within the Reserve.”

Draft HCP at 140.

Development of inholdings within the Reserve would increase habitat fragmentation, the edge effect, the risk of wildfire, predation, poaching and other adverse impacts to the MDT.

3. The Draft HCP Fails to Mitigate Take of MDT to the “Maximum Extent Practicable”

The Service cannot lawfully issue an Incidental Take Permit under the terms of Washington County’s application. Under Section 10 of the ESA, the Service is required to find that the HCP and covered actions will minimize the impacts to MDT “to the maximum extent practicable.” 16 U.S.C. § 1539(a)(2)(B). Under this requirement, the Service must find independently that no practicable alternative to Washington County’s HCP would minimize the taking of MDT. *Gerber v. Norton*, 294 F.3d 173, 185 (2002). Washington County fails to adhere to this standard, and the Service cannot issue an ITP.

For additional discussion on how the Draft HCP fails to mitigate MDT take to the maximum extent practicable, see letter from Desert Tortoise Council Board Member Margaret Fusari.⁸⁵

Issue

15. The draft HCP improperly conditions some necessary tortoise conservation measures on approval of the NCH, and this demonstrates that the county would not take the required “maximum” practicable conservation actions as required for HCP/ITP approval.

The conservation program implemented in the 1995 HCP failed to prevent the 24.3% decline of MDT in the UVRU and the 41% decline of MDT in the Reserve from 1999 to 2020. While stochastic events like drought and wildfire are partially responsible for this decline, data shows that the MDT population never fully recovered after these events, meaning that the conservation program has failed in prevention, response and restoration. (The coalition does not consider human-caused wildfire a stochastic event outside of the applicant’s control, because conservation measures including reduction of invasive plant species, law enforcement and community outreach can be used to prevent human-caused fires). Following drought and wildfire in the early 2000’s, Reserve-wide MDT populations dropped from 29.6 MDT/km² in 2000 to 14.2 MDT/km² in 2007. In 2017, populations had climbed back up to 19.6 MDT/km², but in 2019, populations dropped again to 17.2 MDT/km².

Regional Desert Tortoise Monitoring in the Red Cliffs Desert Reserve, 2017 at 27.

The county must not try to shirk responsibility for these declines by calling them stochastic events, as the data shows that numerous threats within the applicant’s control have contributed to the decline of MDT as discussed elsewhere in these comments. Furthermore, the Utah Division of Wildlife Resources does not find that the MDT population in the Reserve has completely stabilized:

⁸⁵ Desert Tortoise Council Margaret Fusari Letter

“UDWR considers that the population may be stable, although more years of data without a stochastic event are needed to confirm this assumption (UDWR 2020).”
DEIS at 3-48.

In 2020, two more human-caused wildfires ravaged the Reserve, burning 14,000 acres in designated critical habitat. The actual acreage of MDT habitat remaining in the UVRU that may be suitable for mitigating the adverse impacts of wildfire in the Reserve is difficult to determine from the tables in the Draft HCP at 62-63 which mix original habitat mapping with updated modeling. **Regardless, it is clear that identifying and protecting unburned areas is a conservation measure the county must implement.**

The pattern of regular, catastrophic wildfire combined with the county’s inability to curb declining MDT populations in the Reserve show that the conservation measures implemented in the 1995 HCP have failed to offset the take that was authorized. Now, the county is proposing the same conservation measures, in addition to provisions for the Northern Corridor Highway, expecting that this plan can offset the take of 66,301 acres of occupied and potential MDT habitat acres on state and private lands throughout Washington County. If it didn’t work in 1995, it won’t work in 2020, especially with the plan to undermine the central mitigation feature of the 1995 HCP (the Red Cliffs Desert Reserve) with the Northern Corridor Highway.

To fully minimize and mitigate the take, the county must not route the Northern Corridor Highway through the Reserve and must consider establishing commitments in partnership with BLM and SITLA to implement the following, additional conservation measures:

a. Conservation measures based on the recovery actions in the 2011 Revised Recovery Plan for the Mojave Population of the Desert Tortoise.

These measures apply, among other places, to the Red Cliffs Desert Reserve, proposed Zone 6, and any other MDT habitats that are identified for protection in the future.

- **Protect Existing Populations and Habitat**, pg. 67. The existing Red Cliffs Desert Reserve must be protected. The NCH would adversely impact designated critical habitat in the Reserve and the most important high-density cluster of MDT anywhere in the UVRU (DEIS at 3-63) and therefore cannot be accommodated as a changed circumstance in the Draft HCP. **See discussion of the importance of Zone 3 to MDT elsewhere in these comments.**
- **Increase law enforcement**, pg. 69. Recent human-caused wildfires, and the high levels of poaching, dog-off leash and social trailing documented in the DEIS emphasize the need for more law enforcement in the Reserve. The recovery plan states that “increased law enforcement presence is a relatively high priority in all recovery units (**especially Upper Virgin River**) and includes enforcing regulations pertinent to the specific recommendations to protect tortoises or their habitat listed below. This action also includes **using existing officers to ensure law enforcement presence during peak recreational use periods, such as weekends and holidays**, on a rotational basis so enforcement activity is not lost on casual users during standard work-week hours” (emphasis added).
 - **Unauthorized off-road vehicle travel**, pg. 70. The recovery plan notes that “across all recovery units, this aspect of law enforcement is the most important.” Given the 150-mile network of roads and trails documented in proposed Zone 6, this is a crucial conservation measure.

- **Restrict, designate, close, and fence roads**, pg. 71. The Draft HCP must consider conservation measures that place restrictions on existing roads in the Red Cliffs Desert Reserve, including closure of the Cottonwood Road to public use during periods of high wildfire risk. In terms of Zone 6, the Draft HCP at 133 states that HCP partners will “reduce the total mileage of designated recreation access routes within Reserve Zone 6 to approximately 50 miles of primarily non-motorized trails.” However, cross-country OHV use is not allowed in the Red Cliffs Desert Reserve, and all motorized vehicles are restricted to major roads (DEIS at 3-126). Similar, if not stronger, restrictions should apply to Zone 6 because of the well-documented impacts of roads to MDT described in the 2011 Recovery Plan at 71:

“Paved highways, unpaved and paved roads, trails, and tracks have significant impacts on desert tortoise populations and habitat. In addition to providing many opportunities for accidental mortality, they also provide access to remote areas for collectors, vandals, poachers, and people who do not follow vehicle-use regulations. Substantial numbers of desert tortoises are killed on paved roads. Roads also fragment habitat and facilitate invasion of non-native vegetation.”

Conservation measures that close the majority of motorized routes in Zone 6 (and enforce the closures) must be implemented.

- **Restore desert tortoise habitat**, pg. 73. The Draft HCP fails to detail plans for continued habitat restoration in the Red Cliffs Desert Reserve following the severe 2005 and 2006 wildfires, or the recent 2020 wildfires. It also fails to disclose plans for restoring MDT habitat in Zone 6 from adverse impacts caused by grazing, mining, OHV use, social trailing, dumping and target shooting. At a minimum, the Draft HCP must implement conservation measures that eradicate or suppress invasive weeds and revegetate degraded areas with native plants of high nutritive quality to desert tortoises, as well as shrubs needed for cover.
- **Connect functional habitat**, pg. 76. The Draft HCP must consider the impacts of future highways like the Western Corridor on MDT habitat in Zone 6. If, after additional study, Zone 6 is found to increase connectivity between MDT in the UVRU and the Northeastern Mojave Recovery Unit, this connectivity must be preserved.

b. Conservation Measures outlined in the draft HCP that could be implemented independently of triggering the Northern Corridor Highway Changed Circumstance.

These measures, described in the Draft HCP at 132, include:

- **Retire Previously Authorized Incidental Take**

Given the presence of MDT, endangered and sensitive plant species, and popular recreation sites in Zone 6, the county should retire the 3,338 acres of incidental take in Zone 6 independently of the Northern Corridor Highway. This would show a good-faith effort by the county to remove developmental pressures from lands that may, pending future years of study, be able to support broader MDT conservation goals in the UVRU. This is a conservation measure the county could implement in an attempt to curb the steady decline of MDT in the Permit Area that occurred during their management of the 1995 HCP.

- **Cottonwood Road Tortoise Culverts**

Culverts under Cottonwood Road should have been developed long ago. The fees the county collects under ESA Section 10(a) are meant to support MDT conservation, and the county is aware that existing fragmentation of the Reserve must be mitigated:

“The Reserve itself contains a variety of human-created fragmentation barriers, primarily in the form of roads and tortoise-proof fencing. For example, Reserve Zones 2 and 3 are fragmented by State Highway 18 and adjacent urban development. Similarly, Reserve Zones 3 and 4 are fragmented by Interstate 15 and adjacent urban development. Reserve Zones 4 and 5 are fragmented, at least in part, by the Virgin River. Within Reserve Zone 3, Cottonwood Road and Red Hills Parkway are north-south barriers that fragment MDT Habitat. Tuacahn Road similarly creates an internal boundary within Reserve Zone 2. These sources of internal fragmentation were present and considered in the design of the original Reserve boundary in 1995.”

Draft HCP at 82.

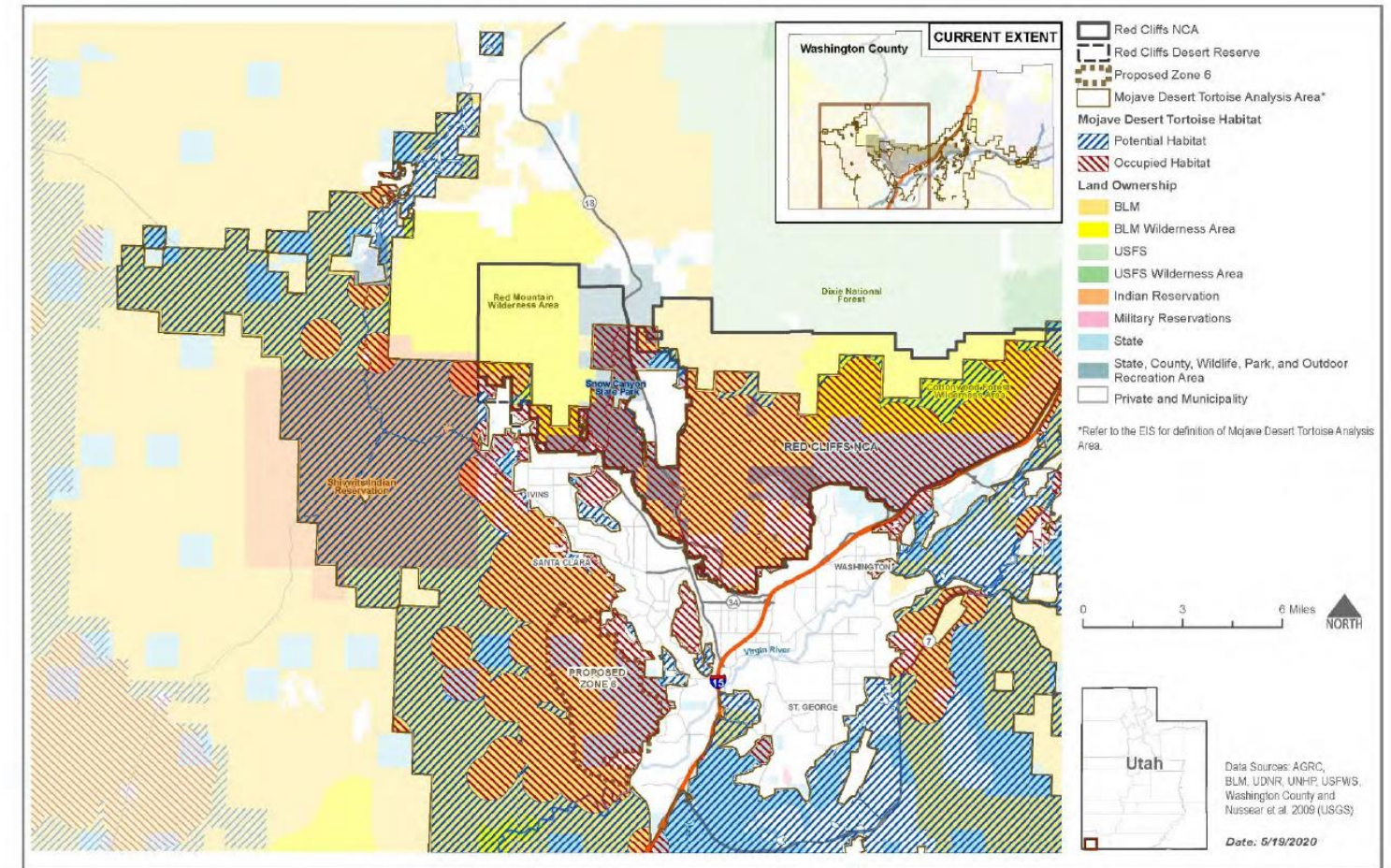
These culverts must be developed independently of the Northern Corridor to reduce habitat fragmentation in the RCDR. Furthermore, they must be maintained and monitored. If MDT are not using them, design modifications may be required.

c. Further investigation of Zone 6, which is necessary to accurately determine its potential for sustaining viable MDT populations.

FWS must consider, as an additional conservation measure, protections for Zone 6 (or a variant) independent of the Northern Corridor Highway after additional investigation determines optimal reserve design and validates the MDT surveys to better understand the habitat quality and suitability. Given the current and concerning decline of MDT in the Reserve and the larger UVRRU, additional conservation lands are warranted. The HCP (and DEIS) put forth Zone 6 as a potential satellite to the Reserve but fail to explain why or how they arrived at the proposed Zone 6 configuration and location.

The Draft HCP (and DEIS) must disclose why Zone 6 is the best option in the UVRRU for additional protection of MDT habitat or offer a more optimal reserve design for Zone 6. Other areas in the UVRRU with occupied or potential habitat exist but have not been included in the proposed Zone 6 (see map excerpted from the DEIS below). The proposed Zone 6 is small, experiences heavy recreational use, is open to grazing, and, while already fragmented from other MDT habitat patches, will become more isolated with increased proximal urbanization (facilitated by the future Western Corridor).

Map 3.5-4a. Occupied and Potential Mojave Desert Tortoise Habitat (1 of 2)



The Draft HCP (and DEIS) must explain its reasoning for the proposed Zone 6 configuration and location. It should list and rank remaining MDT habitats in the plan area, identify the optimal boundary for a potential satellite reserve, and explain the rationale. In doing so, the HCP (and DEIS) should consider current activities and land condition and apply principles of conservation biology for reserve design. These include maximizing size, core/edge ratio, intactness, and connectivity to other protected habitats (e.g., *see* Forman and Godron 1986; August et al. 2002; Groves et al. 2002; Fayrig 1997).

d. Restoration of MDT habitats in the UVRU, including but not limited to Zone 6.

Models show that Zone 6 may contain potentially suitable MDT habitat, but more research is needed to determine whether this area could support a long-term, viable population of MDT. In the meantime, the county should begin habitat restoration there as a good faith gesture and to offset the impacts of take. The DEIS and draft HCP disclose the following adverse impacts to MDT habitats in Zone 6 that require restoration:

- **Restoration related to high levels of visitation is necessary.** With 82,775 annual visits, proposed Zone 6 has a higher density of recreation use than any area on public land in the Red Cliffs NCA. (DEIS at 3-39).
- **Restoration of an extensive trail system, including many social trail miles, in MDT habitat is necessary.** 150 miles of roads and trails, including 13 miles of unpaved roads, 35 miles of two-track vehicle trails, 26 miles of single-track non-motorized trails, and 78 miles of so-called “other” trails. (Draft HCP at 130). Many of these routes are user-

created and were developed by the passage of users or vehicles and were not specifically designed and constructed by land management agencies. Currently, on non-Federal lands, OHV use is relatively unmanaged, and recreational users are known to create social trails in undesignated areas to access recreational opportunities. (DEIS at 3-129).

- **Campsite cleanup is necessary.** Dispersed camping is allowed in undeveloped areas, unless otherwise prohibited (BLM 1999), and car camping on both Federal and non-Federal lands in proposed Zone 6 is popular. While camping is currently prohibited on SITLA lands in Green Valley Gap and Moe's Valley, camping is relatively unmanaged in the area, and recreational users are known to still use the area for camping. (DEIS at 3-129).
- **Target shooting clean-up is necessary.** The proposed Zone 6 area also is widely used for target shooting, which is allowed on BLM-administered and SITLA lands unless posted otherwise. However, discharge of firearms within the St. George city limits, which overlaps the eastern portion of proposed Zone 6, is prohibited. Similar to camping in the area, current recreational target shooting is relatively unmanaged. (DEIS at 3-129).
- **Restoration following competitive events and jamborees is necessary.** Existing land uses within the SITLA-owned portion of the proposed Reserve Zone 6 include mountain biking, hiking, OHV travel, competitive and groups events (e.g., mountain bike races, jamborees, and festivals). (Draft HCP at 130). There are 5 SRP's for competitive sporting events on BLM lands in Zone 6 that attracted at least 4,000 visitors in 2019. (DEIS at 3-128).
- **Restoration of grazed lands is necessary.** Within proposed Reserve Zone 6, approximately 1,462 of the 3,225 acres of SITLA lands are currently under active grazing leases (SITLA 2020a, 2020b), as are almost all BLM-administered lands (3,446 of 3,471 acres). (DEIS at 3-40).
- **Restoration of mined lands in Zone 6 may be necessary.** Within proposed Zone 6, mining can be allowed on SITLA lands if a permit is obtained. Portions of the BLM-administered lands within proposed Zone 6 are closed to fluid mineral development (approximately 122 acres), while the remaining acres are open with varying levels of restrictions. The BLM-administered lands within proposed Zone 6 are also categorized as opened or opened with restrictions to locatable minerals.
- **Closure and restoration of roads in Zone 6 is necessary.** Within the proposed Zone 6, tortoise habitat intersects with 18.6 acres of roads. (DEIS at 3-37).
- **Preventing the spread of invasive weeds is necessary in Zone 6.** According to LANDFIRE Remap data (2019), 640 acres or 10 percent of proposed Zone 6 is classified as ruderal scrub, ruderal shrub, or exotic annual grassland, with exotic species-dominated understory as well as exotic-dominated herbaceous stands. (DEIS at 3-42). Given the high level of visitation, large network of roads, and large proportion of grazed lands in Zone 6, this figure seems very low.

e. Restoring MDT habitats in Zone 6 and other potentially suitable locations requires substantial time, meaning that efforts must begin now.

The 2011 Revised Recovery Plan for the Mojave Population of Desert Tortoise at 73 states that "natural recovery of severely degraded desert scrub is expected to occur over centuries, not decades (Webb et al. 2009a), so active restoration efforts will be required in such areas." The

county must begin restoring Zone 6 (independently of the NCH) and other MDT habitats as a primary conservation measure in the 2020 HCP:

- Given sufficient rainfall, the cover and species richness of annual plants can attain levels found on undisturbed areas within 1–15 y after disturbance (Callison et al. 1985; Brooks and Matchett 2003; Vamstad and Rotenberry 2010).
- However, nonnative annual grasses—poor-quality forage for tortoises—often dominate the disturbed communities within a few years and are persistent (Callison et al. 1985; Brooks and Matchett 2003; Brooks and Berry 2006).
- In a study of annual plant recovery 36 y after construction of the Los Angeles Aqueduct in the western Mojave Desert, certain annual species (e.g., stiff-haired lotus *Acmispon strigosus*) known to be favored by desert tortoises had not colonized the disturbance corridor (Berry et al. 2015).
- Soil formation is in constant flux, with some desert soils requiring millions of years to develop (McDonald et al. 1995).
- Reduction of exotic invasive plants species, such as cheatgrass, in Zone 6 is incredibly important because these species perpetuate destructive burn-reburn fire cycles. Full recovery of desert ecosystems after a wildfire can take up to 65 years and is often complicated by climatic shifts and an assault from invasive plants and grasses that squeeze out native vegetation. (Abella 2010).
- Reduction of road and route mileage in Zone 6 is also critical because it will help to reduce the spread of exotic invasive plant species. Roads have long been implicated in contributing to the invasion and spread of nonnative plants (Frenkel 1977). Brooks and Berry (2006), in a study of nonnative annual plants in desert tortoise critical habitat, reported that density of dirt roads was correlated with abundance of nonnatives. A paved highway appeared to be the source of the invasion of another noxious, nonnative species, Sahara mustard *Brassica tournefortii* in at least one valley within desert tortoise critical habitat in the western Sonoran Desert (Berry et al. 2014a).

All excerpts from Enhancing and Restoring Habitat for the Desert Tortoise, 2016

The Draft HCP must investigate restoring damaged MDT habitat in Zone 6, independently of the NCH, so that this area can contribute to MDT viability in the UVRU. Note that the first step in restoration is reducing the stressors that resulted in degraded habitat conditions. Further, all active restoration must be guided and supported by best available science since, as discussed elsewhere in these comments, attempts to actively restore arid ecosystems are often not successful can make conditions worse.

f. Providing connectivity between analytic units in the UVRU.

The UVRU is the smallest and most isolated of the 5 MDT recovery units (Draft HCP at 33). To support long term MDT viability in the recovery unit, connections between and among the 11 analytic units in the UVRU must be preserved. Zone 6 is located within the larger Green Valley Analytic Unit which borders with the Far West and Arizona Analytic Units.

“The FWS (2020a) has identified four potential habitat connectivity corridors linking the UVRU and the Northeastern Mojave Recovery Unit. These habitat corridors include habitats from Snow Canyon Analytical Unit through Far West or Green Valley Analytical Units, and one that includes habitats through the Arizona Analytical Unit. Connecting the UVRU and the Northeastern Mojave Recovery Unit could benefit tortoise access to larger habitats and maintain genetic and demographic connectivity (USFWS 2020a).”

Zone 6, independent of the NCH, should be further analyzed for its potential to support MDT corridors between the Green Valley, Far West and Arizona Analytic Units. However, this would only be effective if Zone 6 is not fragmented by the Western Corridor (planned for completion by 2050 in the 2019-2050 Draft Regional Transportation Plan) which would prevent the movement of MDT from Zone 6 into the larger Green Valley Analytic Unit. The extension and paving of two roads already built in Zone 6 (Green Valley Dr. and Navajo Dr., each linking to the future Western Corridor) would additionally fragment MDT habitat in Zone 6.

The Draft HCP must institute measures to maintain habitat linkages between Zone 6 and the rest of the Green Valley Analytic Unit, independently of the NCH.

g. Imperiled plants in Zone 6 may benefit from protection.

Zone 6 provides suitable or known habitat for at least five species of federally threatened, endangered or BLM-sensitive plant species, including:

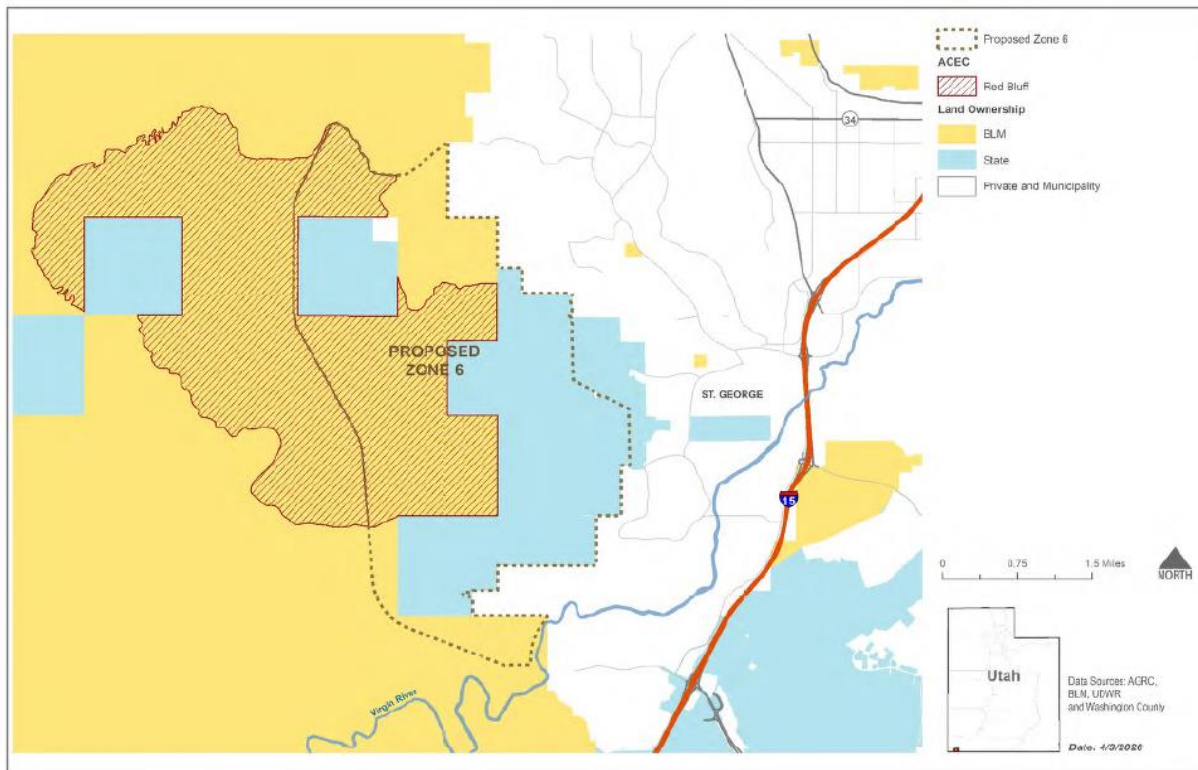
- Dwarf bear-poppy (*Arctomecon humilis*) and Critical habitat
- Holmgren (Paradox) milk-vetch (*Astragalus holmgreniorum*) and Critical Habitat
- Shiwits milk-vetch (*Astragalus ampullarioides*) and Critical Habitat (suitable habitat present)
- Siler pincushion cactus (*Pediocactus* [*Echinocactus utahia*] *sileri*) (suitable habitat present)
- Parry sandpaper-plant (*Petalonyx parryi*)

The Draft HCP must investigate the potential for protections for Zone 6, independently of the NCH, to benefit these imperiled plant species.

h. Manage all BLM lands in Zone 6 as part of the Red Bluffs ACEC.

DEIS Map 2.5-15 shows that less than 40% of the 6,168-acre Red Bluffs ACEC was included within the boundary of Zone 6, despite the fact that all lands in the ACEC are within the elevational range occupied by the MDT.

Map 2.5-15. Area of Critical Environmental Concern within Proposed Zone 6



The Draft HCP must disclose why the western portions of the Red Bluffs ACEC were not included in Zone 6, especially given that these lands are likely far less damaged than the SITLA lands in Zone 6. The entire Red Bluffs ACEC could be designated as a Reserve to increase protections for MDT in the UVRU.

i. Closing Trails

The Draft EIS notes that most of the trails in the Red Cliffs Desert Reserve, including a large proportion of social trails, occur in MDT habitat:

“There are approximately 262 miles of trails within the Reserve, with 108 miles designated and approximately **66 miles of non-designated social trails** on BLM-administered lands and **88 miles of both designated and social trails on non-Federal lands** (BLM 2020b, AGRC 2020). Of these 262 miles of trails, 197 miles occur within suitable Mojave desert tortoise habitat in the Reserve (73 miles on designated trails, **53 miles on social trails**, and 71 miles on non-Federal lands)....The proliferation of these unauthorized trails into prime tortoise habitat can disturb wildlife, trample and compact soils, and spread nonnative plant species resulting in degradation of fragile tortoise habitat (USFWS 2020a).”

DEIS at 3-38.

Snow Canyon State Park closes the Johnson Canyon Trail annually from March 15 to September 14 to protect critical nesting grounds for MDT. The county could consider seasonal closures for trails in the Reserve that are routed through nesting grounds, or temporary closures for trails where reports of poaching, dog-off leash issues, and harassment are frequent.

j. Restricting all travel to designated routes and enforcing designations.

As stated earlier in this section, the county and BLM and SITLA should work together to better control recreation in Zone 6 and other relevant lands to reduce impacts to MDT and other

protected species. Social trail development and use is a major impact that can be controlled by restricting vehicles (bikes and motorized vehicles) to a well-planned system of designated routes and enforcing the designations rigorously. The county, SITLA and the BLM could enter into a MOU to do this together.

4. The Draft HCP does not Ensure Adequate Funding to Fully Implement Mitigation Measures, and FWS must require a More Robust Financial Commitment from the County.

FWS should evaluate the county funding commitments in terms of what is likely to be needed to address the ongoing threats as well as the amplified threats that may result from occurrence of some of the changed circumstances like future fires and severe drought, and FWS must not condone the county's attempt to arbitrarily limit its HCP financial commitments. In the draft HCP, the county commits to spending under a million dollars a year, with a meager .02 percent development impact fee, though the costs of full and complete implementation of the HCP conservation measures, together with other conservation measures designed to respond to changing circumstances (like wildfire, weed infestations and other changed circumstances) will likely far exceed this limit. Without greater county funding for the existing Reserve and the proposed Zone 6, the draft HCP would not provide the required maximum conservation efforts. The county's funding commitments do not meet ESA Section 10(a)(2) requirement that "the applicant will ensure that adequate funding for the plan will be provided."

a. The county fails to adequately fund Reserve Habitat and Fire Management.

County Funding for fire management is limited to \$324,426 over the 25-year term with the Northern Corridor Highway changed circumstance, and only \$162,213 if this changed circumstance is not triggered. Given the size and frequency of wildfires in MDT habitat over the last 20 years, \$324,000 is not enough to deal with the larger and more frequent fires that have defined the recent past and are anticipated in the future. For comparison, preliminary estimates for BLM suppression costs for the 2020 Turkey Farm Road Fire was \$1,724,000 and for the Cottonwood Trail Fire was \$442,000 (personal correspondence with G. Tibbetts). Furthermore, the Draft HCP at 138 notes that "In the event of multiple fires over several years, this commitment ends after the budgeted monies for this line item have been spent."

County Funding for habitat restoration is not specified in the Draft HCP, and generally falls under the umbrella of Fire Management. This is a major omission given that 14,000 acres burned in designated critical MDT habitat in the Reserve in 2020. Furthermore, habitat restoration following the devastating 2005 and 2006 fires has never been completed. This effort was led by BLM and UDWR with no support by the county documented in the Draft HCP. There is an obvious need for the county to spend more to help BLM and UDWR with cooperative fire prevention and post-fire habitat rehabilitation projects.

b. Greater county funding is also needed to increase law enforcement presence in the RCDR.

County Funding for law enforcement is limited to \$30,000 per year without the Northern Corridor Highway changed circumstance, and \$85,000 per year if this changed circumstance is triggered. There is currently a single law enforcement officer assigned to the entire 629,000-acre BLM St. George Field Office, meaning that coverage of the Red Cliffs NCA is very limited. The county currently supports sheriff details, but no fulltime law enforcement officers are assigned to the Reserve. The county must fund greater law enforcement presence to curb pervasive issues

with dogs-off-leash, poaching, social trailing and illegal use of fireworks (with devastating wildfire results) that lead to MDT mortality and habitat loss detailed in the DEIS.

c. Greater county funding could enhance public outreach and education efforts that now barely scratch the surface of public awareness.

County funding for outreach and education is limited to only \$3,000 per year without the Northern Corridor Highway changed circumstance, and \$12,000 per year if this changed circumstance is triggered. This funding would only provide for “videos, advertising, handouts, community engagement, contractor training, and volunteer coordination” (Draft HCP pg. 132). This funding, and the outreach activities it describes, is insufficient because it does not support additional education specialists. To reign in the damaging recreational uses, multiple education specialists would be required to provide outreach to the 82,775 annual visitors (2019) and the fast-growing communities adjacent to Zone 6 on tortoise awareness and authorized uses in Zone 6.

d. Greater county funding is needed to support Reserve recreation management.

County Funding for recreation management in the Reserve is limited to a mere \$1,500 per year over the 25-year term of the HCP without the Northern Corridor Highway changed circumstance and \$3,000 per year if this changed circumstance is triggered. This is woefully inadequate funding given the high level of visitation to the Reserve documented in the DEIS at 3-125 with 190,000 visits in 2019, and the pervasive issues with dogs off-leash, poaching and social trailing, in addition to the high levels of visitation and recreation damage to Zone 6 discussed elsewhere in these comments. At 3-38 the DEIS documents that there are 197 miles of trail occurring within suitable Mojave desert tortoise habitat in the existing Reserve with 53 miles on social trails. Additional funding for recreation management could support better and more frequent trail carsonite signs and trailhead signage, a dedicated staff person to lead a robust trail steward program, and restoration of illegal social trails.

e. Greater county funding is needed to support Reserve land acquisition.

County funding for land acquisition in the Reserve is limited to \$648,851 over the 25-year term of the HCP. This is an inadequate amount to support the acquisition of over 7,000 acres of state and private lands still remaining in the Reserve:

“As of February 2020, approximately 665 acres of private land and 6,432 acres of SITLA land occur within the Reserve and remain to be acquired for long-term management.

Future acquisition of the remaining private and SITLA lands in the Reserve will be a responsibility of the BLM under the Amended HCP and Implementation Agreement.”

DEIS at 2-16.

While the DEIS and HCP fail to disclose the cost of the SITLA and private lands, the price of recent land acquisitions in the Reserve provide a baseline for comparison. In 2019, BLM paid \$7 million to acquire approximately 160 acres of private land from Robert Brennan.⁸⁶ BLM paid roughly \$44,000/acre to acquire these inholdings. At that rate, the County’s \$648,851 would help to acquire only 15 of the remaining 7,000 acres left to be acquired in the Reserve. The county, with \$7 million left over in the bank after the 1995 HCP, must contribute more toward land acquisition to conserve the MDT and offset the impacts of take. Until these acquisitions are

⁸⁶ Federal LWCF-Acquired Properties From BLM’s Draft EIS

completed, as the Draft HCP notes numerous times, designated critical MDT habitat in the Reserve is at risk of development:

“It is possible that a private landowner or SITLA may seek alternative means of ESA compliance, other than through this Amended HCP, and ultimately develop lands within the Reserve.”

Draft HCP at 140.

The county is lobbying for a three billion dollar plus unnecessary Lake Powell Pipeline, and willing to impose massive development impact fees to help pay for it. But the county is only willing to spend less than \$450,000 per year on general HCP administration minus the Northern Corridor. This demonstrates their pro-development bias and improper frugality when it comes to tortoise conservation.

5. The Proposed Taking will Appreciably Reduce Survival and Recovery of MDT

Given the continued decline of tortoise populations in the RCDR and UVRU, FWS cannot properly approve the draft HCP/ITP that would largely continue this trend for the next 25 years because it would “appreciably reduce” the prospects for effective tortoise conservation and recovery. This criterion incorporates the ESA Section 7 jeopardy standard, which is defined at 50 CFR 402.02: “Jeopardize the continued existence of means to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species.” HCP Handbook at 16-5.

The conservation program in the 1995 HCP failed to support stable tortoise populations in the Reserve. The Northern Corridor would contribute to the existing instability, and would exacerbate the fragility of the Reserve (and the larger UVRU as discussed elsewhere in these comments) following the devastating Turkey Farm Road and Cottonwood Trail Fires that burned 14,000 acres of critical MDT habitat. Given the long-term decline of MDT populations in the Reserve and the UVRU documented in the DEIS (and discussed elsewhere in these comments), it is clear that MDT in the Reserve are faring more poorly now than they were in 1995. Therefore, it is critical that FWS insure that the County enhance the conservation program, without facilitating development of the proposed Northern Corridor Highway.

a. MDT populations are Collapsing.

In 1995, the estimated MDT population was 7,883 in the Plan Area/Washington County (Draft HCP at 63). The HCP at that time estimated that the incidental take would be 1,169 MDT which is about 15% of the total MDT. The FWS in its 1996 Biological Opinion stated that “the proposed issuance of a 20-year incidental take permit authorizing incidental take of desert tortoise... is not likely to jeopardize continued existence of desert tortoise...” (Draft HCP at 60). Indeed, the 1996 HCP estimated that the local MDT populations would total 6,714 in 2020.⁸⁷ Today the MDT population in the UVRU is estimated to be 4,449, which is almost 35% below anticipate 2020 population. Indeed, according to Table 6 on page 33 of the Draft HCP, it is estimated that the MDT population in the Upper Virgin River Recovery Unit (UVRU) declined by 24% over a ten-year period from 2004 to 2014.

⁸⁷ The 1995 HCP estimated the abundance of MDT in the Plan Area as 7,883 individuals. 1,169 MDT of these individuals were subject to incidental take, meaning that at least 6,714 MDT should be left in the Plan Area in 2020. (Draft HCP at 63).

Despite this collapse in local MDT populations, the Draft HCP would allow for additional take, but this time the Draft HCP refused to quantify the level of anticipated take, and, instead, identified a habitat surrogate. The trend between 2004 and 2014 was a 24% decline in MDT in UVRU, and increased stress to the MDT is projected in future decades from increased urbanization and roads, more frequent and intense fires, and climate change. If we conservatively⁸⁸ apply a 24% decline rate per decade (continuing the observed decline between 2004 and 2014) through 2045, the 2045 population of MDT would be about 1,950 in the UVRU, far below what is considered genetically sustainable.

The MDT is in a long-term serious decline. The proposed HCP including the NCH will destroy critical habitat and deal a mortal blow to the UVRU MDT population that is already teetering on the edge. The proposed take will appreciably reduce the likelihood of the survival and recovery of the species in the wild. There is no other rational interpretation of the data.

b. A Jeopardy Opinion is Warranted

If granted, the County's ITP application would authorize the loss of one-hundred percent of the known, occupied and potential MDT habitat in the plan area on non-federal, non-tribal lands (66,301 acres) in exchange for the protection of 67,835 acres in the Red Cliffs Desert Reserve and Zone 6 (61,022 acres and 6,813 acres respectively), *after* adversely impacting the function of the Reserve by routing a four-lane highway through "the most important high-density cluster of desert tortoises in the recovery unit (DEIS at 3-63)."

Washington County is applying to protect and destroy roughly equal portions of MDT habitat (based on the results of habitat modeling that determined potential, not even suitable, habitat), not counting federal and tribal lands over which the county has no jurisdiction. This 1:1 ratio of development to conservation is unsustainable given the adverse impacts to the MDT caused by the NCH documented in the DEIS, and the steady declines of MDT throughout the Reserve and the UVRU. The proposed actions will adversely modify designated critical habitat and jeopardize the MDT in the UVRU, and hence to the MDT across its range. This will lead to a jeopardy determination, based on the following:

- 1- For the past 20 years, MDT populations have steadily declined in 4 out of 5 recovery units. (DEIS at 3-47).
- 2- MDT in the UVRU have declined by 24.3% between 2004 and 2014. (DEIS at 3-47).
- 3- "The USFWS (2020a) used a tortoise density value of 3.4 adult tortoises per square mile to estimate a total abundance of 4,450 adult Mojave desert tortoises in the UVRU, with more than half in the Reserve." (DEIS at 3-47).
- 4- "The USFWS concluded that a minimum density of less than 3.9 adult Mojave desert tortoises per square kilometer is likely not viable (FWS 1994 and 2019a)."⁸⁹ (DEIS at 3-48). Thus, the density of MDT in the UVRU is not viable *pre-Northern Corridor Highway*.
- 5- "Tortoise abundance in each of the 11 analytical units in the UVRU is lower than the 3,000 animals recommended by FWS (USFWS 2020a)." (DEIS at 3-48).

⁸⁸ This is very conservative given that the DEIS at 3-48 states that "Within the Reserve, UDWR surveys between 1999 (3,404 Mojave desert tortoises) and 2020 (2,011 Mojave desert tortoises) show an overall decline of 41 percent (UDWR 2020)." If we were to apply this decline rate to the entire UVRU (which is certainly reasonable since conservation in the Reserve is higher than outside of the Reserve), we would anticipate by 2045 a UVRU population of about 1,224.

⁸⁹ 10 adult MDT/sq. mile is equivalent to 3.9 MDT/sq. km

- 6- “Even though the Reserve has some of the highest densities, the small geographic size of both the Reserve and the UVRU compromises the potential viability of the Mojave desert tortoise population.” (DEIS at 3-48).
- 7- The proposed Northern Corridor Highway is routed through one of the most important high-density clusters of MDT in the UVRU. (DEIS at 3-63).
- 8- On top of recent wildfire devastation, the highway could devastate and substantially diminish this most important cluster of tortoise in the already-vulnerable UVRU.
- 9- Since damage caused by the highway cannot be mitigated by Zone 6, and the conservation actions outlined in the draft HCP fail to offset the take, the whole recovery unit is at stake because of this highway.
- 10- When the UVRU no longer is a functional Recovery Unit, by definition the MDT will not be able to be conserved and recovered across its range.

In conclusion, the conservation measures proposed in the Draft HCP have failed to halt the decline of MDT in the RCDR between 1995 and 2020. Because the NCH is being considered as a changed circumstance on top of the inadequate conservation measures, the integrity and functioning of the Reserve will be violated. The resulting habitat fragmentation and destruction will lead to smaller MDT population sizes that are more susceptible to stochastic events, genetic drift and inbreeding, genetic variation declines, and decreases in heterozygosity (Berry and Murphy 2019). Issuance of an ITP based on the conservation measures in this Draft HCP will violate Section 10(2)(A) of the ESA. FWS therefore improperly accepted the county’s draft HCP with the NCH condition because it would violate the ESA.

c. Allowing competitive events in Zone 6 will appreciably reduce survival and recovery of MDT.

Large-scale competitive events were not listed as covered activities under the 1995 HCP. The draft HCP claims that it is carrying forward the covered recreation uses authorized in the 1995 HCP (draft HCP at 11-12), yet proposes to make exceptions for at least 5 competitive mountain biking events in Zone 6 that draw thousands of spectators and participants, in addition to special events including jamborees and festivals. The DEIS estimates that BLM Special Recreation Permit events attract 4,000 visitors in 2019. DEIS at 3-136.

The Draft HCP reiterates covered activities inside the RCDR authorized under the 1995 HCP that are being carried forward in the amended HCP:

“Recreation uses and related facilities: Covered Activities include individual or small-group forms of recreation on designated trails or use areas within the Reserve, when performed in accordance with the conservation measures specified in the PUP (see Appendix B). As established in the 1995 HCP, this set of Covered Activities explicitly includes hiking, birdwatching, photography, camping, horseback riding, and hunting by unorganized individuals or small groups of individuals in guided or controlled tours (1995 HCP:25–43).

Draft HCP at 13.

The 1995 HCP states that covered recreation activities must be performed in accordance with conservation measures outlined in the Public Use Plan (PUP):

“Organized competitive and recreational sporting events **found to be low-impact to habitat** are only permitted in the Reserve with a special use permit issued by the BLM or State Parks in coordination with the HCP Administrator. An organized recreational activity is any scheduled event with a specific planned purpose. Those **organized**

recreational activities which conflict with the intended protection of the desert tortoise or, due to the nature of the event, are unable to provide the degree of supervision necessary to prevent harm to desert tortoises or prevent damage to habitat will not be permitted within the Reserve. These activities and events should generally be staged on designated roads only. **Monitoring for previous-use impacts, habitat density and quality, numbers of spectators and participants, and time of year will all be factors in the decision to issue/re-issue a permit.”** (emphasis added). Red Cliffs Public Use Plan (PUP) at 46.

Based on the PUP’s recommended conservation measures, competitive sporting events cannot be allowed to occur in Zone 6 if added to the Reserve. The Draft HCP and DEIS failed to include monitoring reports for previous-use impacts resulting from competitive events on BLM lands in Zone 6, thus failing to show that these events are low-impact to MDT habitat. The Draft HCP and DEIS have not demonstrated that these events are not in conflict with the intended protection of the MDT, and that the degree of supervision necessary to prevent harm to MDT or habitat can be achieved.

Both the DEIS and Draft HCP fail to disclose the number of participants involved in these events and anticipated numbers of spectators. It can be expected that these events may cause adverse, cumulative impacts to the MDT based on the high level of visitation and questionable timing of events like the True Grit Epic Mountain Bike Race discussed in the April 19, 2020 SG News Article “Following True Grit Epic, race participants question organizers’ decision to hold event.” The duration, timing, and uses that occur in conjunction with the events are also concerning.

Many participants arrive early or stay after the events, utilizing Zone 6 for camping and recreation, thereby extending the window of time that adverse impacts could be occurring in tortoise habitat. Most competitive events occur in spring and fall, critical MDT nesting and breeding seasons.

Huge influxes of visitation associated with competitive events leads to uses in Zone 6 that adversely impact the MDT and its habitat including: dispersed camping, camp fires, heightened risk of wildfire, litter and subsidies for predators, human waste, off-trail motorized, non-motorized and mechanized travel.

Additionally, discussion of mountain biking in the DEIS gives reason for concern:

“Very little is known about whether wildlife responds differently to mountain biking versus hiking. Mountain bikes travel at faster speeds than hikers and may increase chances of accidental encounters or collisions with Mojave desert tortoise. The faster speeds of an approaching bike may startle a tortoise, which could result in the tortoise voiding its bladder and put it at risk of dehydration. Faster speeds may also reduce reaction time by bicyclists to avoid collisions. Management has restricted bicycle use to designated trails throughout the Reserve.”

DEIS at 3-39.

The Draft HCP and FEIS must detail the typical number of participants and length of stay associated with each competitive event, jamboree, and festival that occurs in Zone 6. The Draft HCP and FEIS must not allow jamborees focused on motorized recreation. Finally, the Draft HCP and FEIS must disclose the impacts of past competitive events to MDT and habitat in Zone 6 and assess whether these events can indeed be “covered activities.” The coalition alleges that

they cannot because of the high volume of visitors, and recreation, camping, fire and litter impacts.

6. The Proposed Habitat Surrogate is Unlawful

Issue

16. In the Draft HCP, the Washington County Commission fails to identify an expected level of “take” of MDT, and, instead, adopts a so-called habitat surrogate: the acres of MDT habitat that would be subject to direct modification by the covered activities. HCP at ii, and 52-55.

This is a marked departure from the 1996 HCP and ITP, which identified a numerical threshold for take – i.e., 1,169 MDT individuals. This proposed habitat surrogate is arbitrary and capricious, and fails to adhere to the requirements of the ESA.

A habitat surrogate is a way of defining take by the amount of adversely affected habitat rather than by the number of individuals harassed or killed. The Service has previously explained that habitat surrogates may be “more practical and meaningful to monitor project effects” because they can “provide a clear standard for determining when the amount or extent of anticipated take has been exceeded and consultation should be reinitiated.” Interagency Cooperation–Endangered Species Act of 1973, as Amended; Incidental Take Statements, 80 Fed. Reg. 26,832, 26,839 (May 11, 2015) (codified at 50 C.F.R. § 402.14(i)(1)(i))

Service regulations list three elements necessary for a proper habitat surrogate. First, FWS must include a description of “the causal link between the surrogate and take of the listed species.” 50 C.F.R. § 402.14(i)(1)(i). A “causal link” is an “articulated, rational connection” between the activity and the taking of species. *Ariz. Cattle Growers’ Ass’n v. U.S. Fish & Wildlife Serv.*, 273 F.3d 1229, 1250-51 (9th Cir. 2001). The Service establishes a causal link by examining the habitat requirements and behavior of the listed species and determining the effect of the expected habitat modification.

Second, FWS must explain “why it is not practical to express the amount or extent of anticipated take or to monitor take-related impacts in terms of individuals of the listed species.” 50 C.F.R. § 402.14(i)(1)(i). There is no clear definition of what makes a numerical limit “not practical” (or not practicable), but the Service has indicated that the standard does not require impossibility. Finally, FWS must set “a clear standard for determining when the level of anticipated take has been exceeded.” 50 C.F.R. § 402.14(i)(1)(i). A “clear standard” must be able to adequately trigger re-initiation of consultation, and it cannot be “vague and undetectable criteria,” *Ariz. Cattle Growers’ Ass’n*, 273 F.3d at 1250–51.

Washington County’s habitat surrogate fails on the first two factors. First, the HCP asserts that its proposed habitat surrogate is causally linked to the take of MDT because “[t]racking take of MDT in terms of the acres of MDT habitat that is directly modified by Covered Activities is a surrogate metric with a rational link to the true number of taken individuals. All individual MDT that are reasonably certain to be incidentally taken by Covered Activities are those that use, at least occasionally, areas of MDT Habitat that would be directly modified by the Covered Activities.” HCP at 54.

But this surrogate only accounts for “direct” impacts of a Covered Activity, and the best

available science establishes the indirect impacts on MDT of Covered Activities can extend for up to 4.6 kilometers from the area directly impacted. DEIS at 3-35. Indeed, the HCP itself acknowledges that “indirect impacts” from Covered Activities - including land clearing, building and construction, grazing and farming, utilities and other infrastructure, resource extraction and renewable energy development - may “take” MDT. HCP at 103-106. The HCP is not free to ignore the indirect impacts of the Covered Actions when determining a habitat surrogate, however. *Defenders of Wildlife v. U.S Dept. of Interior*, 931 F.3d 339 (4th Cir. 2019) (rejecting habitat surrogate because it failed to consider indirect impacts of covered activities).

The habitat surrogate is also unlawful because the HCP fails to establish that relying on a numerical threshold is impractical. Indeed, the record here shows that the Service, UDWR, and others routinely collect population monitoring data on MDT, and it is no excuse to assert, as the HCP does, that existing population surveys methods “do not achieve perfect detection” of MDT in the area. HCP at 53. Perfection is not the appropriate standard here, and evidence of past surveys have been relied upon in rejecting habitat surrogates. *See., e.g., Defenders of Wildlife v. U.S Dept. of Interior*, 899 F.3d 260, 276 (4th Cir. 2018); *Miccosukee Tribe of Indians of Fla. v. United States*, 566 F.3d 1257, 1276 (11th Cir. 2009) (finding unpersuasive FWS’s argument that a species was difficult to detect when the record showed the species being counted regularly). For these reasons, the HCP’s proposed habitat surrogate is unlawful, and any Incidental Take Permit, Biological Opinion, or Incidental Take Statement employing this surrogate will be unlawful, too.

7. The Draft HCP is Arbitrary and Capricious.

Issue

17. The Service Cannot Grant Washington County’s ITP Application because it does not meet OMB requirements.

According to the OMB Form 3-200-56 (October 2013), an applicant for a renewed or amended HCP has three options “for providing the required information for an incidental take permit application”: Option I. New Incidental Take Permit & Supplementary Information for Renewal or Amendment of an Existing Valid Permit (*With Changes*); Option II. Renewal or Amendment of an Existing Valid Incidental Take Permit (*With Changes*); and Option III. Renewal/Re-issue of an Existing Valid Incidental Take Permit (*Without Changes*) Using My Current Application Package On File. See Form 3-200-56. Options I and II require the applicant to file with the Service detailed information on the outline of the covered actions, species at issue, and changes to a prior application. *See id.* Applicants choosing Option III, however, need not provide any new information, and only need to certify that “the statements and information submitted in support of my original application for a U.S. Fish and Wildlife Service Incidental Take permit [] are still current and correct and hereby request [either renewal or re-issuance] of that permit without changes. *Id.*

Applicants are warned, however, to “[s]ign the [] statement if you are applying to renew or re-issue an existing valid Incidental Take permit without changes. If you are proposing changes to your Incidental Take permit, you must use Options I. and II. above.”

On January 29, 2015, Robert Sandberg of Washington County submitted an application seeking renewal of its prior Incidental Take Permit. In this application, Sandberg requested renewal under Option III, and requested renewal “without changes.” *See* Federal Fish and Wildlife

Permit Application Form (dated January 29, 2015). But, as is clear from review of the Draft HCP and associated NEPA documents, Washington County is not seeking a renewal of its prior ITP without changes; instead, Washington County is seeking a new ITP with modified “take” triggers, metrics and criteria, and other important changes (as discussed herein).

As such, the Service is without authority to grant the ITP as requested, and any approval or grant of the application will be arbitrary and capricious.

Issue

18. The Northern Corridor Highway and Associated Mitigation is not a “Changed Circumstance.”

The Service cannot consider the NCH as a “changed circumstance” like climate change, drought, disease, or other factual situations generally beyond direct government control; instead, the Service must consider the NCH as a “covered activity.” ESA regulations define changed circumstances as:

“changes in circumstances affecting a species or geographic area covered by a [conservation plan](#) or agreement that can reasonably be anticipated by plan or agreement developers and the Service and that can be planned for (e.g., the listing of new species, or a fire or other natural catastrophic event in areas prone to such events).”

50 CFR § 17.3. The NCH does not meet the definition for a changed circumstance, first, because it is a discretionary action within the County’s control. Second, a changed circumstance must be covered by a conservation plan; and yet the County has expressly exempted the NCH from the revised and amended HCP. Indeed, the County was forced to ignore the NCH in its new HCP (and designate it a “changed circumstance” versus “covered action because the NCH violates the original conservation plan that the county claims it is carrying forward from the 1995 HCP:

“The impacts of take authorized with the Original ITP and reauthorized with the Extended/Amended ITP are fully offset by the conservation program of the 1995 HCP (see Chapter 6.2.1). This conservation program is carried forward and expanded in this Amended HCP.”

Draft HCP at 69.

Yet the Reserve is the core of the conservation plan implemented in the 1995 HCP, which noted “[t]he central conservation measure of the 1995 HCP was the creation of the 61,022-acre Reserve.”

Draft HCP at 2.

The Northern Corridor Highway undermines the basic intended function of the Red Cliffs Desert Reserve to off-set take authorized in the 1995 ITP. Thus, the Northern Corridor Highway cannot be considered a covered activity. In an attempt to skirt the law, the county improperly dresses the Northern Corridor up in the guise of a “Changed Circumstance.”

Third, the definition points toward changed circumstances as planned responses to stochastic events outside of an applicant’s control. The definition does not suggest that a changed circumstance can be used as a mechanism to promote incompatible uses, like the NCH, which would fragment and undermine the central mitigation feature of the 1995 HCP.

Issue

19. The Draft HCP Failed to Examine a Reasonable Range of Alternatives

As discussed in detail in the NEPA section of these comments, BLM and Washington County must consider all viable alternatives to constructing the NCH through the Red Cliffs NCA, including an alternative that would extend the Incidental Take Permit *without the Northern Corridor Highway* was not considered. The Red Cliffs Conservation Coalition scoping comments requested study of this alternative. The BLM rejected this alternative without explanation, and the draft HCP does not consider this approach either.

Issue

20. The draft HCP improperly carries forward the original HCP's No Surprises clause despite the foreseeable Northern Corridor Highway.

Contrary to Washington County's claims that "it has met or exceeded its specified responsibilities for addressing the impacts of the previously authorized incidental take and that these new commitments are above and beyond the actions required of it to minimize and mitigate the impacts of the reauthorized incidental take," the facts here show that the HCP and ITP has not been successful in stopping or even slowing the rapid decline of threatened tortoises in the RCDR nor the larger plan area of the UVRU. The Draft HCP at 78 states ("However, the County asserts that it has met or exceeded its specified responsibilities for addressing the impacts of the previously authorized incidental take and that these new commitments are above and beyond the actions required of it to minimize and mitigate the impacts of the reauthorized incidental take. The County may rely on the No Surprises assurances afforded to it by the good-faith completion of its identified responsibilities under the 1995 HCP.").

Washington County has failed to implement a number of necessary conservation measures that could have slowed or mitigated for this decline, including with respect to adequate post-fire RCDR habitat rehabilitation, stopping chronic RCDR enforcement problems such as illegal social training and dogs off leash, and controlling rising raven predation. As noted extensively elsewhere in these comments, the RCDR tortoise population has declined by 41 percent (See DEIS Volume 2, page 3-48) during the past twenty years. The UVRU tortoise population has declined by 24.3 percent (McLuckie 2018).

Although an HCP may be renewed, FWS must evaluate the Draft HCP/ITP application based on the current law and best available scientific information. The previous 1995 HCP and FWS BO relied on scientific information and analysis that are now substantially outdated and no longer reliable. The county nevertheless expects FWS to accept and carry forward this 25-year-old information and analysis in terms of the previously authorized level of incidental take and to maintain the previous No Surprises assurances.

Meanwhile, the county proposes to construct the NCH through RCDR Zone 3, in designated tortoise critical habitat, which the original HCP found was the "core area" for tortoise protection and that the establishment of the RCDR was the dominant benefit and central mitigation feature of the original HCP. When the county previously put forward the proposed NCH, FWS properly found that it would be a clear violation of the original HCP.⁹⁰ In its renewal application, the county is attempting to "have its cake and eat it too" by wanting to carry forward its previous HCP benefits while simultaneously undermining that same HCP through its insistence on building the NCH.

⁹⁰ See June 4, 2007 letter from USFWS to Washington County. <https://conserveswu.org/wp-content/uploads/Fish-and-Wildlife-letter-no-highway-2007.pdf>

As required under ESA Section 10 (a)(2), “...the applicant will, to the maximum extent practicable, minimize and mitigate the impacts of such taking” In this case, the draft HCP and associated DEIS identify many feasible conservation measures that can and should be implemented by the county because they are clearly within this “maximum extent practicable” standard. However, the county is improperly attempting to condition implementation of some of those otherwise necessary and practicable conservation measures on approval of the harmful NCH.

The county’s overt willingness to violate the original HCP by constructing the NCH, combined with the unfortunate scientific reality of rapidly declining tortoise populations, should negate the previous incidental take authorization and No Surprises benefits and necessitate a *de novo* review of the current draft HCP under the appropriate scientific and legal standards.

Issue

21. The draft HCP improperly and falsely claims that HCP implementation has been successful despite a 41 percent decline of tortoises in the RCDR and a 24 percent decline of tortoises in the UVRRU.

The draft HCP fails to include revisions appropriate to address changes to the status of the threatened MDT. The DEIS and draft HCP both document a steady decline in MDT across the range, the UVRRU, the Reserve, and in Zone 3, the location of the proposed NCH:

- Table 6 on pg. 33 of the draft HCP shows a 24.3% reduction in tortoise numbers in the Upper Virgin River Recovery Unity.
- Pg. 3-47 in Vol. 2 of the draft EIS says that “the 2014 range-wide Mojave desert tortoise population estimate represents a decline of almost 125,000 adults over a 10-year period, a nearly 37 percent overall population decline (Allison and McLuckie 2018).”
- Pg. 3-48 in Vol. 2 of the draft EIS says that “within the Reserve, UDWR surveys between 1999 (3,404 Mojave desert tortoises) and 2020 (2,011 Mojave desert tortoises) show an overall decline of 41 percent (UDWR 2020).”
- Table 3-53 in Vol. 2 of the draft EIS shows a 31% decline in MDT abundance within Zone 3 between 2017 and 2019.

Declines of MDT in all recovery units in the state of California led to a 2019 petition to upgrade the State listing of the Mojave desert tortoise from threatened to endangered.

In this draft HCP, agencies are facilitating development of the NCH inside a dedicated Reserve where MDT are already at risk of extinction, in addition to applying to take MDT on 66,301 acres from occupied and potential habitat outside the Reserve.

Equally important is the fact that 22% of MDT designated critical habitat in the UVRRU is *no longer suitable for MDT* in 2020. Draft Biological Report at 14. To prevent MDT extirpation in the UVRRU, all remaining critical habitat in a dedicated Reserve must remain protected. The draft HCP must respond to the documented declines of MDT and must include revisions that enhance protections for the MDT in the Reserve, first and foremost by denying construction of the NCH.

Issue

22. The draft HCP ignores possible future up-listing of Mojave desert tortoises from threatened to endangered species status as a foreseeable “changed circumstance,” and fails to identify appropriate conservation measures.

Since 2004, MDT populations throughout the listed range, minus the Northeastern Mojave Recovery Unit, have declined by 37% (Allison and McLuckie 2018). Populations in the Upper Virgin River Recovery Unit have declined by 24.3% between 2004 and 2014.

In California, declines in all recovery units within the state led to a 2019 petition to upgrade the State listing of *Gopherus agassizii* from threatened to endangered. The draft HCP must consider the up-grading of the Mojave desert tortoise as a changed circumstance. In failing to do so, the draft HCP is arbitrary and capricious.

Issue

23. The draft HCP and associated DEIS analysis improperly fail to address strong public scoping comments requesting consideration of structural changes to how the HCP would be administered and implemented going forward.

In response to the notice of intent to prepare an environmental impact statement, the undersigned local, regional and national conservation and recreation groups submitted hundreds of scoping comments. Washington County, BLM and the Service have ignored many of these comments, undermining the very purpose of NEPA’s public engagement requirements.

In addition, over the past 20+ years, Washington County continues to dominate HCP administration and has demonstrated a clear pattern of bias toward development interests when potential conflicts with tortoise conservation occur. Likewise, the HCAC and TC have consistently fallen in line with whatever county officials want, which is unsurprising because the county commission must approve all nominations to serve on the HCAC which gives the county a veto over HCAC and TC participation.

FWS and BLM must not allow this county dominance to continue because it is tantamount to them abdicating their independent federal management authority to county officials. FWS and BLM should assume more prominent roles in future HCP administration to ensure diversity, transparency, and accountability.

4.2 Issue with Draft Implementation Agreement for the HCP

Comments on the Draft HCP Implementation Plan

Issue

1. The Draft Implementation Agreement is Inadequate

The draft implementation agreement (IA) is inadequate because it either omits or provides insufficient information under the six required elements of an IA. These required elements include:

- (1) defines the obligations, benefits, rights, authorities, liabilities, and privileges of all signatories and other parties to the HCP;
- (2) assigns responsibility for planning, approving, and implementing specific HCP measures;
- (3) specifies the responsibilities of the FWS, NMFS, or other state and Federal agencies in implementing or monitoring the HCP's conservation program;
- (4) provides for specific measures when habitat acquisition, transfer, or other protections are part of the HCP's mitigation program;
- (5) establishes a process for amendment of the HCP, where necessary; and
- (6) provides for enforcement of HCP measures and for remedies should any party fail to perform on its obligations under the HCP.

The FWS HCP Handbook provides IA guidance. While an IA is not required for some simple HCPs, it is strongly recommended when, as in this case, there are multiple parties with different legal authorities, jurisdictional boundaries, and HCP related roles and responsibilities. When an adequate IA has been prepared and properly executed, it is included among the ITP's terms and conditions, and, if the IA or other of those terms and conditions are violated, the ITP may be revoked. Washington County's draft IA is therefore of crucial importance, as it would play a pivotal role in ensuring the future success of HCP implementation.

Unfortunately, after reviewing the county's draft IA, we find that it is clearly inadequate. It ignores some required elements and fails to provide sufficient information for other elements. Section 6(B) of the draft IA provides a key example. It notes that each party agrees to fulfill its obligations under the IA and HCP, but the IA never expressly identifies these duties and obligations. The central purpose of the IA is to lay out these specific duties and obligations for each party to the IA. By simply citing the draft HCP, the draft IA defies this purpose. In addition, Section 6(D)(1)-(3) provides for some Party commitments but does not describe specifically what they are. Indeed, if an IA is needed, then its job is to give specific direction to each Party so there can be no doubt or ambiguity about what they are expected to do and when they must do it. The draft IA fundamentally fails to do that.

We also have the following concerns with some of the county draft IA's specific provisions. In each case, the draft IA provision is shown in italics, followed by our response in bold to that provision.

Section 2 Recitals:

J. The reason the County seeks a renewal of the Original ITP is to avail non-federal property owners of the previously authorized, but as yet unused, take of MDT under the Original ITP for the next 25 years

Issue

- 2. The county's "reason" for this ITP renewal is inappropriate. The county should not be able to carry forward and use the previously authorized take from the 1996 ITP. This take level is based on outdated science and does not reflect the current facts. Given the significant and continuing decline in RCDR, NCA, and UVRRU tortoise populations in the intervening quarter-century, a new take level must be determined consistent with the current science, factual situation, and laws. The "reason" for this ITP should be to ensure efficient, effective, and timely implementation of an approved HCP. Doing so would advance bona fide tortoise conservation efforts while allowing development to continue on non-federal lands with tortoise habitat.**

K. In cooperation with the Parties and other stakeholders, the County prepared and submitted to the Service in 2020 an amended and restated Washington County Regional Habitat Conservation Plan (the "Amended HCP"), which addresses certain changes in regulation and scientific data that have arisen since the approval of the 1995 HCP. For example, since the approval of the 1995 HCP, the Service has converted to a formal rule the Service's prior "No Surprises" or "Deal-is-a-Deal" Policy. 50 CFR 17.22(b)(5). In addition, the Service has adopted across the range of the MDT new descriptions of potential MDT habitat as well as new estimates of MDT population densities within habitat.

L. For the foregoing reasons, in addition to the requested renewal of the Original ITP, the Service determined that it was necessary to amend in certain, limited respects the Original ITP and, therefore, has issued to the County Incidental Take Permit Number 036719-1 (the "New ITP"), which has the effect of both renewing the term of and amending certain provisions of the Original ITP.

Issue

- 3. This is the county's way of saying that it wants to continue under the previous HCP/ITP, and it only supports revisions that are based on new FWS ESA regulations and policies. As previously indicated, it is not appropriate to "carry forward" the previous HCP and ITP provisions in light of the significant changed circumstances that have occurred over the past quarter century.**

3. Purposes

The purposes of this IA are:

- i. To ensure the cooperative implementation of the Amended HCP by the Parties
- ii. To create an agreement by which the State Parties (i.e., Utah Department of Natural Resources and the School and Institutional Trust Lands Administration) may, in exchange for certain commitments in the Amended HCP, rely on and benefit from the incidental take authorization of the New ITP for their Covered Activities; and
- iii. To describe certain terms not addressed in the Amended HCP, but which are important to the implementation thereof in accordance with the mutual intent of the Parties.

Issue

- 4. It is telling that there are no purposes related to "successful" implementation of the HCP nor anything about stopping or slowing the current rapid decline in RCDR, NCA, and UVRU tortoise populations. This draft IA is clearly biased toward facilitating future highway building and other developments. The dominant purpose of an IA should be to ensure that the HCP is properly and adequately implemented to advance the conservation and recovery of the ESA listed species.**

C. Conflicts and Control

The terms of this IA and the terms of the Amended HCP shall be reasonably interpreted to be supplementary to and consistent with each other. In the event of any direct conflicts between the terms of this IA and the Amended HCP, the terms of the IA shall control.

Issue

- 5. Note that when any conflict occurs, the IA controls rather than the HCP. This is backward since the HCP is the basis for FWS issuance of the ITP. This is also problematic because this draft IA improperly relies on the HCP in terms of the specific duties of the Parties. A vague and incomplete IA should not supersede the HCP.**

D. Specific Commitments

The following commitments contained within the Amended HCP are highlighted for clarity:

- i. Commitments of County
- ii. Commitments of SITLA
- iii. Commitments of UDNR

Issue

- 6. Note that the BLM and FWS commitments are not included, even though they are Parties to this agreement. And nothing is provided to describe the specific County, SITLA, and UDNR commitments.**

5. Effective Date and Term

A. Previous Agreement Superseded

This IA supersedes and replaces the First IA in its entirety.

Issue

- 7. Note that the previous ITP is superseded once the New ITP takes effect. Elsewhere the county wants to “carry forward” or “renew” past HCP and ITP provisions, but apparently not in this draft IA provision. Despite the county’s inconsistencies, we concur that a new IA should supersede a previous one.**

7. B. Effect of a Certificate Holder Default

So long as the New ITP remains in effect and a Certificate Holder is in compliance with applicable provisions of the Amended HCP, that Certificate Holder shall be deemed to have with respect to the Certificate Holder’s Covered Activity, the full benefits and authorities of the New ITP. In the event that the Service may seek to suspend, terminate, or revoke the Original ITP for reasons not the fault of a Certificate Holder, and that Certificate Holder is in compliance with the aforementioned provisions, the Service shall seek to craft a remedy, on a case-by-case basis, that does not affect that Certificate Holder’s rights, benefits, and responsibilities under the Original

ITP prior to suspending, terminating, or revoking the Original ITP. If it is not practicable to craft such a remedy and the Service suspends, terminates, or revokes, the Original ITP, the Service will process for issuance to any such Certificate Holder an ITP conferring the same rights, benefits, and responsibilities with respect to the Certificate Holder's Covered Activities, without additional requirements or conditions beyond those applicable to the Certificate Holder under the Amended HCP. Additionally, the Service agrees that a breach by a Certificate Holder of its obligations will not be considered a breach by any other Certificate Holder. In the event a Certificate Holder has materially breached its obligations and, after reasonable notice and opportunity to cure, such Certificate Holder fails to cure, remedy, rectify, or adequately mitigate the effects of such breach, then the County or the Service may terminate the Certificate Holder's assurances under the New ITP.

Issue

- 8. This provision is poorly written and confusing. It seems to incorrectly go from the New ITP (2020) to the Original ITP (1996), when this draft IA says that it entirely supersedes the Original ITP. If superseded, there should be no legal effect of nor references to the Original ITP.**

8. Miscellaneous Provisions

A. Nullification of Agreement

In the event that the New ITP is revoked in its entirety or attempted to be substantially modified without the consent of the Parties, this IA shall be null and void and, in such event, no Party shall be bound by its terms.

Issue

- 9. The "attempted to be substantially modified" text is improperly vague. It does not identify which Party determines when this condition may be triggered, how they make that determination, and how "attempted" and "substantially modified" are defined. For example, if the dwindling tortoise populations crash, and FWS properly proposes to strengthen the HCP and/or ITP as a last-ditch effort, that proposal might be construed to constitute an "attempt" to "substantially modify" and therefore cause automatic nullification of the IA, thereby violating the IA as a term and condition of the issued ITP. This provision is so wide open that it may give any Party the ability to walk away from its HCP, ITP and IA duties if it dislikes something proposed by FWS or perhaps even third-parties such as environmental groups.**

E. Availability of Funds

Implementation of this IA and the Amended HCP by the Parties is subject to the requirements of the federal Anti-Deficiency Act, the laws of the State of Utah, and the availability of appropriated funds from each Party respectively. The Anti-deficiency Act prohibits Federal agencies from incurring obligations or making expenditures (outlays) in excess amounts available in appropriations or funds (31 U.S.C. § 1341 (a)(1)). Agencies of the State of Utah are likewise enjoined in Utah Code § 63G-6a-1204 from entering into contracts or incurring obligations that commit funding beyond that appropriated. Therefore, Federal and state agency support of the conservation measures in the HCP is contingent on having sufficient funding over the term of the HCP.

Issue:

- 10. On its face, this provision looks reasonable. However, we are concerned that it may become a potential "funding escape hatch" for four of the key Parties (BLM, FWS, UDWR, SITLA). There is nothing about these Parties developing**

and submitting budget/appropriations requests to secure adequate funding to perform their respective HCP, ITP, and IA roles and responsibilities. If the IA is to be implemented in good faith, we believe that the federal and state Parties should be obligated to use their "best efforts" to try to obtain the necessary funds. Politicians tend to fund "squeaky wheels". If these Parties are silent or apathetic about making funding requests, they are likely to receive inadequate funding. They should be obligated to ask for what they need.

F. No Third-Party Beneficiaries; Limitation of Remedies

Without limiting the applicability of rights granted to the public pursuant to the ESA or other applicable law, and except as specifically provided with respect to the Beneficiaries, this IA shall not create any right or interest in the public, or any member thereof, as a third party Certificate Holder hereof, nor shall it authorize anyone not a Party to this IA to maintain a suit under the provisions of this IA. The duties, obligations, and responsibilities of the Parties to this IA with respect to third party beneficiaries shall remain as imposed under applicable provisions of state and Federal law.

Issue:

- 11. This is clearly intended to shut out the public and shield the Parties from any annoying "external" public accountability. Fortunately, this provision cannot supersede any legal standing for the public under ESA, NEPA, OPLMA, FLPMA, or APA.**

Notwithstanding anything contained in the IA to the contrary, the Parties hereto expressly agree and acknowledge that any remedy for a material breach of this IA by another Party is strictly limited to suspension or termination of this IA or, in the case of a breach which also qualifies as a breach by the County of the New ITP, the Service shall have such remedies against the County with respect to such New ITP as are available to the Service under applicable law and regulation.

Issue:

- 12. This provision is improper and too limited. Except for losing ITP coverage for a breach, all of the Parties (save the county) would apparently be shielded from any FWS or DOJ enforcement action for illegal MDT take. A breach would presumably occur by a Party (including the approved municipalities and developers that receive certificates from the county) when MDT take occurred outside of the HCP/ITP "covered activities." In essence, if breaches are triggered under this provision, some illegal MDT take has likely already happened. Breaches are outside of the ITP's protection, and therefore we seriously question the need or justification for this provision. No IA provision should be allowed to weaken or undermine the explicit HCP and ITP provisions, nor potentially hinder any otherwise necessary and appropriate enforcement actions for illegal MDT take.**

I. Force Majeure

If the Parties are wholly or partially prevented from performing obligations under this IA because of unforeseeable causes beyond the reasonable control of and without the fault or negligence of the Parties (Force Majeure), including, but not limited to, acts of God, labor disputes, sudden actions of the elements, epidemics, or actions of nonparticipating Federal or state agencies or local jurisdictions, the Parties shall be excused from whatever performance is affected by such unforeseeable cause to the extent so affected, and such failure to perform shall not be considered a material violation or breach, provided that nothing in this section shall be

deemed to authorize any Party to violate the ESA and provided further that: (i) the suspension of performance is of no greater scope and no longer duration than is required by the Force Majeure; (ii) within forty-five (45) days after the occurrence of the Force Majeure, affected Parties shall give the Service written notice describing the particulars of the occurrence; and (iii) Parties use their best efforts to remedy their inability to perform (however, this section shall not require the settlement of any strike, walk-out, lock-out, or other labor dispute on terms which in the sole judgment of the Parties are contrary to their interest).

Issue:

- 13. This looks like standard text. However, some of the terms are vague and should be clearly defined. For example, "epidemics" because of the current COVID 19 pandemic. This pandemic has properly caused the need for important safety precautions, but it has not prevented most government and business functions from continuing or resuming. "Sudden actions of the elements" is also impermissibly vague.**

M. No Admission

Neither the application for the Original ITP renewal nor the execution of this IA by the Parties shall be construed, considered, or deemed to be an admission by the Parties that any take of any listed species has occurred or will occur.

Issue:

- 14. This provision is illogical and should be deleted. This draft IA is about implementing a new ITP and HCP that are necessary to allow development on non-federal lands to proceed in MDT habitat, where take is likely to occur. In addition, the county has had an ITP for nearly a quarter-century that likewise enabled such take. The Parties may not want to "admit" that any MDT take "has occurred or will occur" but such take has and likely will continue to occur. This provision defies reality.**

N. Compliance with Regulations

Nothing in this IA modifies, in any manner, any applicable obligation to seek the approval of the appropriate Federal land manager prior to taking any action associated with implementation of the Amended HCP on Federal lands.

Issue:

- 15. This provision seems outside the proper scope of an IA because the HCP/ITP only cover MDT incidental take on non-federal lands. Perhaps BLM and FWS representatives requested this provision as a reminder to the other Parties. If so, that would be acceptable.**

4.3 Issue with the UDOT Plan of Development

1. Overview

Issue

1. Figure 1, a map of the Northern Corridor route, incorrectly references the highway crossing private property. It is our understanding that the county purchased property in these area in anticipation of the highway being granted a ROW across federally-managed lands. Table 2 is also affected.

1.1.1 Preliminary Plan of Development

Issue

2. The 2 sources listed in this section represent a very sparse list of references, with one dating to 2012. If it is acceptable to build and use a highway in a protected habitat, there should be many references for doing it in an acceptable manner.

2. Applicant's Objectives

Currently, the existing transportation network between SR 18 and I-15 is not adequate to meet future (2050) travel demand in the northeastern and northwestern areas of St. George based on traffic projections from the DMPO's regional travel demand model (DMPO 2019).

Issue

3. **The applicant's objective addresses issues projected to occur in the distant future. The POD should indicate that its final version will be updated with the latest knowledge about both the traffic modeling, methods of construction and operations prior to final go-ahead.**
4. **Traffic management in the future will most likely be better managed by computer-aided sensors and control systems. Since construction will take plan so far in the future, the POD should include a provision to address embedded highway infrastructure (e.g., sensors, communications) in the final plan.**

4. Project Description

4.2 Roadway Design

4.2.1 Engineering Standards

4.2.1.1 Design Speed

The Project would be designed for a 55-mph speed and posted with a 50-speed limit.

Issue

5. **Traffic on Red Hills Parkway, with its 50-mph speed limit, routinely exceeds 60 mph. It seems that a design limit of 55-mph is insufficient. In addition, since this construction will take place so distant it the future, future speeds enabled by self-driving vehicles should be planned.**

4.2.1.6 Intersection Location and Design

The only full access intersection between Red Hills Parkway and Green Spring Drive would be located at Cottonwood Spring Road (also known as Old Dump Road or Turkey Farm Road), which would be constructed as an at-grade intersection.

Issue

6. **This seems to be an inadequate plan, as projected future traffic volumes would make it untenable.**

7. The intersection of Red Hills Parkway and Bluff/SR-18 should also be considered in the long-term (2050) design as this intersection will likely be overwhelmed by the projected future traffic volumes.

4.3 Permitting Requirements and Pre-Construction Surveys

4.3.1 Permits and Approvals

Non-federal land acquisitions would be required to complete the Northern Corridor. In addition to these non-federal ROW acquisitions, Table 2 lists permits, reviews, clearances, and approvals that may be required for the Northern Corridor.

Issue

8. Conserve Southwest Utah is making a statement for the record that they are an interested party mentioned in Table 2.
9. Table 2 should define who grants which permissions using what criteria.
10. There should be an independent oversight of the approval process.

4.4 Project Construction

4.4.1 Construction Phasing

Issue

11. Currently anticipated timing of the phases should be defined. It is our understanding that phase would begin construction in 2040 and phase 2 in 2050.

6 Mitigation of Environmental Concerns

Table 3. Design Features of the Project for Environmental Protection

Issue

12. The table indicates plans are to be submitted and to whom, but it should also address the approval and issue resolution processes.
13. There should be sections on Fire Prevention and Suppression, Invasive Species Invasion Prevention, Garbage/Litter Prevention and Collection, Predator Invasion Prevention.

Air Quality and Climate Change/GHGs

Do not conduct open burning along highway right-of-way without approval from the Utah Department of Air Quality (DAQ).

Issue

14. Fires should not be allowed under any condition.

Appendix B Detailed Maps

Issue

15. Wildlife pathways over/under the highway should be defined.

Appendix 1: Detailed Accountability of Scoping Comments

The Scoping Comments⁹¹ listed and accounted below were copied directly from the submittal to the BLM electronically (BLM_UT_NorthernCorridor@blm.gov) and in person (to the St George Field Office) on January 6, 2020. The number in parenthesis behind each comment is the page on which the comment appears in the Scoping Comments document.

Appendix 1.1 Draft Environmental Impact Statement Scoping Comment Accountability

General

Summary: 23 scoping comments, 9 addressed, 14 not addressed

Legal

Impacts of NCH on Designated Purposes/Values of the RCNCA

1. Based on these management requirements within National Conservation Lands, we request a robust analysis of the direct, indirect and cumulative impacts of the NCH on the designated purposes and values of the RCNCA, and any and all effects the NCH may have on ensuring that these purposes and values are conserved, protected and restored. (28)

Addressed in DEIS: No

2. Analyze direct, indirect and cumulative impacts to the congressionally-defined purposes of the Red Cliffs NCA which is to protect each species that is located in the NCA and listed as a threatened or endangered species in the Endangered Species Act of 1973; and to conserve, protect, and enhance for the benefit and enjoyment of present and future generations: ecological, scenic, wildlife, recreational, cultural, historical, natural, educational and scientific resources of the NCA. (31).

Addressed in DEIS: No

3. ROW Consistency with NCA: Ensure consistency of the NCH ROW with the established purposes of the NCA, as identified in OPLMA. Disclose the impacts the NCH ROW would have on the special status species and 9 resource values protected inside the NCA. (43).

Addressed in DEIS: No

Suppression of Public Involvement

1. DEIS Language: In the DEIS, BLM must use clear language that is readable by the many groups and individuals who have already submitted public comment on this controversial project.

Addressed in DEIS: Yes

2. Timely Document Availability: BLM has failed to facilitate public comment by providing all relevant documents in a timely manner and must remedy this by providing the following:

- a. Clearly defined proposed actions
- b. A clearly defined project proposal
- c. A purpose and need Statement
- d. A draft of the Washington County HCP

Addressed in DEIS: No

⁹¹ Red-Cliffs-Conservation-Coalition-Scoping-Comments

3. Scoping Comment Period Extension: Set in place plans that encourage public engagement, a tenant core to the NEPA process, rather than suppressing it. (42)
Addressed in DEIS: No
4. Unsubstantial Scoping Comment: A comment need not be substantive to trigger the agency's response requirement. Given the limited scoping period provided for these three complex issues, citizen comments, even those considered "unsubstantial", should receive respectful consideration. (42)
Addressed in DEIS: No

Conflict of Interest

1. Tortoise Survey Data Sources Conflict of Interest: BLM must disclose whether it used or relied upon any data generated by consulting firms that may have a financial or other potential conflict of interest in terms of past, current, or possible future contracts involving any aspect of the proposed Northern Corridor Highway. (35)
Addressed in DEIS: No
2. Horrocks- Disclose how Horrocks and any of its associates would be involved in the planning, design, and/or construction and maintenance of the Northern Corridor Highway if the ROW is granted. (36)
Addressed in DEIS: No. This is a critical omission, as Horrocks was responsible for highway design (DEIS at 4-5) and would likely be awarded the lucrative contract to design the NCH if the ROW is granted.
3. Jacobs- We are concerned with the use of Jacobs Engineering (JE) for this same reason, as Washington County and UDOT hired JE to conduct the environmental analysis process and to prepare the DEIS. Jacobs contributed to the 2012 Washington Parkway Study: Integration of East-West Transportation Needs with Conservation Objectives for Desert Tortoise in Washington County, Utah. In this report, JE asserted that the NCH "...can ameliorate many existing threats, contribute to improving conditions, and provide future management options for the tortoise on the Reserve." (36)
Addressed in DEIS: No. See above.
4. SWCA- For similar reasons are concerned with the use of SWCA consultants, as they too have been actively working with Washington County to facilitate construction of the NCH and have been involved in pre-surveys of the NCH alignment (September 2018) and surveys of Zone 6. Disclose a plan detailing how SWCA will neutrally evaluate scoping comments. (36)
Addressed in DEIS: No

NEPA Segmentation

1. Assess and analyze the cumulative and connecting projects (37)
 - a. The Washington Parkway Extension;
 - b. The 5 transportation projects associated with the NCH listed in the 2019-2050 Regional Transportation Plan;
 - c. The 6 transportation projects associated with Zone 6 listed in the 2019-2050 Regional Transportation Plan
 - d. The widening of the proposed NCH from two to four or six lanes in the future
 - e. Development on private, SITLA, or Washington County private inholdings adjacent to the proposed Northern Corridor Highway

- f. Construction of additional highway projects in the Red Cliffs NCA that would be served by construction of the Northern Corridor Highway
Addressed in DEIS: No
2. Integrated Analysis of the NCH's segments 2 and 3 (Washington Parkway Extension and NCH) (45).
Addressed in DEIS: No

Multiple Use

Multiple-Use Conflicts: Describe how BLM would ensure that the NCA is managed to protect statutorily-designated NCA values, the Mojave desert tortoise, and other special status species rather than as public domain lands under the FLPMA multiple use requirement. (38)

Addressed in DEIS: No

Miscellaneous Requests

Request for Correction of NOI Deficiencies:

1. 1-Project Title: The NOI is focused on the Northern Corridor Highway through the Red Cliffs National Conservation Area/Desert Reserve, which of course is narrowly focused on a particular alternative. We request a broader title to reflect the scope of alternatives that must be considered, such as "Washington County (UT)-St George Metropolitan Area Improved Northern Transportation Route", allowing for consideration of both new and improved existing routes.
Addressed in DEIS: Yes
2. 2- Proposed Action: The NOI's proposed action should define the primary action in addition to the secondary actions that result from it. The DEIS should clarify the primary action, and should include the missing related secondary actions.
Addressed in DEIS: No
3. 3- Alternatives: the NOI is supposed to describe alternatives that were considered; it did not.
Addressed in DEIS: Yes

Construction Methods for NCH

1. Construction Methods Description: Describe the construction methods and how they will minimize new surface disturbances and resource impacts (44)
Addressed in DEIS: Yes
2. Construction Plan Description: Describe a plan for constructing the highway that abides by the guideline requiring that new ROW access roads would not be required for construction, operation, and maintenance (of the NCH) (44)
Addressed in DEIS: Yes
3. Existing ROW Constraints Description: Describe a plan for ensuring that existing ROW access roads would not be permanently widened or upgraded for construction, operation, and maintenance (44)
Addressed in DEIS: Yes
4. Construction Staging: Disclose the exact number of temporary enlargements or modifications to existing access routes needed during construction AND the plan for rehabilitation after construction is completed (44)

Addressed in DEIS: Yes

5. Constraints on Off-Road Travel: Describe a plan for ensuring that construction, operations, and maintenance would not require off-road travel by motorized vehicles. (44)

Addressed in DEIS: Yes

6. Construction Supervision: Describe a plan for supervision of construction activities in critical tortoise habitat (44)

Addressed in DEIS: Yes

1. Purpose & Need

Summary: 10 scoping comments, 0 addressed

1- Whether the NCH is truly “ripe” given that construction won’t begin until after 2030 and won’t be completed until after 2050. (37)

Addressed in DEIS: No

2- Whether applicants have considered advancements in transportation which include self-driving cars, mass-transit, shared vehicles, etc. that would reduce congestion on our roadways. (37)

Addressed in DEIS: No

3- Whether applicants have considered changes to current land use planning and zoning (i.e. implementation of Vision Dixie Smart Growth Principles) that would reduce congestion on our roadways. (37)

Addressed in DEIS: No

4- Whether the population projections used by the applicant to justify need for the NCH are accurate and whether they include the most recent Kem C. Gardner predictions which have been trending down. (37)

Addressed in DEIS: No

5- Proposed Need Statement:

We cannot propose Need Statement since that information has also not been made publicly available, but such a statement must describe the basis for the data used to define the goals and objectives in the Purpose Statement, the point at which congestion causes too much burden on the local economy, the basis for that judgment in comparison with other metropolitan areas, and the degree to which this failure must be alleviated and why. Probabilities/accuracies in data projections must be addressed. (41)

Addressed in DEIS: No

6- Uncertainty: Justify the certain damage to the habitat protected by the HCP and NCA caused by a highway to be built in the distant future having uncertain utility considering the uncertainty of population growth, transportation technology and related network requirements, in light of the ability of local government to significantly impact projected traffic with land use planned to reduce congestion. (48)

Addressed in DEIS: No

7- Purpose Statement: Properly define the goal and objectives to state in the appropriate specificity the anticipated condition, why it is unacceptable, what would be acceptable, and why. (41)

Addressed in DEIS: No

8- Need Statement: Properly define the need to provide data to support the purpose statement, along with estimated degrees of accuracy in the data. (41).

Addressed in DEIS: No

9- Land Use: Determine to what degree the projected traffic congestion can be alleviated by changes in land use designations throughout the county. BLM may argue that land use planning and smart growth are outside the scope of this NEPA analysis because BLM has no authority over zoning and land use on private lands. However, the county and other municipalities that sign on and benefit from the HCP do have this zoning and land use authority. We argue that since the county is behind the UDOT NCH ROW application, it would be disingenuous for them to say that its future land use and zoning decisions are not relevant as part of a comprehensive transportation analysis. The county and cities clearly either make traffic congestion better or worse based on their cumulative zoning and land use decisions. For example, the density of different designated zoning districts, and the number of lots approved in subdivision plats, obviously affects the amount of traffic that would be generated at those locations. If the county and cities choose to continue to allow endless sprawl development, should they be rewarded by letting them harm an NCA and threatened species (48).

Addressed in DEIS: No

10- Transportation Modeling Deficiencies: Determine and correct deficiencies in the transportation modeling used by UDOT and the Dixie MPO to define the NCH's purported need, and develop and apply a "No Build" alternative for modeling in the DEIS to provide an objective comparison (51).

Addressed in DEIS: No

Relationship to Other Plans

Summary: 1 scoping comment, not adequately addressed.

1- TMP-NCH: Include a full and robust discussion of how the TMP and associated NEPA documentation may affect this NCH process. (45).

Addressed in DEIS: Not adequately addressed.

2. Alternatives

Summary: 13 scoping comments, 3 inadequately addressed, 10 not addressed

Alternatives Outside the NCA

1- Alternatives Outside NCA/DR: In the DEIS, analyze transportation alternatives outside the Red Cliffs NCA/Reserve, including the Community Transportation Alternative proposed by Conserve Southwest Utah. (35)

Addressed in DEIS: Partial – elements of some CSU alternatives were included, many were excluded with inadequate reasoning

2- Fair and Unbiased Consideration of Alternatives: We ask that the DEIS disclose a plan for fair and unbiased screening of alternatives suggested during scoping (36)

Addressed in DEIS: Partial - with some bias on environmental impacts of alternatives

3- Alternatives outside the NCA: Consider options for routing or siting the NCH ROW outside of the NCA (43)

Addressed in DEIS: Partial - no logic supporting the BLM preferred alternative

4- NCH Alternatives Analysis: The EIS should analyze two additional sets of alternatives: 1. All of the proposed projects minus the Northern Corridor 2. All of the proposed projects minus the Northern Corridor plus the set of Community Alternatives, singly and in multiple combinations (53).

Addressed in DEIS: No

5- Technological Improvements: Determine the degree to which anticipated technological improvements could improve traffic flow. (56)

Addressed in DEIS: No – judged out-of-scope

6-Vision Dixie Implementation: Determine the implications of Vision Dixie implementation on projected traffic congestion, including how congestion would be affected with and without the NCH (57).

Addressed in DEIS: No – judged out-of-scope

7- Moving People: Determine the degree to which traffic congestion could be eased by appropriately timed and planned implementation of alternatives to cars. This is coupled with Vision Dixie land use changes. (58).

Addressed in DEIS: No – judged out-of-scope

8- Re-routing I-15 Thru Traffic: Determine the degree to which traffic congestion could be eased by re-routing a portion of north-south traffic from I-15 to the Southern Parkway (59).

Addressed in DEIS: No

9-Industrial Park Reuse: Determine the degree to which traffic congestion could be eased by re-routing traffic associated with the industrial park to a more fortuitous location. (59).

Addressed in DEIS: No – judged out-of-scope

Traffic Modeling

1- Traffic Modeling should include: Since all documentation requests about the modeling and simulation have been refused, we have no data about the conditions under which the simulation was executed or the results of the simulation, such as: (49)

Addressed in DEIS: No

• Time: month, day, time • Land use, and logic driving vehicle trips • Traffic flow limitations (speeds, distances between vehicles, traffic signal timing, etc.) • Definition of “failed” intersections (vehicles entering > vehicles exiting) based on duration of failure and duration of wait • Planned improvements included/excluded from the model • Accuracy of traffic modeling.

2- Determine reasonableness and accuracy of the data basis for the traffic modeling/simulation used to determine the value of the NCH.

Addressed in DEIS: No

3- Verify the criteria and data used to determine the acceptability/unacceptability of congestion areas/intersections, including comparisons to other cities with similar congestion.

Addressed in DEIS: No

4- Verify the economic impact of potential future congestion with and without the NCH. **(This should also be answered in Chapter 4: Social & Economic Conditions).**

Addressed in DEIS: No

3. Affected Environment and Environmental Consequences

3.2 Native Vegetation Communities

1- All vegetation communities should be mapped and described, such as creosote bush, blackbrush, saltbush, biological soil crust, riparian, and other plant communities using nomenclature established by the U.S. National Vegetation Classification system. (78)

Addressed in the DEIS: Yes.

2- An up-to-date inventory of the on-site vegetation resources in both the proposed project area as well as any mitigation areas need to be completed and used as a basis for analysis of impacts and mitigation. (78)

Addressed in the DEIS: No. An undefined number of plots were used as a basis for describing the on-site vegetation resources in the proposed project area and alternatives. No inventory of the on-site vegetation resources in the mitigation areas was provided.

3- Impacts to specific vegetation types and soil crusts must be mitigated adequately by type.

Addressed in the DEIS: No.

4- Specific management prescriptions then need to be developed and included in the DEIS to conserve and protect project area resources and where enhancement of resources is necessary for mitigation purposes. (78)

Addressed in the DEIS: Partially. The DEIS does not provide any specific management prescriptions for increased conservation, protection or enhancement of resources. While it proposes Zone 6 as mitigation for Alternatives 2-4 only, it does not provide detailed management prescriptions and instead proposes two vague management Alternatives (Alternative B and C).

5- A full floral inventory of all species encountered needs to be documented and used as a basis for avoidance and impact analysis. All rare species surveys should follow agency-adopted protocols. (78)

Addressed in the DEIS: No.

6- Vegetation mapping must be done in the proposed project and all proposed mitigation areas, in order for the public and decision-makers to be adequately informed of the impacts and mitigation adequacy. The mapping must be at a large enough scale to disclose unique microhabitats. Upland vegetation, riparian areas and other unusual plant assemblages should be mapped at such a scale to provide an accurate accounting of the proposed impacts and

mitigation. A half-acre minimum mapping unit size is recommended, such as has been used for other development projects. (78)

Addressed in the DEIS: No.

7- The DEIS must include clear and measurable success criteria for any proposed revegetation. (78)

Addressed in the DEIS: No.

8- The DEIS must address NCH impacts to native and riparian vegetation communities by inventorying and providing management prescriptions for each community and by planning for revegetation projects using locally-sourced native seeds. (79)

Addressed in the DEIS: No.

Riparian Vegetation

1- The DEIS should inventory riparian areas to establish baseline data on functioning conditions, trends in native plant composition, and infestations of noxious weeds and invasive species, before any highway construction activities occur. The results of the riparian area inventories need to be presented in the DEIS and used as a basis for avoiding and minimizing impacts to these very rare plant communities. If impacts are still anticipated, clear mitigation requirements need to be included that align with the objectives of the RMP. (79).

Addressed in the DEIS: No.

Vegetation Restoration

1- The DEIS should detail all native vegetation revegetation activities associated with mitigation of construction activities. Only locally-sourced native seeds should be used. (79).

Addressed in the DEIS: No.

2- If revegetation efforts are proposed to be used as mitigation, the DEIS must include clear and measurable revegetation success criteria that include a clear and measurable timeframe for establishment, maintenance, monitoring and ultimately a fully functional revegetation site. (79).

Addressed in the DEIS: No.

Noxious Weeds & Invasive Species

1- An Integrated Weed Management Plan should be developed as part of the NEPA process and included in the DEIS, so that the public may participate in reviewing this important document. (79)

Addressed in the DEIS: No.

2-The DEIS should describe all avoidance, best management practices and mitigation measures towards halting any increase of introduced plants and noxious weeds. (80)

Addressed in the DEIS: No.

3- The DEIS must clearly analyze how construction and maintenance of the NCH would add to the introduction and spread of invasive and noxious weeds. (80)

Addressed in the DEIS: Inadequately. It mentions that invasive plant species spread is facilitated by roads. No analysis is provided.

3.3 Special Status Species- Plants

1- Surveys for the federally endangered Dwarf bear-poppy (*Arctomecon humilis*), one of the rarest poppies in the world (endemic to Washington County, Utah) and among the first listed species under the Endangered Species Act, should be undertaken across the corridor proposal and a buffer, as well as in Zone 6. (81)

Addressed in the DEIS: No.

2- The DEIS must identify and analyze how highway construction will directly and indirectly impact these rare plants, their federally designated critical habitat and their potential for recovery. (81)

Addressed in the DEIS: Yes.

3- Will herbicides be used during highway construction activities, and right-of-way maintenance? How will this impact rare plant populations into the future? (81)

Addressed in the DEIS: Partially. Herbicides may be used but no evaluation of impact to rare plant populations are provided.

4- Will dust palliatives be used during construction? How will these impact the rare plants, seedbanks and pollinators? (81)

Addressed in the DEIS: No.

5- The DEIS should analyze how any corridor construction will directly or indirectly impact any ecologically intact core areas of sensitive species habitats that are conserved and protected from fragmentation in the NCA.

Addressed in the DEIS: No.

6- The DEIS should also identify BLM sensitive species that occur in any proposed mitigation lands and evaluate direct or indirect impacts associated with the proposed project.

Addressed in the DEIS: Partially. The DEIS provides a list of BLM sensitive plant species, but no impact analysis is provided.

7- Holmgren Milkvetch Protection: The DEIS should disclose the general locations of endangered Holmgren Milkvetch in Zone 6. What plans are there to fence-off or otherwise protect this endangered plant from rampant off-trail recreation, and the direct, indirect and cumulative impacts of the NCH and modification of the SGFO RMP on milkvetch? (143)

Addressed in the DEIS: Partially. The DEIS provides the general locations of the plants in Zone 6. Alternative B proposes to fence-off the western boundary to help reduce ORV impact. Other impacts are not evaluated.

Ecotone & Edge Effect

1- The DEIS must address cumulative and residual NCH impacts to ecotone plant and animal species living at the historic edges of their ranges. (82)

Addressed in the DEIS: No.

Sensitive Species

1- The DEIS should analyze how any NCH construction will impact any ecologically intact core areas of sensitive species habitats that are conserved and protected from fragmentation in the NCA. How would this NCH affect the current level of protection for these species and their habitats, as well as the prospects for their future recovery? (96)

Addressed in the DEIS: No.

2- The DEIS must address direct, indirect, cumulative, and residual NCH impacts to all BLM sensitive species, including fish, raptors, migratory birds and birds of conservation concern, mammals, reptiles and amphibians. (98)

Addressed in the DEIS: Partially, but not all species or their impact analyses are provided.

Other Sensitive Wildlife Species

1- Impacts to other fish and wildlife habitat: The DEIS must address direct, indirect, cumulative, and residual NCH impacts related to multispecies habitat connectivity and migration routes for all wildlife. (99)

Addressed in the DEIS: No.

3.4 General Wildlife Concerns

The DEIS should address NCH related impacts for items 1-5 below: (100)

1. The impacts of habitat fragmentation on each of the species listed above.
2. The impacts of ROW maintenance on each of the species listed above.
3. Analysis of impacts to species found at the extremes of their historic ranges in the NCA because of its unique position at the meeting place of three ecoregional transition zones
4. Analysis of the relationship between habitat fragmentation and climate change, including the need for connected, contiguous swaths of protected land for wildlife.
5. Analysis of habitat fragmentation on reptiles with temperature dependent sex determination, including the Mojave desert tortoise.

Addressed in the DEIS: Not adequately addressed. The DEIS only provides a general discussion of adverse impacts that the NCH would cause to general wildlife, but fails to analyze scoping concerns 2-5 listed above.

All species include:

- Virgin River Chub & Woundfin
- Southwestern Willow Flycatcher
- Yellow Billed Cuckoo
- Mojave desert tortoise
- Flannel-mouth sucker
- Virgin spinedace
- Bald eagle
- Ferruginous hawk
- Lewis's woodpecker
- 133 migratory birds and birds of conservation concern
- Fringed myotis
- Kit fox

- Townsend's big-eared bat
- Common chuckwalla, Gila monster
- Sidewinder, western banded gecko
- Western thread-snake
- Mule deer
- Mountain lion
- Gambel's quail
- Relict leopard

3.5 Special Status Species- Wildlife

3.5.1.1 Endangered Species Act Listed Wildlife

1. Mojave Desert Tortoise

1- Independent Tortoise Survey: BLM must complete independent research and gather information on the density of the threatened Mojave desert tortoise population in Zone 6 since no adequate information exists. The existing survey results are not accepted by all members of the scientific community. (35)

Addressed in the DEIS: No.

The DEIS states that USFWS pre-project survey protocols were used to estimate the abundance of 22.5 tortoise/km² in Zone 6, and that this protocol, "is only intended to locate individual tortoises and not to derive density estimates. Therefore, this density estimate is not comparable with other Mojave desert tortoise populations. Additional years of survey data will be needed to validate Mojave desert tortoise density in proposed Zone 6." The DEIS failed to use independent research to gather accurate data on the density of MDT in Zone 6. The mitigation value of Zone 6 cannot be determined without accurate data.

2- Impact Analysis and Use of best available science: The BLM and USFWS must use the best available science when analyzing direct, indirect, cumulative and residual impacts to the threatened Mojave desert tortoise. (61).

Addressed in the DEIS: Not adequately addressed.

The DEIS failed to share the tools used by USFWS to assist in evaluating the impacts of the BLM decisions and the proposed conservation measures to replace the resources potentially impacted by the ROW and RMP revisions. The DEIS references, but fails to provide to the public three tools that are critical to understanding NCH impacts to the threatened Mojave desert tortoise: the draft biological report, resource equivalency analysis, and spatial decision support model. Since these documents weren't made available to the public, it's impossible to gauge whether the best available science was used.

3- Current Modeling Data and Analysis: Incorporate the Defenders of Wildlife study's applications and findings into the Draft Environmental Impact Statement and utilize the information in the analysis of the environmental impact of the alternatives. (61).

Addressed in the DEIS: No.

The DEIS failed to incorporate the Defenders of Wildlife "Protecting the Mojave Desert Tortoise: A Model Approach-New habitat, connectivity and disturbance models for conserving a threatened species" Study or applications in their analysis.

4- “Take” Disclosure: Disclose the full amount of Mojave desert tortoise take (direct, indirect, cumulative and residual) that would be caused by the construction and operation of the NCH (independent from Zone 6 mitigation calculations) (44)

Addressed in the DEIS: Not adequately addressed.

The DEIS failed to disclose the full amount of MDT take that would be caused by the NCH because it used poor information to calculate direct and indirect impacts when better information was available (see [3.5 Special Status Wildlife](#)) and it failed to assess the full cumulative impacts because of an inappropriately short planning horizon (see [3.28 Cumulative Effects](#)).

5- Critical Habitat Modification Disclosure: Disclose the full amount (acreage) of adverse modification of designated critical habitats for the threatened Mojave desert tortoise (44).

Addressed in the DEIS: Not adequately addressed.

The DEIS failed to disclose the full amount of adverse modification of critical habitat for the threatened MDT because it based indirect impacts on the size of an adult male MDT’s annual home range (508 meters) when studies show that roadways depress tortoise populations from 2,150 meters to 4.6 kilometers from the road.

6- Road Effect: BLM’s DEIS must fully disclose the direct, indirect and cumulative impacts of construction and siting of the NCH, together with the overlapping impacts of wildfires, on known tortoise densities. Please superimpose the location of the proposed NCH relative to the wildfire footprint, existing tortoise densities, habitats to the north that are not deemed suitable for tortoises, etc. so that we can see the full extent and juxtaposition of the proposed NCH to these sustained and impacted tortoise densities.

Addressed in the DEIS: No.

The DEIS failed to create maps that show the relationship between NCH alternatives, wildfire history and tortoise density. The DEIS also failed to adequately discuss the relationship between the proposed NCH and future wildfires because it erroneously said that roads act as firebreaks and did not discuss how roads provide ignition sources for wildfires.

7-Direct Impacts to Tortoise: a. Direct mortality during and following construction, including entombment and entrapment of tortoises and road kills b. Introducing construction activities into a dedicated Reserve area c. Creating habitat fragmentation; d. Resulting in habitat loss, surface disturbance and direct loss of shelter, breeding and nesting sites e. Impairing the efficacy of an already minimally-sized reserve and adversely affecting the tortoise population; f. Degrading habitats that would not otherwise be disturbed; g. Resulting in the spread of exotic and invasive plant species; h. Increasing the risk of fire, which has already decimated tortoise populations in the Reserve; i. Increasing the predation of tortoises by common ravens and coyotes; j. Possibly promoting disease and impairing tortoise health by introducing chemicals and toxicants associated with vehicles; and k. Increasing access to reserve areas that could result in poaching and vandalism of tortoises.

Addressed in the DEIS: Not adequately addressed.

The DEIS addressed most of these direct impacts to MDT, but failed to adequately discuss the relationship between the proposed NCH and increased risk of wildfire in the Red Cliffs NCA.

8- Indirect Impacts to Tortoise: BLM and USFWS should evaluate the effects of the following indirect impacts associated with the Northern Corridor Highway and consider whether these indirect impacts would jeopardize the continued survival of the threatened Mojave desert tortoise in Zone 3 and in the larger Red Cliffs Desert Reserve and Upper Virgin River Recovery Unit: a. Human access b. Garbage and litter c. Choking related to ingestion of litter d. Ravens, predators and subsidized predator populations via road kills, discarded food items, and above-ground utilities (which may provide raven perch sites) e. Increased risk of poaching, harassment, killing f. Increased risk of dogs off leash g. Catastrophic wildfires caused by introducing vehicle traffic into a dedicated Reserve. Tossing of cigarettes, dragging tow chains, vehicle collisions, etc. should be considered. h. Toxicants i. Sound and light pollution j. Invasive plants and habitat shift k. Loss of native plants, including those necessary for maintaining PEP (potassium excretion potential) balance l. Fire m. Altered hydrology, including but not limited to: changes to stormwater run-off and increased potential for localized flooding of tortoise habitat, drowning of tortoises in burrows, and/or increased soil erosion that would diminish habitat quality in the Road Effect Zone.

Addressed in the DEIS: Not adequately addressed.

The DEIS addressed many of these indirect impacts to MDT, but failed to adequately discuss how these threats, in conjunction with the NCH, could jeopardize the continued survival of the MDT in Red Cliffs. The DEIS also failed to adequately address the relationship between the proposed NCH and landscape-level changes including wildfire, altered hydrology, and invasive plants and habitat shift.

9- General: BLM and USFWS must take a hard look at the impacts (direct, indirect, cumulative and residual) of the alternatives on desert tortoise. The agencies must calculate the actual mitigation value of Zone 6 and objectively compare it to the actual NCH's adverse impacts in Zone 3.

Addressed in the DEIS: Not adequately addressed.

The DEIS failed to take a hard look at indirect and cumulative impacts of NCH alternatives on the MDT (see above). The DEIS failed to objectively calculate the mitigation value of Zone 6 because it did not rely on accurate data on the density of MDT in Zone 6. The mitigation value of Zone 6 cannot be determined without accurate data.

10- Cumulative Impacts: BLM and USFWS must analyze cumulative impacts associated with the NCH and consider whether these cumulative impacts would jeopardize the continued survival of the threatened Mojave desert tortoise in the Red Cliffs Desert Reserve/NCA and the large Upper Virgin River Recovery Unit (UVVRU). Additionally, if the UVVRU is compromised, what would be the impact on the species' range-wide recovery? a. Habitat loss, alteration, degradation and fragmentation; b. Increased genetic isolation; c. Loss of genetic diversity; d. Extirpation; e. Small population and stochastic effects; f. Restricted home range g. Fence pacing; h. Loss of shelter, breeding and nesting sites; i. Effects of freeway contaminants (applicable to all wildlife); j. The failure of translocation to mitigate cumulative effects, given that the practice has not proven successful in much of the tortoises' range; k. Value of contiguous habitat as it relates to climate change and the needs of TDSD (Temperature Dependent Sex Determination) reptiles for contiguous, connected habitat.

Addressed in the DEIS: Not adequately addressed.

The DEIS addresses many of the cumulative impacts listed above but fails to adequately address fence pacing, the failure of translocation, and the value of

contiguous habitat for TDSD reptiles. The DEIS also fails to adequately discuss the impact the NCH might have on MDT survival in the UVRRU and range wide. See comments at [3.28 Cumulative Effects](#) for additional discussion.

11- Cumulative Impacts- Adding to Human Growth/Development: The DEIS must address impacts related to development of BLM-NCA and Reserve lands that add cumulatively to the human growth and development in the region, including: a. Past projects. The DEIS should disclose the number of taken tortoises associated with the expansion of Red Hills Parkway from 2 to 4 lanes, and for all projects that have been approved inside the Reserve/NCA since 1995. b. Past projects. The HCP has facilitated rapid growth and development in Washington County. The number of take acres developed since the implementation of the HCP needs to be disclosed. c. Recent projects. Recent development in Sienna Hills caused multiple tortoises to be removed in in 2018. The DEIS must disclose the take of tortoises in other recent developments. d. Current projects. Special attention must be given to construction of the Washington Parkway Extension (WPE) which would link to the NCH if the NCH ROW is granted. Take for this WPE project must be monitored and documented. e. Future projects. These include, but are not limited to: continued development on a number of acres yet to be determined during 2020 HCP renewal; the proposed Lake Powell Pipeline; paving of the Babylon Road through Zone 4 where over 485 tortoises have been translocated since 1995; and construction of the Western Corridor and extensions of Navajo Dr. and Green Valley Dr. that would impact or fragment Zone 6. f. Future projects including addition of utilities to the NCH ROW. Projects like the proposed Dominion Energy Gas Line that would have co-located a natural gas pipeline in the NCH ROW are concerning. g. Future impacts from maintaining the NCH ROW.

Addressed in the DEIS: No.

The DEIS fails to adequately address the cumulative impacts of past projects in Red Cliffs because it only states that 200 acres of critical habitat inside the Reserve have been lost to covered activities in the duration of the 1995 HCP. It does not disclose the number of MDT that were taken or the indirect impacts these activities had on habitat.

The DEIS does not disclose the number of MDT taken with the expansion of Red Hills Parkway or other projects approved within the Reserve since 1995.

The DEIS failed to disclose the take associated with recent development and recently-completed projects including the Washington Parkway Extension.

Importantly, the DEIS fails to address the pre-decisional bias that appears to have interfered with the selection of NCH alternatives caused by the WPE. This project should have been evaluated as a connected action to the NCH because its purpose is to link to the NCH as documented in the Dixie MPO's 2019-2050 Regional Transportation Plan maps⁹² and as described in the Washington City Transportation Master Plan.⁹³ Given these admissions linking the WPE to the NCH, it seems obvious that these projects are "connected actions" and "cumulative actions" under 40 CFR Section 1508.25 (a)(1) and (2), and therefore should have been analyzed together through one comprehensive NEPA process.

⁹² Dixie MPO 2019-2050 Regional Transportation Plan

⁹³ Washington City Transportation Master Plan, pp. 28-33.

However, the WPE was approved under a Categorical Exclusion in late summer 2019, and construction was completed in summer 2020 before NEPA was completed for the NCH. This introduced pre-decisional bias into the selection of alternatives for the NCH and may have influenced BLM's preferred alternative for the NCH.

Finally, the DEIS failed adequately consider future projects like the Lake Powell Pipeline. It did not address the Babylon Road, the full Western Corridor, or the extensions of Navajo and Green Valley Dr. in the proposed Zone 6. The DEIS did discuss the co-location of utilities within the NCH ROW, but did not adequately address the risk. It discussed increased risk of predation by ravens that perch on power lines but failed to discuss the impacts of blasting and trenching for underground utilities. The DEIS also failed to address future impacts of maintaining the NCH ROW.

12- Habitat Fragmentation: The USFWS must look specifically at questions that concern the cumulative effects of habitat fragmentation from constructing the NCH. In addition, the BLM needs to address two other questions through this same lens of habitat fragmentation. The first is to determine whether a trade of acreage on the opposite side of St George, the proposed Zone 6, will actually mitigate the effects of the NCH on the tortoise population in Zone 3. Second is whether the County and UDOT have sufficiently analyzed the available transportation alternatives that might remove the need to build a new highway through the RCNCA.

Addressed in the DEIS: Not adequately addressed.

The DEIS fails to show that Zone 6 will mitigate for damage caused by the NCH. The DEIS did analyze transportation alternatives located outside Red Cliffs and found that they do *not* adversely impact MDT in Red Cliffs and they do successfully reduce traffic congestion. However, the DEIS fails to disclose why these alternatives were not selected as preferred by the BLM.

13- Impact due to NCH Phasing: The DEIS must address impacts related to the NCH being built in phases, the roadways connected to it, and plans for future infrastructure including utilities.
(68)

- a. Associated infrastructure and future plans to widen the NCH would cause additional habitat loss. UDOT's Plan of Development states that: "At full build-out, the roadway would be an approximately 4.5-mile-long, four-lane divided highway with two 12-foot-wide travel lanes in each direction. Other features would include a median, drainage swales, bicycle and pedestrian trails, and associated signage."
- b. The Washington City Master Transportation Plan shows the Washington Parkway Extension (which would connect to the NCH) being 6 lanes at full build-out. If the NCH was likewise increased from 4 to 6 lanes, that would cause major damage.
- c. We note that there are no provisions for either underground or aboveground linear facilities in the project description. The DEIS must disclose plans for future utilities.
- d. Roadway projects associated with the NCH including improvements to Cottonwood Road (67)

Addressed in the DEIS: No.

The DEIS does not address the phased nature of the NCH. It says that the "UDOT Application Alignment, or Southern Alignment may be phased by building one lane in each direction, with subsequent phases adding another lane." (DEIS Vol. 2 pg. 2-5). This incorrectly assumes that if a 500' ROW is granted, no additional

stress or adverse impacts will be experienced by the MDT during different phases of construction. Indirect impacts associated with the construction of additional highway lanes (noise, vibration, dust, human access, toxicants, etc.) will be reintroduced at each phase of construction.

The DEIS fails to address the Washington City Transportation Master Plan which shows the NCH will be 6 lanes at full build out.⁹⁴ The DEIS discloses that under Red Cliffs NCA RMP Amendment Alternative C, utilities would be granted in the NCH ROW but fails to adequately address the heightened risk to MDT.

Importantly, the DEIS says that the NCH will include “a new at-grade intersection with traffic signals at Cottonwood Springs Road (also known as Old Dump Road or Turkey Farm Road); this connection would fit within the 500-foot ROW” (DEIS Vol. 2 pg. 2-5). Placing an intersection at Cottonwood Springs Road would allow vehicle access to busy shopping and business centers in St. George and Washington City. It’s important to note that Cottonwood Springs Road is steep, narrow and winding below its intersection with the proposed NCH. To have this section of the road function as a major artery, approximately 1 mile of road south of the NCH would have to be straightened and widened. The impacts of this project to MDT and their critical habitat in Zones 2 and 3 would substantially increase the road effect zone and must be evaluated in a separate environmental impact statement.

14- Residual Impacts: The DEIS must provide data and address residual impacts related to predator subsidies, poaching, vandalism, catastrophic wildfire (including the failure of highways to act as fire breaks), climate change, and invasion of exotic annuals. (70).

Addressed in the DEIS: Not adequately addressed.

The DEIS addresses many of these residual impacts but fails to adequately discuss the impact of catastrophic wildfire, highways functioning as ignition sources, and highways failing to act as firebreaks.

15- The DEIS should disclose and analyze what NEPA compliance may be needed for raven or other predator control measures to reduce tortoise mortality, and the relative timeliness and priority of completing that NEPA in light of other workload priorities. We believe that the protection and recovery of the ESA listed tortoise and other special status species and the completion of any associated required NEPA compliance should be a very high priority and not put “on the back burner” when BLM is faced with other proposed actions, especially those that arguably conflict with the ESA, HCP, and Red Cliffs NCA Plan. (94)

Addressed in the DEIS: Not adequately addressed.

The DEIS fails to address NEPA compliance for raven and other predator control measures. The DEIS fails to discuss prioritizing actions that benefit conservation of the MDT.

2. General

The DEIS must address direct, indirect, cumulative, and residual NCH impacts related to items 1- 4 below:

⁹⁴ Washington City Transportation Master Plan, pg. 32. See project #21.

1. The DEIS should list and analyze all dust palliatives, herbicides, and other chemicals used during construction, as well as the risk for spills of oil, fuels, toxic chemicals, and all hazardous materials that could wash onto adjacent wildlife habitat during rain events and flooding. Spills from accidents on a highway should also be analyzed into the future. (94)

Addressed in the DEIS: No.

2. Will truck shipments of mining materials, toxic chemicals, fossil fuels, or other hazardous materials be allowed to drive on the Northern Corridor through a high-value NCA? This should be analyzed in the DEIS. (94)

Addressed in the DEIS: No.

3. The potential for road mortality of animal species attempting to cross a new highway should be analyzed, as well as these road mortalities attracting scavengers such as ravens and coyotes. Such subsidy of predators can lead to increased predation on native species such as Mojave desert tortoise, other reptiles, mammals and nesting birds. The DEIS should analyze how predators that likely cause mortality in special status wildlife species can and would be controlled. (94)

Addressed in the DEIS: Not adequately. The DEIS discusses fencing of the NCH to prevent road mortalities, but fails to discuss how fencing is not a failsafe method. Regular maintenance is required and the DEIS does not discuss this, nor does it discuss predator control measures.

4. The DEIS needs to include an inventory of existing wildlife corridors in the NCA and all proposed mitigation lands in order to evaluate the effect of the proposed highway on local wildlife movements. With ongoing climate change, these critical wildlife movement corridors are essential to be maintained and protected to the fullest extent possible in order to allow wildlife to migrate to suitable habitat as climate change proceeds. Some species may need to move seasonally, generally from higher to lower elevations and back again. Other species may need to move based on the temporary location of surface water sources to drink, or to breed for amphibians, or when fires destroy habitat and they must move to find forage and survive. (94)

Addressed in the DEIS: No. The DEIS fails to discuss wildlife corridors.

3. Bees & Pollinators

1- The DEIS must address NCH impacts to special status plant species, BLM sensitive plant species, and pollinators including, but not limited, to bees. (81)

Addressed in the DEIS: No

4. Special Status Bird Species

1- The DEIS must address direct, indirect, cumulative, and residual NCH impacts to all special status bird species, including southwestern willow flycatcher, western yellow-billed cuckoo, and condor. (95).

Addressed in the DEIS: No

5. Special Status Fish Species

1-The DEIS must address direct, indirect, cumulative, and residual NCH impacts to all special status fish species, including Woundfin Minnow and Virgin River Chub. (96)

Addressed in the DEIS: No

3.6 ESA Section 6 Grants

No comments

3.7 Paleontological Resources

1- Paleo Resources: Complete inventories for paleontological resources. (32)

Addressed in the DEIS: No.

2- Data, Analyses, Methods and Issue Resolution: BLM must provide the public with an explanation of both the data used in analyzing the potential effects of management alternatives and the methods used to conduct the analysis, as well as an opportunity to provide comments and propose corrections or improvements. (35)

Addressed in the DEIS: No.

3- Paleo/Geological Survey: A complete inventory of currently-known and potential fossil sites should be analyzed by BLM, especially any potential new fossil beds in the path of the corridor right-of-way. The DEIS should describe a protocol of surveys for important paleontological and geological resources in the proposed corridor and a buffer around it, in order to avoid damage to these unique resources. A Paleontological Resource Mitigation Plan should be prepared during the environmental review process, where the public can comment and participate in the protection of these public lands scientific wonders and ensure they are fully documented. (113)

Addressed in the DEIS: No.

3.8 Geologic Resources

Cave & Karst Resources

1- Resources - Surveys for any new cave and karst resources should be undertaken along the proposed corridor and a buffer zone, to ensure no unidentified resources are impacted. (76)

Addressed in the DEIS: No.

Soil Resources

1- Impacts to cave, karst and soil resources: The DEIS must address NCH impacts related to cave, karst, biological soil crust, soil types, soil health, and related salinity displacement. (77).

Addressed in the DEIS: No.

Special Designations

Summary: 8 scoping requests not answered and 1 not adequately addressed.

Lands with Wilderness Characteristics

-Impacts to Natural Resources: The DEIS must address NCH related impacts to designated wilderness, dark night skies, and natural soundscapes listed in items 1 – 9 below. (108-111)

1. The southeast portion of the 11,668-acre Cottonwood Canyon Wilderness is located one mile from the proposed NCH, and portions of the Mustang Pass and Mill Creek trails used to access the wilderness are located less than ½ mile from the highway. How will the increased noise, air pollution, litter and visual/scenic disruption impact visitor experience in-route to, and inside, this wilderness area?

Addressed in DEIS: No.

2. The Cottonwood Canyon Wilderness shares a common boundary with Dixie National Forest Cottonwood Forest Wilderness which is adjacent to the Pine Valley Wilderness. This patchwork of connected, protected land ranges in elevation from roughly 2,800 feet at the southern boundary of the Red Cliffs NCA up to 10,300 feet in the Pine Valley Wilderness. We believe that it is critically important to protect this connected natural landscape from harmful fragmentation. Large contiguous swaths of land function as crucial wildlife corridors and will become increasingly important to the survival of many species that may need to migrate to higher elevations to cope with climate change.

Addressed in DEIS: No.

3. Starry night skies and natural darkness are important components of National Conservation Lands. Many NCAs are some of the last remaining harbors of darkness and provide excellent opportunities for the public to experience this endangered resource. The Red Cliffs NCA is adjacent to one of the fastest-growing metro areas in the nation. The DEIS must analyze impacts of light pollution on the residents of Green Springs, on wildlife (including bats and nocturnal animals), and on visitors to the NCA.

Addressed in DEIS: Not adequately addressed. The DEIS only discloses that roadway lighting and vehicle lights would draw attention to the alignment at night for residents at the north end of Green Springs. It failed to analyze the impacts to human health and the experience of dark night skies.

4. Starry skies are important to Washington County residents who are actively working to combat light pollution and gain Dark Sky status for their cities. The towns of Virgin, Rockville, Springdale and Ivins are engaged in these efforts in order to benefit wildlife, health, economy, heritage and posterity.¹²⁷ Dark night skies are integral to the historical fabric of Washington County. As light pollution from urbanized areas in Washington County increases, the idea of protecting remaining dark skies increases. The DEIS must analyze the NCH related impacts loss of starry skies will cause to the community.

Addressed in DEIS: No.

5. Light pollution is visible from many locations within the NCA already, even in the Cottonwood Canyon and Red Mountain Wilderness Areas. Introducing a 4-lane highway will only increase this light pollution.

Addressed in DEIS: No.

6. Unshielded highway lights would have an especially large impact on residents of the Green Springs whose homes are located between 700 and 1500 feet of the highway. Artificial light is known to suppress the hormone melatonin and increase the risk for certain types of cancers and Type II Diabetes.

Addressed in DEIS: No.

7. Preserving dark night skies is also important to the health of nocturnal animals like the ring-tailed cat, kitfox, bobcat, Townsend's big-eared bat, lyre snake, western banded gecko. These species rely on darkness for navigation, to cue behaviors, to hide from predators, and to hunt and light pollution from the highway could disrupt these activities.

Addressed in DEIS: No.

8. The DEIS must analyze the degree to which light pollution already impacts locations throughout the NCA and how light from the NCH would add to this baseline.

Addressed in DEIS: No.

9. The DEIS must analyze how highway lighting disrupts the foraging and commuting routes of bats and interferes with their feeding behavior. Over 13 species of bat, including the BLM-sensitive Fringed Myotis and the rare Spotted Bat and Yuma Myotis, have been identified near the proposed route of the NCH.

Addressed in DEIS: No.

3.9 Farmland

No comments.

3.10 Wetlands, etc.

No comments.

3.11 Water Resources

Summary: 1 scoping request addressed, 1 not addressed, and 2 not adequately addressed.

1- Impacts to hydrologic conditions: The DEIS must address NCH impacts related to highway construction, emissions and pollutants. (72)

Addressed in the DEIS: Yes.

2- Please include the following reports in your analysis: a- THE NAVAJO AQUIFER SYSTEM OF SOUTHWESTERN UTAH Geological Society of America 2002 Rocky Mountain Section Annual Meeting Cedar City, Utah May 6, 2002.

<https://pubs.usgs.gov/of/2002/0172/pdf/chap3.pdf> b- Highway Runoff Quality, Environmental Impacts and Control.

<https://www.sciencedirect.com/science/article/pii/S0166111608700839> (72)

Addressed in the DEIS: No.

3- Impacts to water resources: We specifically request BLM include the following analysis of items 1 - 8 in its DEIS: 1. How will the construction of the proposed NCH maintain soil stability, minimize wind and water erosion, and ensure that road-building surface disturbances do not increase sedimentation to waterways of the Virgin River watershed? 2. Where will construction water for the highway will come from, and how many gallons or acre-feet per month. Will groundwater be pumped in area wells for use in construction, or will water be trucked in from another source? 3. All streams, dry washes, springs, seeps, and riparian areas that will be directly, indirectly, or cumulatively impacted by the NCH must be mapped and examined. 4. BLM must identify and discuss all avoidance measures, mitigation measures, and best management practices to prevent significant impacts to these water resources. 5. BLM must complete a conceptual groundwater model of quantity recharge of springs, seeps, and surface flows within and adjacent to the NCA, and BLM must examine and discuss this model as a basis for an impact analysis for the NCH. 6. BLM must examine and discuss how will climate change potentially affect precipitation and groundwater in the area? 7. BLM must also describe how the NCH will be built to weather

flash floods and surface water flow through washes, canyons, and sheet flow across the desert during extreme storm events, so that natural resources in the NCA are not damaged. Will the construction of a highway through this desert result in significant impacts to natural resources due to flash flood damage? Culverts should be described in detail, with respect to size and design, to avoid flood debris clogging, blow-outs, and damage to highway infrastructure which could impact adjacent natural resources. Culvert design should consider how best to potentially facilitate movement of tortoises and other wildlife species under the NCH in both directions. Species isolated to limited habitats by the NCH are likely to suffer from inbreeding depression over time that may lead to localized extirpation. 8. The analyses of hydrology and water quality need to identify and analyze all of the project's impacts. The DEIS must include avoidance, minimization and, if necessary, mitigation measures, to offset any impacts. (72).

Addressed in the DEIS: Not adequately addressed. The DEIS failed to address how construction of the NCH could be completed in a way that doesn't increase erosion and runoff; it failed to disclose where construction water for the highway would come from; it failed to complete a conceptual groundwater model of quantity recharge of springs, seeps, and surface flows within and adjacent to the NCA; it failed to discuss how climate change potentially affect precipitation and groundwater in the area; and it failed to discuss avoidance, minimization and, if necessary, mitigation measures, to offset adverse impacts to hydrology and water quality.

4- Impacts to watershed: The DEIS must address NCH impacts related to wildfire, erosion, increased sedimentation, runoff and heavy metals to all ephemeral washes, creeks, and streams in the project area. (76).

Addressed in the DEIS: Not adequately addressed. The DEIS failed to wildfire-related impacts to the watershed.

3.12 Air Quality/Climate

Air Quality

1. Impacts to air quality: The DEIS must address NCH impacts related to construction, vehicle travel, and long-term air quality. (76)

Addressed in the DEIS: Partial

2. The DEIS must provide a good faith analysis of the Project's impacts to Air Quality, analyzing the project in relation to the current regional, state, and federal standards. The DEIS must also be prepared with a sufficient level of analysis to provide decision-makers with the information needed to make an intelligent decision concerning a project's environmental consequences. (76)

Addressed in the DEIS: Partial

Climate

3. Consider Recent Climate Science

Addressed in the DEIS: Partial.

4. Fully Quantify Direct, Indirect, and Cumulative Greenhouse Gas Emissions

Addressed in the DEIS: No.

5. Assess the Significance of Greenhouse Gas Emissions

Addressed in the DEIS: No.

6. Consider Carbon Budgeting as a Tool for Assessing Significance
Addressed in the DEIS: Partial. The DEIS did note how much is left in the global carbon budget.

For example, carbon budgeting is a valuable tool for assessing the significance of GHG emissions in the current context. BLM and USFWS are required to determine whether this tool would contribute to informed decision-making.

The science of carbon budgeting has greatly improved in the last few years, and recent reports demonstrate the evident usefulness of carbon budgeting in assessing the significance of future emissions. For example, the October 2018 IPCC *Global Warming of 1.5°C* special report provided a revised carbon budget for a 66 percent probability of limiting warming to 1.5°C, estimated at 420 GtCO₂ and 570 GtCO₂ depending on the global emissions rate of 36 GtCO₂ per year noted above for 2012-2014, the IPCC temperature dataset used, from January 2018

7. Consider Analyzing the Costs of Reasonably Foreseeable Carbon Emissions
Addressed in the DEIS: No.
8. Consider Climate Change
Addressed in the DEIS: No.

3.13 Visual Resources

- 1- BLM must analyze the direct, indirect, and cumulative impacts of the proposed ROW and NCH to visual resources. BLM must consider alternatives that do not degrade the current level of visual resources on affected public lands. VRM Class II areas must be managed to retain the existing character of the landscape and management activities in VRM Class III areas may only moderately change the character of the landscape. (85)

Addressed in the DEIS: No.

- 2- The DEIS must address NCH impacts to viewshed, scenery and designated wilderness, and must consider VRM management objectives. (85)

Addressed in the DEIS: No.

- 3- Key Observation Points: VRM analyses in the DEIS must rely on multiple, carefully-chosen KOP's. (93)

Addressed in the DEIS: Yes.

- 4- NCH Mitigation Measures: Describe the NCH mitigation measures that would be used within the avoidance area consistent with VRM objectives and the purpose of the NCA (43)

Addressed in the DEIS: No.

Visual Resource Impacts Experienced from Trails

- 1- The DEIS must address NCH impacts to scenery and visitor experience on the 9 trails listed above: Mustang Pass • Ice House • Cottontail • Middleton Powerline • T-bone • Pioneer Hills • Pioneer Rim • City Creek • Owen's Loop (89)

Addressed in the DEIS: No. Some trails and locations were chosen as KOPs, but inclusion involved no discussion of impacts to scenery or visitor experience.

- 2- The DEIS must address cumulative NCH/Washington Parkway Extension impacts to scenery and visitor experience on the 6 trails listed above: Mill Creek • Bone Wash • Elephant Arch • Sand Hill • Dino Cliffs • Grapevine (91)

Addressed in the DEIS: No.

3.14 Cultural Resources

Cultural Resources: Complete inventories for cultural resources per Section 106 of NHPA47 (32)

Tribal Participation: Invite a cultural monitor from the Shivwits Band, whose ancestral homelands the NCH would travel through, to participate during cultural inventories (32)

Impacts to Cultural Resources: The DEIS must address the following NCH related impacts, concerns and issues listed in items 1- 8: (105)

1. Inventory of cultural resources in the NCH alignment and any other alignments considered.

Addressed in the DEIS: Yes.

2. Impacts to TCP (traditional cultural properties) and heritage resources.

Addressed in the DEIS: No.

The DEIS notes the requirement of tribal participation in assessing potential concerns about/impacts of the NCH to Traditional Cultural Properties and cultural resources, as stated on page 3-121: “These concerns would be identified and resolved through appropriate levels of consultation required by law, regulations, and agency policies.” The DEIS notes that a records search and BLM Class III survey were done to locate sites. Was the Shivwits Band of Paiutes included in the process of information gathering and analysis undertaken for the Affected Environment and Environmental Consequences sections? If yes, what input did the Shivwits Band have? If no, why not? Are there legal requirements that have not been met?

3. Impacts to TEK (traditional ecological knowledge)

Addressed in the DEIS: No.

What are potential impacts of the NCH on Traditional Ecological Knowledge? Has the Shivwits Band been invited to provide input about potential impacts to cultural plants traditionally important for providing food and medicine? Culturally important animals should also be evaluated, which face impacts from direct mortality, and habitat loss and fragmentation.

4. BLM must consult with the Shivwits Band on these impacts as the NCH crosses their ancestral homelands. The Band should be given the opportunity, and provided compensation, for input (and ethnography) on the land and its resources.

Addressed in the DEIS: Not adequately addressed.

The Shivwits Band was one of 14 bands and tribes invited to participate in government-to-government consultation. However, the DEIS does not indicate that BLM consulted with the Shivwits Band who claim cultural affiliation to land in the Red Cliffs NCA. BLM failed to consult or conduct oral history interviews prior to the Class III surveys. This consultation could have resulted in more cultural resources being identified during the survey, perhaps even the “three previously recorded resources that could not be relocated during the field inventory” (DEIS at 3-119).

5. Impacts to cultural plants that provide food and medicine, including but not limited to the following (common name, Southern Paiute name, Shivwits dialect used when available) • Creosote (yatumb) • Indian rice grass • Indian tea (tu’tup) • Utah agave (yaant) • Engelmann prickly pear (Manav) • Seepwillow (Kanave) • Other willow and riparian species found in washes crossed by the NCH • Desert Sage • Yucca • Globemallow

Addressed in the DEIS: No.

The DEIS failed to address NCH impacts to important cultural plants to the Shivwits Band of the Paiute Indian Tribe of Utah.

6. Impacts to cultural animals related to habitat fragmentation, loss and direct mortality • Tortoise (pika’aya) • Cultural history, knowledge and value pertaining to tortoise • Horned toad and lizard (mukaw’chuts and sixuupits) • Mule Deer (tuiits) • Roadrunner (aots) • Quail (karam) • Jack Rabbit and cottontail (kamunts and tavuts) • Hawk (kusuvi) • Golden Eagle and Bald Eagle (kwanants and pa’si) • Owl (muupits) Fox and Coyote (ontsi’ats and sunangwavi) • Bat (pawchuts) • Chipmunk and squirrel (tavats and skuts)

Addressed in the DEIS: No.

The DEIS failed to address NCH impacts to important cultural animals, including the threatened Mojave desert tortoise, to the Shivwits Band of the Paiute Indian Tribe of Utah.

7. There is a known petroglyph site in the NCH corridor northeast of Middleton Wash (approx. 20’ by 10’). There are likely other sites nearby. (106)

Addressed in the DEIS: Not adequately.

The DEIS acknowledges the presence of a pre-historic petroglyph panel in the NCH alignment, but fails to provide information on how, or if, highway damage to this panel would be mitigated.

8. What will happen to this petroglyph panel? Conserve Southwest Utah has location details. (106)

Addressed in the DEIS: No.

See above. This is incredibly concerning, because observations at this site are not limited to the petroglyph panel itself, but also include:

- Scattered flakes and likely thermally altered rock, in the sandy area downslope of the petroglyph panel. One volcanic cobble appears to have been brought in.

- Flakes continue to the west and north. Potential for buried features (hearths, for example) in the sandy area-- given the scattered pieces of burnt rock.
- Other sand area sites in the vicinity have contained buried features, even when surface artifacts are sparse.
- One grey corrugated pottery sherd and a few flakes and burnt rock pieces were seen in an area to the north/northeast of the panel location, also.

Historical Resources

1- The DEIS must include inventory of historical resources in the NCH alignment and any other alignments, including inventory of the “Pioneer engravings” in basalt rock northeast of the T-bone Trail. (108)

Addressed in the DEIS: No.

3.15 Recreation and Visitor Services

Recreation Quality and Visitor Experience Impacts: The DEIS must address the following NCH related impacts, concerns, and issues listed in items 1- 22: (101-103)

1. Direct, indirect and cumulative impacts to recreation on the T-bone trail which would be fragmented by the Project. This is an easily accessed, local favorite for hiking and trail running which has experienced an increase in use from 745 visits in 2015 to 910 in 2019.

Addressed in the DEIS: No.

2. Direct, indirect and cumulative impacts to recreation on the Cottontail trail which would be fragmented by the Project. This trail is very popular with residents of Green Springs who use it to access Middleton Powerline, Mustang Pass and Ice House trails. A trail counter should be placed on this trail to record annual usage.

Addressed in the DEIS: No.

3. Direct, indirect and cumulative impacts to recreation on the Pioneer Rim and Pioneer Hills trails which are sandwiched between Red Hills Parkway and the Project. These trails would be changed forever by the sights, sounds and inevitable highway litter and vehicle emissions which would come from the additional highway. In an area favored by families and children because of its proximity to the “Sugarloaf,” this would be a completely different experience. The Pioneer Hills trailhead use has nearly doubled from 2015 to 2019, increasing from 504 visits to 1050 visits.

Addressed in the DEIS: No.

4. Direct, indirect and cumulative impacts to recreation on the Owen’s Loop and City Creek trails. These trails may be on the other side of the Red Hills Parkway, but the added congestion at the interchange of that highway and the Project would impact visitor experience there as well. City Creek trail system is considered an Intensive Use Area and visits in 2015 of 7,065 have increased to 9,200 in 2019.

Addressed in the DEIS: No.

5. Direct, indirect and cumulative impacts to recreation on the Broken Mesa Trail. Hikers or mountain bikers coming down off of Broken Mesa would have an experience of heading into the highway area with associated noise, litter and visual disturbance.

Addressed in the DEIS: No.

6. Direct, indirect and cumulative impacts to recreation on the Ice House, Mustang Pass and Middleton Powerline trails which are all within one mile of the proposed highway with disturbances similar to those mentioned for Broken Mesa trail.

Addressed in the DEIS: No.

7. Direct, indirect and cumulative impacts to recreation quality related to increased noise pollution. 32-46 thousand vehicles per day would travel at minimum speeds of 55 mph through the heart of the NCA by the year 2040, producing an average of 70-80 decibels of traffic noise continuously. Studies have shown that that level of noise will increase heart rate, blood pressure and cortisol. Visitors to Red Cliffs seek an experience of natural quiet and solitude in a designated NCA, not highway noise.

Addressed in the DEIS: No.

8. Direct, indirect and cumulative impacts to recreation quality related to increased ease of access that will likely cause new social trails and trampling of the vegetation.

Addressed in the DEIS: No.

9. Direct, indirect and cumulative impacts to recreation quality related to increased air pollution caused by vehicle emissions.

Addressed in the DEIS: No.

10. Direct, indirect and cumulative impacts to recreation quality related to the Project's connection to the Washington Parkway Extension (WPE) which would negatively impact recreation experience on the Mill Creek, Bone Wash, Sand Hill, Dino Cliffs, and Grapevine Trails.

Addressed in the DEIS: No.

11. Direct, indirect and cumulative impacts to recreation quality on trails that lead to the Cottonwood Canyon Wilderness which is managed for unconfined and primitive recreation and to preserve natural quiet, dark night skies and the experience of solitude. These trails include: Ice House, Mustang Pass, Middleton Powerline, Millcreek and Bone Wash.

Addressed in the DEIS: No.

12. Direct, indirect and cumulative impacts to recreation quality related to visual disturbance on all 15 listed above.

Addressed in the DEIS: No.

13. Direct, indirect and cumulative impacts to recreation quality related to viewshed destruction because of the increased threat of catastrophic wildfire caused by vehicle sparks on dry grasses or the careless toss of a lit cigarette from a vehicle window traveling on the NCH.

Addressed in the DEIS: No.

14. Direct, indirect and cumulative impacts caused by direct habitat loss that would change visitor experience of a familiar and much-loved landscape. These include loss of soil crust, increased erosion, loss of native vegetation and wildlife, more invasive and exotic weeds, higher risk of catastrophic wildfire, destruction of highly-scenic viewsheds, and more litter, noise and air pollution.

Addressed in the DEIS: No.

15. Direct, indirect and cumulative impacts caused by loss of access to recreation in quiet, natural spaces. Time spent in nature has been proven to reduce the stress hormone cortisol and increase physical, mental and emotional health. As Washington County's rapid growth continues, the health benefits that come from having an easily-accessible, 130-mile network of trails protected in our Red Cliffs NCA must be protected. There is a strong sense of local ownership and commitment to stewardship by local residents who do not want to see their trails and their sanctuary compromised.

Addressed in the DEIS: No.

16. Mitigation measures, if any, for damage to visitor experience of natural quiet, dark night skies, solitude and exposure to natural landscapes.

Addressed in the DEIS: No.

17. Mitigation measures analyzed should include highway speed limits of 30 mph or less; under or overpasses for fragmented trails; organization of regular litter pick-ups on the 15 trails impacted by the highways; AND

Addressed in the DEIS: No.

18. Mitigation measures, if any, for diminished recreation experience on trails directly and indirectly affected by the highway.

Addressed in the DEIS: No.

19. How will hikers and bikers continue traveling north-south on the T-bone trail and east-west on the Cottontail Trail?

Addressed in the DEIS: No.

20. How will the BLM keep lands adjacent to the highway clean and free from litter? Litter released by open dump trucks and vehicles on Red Hills Parkway, the other 4-lane highway through the NCA, spreads into the NCA and accumulates on roadsides, subsidizing tortoise predators and diminishing scenic qualities.

Addressed in the DEIS: No.

21. How will the BLM mitigate for increased noise and air pollution experienced by recreators?

Addressed in the DEIS: No.

22. How will north-south travel on Cottonwood Springs Road be maintained if the NCH is built? This is an existing motorized road that is commonly used by trail runners and that provides access to the Yellow Knolls Heritage Site and many other trails in the NCA.

Addressed in the DEIS: No.

Equestrian Recreation (104)

- 1- Impacts to the Mill Creek Trail which provides access to Elephant Arch, Mustang Pass, Ice House, Sand Hill and Dino Cliffs Trails, all popularly used by equestrians.

Addressed in the DEIS: No.

2. Impacts to the Pioneer Hills Trailhead and the nearby Pioneer Hills and Pioneer Rim Trails.

Addressed in the DEIS: No.

3. Impacts to the experience of quiet recreation by equestrians

Addressed in the DEIS: No.

4. Mitigation measures, if any, for equestrian experience that would be damaged by the spewing of exhaust, dust, and never-ending noise caused by the four-lane highway.

Addressed in the DEIS: No.

5. Mitigation measures, if any, for insulating horses and riders against any of those pollutants.

Addressed in the DEIS: No.

6. How the NCH would negatively impact equestrian experience in the nearby Cottonwood Canyon Wilderness Area which is located approximately 1 mile from the eastern terminus of the NCH. The Wilderness Act of 1964 directed that designated wilderness areas “shall be administered for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness, and so as to provide for the protection of these areas, the preservation of their wilderness character,...” The Act recognized the value of preserving “an area where the earth and its community of life are untrammeled by man.”

Addressed in the DEIS: No.

7. Impacts to the long-standing efforts of Back Country Horsemen of Utah Southwest Chapter, who have dedicated extensive volunteer time to maintaining and stewarding trails in the Red Cliffs NCA/DR. These projects include trail identification and marking; trailhead cleanup; installation of metal stepovers found at several trailheads to keep the tortoises within the boundaries while allowing for non-motorized access; and cleanup of tumbleweed piled almost 5 feet tall that had strangled the access road to the Cottonwood trailhead.

Addressed in the DEIS: No.

Interpretation/Visitor Understanding

Community Education and Volunteers

The DEIS must address NCH related impacts to educational resources, community learning and cohesion listed below in items 1 – 3: (111-112)

1. Impacts to the volunteer site steward program and the stewards who currently monitor sites inside the Red Cliffs NCA. Routing the NCH through one known petroglyph panel (and an as-of-yet unknown number of other precious sites)

undermines the efforts of site stewards who volunteer their time to monitor and guard heritage resources protected inside the Red Cliffs NCA.

Addressed in the DEIS: No.

2. Impacts to a decade of educational efforts focused on conservation of the special status species and 9 resource values protected in the NCA. Since 2009, Conserve Southwest Utah staff and SUNCLF members have spent thousands of hours providing outreach, stewardship, habitat restoration, litter pickups, guided hikes, and community building events focused on the Red Cliffs NCA and its value to our community. Current education efforts focus on welcoming all members of our diverse and growing community to experience and advocate for conservation of the 9 resource values protected inside the NCA. The NCH undermines great effort to connect our community to stewardship, education and appreciation of their NCA.

Addressed in the DEIS: No.

3. Conserve Southwest Utah currently has over 2,000 members, and SUNCLF over 40 site stewards, who are dedicated to protecting the Red Cliffs NCA's resources. The NCH undermines their efforts as well.

Addressed in the DEIS: No.

Education & Scientific Resources

- 1-Impacts to Scientific Research: The DEIS must address NCH related impacts to the legacy of Mojave desert tortoise research inside Red Cliffs NCA/DR and to opportunities for future research. (112)

Addressed in the DEIS: No.

3.16 LWCF

No comments.

3.17 BLM Travel and Transportation Management

Linear ROWs and Site Type Leases

Existing ROWs:

- 1-Provide baseline data on impacts existing ROWs have caused to the tortoise, other special status species, and the NCA's 9 resource values prior to calculating NCH ROW-specific impacts. (26)

Addressed in the DEIS: Not adequately addressed. The DEIS discloses that there are 38 existing ROWs on BLM lands in the RCNCA, but fails to disclose the impacts of these ROWs in terms of habitat fragmentation, adverse modification, predator subsidies, etc.

- 2- Inventory Baseline Conditions: In the DEIS, establish baseline conditions by conducting inventories for each special status species protected inside the Red Cliffs NCA and for each of the 9 resource values the Red Cliffs NCA was designated to protect. (32)

Addressed in the DEIS: No.

3.18 NCA

Summary: 1 scoping request addressed, 1 not addressed, and 6 not adequately addressed.

Impacts of NCH on Designated Purposes/Values of the RCNCA

1- Based on these management requirements within National Conservation Lands, we request a robust analysis of the direct, indirect and cumulative impacts of the NCH on the designated purposes and values of the RCNCA, and any and all effects the NCH may have on ensuring that these purposes and values are conserved, protected and restored.

Addressed in the DEIS: Not adequately addressed.

While the DEIS analyzed the direct and indirect impacts of the NCH on the purposes and values of the Red Cliffs NCA, no cumulative effects analysis was completed for the NCA resource values. Additionally, the DEIS failed to analyze the significance of the NCH in terms of duration and severity of impacts as required under 40 CFR Section 1508.27.

2- Analyze direct, indirect and cumulative impacts to the congressionally-defined purposes of the Red Cliffs NCA which is to protect each species that is located in the NCA and listed as a threatened or endangered species in the Endangered Species Act of 1973; and to conserve, protect, and enhance for the benefit and enjoyment of present and future generations: ecological, scenic, wildlife, recreational, cultural, historical, natural, educational and scientific resources of the NCA.

Addressed in the DEIS: Not adequately addressed. See above.

3- ROW Consistency with NCA: Ensure consistency of the NCH ROW with the established purposes of the NCA, as identified in OPLMA. Disclose the impacts the NCH ROW would have on the special status species and 9 resource values protected inside the NCA. (43).

Addressed in the DEIS: Yes.

Utility Impacts to the Purpose of the NCA:

1- Determine the cumulative impacts caused by future utilities (power, water, gas, and others) that could be constructed in the NCH ROW. What are cumulative impacts to the threatened Mojave desert tortoise, other special status wildlife and the 9 resource values protected in the NCA (26)

Addressed in the DEIS: Not adequately addressed. The DEIS fails to address the cumulative impacts of potentially siting utilities in the NCH ROW to the MDT or any of the NCA's objects and values.

2- Determine impacts from future utility developments that could be constructed in or near the NCH ROW, including applications to expand this ROW to accommodate such projects. (26)

Addressed in the DEIS: Not adequately addressed. Red Cliffs NCA RMP Amendment C would accommodate utilities in the ROW corridor, but the impact of such utilities is not adequately discussed.

3- Finally, any known plans for future ROWs in the NCA/Reserve should be addressed. Estimate the foreseeable future demand for ROWs and where they would be located. (26)

Addressed in the DEIS: No.

4- The DEIS should analyze pros and cons of co-locating utilities in the NCH ROW above and below ground. For example, above ground transmission lines disturb scenic resources and provide nest perches for ravens, a major tortoise predator. Below-ground

utilities require blasting and excavation that could negatively impact the threatened Mojave desert tortoise. (26)

Addressed in the DEIS: Not adequately. The DEIS discusses how above-ground utilities may function as perch sites for MDT predators, but fails to discuss the impacts of below-ground utilities.

5- In the DEIS analyze past, present, and reasonably foreseeable projects in the Red Cliffs NCA/Reserve and in proposed Zone 6 and for projects constructed outside the NCA/Reserve that are connected to the proposed Northern Corridor Highway. (31)

Addressed in the DEIS: Not adequately. The DEIS fails to analyze many critical projects that would impact Zone 6 and the Red Cliffs NCA, including the Babylon Road, and the extensions of Navajo Dr. and Green Valley Dr. through the proposed Zone 6.

3.19 ACEC

No comments.

3.20 BLM Topic: Lands & Realty

Summary: 17 scoping comments, 1 addressed, 16 not addressed

Private Inholdings and Land Ownership within the RCNCA/DR:

We request that the DEIS address the following issues and concerns regarding current land ownership in the Red Cliffs NCA/Reserve and its relationship with the NCH: (a-m found on page 24 of scoping comments)

- a. At its eastern end, the highway is routed through SITLA land. SITLA claims that the most valuable land in all of Washington County is their inholding inside the Red Cliffs Desert Reserve, above Green Springs. SITLA has also stated that they have the ability to withdraw from the Washington County HCP at will and develop this land because they own land in Zone 6 that they believe could be used as mitigation (Pers. Communications). What plan is in place to make sure that SITLA does not withdraw from the HCP after the NCH is built through their land, increasing access and the temptation to develop?

Addressed in DEIS: No

- b. The DEIS should disclose the appraised and/or assessed value of SITLA land in the Red Cliffs Desert Reserve and in Zone 6.

Addressed in DEIS: No

- c. After passing through SITLA land, the NCH passes through private inholdings owned by Alan Carter and Robert Brennan. Please identify and discuss any plan, alternative or approach to resolving any and all ownership, fee title, and management issues regarding the private inholding of Brennan, Carter and any and all other private inholdings in the RCNCA.

Addressed in DEIS: No

- d. The DEIS should disclose the appraised and/or assessed value of private inholdings inside the Red Cliffs Desert Reserve, specifically per-acre cost of Alan Carter, James Doyle, Robert Brennan and any and all other private inholdings.

Addressed in DEIS: No

- e. The DEIS should address pre-decisional bias associated with Washington County's recent \$1.35 million purchase of a 29.53-acre parcel inside the Red Cliffs Desert Reserve from private in-holder Robert Brennan. These parcels fall within the proposed NCH alignment. This purchase should not be allowed to influence the selection of alternatives.

Addressed in DEIS: No

- f. The DEIS should disclose why Washington County purchased for 1 million dollars a 22.73-acre parcel inside the Red Cliffs Desert Reserve from Robert Brennan that is adjacent to the NCH alignment. What are the plans for this parcel?

Addressed in DEIS: No

- g. The DEIS should address how routing the NCH through 1.75 miles of BLM-NCA lands would undermine the management of these lands as part of the American system of National Conservation Lands.

Addressed in DEIS: No

- h. The DEIS should address how routing the NCH through 0.62 miles of UDWR land would undermine the management of these lands as part of the Utah's system of Wildlife Reserve/Management Areas.

Addressed in DEIS: No

- i. The DEIS should describe how the applicant plans to secure ownership of the private inholdings through which the NCH would be routed.

Addressed in DEIS: No

- j. The DEIS should include the cost of acquisition of private land for the NCH ROW.

Addressed in DEIS: No

- k. The DEIS should disclose the exact acreage of SITLA and private inholdings that have been traded out, exchanged, or acquired in the Reserve/NCA since 1995 and the cost of these transactions. These transactions have been facilitated by or paid for with tax payer money, and routing a highway through land acquired for conservation purposes is a disservice to the American taxpayer.

Addressed in DEIS: No

- l. The DEIS must include analysis of the full breadth of all land acquisitions within the Desert Reserve since 1996, and the legality of routing the NCH through land acquired with LWCF or Section 6 Funds.

Addressed in DEIS: No

- m. Additionally, the DEIS must disclose the number of acres within the NCH ROW that were acquired with LWCF and/or Section 6 Funds.

Addressed in DEIS: Yes

2- Non-BLM Lands: ROW is required through the entire ~5-mile long proposed highway through lands governed by the provisions of the HCP and NCA, not just those currently managed by the BLM. (39)

Addressed in DEIS: No

3- Private Inholding Status: Determine the conditions under which the private in-holdings within the RCNCA could be developed and establish a binding agreement to prevent development from occurring in a federally designated NCA or in critical habitat managed under the provisions of an HCP. Absent acquisition or exchange at fair market value, these inholding owners likely always could pursue Fifth Amendment “takings” claims with the U.S. Court of Claims, arguing that the surrounding NCA or HCP prevents all reasonable uses or development of their land. (49).

Addressed in DEIS: No

3.21 Livestock Grazing

Summary: 1 scoping request addressed, 2 not addressed and 4 not adequately addressed.

1- Any livestock grazing in proposed mitigation areas should be analyzed for impacts to desert tortoise, and permit retirement strongly considered. (80)

Addressed in the DEIS: Not adequately. SGFO Amendment Alternative B proposes to end grazing on BLM lands in the proposed Zone 6, but the DEIS failed to analyze the impacts of grazing on vegetation communities, soil, and wildlife.

2- Impacts to Native Vegetation Communities: The DEIS must address NCH impacts related to fire, fuels, noxious and invasive weeds and grazing. (80)

Addressed in the DEIS: Not adequately. See above.

3- Grazing Permit Management: plans for management of existing grazing permits on BLM lands in Zone 6, including Box Canyon Allotment, Curly Hollow Allotment Holding Pasture, and Curly Hollow Allotment River Pasture. (141)

Addressed in the DEIS: Yes.

4- Fencing Plans: Plans for fencing if grazing is permitted to continue in Zone 6. Will BLM fence the allotments after removing and translocating tortoises? Will USFWS acknowledge that livestock grazing is an identified threat to the conservation and recovery of tortoises in the original and updated USFWS MDT recovery plans? If so, on what logical basis could USFWS continue to approve livestock grazing in tortoise habitat, whether under a revised HCP or one or more Biological Opinions pursuant to ESA Section 7 consultations? If livestock grazing is prohibited on BLM tortoise habitats in Clark County Nevada (with allotments unavailable for grazing and permits bought out), why is this grazing still permissible on BLM tortoise habitats across the biologically arbitrary state line in Washington County Utah? (141)

Addressed in the DEIS: Not adequately. The DEIS states that current existing fencing for the allotment and pasture boundaries within proposed Zone 6 **could** be removed after the amendment, but does not say that it would be removed. The DEIS also fails to discuss the impacts of rangeland fences to MDT in Zone 6. The DEIS also fails to adequately discuss how grazing would be ended on SITLA lands in the proposed Zone 6.

5- Grazing Allotments Purchase Plans: Plans for buying out grazing allotments if sellers are willing. (141)

Addressed in the DEIS: Not adequately addressed. The DEIS simply says that Washington County would attempt to work with willing sellers.

6- Grazing Impacts: Analysis of grazing impacts on vegetation needed by the tortoise for shelter and food. (141)

Addressed in the DEIS: No.

7- Grazing Impacts on Invasive Species: Analysis of grazing impacts on the spread of invasive brome grasses in tortoise habitat. (141)

Addressed in the DEIS: No.

3.22 Fire & Fuels Management

1- The DEIS should describe the presently known ecosystem processes of vegetation communities in the NCA and all proposed mitigation areas, as well as natural cycles and anthropogenic factors that affect the fire return intervals. How will construction of a highway disrupt these ecosystem processes, considering potential fire ignition sources from the highway, vehicles and drivers? (79)

Addressed in DEIS: No

Notes: The DEIS did not address ignition sources coming from highways. It also did (and could) not, but now must, consider the 2020 Turkey Farm Road and Cottonwood Trail fires.

3.23 Noise

Summary: 4 scoping requests not addressed and 3 not adequately addressed.

1. 32-46 thousand vehicles per day are projected to travel on the Northern Corridor in 2040, dramatically increasing noise levels in the southern portion of the NCA. BLM must study the encroachment and cumulative impact of artificial sound-levels resulting from the NCH. Vehicle noise would be transmitted for miles in all directions disrupting the natural soundscape. With the expected St. George population growth, vehicle noise pollution would intensify over time.

Addressed in the DEIS: Not adequately addressed. BLM failed to provide estimates on potential sound level increases that would be caused by the highway. The Draft EIS stated that noise modeling (estimating increases in noise levels due to the NCH) and consideration of noise barriers (sound walls) would occur later in the NEPA process. BLM also failed to incorporate a recent noise study completed for the WPE⁹⁵ which concluded noise levels would increase by more than 30 dBA in some locations (double the normal noise level). Since the NCH is similar to the WPE and will connect to it, this study should be referenced to fully consider data relevant to the NCH.

2. The potential for noise pollution to induce modified wildlife behavior such as aversion to highway surroundings, thereby reducing the total usable habitat and forging.

Addressed in the DEIS: Not adequately addressed. The DEIS only states that indirect impacts to the MDT include noise and vibrations from the highway.

3. A full analysis requires: baseline metrics of current sound pressure levels, a noise-level modeling study, an analysis on the failure of wildlife to adapt to the noise pollution and a cumulative assessment of long duration and escalating sound levels on landscape health.

Addressed in the DEIS: No.

4. The DEIS must analyze the impacts of highway traffic noise to residents, visitors and wildlife.

Addressed in the DEIS: Not adequately addressed. See above.

5. Traffic noise degrades the calming effect we experience when we spend time in wild places, diminishing visitor experience and adversely affect wildlife survival rates and

⁹⁵ Traffic Noise Analysis: Washington Parkway Green Springs Dr. to I-15

distribution. The DEIS must analyze the impacts of highway noise on recreation experience.

Addressed in the DEIS: No.

6. The DEIS should incorporate recent studies which show that human-caused noise has doubled the level of environmental sound in 63 percent of U.S. protected areas, and produced a tenfold or greater increase in 21 percent of protected areas. In general, a growing number of studies indicate that animals, like humans, are stressed by noisy environments.

Addressed in the DEIS: No.

7. The DEIS should include analysis of NCH noise-related impacts to human physiological, physical and mental health.

Addressed in the DEIS: No.

3.24 Hazardous Materials & Waste

No comments.

3.25 Human Health & Safety

No comments.

3.26 Social and Economic Conditions **12 scoping comments, none addressed**

- 1- Verify the economic impact of potential future congestion with and without the NCH. (49).

Addressed in DEIS: No

2- Socio-Economic Framework: BLM should use Appendix G, Socio Economic Framework for Public Land Management Planning: Indicators for the West's Economy in determining the baseline analysis of the region's economy. (114)

Addressed in DEIS: No

3-Evaluating Alternatives: BLM should utilize a Total Economic Valuation Framework for evaluating alternatives. (114)

Addressed in DEIS: No

4-Avoid IMPLAN: BLM should avoid IMPLAN or other input-output models that are grounded in Economic Base Theory when estimating jobs-income for each alternative. (115)

Addressed in DEIS: Yes

5-Total Personal Income: BLM should use Total Personal Income as a basis for examining economic impacts. (117)

Addressed in DEIS: No

6- Examination of Historic Trends: To provide socio-economic context, BLM should examine historic trends in county income and employment. (117)

Addressed in DEIS: No

7- Ecosystem Services and Nonmarket Values: BLM should complete quantitative analysis of nonmarket values to the extent possible, particularly to help the public understand the economic benefits that could be realized by visitation to the NCA. (119)

Addressed in DEIS: No

8- Cost-Benefit Analysis: The DEIS must include cost-benefit analysis of the NCH and must address the following concerns and issues listed below in items 1 – 6: (119-121)

Addressed in DEIS: No

1. Cost-benefit analysis of the NCH inside the Red Cliffs NCA versus road improvements outside of the NCA.
2. The DEIS must disclose the amount of federal funds that would or may be used to construct the NCH. We are concerned that UDOT may use a combination of comingled funds in a manner that makes it difficult to determine whether or how much federal funding may be used for the NCH. We believe that it is important to know whether or how much federal funds may be used for the NCH for several reasons. For example, the DOT and FHWA have a legal obligation to not use federal highway funds in a manner that may harm so-called Section 4(f) conservation lands unless no feasible alternatives exist. We believe that the Red Cliffs NCA/DR clearly qualifies for protection under Section 4(f), and therefore we need to know whether any federal highway funds may be used for the NCH.
3. Cost Calculation for the Northern Corridor Highway: The DEIS must account for the full cost of the proposed NCH, which includes, but is not limited to the following:
4. Known Costs

The cost of the Northern Corridor Highway, built in 2 phases with interchange and ROW application support, totals at least \$135.6 million according to the DMPO's 2019-2050 RTP.

 - The cost of the Washington Parkway Extension, without which, the Northern Corridor Highway would not function in moving east-west traffic across northern St. George. This cost, according to the DMPO's 2019-2050 RTP, is \$4.6 million.
 - The cost of upgrading Cottonwood Springs Road and linking it to the Northern Corridor, which, according to the DMPO's 2019-2050 RTP, is \$8.64 million.
 - Total cost of Northern Corridor-related projects is \$144,240,000.
 - Inflation must be factored in.
5. Unknown Costs
 - The cost of establishing Zone 6 Mitigation, including
 - o Fencing
 - o Law Enforcement
 - o Outreach and Education
 - o Additional Staff
 - o Closure of trails
 - o Major Clean-up and habitat restoration
 - The yearly cost of managing and maintaining proposed Zone 6 mitigation from year 1 to year 25 (proposed HCP duration)
 - The cost of acquiring the approximately 3,200 acres of SITLA land in Zone 6

o The DEIS must disclose the appraisal and assessed value of the SITLA acres in Zone 6

6. Past Costs (Also Unknown)

- Trips to Washington DC to lobby for passage of HR 5597/S 3297, The Desert Tortoise Habitat Conservation Plan Expansion Act
- Cost of Studies used to Justify Need for the Northern Corridor
- Washington Parkway Study: Integration of East West Transportation Alternatives
- Washington Parkway Cost/Benefit Analysis
- Cost of survey work (for tortoise) in NCH route
- Cost of survey work in Zone 6
- Staff time devoted to NCH
- HCP staff (5 staff devoting considerable time to this project for a period longer than 10 years)
- HCAC member time and travel to 10-12 meetings per year for more than 10 years
- TC member time and travel to 10-12 meetings per year for more than 10 years
- Consultant Cost, including SWCA, Jacobs, other
- Engineering
- Attorney
- Agency cost including BLM, FWS, UDWR
- Cost of delaying renewal of HCP
- Cost of special and private meetings, travel and meals

9 -Real Estate: The DEIS must address NCH related impacts to real estate, especially in the communities of Green Springs and Middleton. (121)

Addressed in DEIS: No

10- Nonmarket Values: The DEIS must address NCH related impacts to nonmarket values, including the following impacts, concerns and issues listed below in items 1 – 15: (121-122)

Addressed in DEIS: No

1. Health and wellness, including physical, physiological, mental and cognitive
2. The value of world-class recreation including climbing, hiking, trail running, biking and equestrian recreation
3. The quality of life that attracts new residents and businesses to our area and supports the health of long-term residents
4. The value of scenic open space
5. The value of a highly-rated, aesthetically-pleasing viewsheds which are adjacent to one of the fastest growing metro areas in the nation
6. Real estate value
7. The passive value of the NCA appreciated by people who plan to visit in the future
8. The passive value of the NCA appreciated by people who value protection of threatened and endangered species and the larger system National Conservation Lands
9. The value of abundant wildlife and habitat
10. Ecosystem return services

11. The value of intact landscapes
12. The unpriced benefits to present and future generations related to protecting the NCA's purposes
13. The value of carbon sequestered by undisturbed vegetation
14. The value of being able to conduct scientific research and environmental education activities for adults and school children in such close proximity to a rapidly growing metropolitan area
15. According to Table 3-42 in the Red Cliffs NCA DRMP, Red Cliffs has high visitor use and provides many amenities for the public, including hiking, mountain biking, camping, equestrian activities, rock scrambling, and rock climbing, among others. BLM must identify and employ a tenable methodology for determining the non-market values of these activities, together with a tenable methodology for assessing the costs to the activities associated with the construction and siting of the NCH.

11-Scenic Values related to tourism and major events: The DEIS must address NCH related impacts to scenic values, including the following impacts, concerns and issues listed below in items 1 – 2: (122)

Addressed in DEIS: No

1. The DEIS should incorporate analysis of market and nonmarket values related to the scenic values of the Red Cliffs NCA.
2. The scenic beauty of our public lands in Washington County is world-renowned and drives our economy, providing thousands of jobs in hospitality and tourism. Red cliffs circle our community and support our transition to a future grounded in tourism and outdoor recreation, an industry that provided 110,000 direct jobs and \$3.9 billion in wages in the state of Utah in 2017. The St. George Area Sports Commission calculated that in 2017, 42 major athletic events brought more than 62,000 participants and over 116,000 out of town visitors to the area resulting in \$78 million in direct economic impact. Iron Man 70.3 brought in \$7 million in 2017. In 2018, the Huntsman World Senior Games had an estimated \$17 million economic impact. In 2017, the St. George Marathon brought in \$3.2 million from athletes and their entourages spending \$175 per day in our community. All of these major athletic events appeal to participants with advertising that features the Red Cliffs area.

12-Health Benefits: The DEIS must address NCH related impacts to health, including the following impacts, concerns and issues listed below in items 1 – 3: (123)

Addressed in DEIS: No

1. The value of open space, scenery and recreation to community health.
2. Most trailheads in Red Cliffs are located between 5 and 15 minutes from downtown St. George. The Centers for Disease Control and Prevention (CDC) reports that greater access to parks leads to 25% more people exercising three or more days per week.
3. By preserving Red Cliffs, natural soundscapes are preserved. Freedom from excessive human-caused noise, including highway noise, is beneficial to health. Studies have shown highway noise increases heart rate, blood pressure, cortisol and have adverse cardiovascular consequences. Chronic exposure to excess noise leads to chronic stress, heart disease and stroke.¹⁴³

3.27 Environmental Justice

No comments.

3.28 Cumulative Effects

1- The DEIS must address future development demand in the Red Cliffs NCA/DR facilitated by the NCH and it must address the cumulative impacts of other large-scale projects in critical tortoise (and other vulnerable species) habitat. (100)

Addressed in DEIS: Not adequately addressed. The DEIS provides a terse and incomplete table of future projects in Washington County, failing to analyze the cumulative impacts of these future projects.

4. Consultation & Coordination

Summary: 2 scoping comments, one addressed and one not addressed.

1- Tribal Consultation: Consistent with the requirements of the National Historic Preservation Act, BLM must invite participation by the following bands and tribes, all who have a stake in the fate of their ancestral homelands and cultural resources protected therein: (37)

Addressed in DEIS: Yes.

- a. The Paiute Indian Tribe of Utah including the Shivwits, Cedar, Indian Peaks, Kanosh and Koosharem Bands
- b. The Moapa Band of Paiutes
- c. The Kaibab Paiute Tribe
- d. All groups that claim affinity to this area should be consulted and given the opportunity to provide ethnography and input on cultural resources.

2-Tribal Communications on Cultural Resources: We also request that the Shivwits Band of the Paiute Indian Tribe of Utah and other groups claiming affinity to the area be alerted to the following: (38)

Addressed in DEIS: No.

- a. The known petroglyph panel located inside the proposed NCH alignment.
- b. That band/tribal members be invited to visit and provide comment on this (and other) petroglyph panels and cultural resources prior to the DEIS

Appendix 1.2 Draft St. George Field Office RMP Scoping Comments Accountability Mitigation

Summary: 8 scoping requests not addressed and 6 not adequately addressed.

1- Zone 6 Mitigation Uncertainty and Acknowledgement: In the DEIS, BLM must examine and discuss the scientific uncertainty related to Zone 6 functioning as effective mitigation for the Northern Corridor Highway. Furthermore, BLM must acknowledge and respond to questions and concerns expressed by the scientific community regarding Zone 6. (35)

Addressed in DEIS: Not adequately addressed. The DEIS discloses that Zone 6 is a heavily-recreated and damaged area home to a population of MDT that has not yet been validated, but it fails to demonstrate how, given these issues, Zone 6 could mitigate the NCH.

2- Major Zone 6 Inadequacies: The DEIS must consider how the NCH and proposed Zone 6 fails to mitigate for damage to original mitigation; fails to mitigate for damage to the 9 resource values protected in the Red Cliffs NCA; and fails to meet DTRO criteria for Reserve design. It must address:

- a. Providing mitigation for damage caused to the original 62,000-acre mitigation that is the Red Cliffs Desert Reserve undermines the Washington County HCP. (143)
- b. Off-site mitigation in Zone 6 fails to mitigate for damage caused to the purposes of the Red Cliffs NCA, including its 9 statutorily-designated resource values. 3. Zone 6 does not meet the Desert Tortoise Recovery Office Criteria for Reserve Design. (143)

Addressed in DEIS: Not adequately addressed. The DEIS fails to discuss how Zone 6 could mitigate for damage caused to the Red Cliffs NCA's purpose, or how it could mitigate for damage to the RCDR, which is the original mitigation for the take authorized in the 1995 HCP.

3- Zone 6 Mitigation Effectiveness: Analyze the effectiveness of the proposed Zone 6 Satellite Mitigation Area in mitigating not just damage caused to the threatened Mojave desert tortoise and its critical habitats, but also to the other 9 resource values the Red Cliffs NCA was statutorily designated to protect, and to the other special status species protected inside the NCA. (33)

Addressed in DEIS: No.

4- Zone 6 Mitigation Uncertainty: Disclose the scientific uncertainty related to Zone 6 functioning as effective mitigation for damage caused to Zone 3 (and the larger Reserve and Upper Virgin River Recovery Unit) by the Northern Corridor Highway. There is no scientific consensus regarding the effectiveness of Zone 6 mitigation. (33)

Addressed in DEIS: Not adequately. The DEIS acknowledges that more years of survey are necessary in Zone 6 to validate the MDT survey results there, but fails to discuss how this uncertainty means that Zone 6 is inadequate mitigation.

5- Zone 6 Management Plan: Document how Washington County plans to honor its commitment to manage Zone 6 in the same manner that the other 5 Zones of the Red Cliffs Desert Reserve are managed, i.e., for protection and recovery of the threatened Mojave desert tortoise, and under management protocols for National Conservation Lands. For example, given the increasing recreational uses in Zone 6 and the likelihood of greater future management conflicts, how would the county be able to guarantee its ability to exert adequate management control to ensure protection for tortoises and their habitats? (33)

Addressed in DEIS: Not adequately. The DEIS discusses amendments to the SGFO RMP that would reduce, but not eliminate, damaging recreational uses in Zone 6, but fails to

discuss how these same uses would be curbed on SITLA lands until they are brought under federal ownership.

6 – Zone 6 Mitigation Value and Survey Methods: Describe the mitigation value (tortoise abundance and density and quality of habitat) of Zone 6 in a manner that enables its value to be compared accurately and fairly with the value of the unfragmented (pre-NCH) Red Cliffs Desert Reserve Zone 3. Survey methods to determine density and abundance of the threatened Mojave desert tortoise in Zone 6 and Zone 3 must be comparable. If different survey methods are used (as we know was the case for 2018 surveys in Zone 6) the DEIS must explain clearly and concisely how their differences are equitable. (33)

Addressed in DEIS: No. The DEIS fails to resolve the issues with different survey methods used in Zone 6 versus Zone 3.

7- Zone 6 Mitigation Concept: Detail how Zone 6 would mitigate damage caused to the ecological, scenic, wildlife, recreational, cultural, historical, natural, educational and scientific resources the Red Cliffs NCA was statutorily designated to protect. The purposes of the Red Cliffs NCA are bounded by the geography of the NCA, and damage to the purposes cannot be mitigated off-site in Zone 6. (33)

Addressed in DEIS: No.

8- Zone 6 Permanent Protection: Describe how the SITLA lands in Zone 6 would be permanently protected as mitigation given SITLA's top fiduciary duty to optimize revenue for its beneficiaries and therefore the possibility that future lucrative development proposals could persuade or require SITLA to renege on its promise to allow full protection of these SITLA lands. In addition, what mitigation benefit may occur if the new HCP prohibits any incidental take on these SITLA Zone 6 lands? (34)

Addressed in DEIS: No.

9- Zone 6 Management: Describe how the BLM lands in Zone 6 (including in the Red Bluffs ACEC) would be managed differently to achieve an arguably higher level of protection for tortoises and their habitats. Since BLM is already legally obligated to protect tortoises and their habitats, how would establishing the new Zone 6 overlay to those lands "add conservation value" with regard to mitigation for the Northern Corridor's significant adverse impacts? (34)

Addressed in DEIS: No.

10- Zone 6 Future Mitigation Value: Describe how proposed future developments and infrastructure in and adjacent to Zone 6 would directly, indirectly, and cumulatively affect the current and future mitigation value of Zone 6. (34)

Addressed in DEIS: No. The DEIS fails to address the future planned roadways for Zone 6.

11- Zone 6 Survey Methods: If different survey methods are used (as we know was the case in 2017 for RCNCA and Zone 6) DEIS must explain clearly and concisely how their differences are equitable." (34)

Addressed in DEIS: No.

Recreation

Address the following issues with recreation types in Zone 6 that would not contribute to the protection or recovery of the threatened Mojave desert tortoise: (126)

- a. Commercial zip lines. The DEIS must also disclose a full list of all other special recreation permits and commercial recreation types that are currently offered or occurring in Zone 6.
- b. Off-trail mountain biking. Will fences be constructed around critical tortoise foraging, sheltering, breeding, and nesting grounds to protect them?

- c. Increasing recreation on the Bear Claw Poppy Trail System. Visits increased from 19,389 to 26,985 from the fiscal year ending Sept 30th 2015 to fiscal year ending Sept 30th 2019.¹⁴⁴
- d. Increasing recreation at the Gap trailhead. Visits increased from 7,506 to 8,600 for the same time period as above.
- d. The DEIS must disclose plans for managing wide-spread dispersed camping across Zone 6
- e. The DEIS must disclose the areas where designated camping will be allowed in Zone 6 and how designated campsites will be monitored to prevent litter and predator subsidies, poaching, vandalism and dogs-off-leash. If designated camping will be open to motorized campers, travel trailers and RV's, the DEIS must disclose plans for any dump stations, showers or electric hookups.

Addressed in DEIS: Partial

Long-standing Zone 6 Issues

The DEIS must address the following issues with long-standing land uses in Zone 6 that would not contribute to the protection or recovery of the threatened Mojave desert tortoise: (127-128)

- a. Target shooting is pervasive across Zone 6. Members of these organizations have documented bullet casings outside tortoise burrows in Zone 6 and have had live rounds pass over their heads while walking in Zone 6. Target shooting in Zone 6 is a danger to recreators and wildlife. The DEIS should include a detailed plan of community outreach and law enforcement for curtailing target shooting in Zone 6. Additional Law Enforcement officers would need to be hired.
- b. Illegal dumping. Since 2018, 3 major clean-ups on SITLA lands in Zone 6 have been organized by Washington County's Give Your Land a Hand group. Each time, a 50-yard dumpster has been filled to the brim with appliances, target shooting trash, debris, and general trash. These major clean-ups have barely made a dent in the pervasive illegal dumping problem in Zone 6.
- c. Pallet burning, bonfires, and pervasive campfire rings
- d. Long-term residences and permanent trailer camping
- e. Widespread, off-trail OHV, ATV, dirt bike, and vehicle use. The DEIS should reveal the total number of miles of motorized routes and illegal social trails. See BLM graphic below.
- f. The DEIS should provide mapping that overlays the road and route map below with tortoise observations and sign.
- g. The DEIS should analyze the impacts to tortoise health and physiology related to high levels of sound and vibration recreation uses like OHV, ATV, and competitive sporting events.

Addressed in DEIS: Partial

Competitive Sporting Events: True Grit Epic, The Red Rock Rampage, The Huntsman World Senior Games, National Interscholastic Cycling Association High School Championship. Requests for Inclusion in the DEIS Scope: (141)

- a- Event Timing: The DEIS should analyze the timing of these events in relation to critical tortoise life events like nesting and hatching of hatchlings. If events that attract thousands of visitors are hosted at the same time as nesting or hatching of hatchlings, this could appreciably reduce survivorship of the tortoises over a long period of time.
- b- Event Supervision: The DEIS should disclose a plan for event supervision and clean-up/litter pick-up after each of these events, including funding sources for the extra staff time.

- c- Event Economic Impact: The DEIS should also disclose the economic impact to Washington County from each of these events.
 - d- Constraints on Events: If competitive events are allowed to continue in Zone 6, this should not open the way for competitive events in other Reserve Zones 1-5.
 - e- Visitor Impacts: The DEIS should analyze the number of visitors to each of these events and the most common negative impacts of visitation, i.e., litter, off-trail travel, poaching, vandalism, etc.
- Addressed in DEIS: No***

Lands & Realty

Summary: 4 scoping comments, none addressed

1- Impact of Planned Road Projects on Zone 6: The DEIS should analyze the impacts of multiple road projects listed in the DMPO's 2019-2050 Regional Transportation Plan that would fragment, impact, or increase traffic on roads in or adjacent to Zone 6. • The DEIS should disclose plans for future utility development in Zone 6 • The DEIS should disclose plans for future co-location of utilities in the Western Corridor or extensions of Navajo and Green Valley Drive • Utility development should not be permitted in Zone 6 if added to the Reserve. (142)

Addressed in DEIS: No

2- Mining Requests for Inclusion in the DEIS: GEM Mine Impacts: The DEIS should analyze the direct, indirect and cumulative impacts of future work at the GEM mine on BLM land near Zone 6, five miles north of Sun River: • The cumulative impacts of mineral extraction on the threatened Mojave desert tortoise, including air and noise pollution, dust accumulation affecting vegetation growth, and increased traffic on roads like the Western Corridor and potentially the extensions of Navajo Drive and Green Valley Drive inside Zone 6 to accommodate the "hauling" of gypsum and other minerals. • As the market allows, hauling traffic could increase to 100,000 tons per year, or 15-19 hauls per day using roads that fragment or impact tortoise habitat in Zone 6. (142)

Addressed in DEIS: No

3- DiVario Development: The DEIS must analyze the direct, indirect and cumulative impacts of adjacent developments like DiVario on the tortoise, including the risk of increased habitat disturbance from greater local recreational pressures, predator subsidies from nearby trash, outside pet food, and artificial water sources, poaching, and predation of tortoises by pets. (143)

Addressed in DEIS: No

4- Adventure Park/Shooting Impacts: The DEIS must analyze the impacts of these associated developments on the efficacy of Zone 6 mitigation. (143)

Addressed in DEIS: No

Appendix 1.3 Draft Habitat Conservation Plan Scoping Comment Accountability

122 scoping requests
8 were adequately addressed
45 were not addressed at all
69 were not adequately addressed

1- Update of Threat Assessments: key documents are nearly a quarter-century old.

Addressed in Draft Amended HCP:

No. Discussion of threats to MDT in the Plan Area is generalized and incredibly lacking. Section “3.2.5 Threats” is one scant paragraph long. The Amended HCP must fully discuss habitat fragmentation and proliferation of roads and highways because the plan accommodates the Northern Corridor Highway as a changed circumstance. It must also discuss the threats of OHV activity and recreation because the plan accommodates Zone 6 as a changed circumstance.

2- Evaluate HCP/ITP in light of Updated Species Inventories: When updates are completed, provisions in the current HCP and ITP should then be carefully evaluated in light of the inventory data to determine whether those provisions remain relevant and appropriate.

Addressed in Draft Amended HCP:

Not adequately addressed. The Amended HCP fails to adequately discuss how updated species inventories show that the MDT is declining across the range, the UVRU, and the Reserve. Instead, the Amended HCP states that “UDWR considers the population of MDT within the Reserve to have stabilized: “there is no evidence of further declines in tortoise densities” (McLuckie et al. 2020) Draft HCP at 33. However, the McLuckie data captured in the DEIS tells a different story. Table 3-5.3 shows that MDT densities Reserve wide have declined from 19.6 to 17.2 MDT/kilometer² between 2017 and 2019. In Zone 3, where the NCH alternatives are being studied, MDT density declined from 17.2 to 12.3 MDT/km² between 2017 and 2019. The Amended HCP must recognize that updated species inventories show significant declines in MDT in the Reserve.

3- Define Biological Goals and Objectives:

Addressed in Draft Amended HCP:

Not adequately addressed. The Amended HCP fails to show how it carries forward biological goals and objectives consistent with those identified in the 1995 HCP. See [comments at Section 4.1](#) Issues with Draft Amended HCP.

The Amended HCP also fails to show how it is in accordance with the 2011 MDT Recovery Plan because it accommodates a changed circumstance that undermines the primary conservation measure of the 1995 HCP (the Reserve) with a 4-lane highway. This violates the following objectives and criteria from the Recovery 2011 MDT Recovery Plan:

- Recovery Criterion 1. Rates of population change (λ) for desert tortoises are increasing (i.e., $\lambda > 1$) over at least 25 years (a single tortoise generation), as measured
- Recovery Criterion 2. Distribution of desert tortoises throughout each tortoise conservation area is increasing over at least 25 years (i.e., ψ [occupancy] > 0).
- Objective 3. Ensure that habitat within each recovery unit is protected and managed to support long-term viability of desert tortoise populations.
- Recovery Criterion 3. The quantity of desert tortoise habitat within each desert tortoise conservation area is maintained with no net loss until tortoise population viability is

ensured. When parameters relating habitat quality to tortoise populations are defined and a mechanism to track these parameters established, the condition of degraded desert tortoise habitat should also be demonstrably improving.

4- High Standard of Protection: Biological objectives should include species- and reserve area-specific population goals, protective management actions, and monitoring measures.

Addressed in Draft Amended HCP:

Not adequately addressed. Population goals are absent; protective management actions detailed in the Amended HCP fail to curb damaging recreational uses in Zone 6; and the Amended HCP claims that the County exceeded its commitments under the 1995 HCP to support monitoring activities within the Reserve. Furthermore, it misinterprets the monitoring results when it says that “baseline monitoring indicates...the population of MDT within the Reserve appears to be relatively stable and robust.”

5-Define an Adaptive Management Plan:

- HCP compliance
- Fire management, including emergency-response and prescribed fire
- Fencing, including a plan for immediate response to fence blow-outs caused by heavy precipitation events. This is crucial for preventing tortoises from entering roadways and being struck by vehicles. Rapid inspection of tortoise fences should occur promptly after each major storm or monsoonal event. Over time, it should be clear where most of the common blow outs occur.
- Signage that describes the criminal and civil consequences and fines for illegally taking a tortoise home or of allowing a dog to wander off-leash in the Reserve
- Exotic species control, including investigation and trial-use of pre and post emergent herbicides like Esplanade (if it is determined not to be detrimental to the tortoise) for combatting the spread of invasive brome grasses and Sahara mustard
- Revegetation (including use of more of the lower potassium native plant species so that tortoises can continue to eat them during extended drought periods)
- Seed banking
- Uses to be allowed in preserve
- Public access points, if any
- Reserve staff duties and licensing and education requirements
- Education, including neighborhood and school programs that are accessible to community members of all ages, races, ethnicities and socio-economic backgrounds AND the supervision of new outreach staff AND mandatory creation of scientifically-sound, peer-reviewed Interpretation Plans to guide outreach efforts
- Monitoring of the condition of covered-species populations
- Monitoring of annual condition of the sub-areas of the reserve

Addressed in Draft Amended HCP:

Not adequately addressed. The document fails to discuss HCP compliance in regards to the NCH undermining the central mitigation feature of the 1995 HCP; immediate response plans for fencing blow-outs; effective signage to combat issues with poaching and dogs-off-leash; revegetation with attention to PEP; uses allowed in the Reserve (the Amended HCP notes that damaging uses will continue in Zone 6); detailed information on education and outreach and creation of interpretation plans; monitoring in sub-areas.

6- HCP Land Hard-line Component: Hard boundary lines for the WCHCP land conservation reserves – whereby the reserve boundary is delineated, and protection of all land within the reserve boundary is assured – are necessary to conserve covered species, focus and increase the efficiency of reserve and covered species management. Establish Definitive HCP Boundaries.

Addressed in Draft Amended HCP:

No.

7-Free From Harmful Use: WCHCP needs to provide assurances and guidelines regarding management of the reserve system, including monitoring and adaptive management. Funding needs to be assured. Compatible, low-impact uses like hiking, bird-watching and photography may be appropriate on reserve lands, after appropriate environmental reviews to determine no significant impacts to species. But these lands should not be managed for multiple-use.

Activities like ATV/OHV use, competitive sporting events, dispersed camping and target shooting should be banned. Specific management actions need to be outlined in the WCHCP.

Addressed in Draft Amended HCP:

Not adequately addressed. The Amended HCP fails to discuss impacts from the harmful uses that will continue in Zone 6. However, the Draft EIS discloses that harmful uses including ATV/OHV use, target shooting, and grazing and mining to some extent will continue in the proposed satellite reserve. Discussion of ending or reducing these activities on SITLA lands in Zone 6 is inadequate. The County simply proposes to spend \$55,000 more per year on law enforcement. Given the failure of law enforcement to prevent human-caused wildfires, dog-off leash issues, off-trail issues, etc., this will not cut it for Zone 6.

8- Existing Conditions in Reserve: Disclose the existing environmental conditions in the Reserve/NCA and outside the Reserve/NCA including, but not limited to the following:

Addressed in Draft Amended HCP:

Not adequately addressed. See below.

9- Current percent cover of exotic annuals in the Reserve, including brome grasses, Russian thistle, Sahara Mustard and others

Addressed in Draft Amended HCP:

Not adequately addressed. The Amended HCP relies on data from 2015 which shows that “exotic annual grasses and forbs reach almost every area of the NCA, ranging from 5% to 30% coverage within the landscape (BLM 2015).” Current data on the percent coverage of invasive species is missing..

10- Document the spread of Sahara mustard from vectors Pioneer Park and Cottonwood Springs Road through the Reserve. Abundance of Sahara mustard in Pioneer Park and at Pioneer Hills, where the western terminus of the NCH would link up with RHPW, is concerning. How would the NCH contribute to increased levels of Sahara Mustard in the Reserve?

Addressed in Draft Amended HCP:

No.

11- The number, types and acreage of vegetation communities in the Reserve that show departure values greater than 20% from reference-baseline or Natural Range of Variability (NRV) established in 2011 Landscape Conservation Forecasting by The Nature Conservancy.

Addressed in Draft Amended HCP:

No.

12- The history and extent of wildfire in the Reserve from the earliest year that data was collected up to present day. Special attention should be paid to fires that were started from route, road or highway vectors.

Addressed in Draft Amended HCP:

Not adequately addressed. The document discloses adverse impacts past fires have had in the Reserve, but fails to consider roads as vectors for ignitions.

13- Analysis of tortoise declines following each major wildfire. For example, following the 2005 fires, the tortoise population in Zone 3 declined by as much as 50%.

Addressed in Draft Amended HCP:

Not adequately addressed. The document discloses that MDT mortality in Zone 3 was 15%, and Reserve-wide was 37.5%, following the 2005 wildfires. However, the document fails to discuss how the NCH may act as a vector for wildfire in the future and does not include any plans for reducing the number of wildfires started on roads inside or adjacent to the Reserve.

14- Analysis of re-burned areas and their proximity to the proposed NCH. For example, the eastern terminus of the NCH is less than 1 miles from critical tortoise habitat that has burned 4 times between roughly 1990 and 2014.

Addressed in Draft Amended HCP:

No.

15- Analysis and mapping of the number of fires, as far back as the fire data goes, that started on roads inside and adjacent to the Reserve, including Cottonwood Springs Road, Red Hills Parkway, SR-18 and I-15.

Addressed in Draft Amended HCP:

No.

16- Justification for comparing Zone 3 tortoise densities post-fire compared to Zone 6 “no fire” densities. Zone 3 habitat and population numbers were much more robust (more robust than what Zone 6 is currently supporting) prior to the severe wildfires in the early 2000’s, more robust than current densities in Zone 6.

Addressed in Draft Amended HCP:

No. The document relies on a flawed comparison of 2017 MDT densities in Zone 6 to 2019 MDT densities in Zone 3. Furthermore, the density estimates for Zone 3 do not account for the impacts of the Turkey Farm Road and Cottonwood Trail Fires which burned 20% of the Reserve almost entirely in Zone 3.

17- An analysis of the accomplishments of habitat restoration projects in the Reserve/NCA. We find that habitat restoration is slow and intensive, but necessary process, and that great care should be given to ensuring that additional habitat restoration is not needed in the future due to wildfires that start from a highway vector, like the proposed NCH.

Addressed in Draft Amended HCP:

Not adequately addressed. The document states that Washington County has supported habitat restoration efforts, but fails to discuss the progress of restoration efforts led by the BLM and UDWR.

18- An analysis of the health of crypto biotic soil crusts in the Reserve/NCA. Attention may need to be given to restoration of crypto biotic soil crusts in the near future. These crusts hold the soil, add nutrients, and resist invasive plant species.

Addressed in Draft Amended HCP:

No. This is a critical omission because cryptobiotic crusts play a large role in supporting the native vegetation communities MDT rely on for nutrition. They also play a role in preventing the spread of invasive weed species. The Amended HCP must include information on the health of soil crusts in Red Cliffs.

19- Analysis and mapping of tortoise population declines inside the Reserve since 1995.

Addressed in Draft Amended HCP:

Not adequately addressed. The document claims that, “the Red Cliffs Desert Reserve TCA hosts a higher density of adult MDT than any other TCA” and that “UDWR considers the population of MDT within the Reserve to have stabilized” following wildfires which reduced the population from 29.6 to 19.16 tortoises per square kilometer. It fails to use the most recent density estimates for the Reserve (17.2 tortoises per square kilometer in 2019) and does not account for the impacts of 2020 wildfires.

20- Analysis of raven predation of tortoises inside the Reserve, including analysis of the relationship between highways and predator subsidies, and the relationship between utilities and raven perch sites.

Addressed in Draft Amended HCP:

Not adequately addressed. The document discusses raven predation trends in the Reserve but fails to discuss trends in Zone 6 or provide plans for combatting raven predation in Zone 6.

21- The DEIS should include a plan for combatting growing raven predation rates in the Reserve. This plan should investigate the use of targeted outreach and education; egg oiling; anti-perch devices; and use of techno-torts.

Addressed in Draft Amended HCP:

No.

22- Analysis and mapping of Upper Respiratory Tract Disease (URTD) in the tortoise population in the Reserve, including known number of documented ELISA positives, what happened to ELISA-positive tortoises (dead or alive), where they were released after testing and plans for combatting URTD in the future.

Addressed in Draft Amended HCP:

Not adequately addressed. The document discloses that URTD and shell disease is present in the Reserve, that incidences are increasing, and that 11% of the MDT in the Reserve displayed clinical signs of URTD in 2018, but shares no information beyond that.

23- Analysis and mapping of tortoise road mortalities on roads in and adjacent to the Reserve, including on roads in Washington County non-adjacent to the Reserve. Road mortality mapping should be overlain with mapping that depicts the age and general condition of the fencing around the perimeter of the Reserve and the fencing that delineates the roads.

Addressed in Draft Amended HCP:

Not adequately addressed. The Amended HCP fails to discuss, but the Draft EIS does disclose, that 146 tortoise mortalities have been observed on roads and trails in and adjacent to the Reserve. Specific details were not shared. The Amended HCP must include plans to curb road and trail mortalities in the Reserve and Zone 6 that includes, at a minimum, law enforcement, outreach, fencing, and road/trail closure components.

24- We request that a plan for addressing fence blow-outs, including staff and money resources, be designed.

Addressed in Draft Amended HCP:

No.

25- Analysis and mapping of poached, illegally “adopted” and stolen tortoises from the Reserve. There are many instances of tortoises being picked up from the Reserve and then dropped off at

pet stores or at the Washington County HCP office. An analysis of the frequency and extent of this behavior is necessary.

Addressed in Draft Amended HCP:

Not adequately addressed. The Amended HCP fails to discuss, but the Draft EIS does disclose, that 38 incidents of suspected or confirmed illegal take of Mojave desert tortoises from the Reserve have occurred. The Amended HCP must include a plan for curbing MDT poaching in the Reserve and Zone 6 that includes, at a minimum, law enforcement, outreach (community-wide and pet-store-specific), and signage components.

26- Furthermore, analysis and mapping of the non-native tortoise species (like Russian tortoises, African sulcatus, and others) that are abandoned in the Reserve must be completed. People frequently abandon non-native pet tortoises in the Reserve. What is the relationship between abandonment on non-native species and spread of diseases like URTD and others? To what extent could the continued illegal releases of non-native tortoises in the Reserve cause increased competition with native tortoises for limited forage resources, especially in areas recovering from fire, largely infested with brome and mustard, or subject to heavy raven or other predation? How do non-native and native tortoises interact in terms of potential competition for home ranges and use of deep burrows, and how could such competition increase stress on native tortoises?

Addressed in Draft Amended HCP:

No. The Amended HCP must include a plan for curbing the rate of turtle and tortoise dumping in the Reserve and Zone 6 that includes, at a minimum, law enforcement, outreach (community-wide and pet-store-specific), and signage components.

27- Analysis of dog-off-leash issues, including a report on the number of tortoise carcasses and tortoise injuries found since 1995 that show signs of canid trauma. And a compilation of the number of all Law Enforcement citations/warnings that have been issued since December 1995 related to dog-off-leash issues.

Addressed in Draft Amended HCP:

Not adequately addressed. The Amended HCP fails to discuss, but the Draft EIS does disclose, that various reports over the last 10 years indicate predation of tortoises by dogs in the Reserve.

28- A plan for combatting the increasing issue of dog-off-leash issues in the Reserve, complete with plans for signage and targeted community outreach, perhaps visits and literature distributed at local dog parks, and new content added to the Red Cliffs Desert Reserve website which would share a list of public lands in Washington County where people are allowed to have their dogs off-leash as contrasted to the Reserve, where dogs are not allowed off leash.

Addressed in Draft Amended HCP:

No. The document discloses that this is a problem but offers no solution: “Despite leash requirements within the Reserve, predation by domestic dogs (as well as ravens) likely play a role in the population dynamics of MDT within the Reserve (McLuckie et al. 2018) and the decline of MDT within the Permit Area.” The Amended HCP must include a plan for leash laws in the Reserve and Zone 6 that includes, at a minimum, law enforcement, outreach, and signage components.

29- Analysis of recreation impacts in the Reserve, including the length of illegal social trails and other forms of off-trail travel and the impacts this has to wildlife, vegetation and soil crust.

Addressed in Draft Amended HCP:

Not adequately addressed. The Amended HCP must include a plan for enforcing on-trail recreation in the Reserve and Zone 6 that includes, at a minimum, law enforcement, outreach, and signage components. The Amended HCP must also include a detailed plan for rehabilitation of the “proliferation of social trails” documented in 6.3.3.1 Adaptive Management Program.

30- A plan for curtailing recreation-related littering in the Reserve. Litter levels are increasing as visitation increases.

Addressed in Draft Amended HCP:

No. The Amended HCP must include a plan for curtailing litter in the Reserve and Zone 6 that includes, at a minimum, law enforcement, outreach, and signage components. Outreach and education focused on the negative impacts of litter in subsidizing predator populations should be offered in schools and to local hiking clubs and others in the recreation community, and especially to the local church-organized youth groups that utilize the Reserve.

31- A plan for providing outreach and education that will help curtail human-caused take of tortoises and subsidization of predator populations through litter and uncovered trash.

Addressed in Draft Amended HCP:

No. See above.

32- Evidence of MDT Take Impact: evidence that any taking of MDT can occur without reducing the likelihood of the survival and recovery of the species.

Addressed in Draft Amended HCP:

No.

33- USFWS must undertake a full and thorough accounting of the take authorized in the original WCHCP, including:

Addressed in Draft Amended HCP:

Not adequately addressed. See below.

34- Take of tortoises from 1995-2019 that includes number of translocated tortoises, but also number of direct mortalities including construction related and roadkill mortalities, poaching, harassment, and illegal “adoption”; and number of ELISA positive tortoises prevented from being released back into the Reserve.

Addressed in Draft Amended HCP:

Not adequately addressed. The document says that 776 reported MDT individuals were processed through the Washington County HCP, but only 257 should be debited from the take. It does not disclose the number of construction-related mortalities or URTD or other disease mortalities. It also doesn’t disclose the number of roadkill or poaching mortalities, although this information was shared in the Draft EIS.

35- Take of critical habitat acres from 1995-2019 during the course of development in Washington County.

Addressed in Draft Amended HCP:

Not adequately addressed. The document discloses the take of occupied and potential habitat acres, but does not discuss the take of critical habitat acres. This is important given that not all the designated critical habitat in the plan area falls within the Reserve boundary. It also fails to discuss the take of critical habitat inside the Reserve due to the NCH.

36- Take of low, medium and high-density tortoise density acres (as identified in the 1995 WCHCP) in Washington County.

Addressed in Draft Amended HCP:

Not adequately addressed. The document discloses take of 5,700 incidental take area acres; 16,037 acres of Occupied MDT Habitat; and 6,785 acres of Potential MDT Habitat. It does not disclose the acres of take in low, medium and high-density MDT areas. The HCP should provide clarification on “Occupied MDT habitat.” Is the 14,466 acres of Occupied MDT Habitat the county is applying for considered low, medium or high-density habitat?

37- Under Section 10 of the ESA, an applicant for an ITP must establish that it has taken steps to minimize and mitigate take of covered species. Courts have struck down HCPs and ITPs for failing to ensure that their effects had been minimized and mitigated to the maximum extent practicable. Before the FWS can issue an ITP, the Service must first revise and amend the HCP to account for new information on the MDT populations and habitat, including:

Addressed in Draft Amended HCP:

Not adequately addressed. See below.

38- Identifying, mapping and discussing the most productive and biologically valuable habitat across its range for the tortoise, and protecting this habitat in the reserve system, (not damaged by projects like the NCH) including the tortoise’s current and potential future distributions;

Addressed in Draft Amended HCP:

Not adequately addressed. The Amended HCP relies heavily on a 2009 US Geological Survey (USGS) model developed by Nussear et al. to identify potential suitable habitat, but fails to correctly understand and apply the model. See “The DEIS’ application of the USGS (2009) model does not acknowledge and address shortcomings” in [Section 3.5](#) Special Status Wildlife.

39- Detailed mapping of vegetation communities (using agency accepted identification protocols) and wildlife habitats;

Addressed in Draft Amended HCP:

Not adequately addressed.

The DEIS shows that LANDFIRE data was used to map vegetation communities, but admits that “the LANDFIRE data are not intended to imply 100 percent accuracy on the ground.” (DEIS at 3-12) Comprehensive on-the-ground surveys are required to provide the necessary information on the actual vegetation communities that occur within the Permit Area, and especially within the proposed NCH ROWs in order to analyze the actual acreage of permanent and temporary impact for each vegetation community.

40- The preserve design needs to be based on scientifically accepted principles of reserve design which do not support the fragmentation of critical habitat by projects like the NCH;

Addressed in Draft Amended HCP:

Not adequately addressed. The document proposes a reserve design that would fragment the existing Reserve (and central mitigation feature of the 1995 HCP) with a highway in exchange for adding disconnected, damaged land in Zone 6. The document fails to discuss how this design does not meet the criteria for Reserve design envisioned by the 1994 MDT Recovery Plan.

41- Particular life-history requirements of the tortoise;

Addressed in Draft Amended HCP:

Yes.

42- All available scientific data need to be included when identifying the actual reserve;

Addressed in Draft Amended HCP:

Not adequately addressed. The Amended HCP fails to consider the best available scientific data when identifying MDT in the Reserve or the larger Plan Area. Specifically, the document fails to incorporate the more sophisticated MDT potential habitat model by Defenders of Wildlife and NatureServe in 2019 (Feinberg et al. 2019). This model was submitted in the scoping letter submitted by the Red Cliffs Conservation Coalition (see page 61 and Appendix F). The Feinberg et al. (2019) model updates and refines Nussear et al. 2009 in many important ways. See “The DEIS relies on Nussear et al. 2009 even though more sophisticated modeling tools exist” in [Section 3.5 Special Status Wildlife](#).

Additionally, the draft HCP didn’t adequately interpret the data that has been gathered on MDT from 1995 to 2020 (which shows population declines of 41% in the Reserve). This data should have been used to assess threats, respond with an appropriate conservation strategy, and lay the foundation for an Amended HCP that actually protects the MDT.

43- Connectivity must be assured not only from north to south, but also east to west, so that important habitats remain connected and/or can be reconnected;

Addressed in Draft Amended HCP:

No. The Amended HCP accommodates the NCH which would fragment the Reserve from north to south. It fails to address the connectivity issues with Zone 6 being cut off from the rest of the Green Valley Analytic Unit by the future Western Corridor Highway.

44- Baseline inventories on plant and animal species distribution, abundance and trend;

Addressed in Draft Amended HCP:

Not adequately addressed. The document claims that the MDT population in the Reserve appears to be relatively stable and robust, but the data provided in the Draft EIS contradicts this statement. See more discussion elsewhere in comments.

45- Consider and evaluate species for long-term monitoring (continue honoring the commitment to long-term monitoring by UDWR).

Addressed in Draft Amended HCP:

Not adequately addressed. The document claims that “monitoring indicates that the conservation program of the Washington County HCP is effective, and ongoing funding by the County is no longer necessary to assess the basic efficacy of the conservation program.” The County will contribute only \$650,000 for monitoring over a 25-year period if the NCH is not granted. They contributed \$1 million for monitoring in the 1995 HCP. Conversely, if the NCH is granted and Zone 6 is added to the Reserve, they will contribute \$2.3 million for monitoring.

46- Effects of invasive species on the habitats and covered species;

Addressed in Draft Amended HCP:

Not adequately addressed. The document discloses that “all of the ecological systems in the Reserve have a high departure from their natural range of variability due to the presence of nonnative grasses and forbs in burned and unburned areas (Provencher et al. 2011). Invasive annual grasses common to the RCNCA and vicinity include red brome (*Bromus rubens*) and cheatgrass,” but fails to discuss how Amending the HCP to accommodate the NCH will lead to increased presence of invasive weeds that harm MDT.

47- An accounting for past land management practices and other actions of the applicant that have limited the conservation and recovery of covered species.

Addressed in Draft Amended HCP:

Not adequately addressed. The document discloses the “effects of the covered activities,” but largely fails to provide Reserve-specific examples. See additional discussion elsewhere in the comments.

48- Each vegetation type that occurs in the planning area must be protected adequately in the preserve;

Addressed in Draft Amended HCP:

No.

49- Vegetation communities listed in the 2011 Landscape Conservation Forecasting must be completely protected, including but not limited to creosote-white bursage scrub, warm season grassland, desert sand sagebrush, and blackbrush thermic.

Addressed in Draft Amended HCP:

Not adequately addressed. The document discloses the presence of these vegetation communities in the Reserve, but fails to discuss how they will be protected. The Draft EIS shows that the NCH will destroy at least 285 acres of creosote-white bursage scrub, desert scrub and shrubland inside the Reserve. Indirect impacts of the NCH will affect 3,879 acres of chaparral and desert scrub. (DEIS Vol. 2, pg. 3-13).

50- In addition, for BLM’s sensitive plant species, including the 12 species found in Washington County, the USFWS must provide a robust analysis of the following factors: Assessment of current and potential future habitat/environmental conditions;

Addressed in Draft Amended HCP:

No. The document discusses federally-endangered and threatened plant species, but not BLM sensitive plant species.

51- Vegetation community and habitat mapping validation;

Addressed in Draft Amended HCP:

Not adequately addressed.

The DEIS and Amended HCP rely on the Landfire data for impact analysis while recognizing that it is inaccurate: “The LANDFIRE data are not intended to imply 100 percent accuracy on the ground.” (DEIS at 3-12) Comprehensive on-the-ground surveys are required to provide the necessary information on the actual vegetation communities that occur within the HCP plan area.

52- Compilation of all existing data on species.

Addressed in Draft Amended HCP:

Not adequately addressed. The Amended HCP failed to reference many important studies on the MDT, including studies that guide MDT habitat restoration. Failure to discuss necessary habitat restoration to combat the spread of invasive plants species and lessen the risk of catastrophic wildfire was a critical omission in the Amended HCP. The document should incorporate: Abella S.R. and K.H. Berry. 2016. Enhancing and restoring habitat for the desert tortoise (*Gopherus agassizii*). Journal of Fish and Wildlife Management 7(1):xx–xx; e1944-687X. doi: 10.3996/052015-JFWM-046.

53- Dismiss the concept of using Zone 6 as a Mitigation Bank.

Addressed in Draft Amended HCP:

No. The document fails to disclose how current legislation (H.R. 7815) attempts to establish Zone 6 as a mitigation bank: “The Secretary shall manage the Red Cliffs Desert Reserve, Zone 6, as a land bank to provide mitigation credits for future disturbances of the Red Cliffs Desert Reserve, including utility disturbances and the construction of the Northern Transportation Corridor identified in section 5(e).”

54- Analyze Zone 6 as mitigation considering acreage, quality, activities and fragmentation.

Addressed in Draft Amended HCP:

Not adequately addressed. The document lists the numerous damaging recreation type and illegal activities that occur in Zone 6, but fails to detail how these uses will be ended if Zone 6 is added to the Reserve. Discussion of how recreation and illegal uses will be managed on SITLA lands is seriously lacking because the Amended HCP says only that “The County will provide additional funding for Washington County Sheriff Deputy patrols within the Reserve. Law enforcement will support Reserve integrity, help manage allowed uses of the Reserve, and minimize impacts on MDT and listed plants within Reserve Zone 6.”

55- Disclose the new survey data used to calculate the extent and distribution of known and *potential* Mojave desert tortoise habitat for the purposes of WCHCP Renewal.

Addressed in Draft Amended HCP:

Not adequately addressed. See #38 above.

56- Disclose the survey data used to determine the estimated abundance of tortoises inside and outside the Reserve and in Zone 6.

Addressed in Draft Amended HCP:

Not adequately addressed. The document fails to discuss the issues with using different survey methods in Zone 6 vs. the Reserve. It fails address the Draft EIS which says that MDT density estimates in Zone 6 have not been validated.

57- Ensure New Development Mitigation Measures.

Addressed in Draft Amended HCP:

Not adequately addressed. 6,813 acres in Zone 6 are proposed as mitigation for the NCH, but no additional mitigation is proposed for the loss of up to 66,301 acres of occupied and potential habitat in the permit area. Additionally, the Reserve’s function as the primary mitigation measure in the 1995 HCP is undermined by the NCH.

58- “Take” Determination Process.

Addressed in Draft Amended HCP:

Not adequately addressed. In the Amended HCP, the applicant seeks more take than it received in the 1995 HCP, but still claims that this take is “unrealized” due to updated habitat mapping which shows that there is more MDT habitat in the plan area than realized in 1995. However, the habitat mapping results are suspect because the Nussear model was incorrectly interpreted. See #38. The Amended HCP relies on suspect habitat mapping to support the county’s application for more take with fewer conservation measures.

59- Determining Take Levels for the amended WCHCP

Addressed in Draft Amended HCP:

Not adequately addressed. See below.

60- How many tortoises have been taken and how many acres of occupied habitats have been developed since 1996? This is necessary to ascertain an appropriate term limit for renewed take authorization.

Addressed in Draft Amended HCP:

Yes.

61- We assume that the 2016 term limit was reached because the original take authorization was granted for 20 years, and therefore expired in 2016. Have the take limits of tortoises or the authorized loss of acreage been reached?

Addressed in Draft Amended HCP:

Yes.

62- Analyze how much longer the current take authorization could have proceeded had the 20-year term limit not been reached. Once analyzed, the NEPA analysis may show that only a new term limit needs to be established, and not be a pre-decisional means to allow for the development of the NCH.

Addressed in Draft Amended HCP:

No. The document disclosed that between 22 and 46% of the take issued in the 1995 ITP had been used, but failed to consider a scenario where the ITP was re-issued without the NCH in the “Alternatives to the Taking” section.

63- Take must be determined, at least, in terms of acreage and the number of tortoises displaced, accidentally killed, etc. The analyses must document the following:

Addressed in Draft Amended HCP:

Not adequately Addressed. See below.

64- The number of acres, both occupied by tortoises and not occupied, that have been developed and therefore lost to future tortoise use since 1996 under the existing 10a permit;

Addressed in Draft Amended HCP:

Yes. Covered Activities caused the loss of 16,037 acres of Occupied MDT Habitat and 6,785 acres of Potential MDT Habitat (together, 22,822 acres of MDT Habitat) from non-federal lands in the Permit Area.

65- The number of tortoises that have been displaced, the locations of the translocations, and monitoring results that can be used to judge the efficacy of the translocations.

Addressed in Draft Amended HCP:

Not adequately addressed. The document discloses that translocated tortoises are not monitored after release in Zone 4. It fails to disclose the extent to which MDT have dispersed within Zone 4

66- Map out losses of habitat accredited to the HCP and based on these data show how adjacent areas of varying tortoise densities could be developed with HCP renewal.

Addressed in Draft Amended HCP:

Not adequately addressed. The document discloses that 5,700 acres of the 12,164 authorized for take on an incremental release schedule have been developed, but fails to map this out. The Amended HCP fails to show any maps of Incidental Take Areas whatsoever, and also fails to discuss whether incremental take will still be a strategy in the 2020 HCP.

67- Require Conservation Fulfillment prior to Take. Take of covered species and habitat should only proceed as concurrent conservation commitments are fulfilled.

Addressed in Draft Amended HCP:

Not adequately addressed. The document claims that “Accounting under the incremental release schedule demonstrates that these permittee commitments have been met in full, thereby releasing all of the authorized incidental take for use through the Covered Activities” (pg. 65). The County will no longer incrementally release occupied MDT habitat acres in the 2020 ITP because they claim to have fulfilled their conservation commitments by spending 70% more on implementing the HCP and HCP Activities than budgeted for in 1995.

This is a problem because conservation activities, including Reserve Land Acquisitions, have failed to cur the 41% decline of MDT in the Reserve between 1999 and 2020. The County should continue to release take incrementally until its conservation commitments have been met and the remaining 40% of the private inholdings in the Reserve are brought into federal ownership.

68- Specify Harmful Impacts of “Take.” The WCHCP must specify all harmful impacts which will likely result from permitted take of covered species.

Addressed in Draft Amended HCP:

Not adequately addressed. The document fails to discuss harmful impacts of take specific to the Permit Area and Reserve because it only discusses generalized effects of covered activities.

69- Compliance Accountability: HCP compliance must be monitored and the take permit revoked in the event of non-compliance.

Addressed in Draft Amended HCP:

Not adequately addressed. The document discloses that USFWS will provide “oversight of compliance with the terms and conditions of the ITP” (pg. iv), but fails to discuss how USFWS is not ensuring compliance with the 1995 HCP because they fail to analyze an HCP renewal alternative that reauthorizes the ITP without provisions for the NCH. We assume that USFWS would not normally allow ITP Renewal to be linked to construction of a highway through the Reserve⁹⁶ were it not for enormous political pressure.

70- Issues with Translocation of tortoises from NCH ROW to Zone 6: Efficacy of Mass Translocations: assess the efficacy, both successes and failures, of recent mass translocations of tortoises.

Addressed in Draft Amended HCP:

No. The document should have addressed this because continued translocations of MDT from occupied and potential habitats will be necessary during the 2020 HCP, and Zone 6 is being considered as a translocation site. Additionally, the Amended HCP fails to discuss whether MDT impacted by the NCH will be translocated, and if so, where?

71- MDT Use of Culverts: analyze a wide range of literature related to the documented use of culverts by tortoises and the efficacy of culverts at mitigating habitat fragmentation.

Addressed in Draft Amended HCP:

Not adequately addressed. The document only references two studies on the use of culverts by MDT: (Balduini 2018) and (Deffner and Myers 2019). The document fails to show that culverts could mitigate habitat fragmentation caused by the NCH or existing roads in the Reserve because it references only studies that show the effectiveness of culverts and fails to discuss the

⁹⁶ See “2.4.1 Habitat Conservation Plan and Incidental Take Permit No Action Alternative” on pg. 2-11 of the Draft EIS which offers two choices: New HCP (with provisions for NCH) or no HCP.

implications of the USFWS documentation showing that only one MDT has ever been documented using a culvert in the Reserve.

72- Define how Zone 6 Mitigates NCH Impacts:

Addressed in Draft Amended HCP:

Not adequately addressed. See below.

73- Define how Planned Zone 6 Fragmentation supports MDT recovery.

Addressed in Draft Amended HCP:

Not adequately addressed. The document fails to discuss how Zone 6 will support MDT recovery because it does not address the future planned highways that will impact Zone 6. Additionally, it fails to detail how the 150-mile network of roads and trails in Zone 6 would be substantially reduced, especially on SITLA lands.

74- The USFWS must also fully explore and disclose whether the proposed addition of 6,800 acres of marginal tortoise habitat, over half of which is already managed for protection of special status species in the BLM Red Bluff Area of Critical Environmental Concern (ACEC) is adequate to minimize and mitigate take of MDT.

Addressed in Draft Amended HCP:

Not adequately addressed. The document discusses the potential conservation benefit of Zone 6 in relation to the County retiring 3,338 acres of SITLA land from its incidental take. However, it fails to show how these SITLA acres would be permanently protected for conservation, leaving the acquisition largely in the hands of the BLM. The document should describe a plan for prioritizing SITLA acres in Zone 6 for federal land exchange.

75- Consistent, Valid Survey Methods: Rely on scientifically valid surveys of tortoise populations in Zone 6 compared to the rest of the Red Cliffs Desert Reserve.

Addressed in Draft Amended HCP:

Not adequately addressed. The document fails to show how 2017 surveys of MDT in Zone 6 are valid because it only discusses survey results. It does not address the Draft EIS, which says that “Additional years of survey data will be needed to validate Mojave desert tortoise density in proposed Zone 6” (Vol. 2. 3-49). The document fails to discuss how the pre-project survey protocols used in Zone 6 are only meant to locate individual MDT. The distance sampling method is used to determine population density estimates in Red Cliffs. The density estimates of 22.5 tortoise/km² in Zone 6 is not comparable to the density estimate of 17.2 tortoise/km² in 2019 in Reserve Zones 2, 3 and 5. Flawed comparisons cannot be used to suggest that Zone 6 could mitigate for the adverse impacts the NCH will have to the largest population of MDT in Red Cliffs.

76- FWS should provide the scientifically peer reviewed literature that justified this change in estimating tortoise densities.

Addressed in Draft Amended HCP:

No.

77- Where the FWS has used this exact methodology elsewhere and what the values were and how they were compared to other tortoise populations.

Addressed in Draft Amended HCP:

No.

78- Justification (if any) for using a survey method that was designed to quickly assess the number of tortoises that would be impacted pre-Project. We understand that this survey method was not designed to estimate density and abundance to the same degree of precision as the surveys used throughout the rest of the Reserve.

Addressed in Draft Amended HCP:

No.

79- How were the polygons in Zone 6 identified?

Addressed in Draft Amended HCP:

No.

80- The calculated statistical confidence intervals you relied on in your comparisons of Zone 6 densities to Zone 3.

Addressed in Draft Amended HCP:

No.

81- Identify which survey method will be used henceforth in the Reserve – will it be your new Zone 6 methodology or the formerly used UDWR methodology and why?

Addressed in Draft Amended HCP:

No.

82- Share a plan for funding, in addition to the Reserve, the proposed Zone 6 mitigation. This plan must include how the following costs will be met in year 1 through year 25 of the WCHCP, including:

- A proposed budget that details how the additional costs for Zone 6 will be funded
- Fencing of Zone 6 perimeter and all road ways that would continue being used inside Zone 6
- Law enforcement. We advocate for the presence of multiple law enforcement officers on ground 7 days/week due to the prevalence of dangerous recreation types in Zone 6 that include target shooting, dumping, bonfires, off-trail OHV use and others
- Outreach, including community education and involvement, such as organized school or other public events. This may help give local residents “ownership” of Zone 6 in terms of understanding and respecting the need for limits on recreational uses.
- Service clubs could also be encouraged to assist with clean up and habitat restoration projects.
- Signage
- Bi-annual monitoring of the tortoises by UDWR (that mirrors the survey efforts already used in the Reserve)
- Extra staff on site for supervision of the huge influx of visitors associated with the 4 competitive, organized sporting events that occur in Zone 6 each year
- Habitat restoration for areas disturbed by OHVs, target shooting, competitive events, trash dumping, fires, etc.
- Proactive herbicide treatments to limit the colonization and spread of invasive species
- Ongoing efforts to dismantle dump sites and remove trash
- Raven control
- Implementing redundant route closures with vertical mulching or other camouflaging techniques, and long-term monitoring
- Acquisition of SITLA lands through purchase or exchange for subsequent BLM management.

Addressed in Draft Amended HCP:

Not adequately addressed. The document discloses that the cost of implementing the HCP with the NCH and Zone 6 is \$16 million dollars more than the cost of implementing the HCP without these changed circumstances. The budget is concerning because it reveals that the County is willing to pay an extra \$16 million dollars to get the Northern Corridor Highway.

The budget of the Amended HCP is flawed because it does not show that the County is 100% committed to managing the SITLA lands in Zone 6 until they are transferred to federal ownership. Given the slow pace of land acquisitions in the Reserve over the last 25 years, it cannot be expected that acquisitions of SITLA land will occur any more quickly. If the County does not commit to fully funding conservation actions on SITLA lands, MDT, sensitive plant species and recreation will not be protected in Zone 6 as the County promises. The reserve administration, law enforcement, land acquisition, and recreation management budget categories appear to have insufficient funding for management of 3,225 acres of SITLA lands. Specific to land acquisition, Reserve acquisitions should be prioritized over Zone 6 acquisitions.

The monitoring and adaptive management planning category does not explain how funds will be split between monitoring in Zone 6 versus the rest of the Reserve. Adequate funds for monitoring both places are crucial given that tortoise survey results in Zone 6 are not validated, and that the Reserve has just experienced wildfires that burned 20% of the MDT habitat there.

The Amended HCP fails to address or budget for the unique costs associated with Zone 6, including the following:

Extra staff to supervise increased visitation during competitive sporting events; cleanup of dumpsites, campsites and target shooting ranges; route closures and rehabilitation; habitat restoration for lands previously mined and grazed.

83- At a minimum, the WCHCP must create a process for how future funding will be assured.

Addressed in Draft Amended HCP:

Not adequately addressed. The Amended HCP fails to consider the additional costs for BLM and UDWR to help manage Zone 6 in addition to the rest of the Reserve. The document does not show that BLM and UDWR funding for Zone 6 is assured.

84- A funding scenario must be outlined based on the premise of the NCH ROW not being granted.

Addressed in Draft Amended HCP:

Yes.

85- FWS must include analysis that evaluates the efficacy of the existing fee structure (impact fees) and whether elevated rates are warranted.

Addressed in Draft Amended HCP:

Not adequately addressed. The document shows that the County's 0.2% impact fee, in addition to funding from HCP partners, has been sufficient for funding the 1995 HCP. However, the Amended HCP fails to show that acquisition of 3,225 acres of SITLA lands in Zone 6 can be completed without adjusting the existing fee structure.

86- Major funding for the WCHCP must not rely on future speculative sources, nor ultimately on the taxpayers, but be clearly identified as to the source of funding.

Addressed in Draft Amended HCP:

Not adequately addressed. The document shows that BLM will be responsible for the acquisition of nearly half of the lands in Zone 6. The availability of LWCF and ESA Sec. 6 funds to support BLM's land acquisitions is speculative.

87- The DEIS should disclose the following budget related information, including how much money does the HCP have saved in the bank?

Addressed in Draft Amended HCP:

Yes.

88- What large, future costs is the HCP budgeting for? I.e., a new Interpretation Center, Zone 6 management, etc.?

Addressed in Draft Amended HCP:

Not adequately addressed. The document shares that the HCP is budgeting for a new interpretation center, but fails to show that its budgeting enough for wildfire response and adaptive management concerns including climate, change, drought and translocation.

89- What were the yearly implementation costs for the WCHCP in a detailed, line by line item budget, for the year 2019?

Addressed in Draft Amended HCP:

No. The document should disclose HCP costs in 2019 to account for spending of HCP dollars, which can only be used for the purposes of implementing the HCP or "for expenditures that are otherwise consistent with the conservation or recovery of the MDT" (Draft HCP at 125). The coalition is concerned that funds have been improperly spent in 2019 (and also 2018 and 2017) on activities that support the application for the Northern Corridor Highway through the Reserve.

90- What were the yearly implementation costs for the WCHCP from 1995 to 2018?

Addressed in Draft Amended HCP:

No.

91- What is budgeted for adaptive management and contingencies? What contingencies are listed? What adaptive management activities are being planned for?

Addressed in Draft Amended HCP:

Not adequately addressed. The County budgets \$811,064 for Monitoring and Adaptive Management Planning without the Northern Corridor Highway and budgets three times as much for the changed circumstance scenario incorporating the NCH and Zone 6. The Amended HCP fails to list the contingencies the County is planning for. Importantly, it fails to discuss the County stepping away from its original commitment to protect the Reserve as the 1995 HCP's central mitigation feature. The proposed budget illustrates that the County is backing away from its original commitment to the Reserve because it shows that the County is willing to spend twice or three times the amount of money for the NCH and Zone 6 changed circumstance, while letting the Reserve languish.

92- What impact fees were collected from 1995 to 2018?

Addressed in Draft Amended HCP:

No.

93- What is the full list of funding sources, in addition to impact fees, for the WCHCP? • What are the costs of new building permits related to the WCHCP in Washington County? • What are future plans for adjusting impact fee (what we understand to be 0.2% of construction cost)? •

What is the justification for eliminating \$250 flat fee on plat approval as listed in Appendix H? If this flat fee was retained, could the money be used for habitat restoration or other activities that will enhance the recreational, ecological and scenic qualities of the Reserve? • What are the funding assurances for the WCHCP if the NCH ROW is not granted? What is Washington County's plan for renewing the WCHCP without the NCH? • What incremental implementation strategies are being considered? • What audits have been done of past HCP-related revenues and expenses, by whom, when, and are those audit reports available to the public?

Addressed in Draft Amended HCP:

Not adequately addressed. The document fails to disclose the funding BLM and UDWR will commit to the HCP with Zone 6 and does not discuss whether these partners are actually capable of funding Zone 6. It does not discuss retaining the plat approval fee (which generated 10% of the HCP revenue) to support habitat restoration in the face of increased risk for catastrophic wildfire or other conservation activities. It fails to discuss audits of past HCP-related revenues. The Amended HCP fails to consider incremental implementation strategies for the 2020 HCP because it claims that the County met all its conservation obligations in the 1995 HCP.

The Amended HCP must consider incremental implementation that emphasizes conservation actions to rehabilitate the Reserve after severe wildfires in summer 2020 *and* to mitigate the loss of 16,037 acres of occupied MDT for which the County is applying to take.

It is concerning that the Draft EIS links the granting of the NCH ROW to ITP Renewal, meaning that if the County doesn't get the highway they will not renew the HCP and will stop supporting the Reserve with funding.

The USFWS must consider a scenario in which the HCP is renewed *without* the NCH.

94- HCP Administration Reform: Implement changes in HCP administration requiring diverse and qualified advisors and staff and checks and balances.

Addressed in Draft Amended HCP:

No.

95-There are 15 other federally listed species in the Plan Area. The document should disclose the new survey data used to review the health and stability of these populations as well.

Addressed in Draft Amended HCP:

Not adequately addressed. The Amended HCP lists these species, but fails to provide data on their viability in the plan area.

96- Alternatives not Linked to HCP Renewal: Analyze alternatives to ITP/HCP Renewal that do not conditionally link HCP Renewal to granting of the NCH ROW.

Addressed in Draft Amended HCP:

No. Given that the current HCP has failed to halt the continuing decline in tortoise numbers and usable habitat acres, the new proposed HCP must change that status quo and attempt to reverse those declines by considering an alternative for HCP renewal that is not linked to the NCH. The Amended HCP has failed to do this.

97- Clarification of ITP Application: The scope of this item is unclear in that it does not address which specific land use/development activities are to be considered. It may address the ROW only, or the proposed Zone 6, or any number of other future development projects. Is the applicant applying for a new ITP, or an amendment to the existing ITP?

Addressed in Draft Amended HCP:

Not adequately addressed. See below.

98-Renewed or New Take Permit: USFWS must clarify whether they are renewing the existing take permit or issuing a new take permit.

Addressed in Draft Amended HCP:

Not adequately addressed. The document claims that the County is applying to reauthorize its remaining take, but new habitat modeling and the use of a habitat surrogate metric supports the County's application for more take than they received in the 1995 HCP. Addressing "take" of habitat as a surrogate for take of individuals of a species is problematic because the habitat mapping exercise was flawed.

Additionally, the Amended HCP must clarify whether "take" of habitat includes development of the entire parcel or only the project footprint. It should be the entire parcel to account for take from harm and harassment as well as mortality, wounding and injury as defined in 50 CFR 17.3.

99- Analyze at Least 3 Alternatives: To avoid demonstrating pre-decisional bias and arbitrary and capriciousness, at least three alternatives must be carried forward for detailed analysis, beyond the required proposed action and no-action alternatives. We ask FWS to consider the following WCHCP alternatives for analysis in the DEIS:

1. proposed HCP renewal and updating without the "if/then" Northern Corridor/Washington Parkway construction option;
2. proposed HCP renewal and updating without linking the establishment of Zone 6 as a condition for constructing the Northern Corridor/Washington Parkway; and
3. proposed BLM NCA and SGFO Plan amendments that relate to the UDOT application, without authorizing construction of the Northern Corridor/Washington Parkway, and with analysis of one or more highway alternatives outside of the Reserve/NCA.

Addressed in Draft Amended HCP:

No. The Amended HCP fails to analyze an alternative that doesn't conditionally link granting of the NCH ROW to HCP and ITP Renewal and/or protection of Zone 6. The purpose and need of the HCP is arbitrarily narrow because it filtered out consideration of such an alternative, and shows that the HCP is not focused on recovery and conservation of MDT, but on the Northern Corridor Highway.

100- The USFWS must strengthen the relationship between Utility Development Protocols and Mitigation, including:

Establishing the Reserve as an avoidance area for new utilities;

- Visual resources in the Reserve must be maintained by requiring any new utility projects be underground when deemed appropriate and non-damaging to the tortoise;
- UDPs must have strong administrative guidelines to ensure approvals go through the proper process;
- Maintain or further reduce the maximum width limits for temporary disturbances such as roads, turn arounds, or parking areas;
- Increase the minimum set back distance for any blasting operations, from the nearest active or potential tortoise burrows and the blasting location. All burrows within a larger set back area should be scoped for tortoises before blasting, and the burrows should be checked immediately after blasting in case it caused any occupied burrows to collapse and entomb the tortoises. If so,

those tortoises should be quickly rescued for subsequent relocation within or near their likely original home range;

- All utility personnel should receive thorough, regular tortoise conservation education and follow best practices;
- Measures should be put in place to supervise the travel of maintenance and utility vehicles on unfenced roads inside the Reserve during the active season; and
- There should be specific and serious penalties for any UDP violations against those who approve or cause the violations.

Addressed in Draft Amended HCP:

Not adequately addressed. The Amended HCP fails to provide adequate protection for because it fails to update the UDP's to minimize adverse impacts to MDT from utility development in the Reserve. The Amended HCP includes no revisions of the UDP's and does not mention plans for future revisions that would enhance protections for MDT in the Reserve. In fact, "Live More. Drive Less. Traffic Congestion in Washington County" messaging from Washington County sent to e-news subscribers on 8-14-20 encourages readers to support the Red Cliffs NCA RMP Amendment Alternative C which would allow for above and below ground utilities in the Northern Corridor Highway ROW and would weaken protections for visual resources in the Reserve.

101- Require an Independent Review of HCP Documents.

Addressed in Draft Amended HCP:

No.

102- The WCHCP should address the status private inholdings in the Reserve, including: Are any of the current Reserve private in-holders threatening to develop their lands?

- If so, whom and where?
- If not, why is this concept relevant?
- If private land in the Reserve is proposed for harmful development, how could FWS legally authorize that incidental take?
- Would Zone 6 mitigation credits be available for this purpose?
- Would NCH construction increase the incentives and potential for such incompatible Reserve development on private or SITLA lands?

Addressed in Draft Amended HCP:

No. The document fails to discuss private inholdings in the Reserve and how the BLM-preferred route for the NCH travels through these inholdings, thereby increasing access. The Amended HCP explicitly discusses "Private Lands in Reserve Become Developed" as a changed circumstance and addresses the issue in multiple places, including on pages vi, xvi, and 140. The Amended HCP also explicitly addresses the idea of SITLA developing lands in the Reserve. Since the Amended HCP accommodates Zone 6 as mitigation for damaging activities inside the Reserve, this creates a path for SITLA to achieve ESA compliance by offering mitigation in Zone 6. The Amended HCP must not facilitate future development inside the Reserve by setting up Zone 6 as a mitigation bank.

102- HCP Economic Value: determine the economic value of the HCP from December 1995 to present day.

Addressed in Draft Amended HCP:

No. The Amended HCP reveals that 5,700 acres inside incidental take areas have been developed over the course of the 1995 HCP. It also reveals that 16,037 acres of Occupied MDT Habitat and 6,785 acres of Potential MDT Habitat have been developed (which overlap the incremental take

acres? The Amended HCP does not specify) but fails to estimate the economic benefit of the development of these 20,000+ acres. The HCP that has provided for so much growth in our County was made possible by protecting the Reserve. This plan, and this promise, must not be compromised by the NCH.

103- Disclose a list of all the covered and non-covered activities that will or will not be permitted in the new WCHCP with justification for each that is grounded in and consistent with existing relevant statutes, regulations, and policies as well as BLM plan decisions.

Addressed in Draft Amended HCP:

Not adequately addressed. The document says that it “does not expand the list of Covered Activities beyond those addressed in the 1995 HCP,” but discloses that existing Zone 6 recreation uses will continue as covered activities. These include competitive sporting events and motorized recreation. The document fails to justify how covering these activities (especially competitive events that attract thousands of participants) is consistent with the covered activities in the 1995 HCP, especially the recreation uses which covered “small-group forms of recreation” (pg. 13). The document also fails to incorporate 2016 HCP Handbook guidance under “Describing Covered Activities in the HCP” which states that “An HCP should thoroughly describe activities and associated components that are likely to have impacts, but should not include overly detailed information about sub-activities that do not affect covered species” (5-5). The document fails to describe the competitive events or their likely adverse impacts on the MDT and its critical habitat.

104- Disclose how the NCH may be contrary to specific existing plan decisions.

Addressed in Draft Amended HCP:

No. The document fails to consider how the NCH is contrary to specific existing plan decisions, including the 1995 HCP which established the Reserve as the primary mitigation feature for the authorized take of 350,000 acres in the plan area.

105- Examine the interplay between the ecological impacts of the NCH on MDT populations and habitat and the goals, objectives and criteria outlined in the 2011 Revised Recovery Plan for the Mojave Population of Desert Tortoise.

Addressed in Draft Amended HCP:

No. The Amended HCP fails to consider the impacts of the NCH on MDT populations in the Reserve or how the NCH violates criteria outlined in the 2011 USFWS MDT Revised Recovery Plan. This is a major omission because the Reserve, if fragmented by the NCH, will no longer function as the central mitigation feature of 1995 HCP and will fail to mitigate the County’s application for re-authorized take of 66,301 acres.

106- Disclose how the NCH undermines, distracts and moves staff time and funding away from the prioritized actions outlined in the Recovery Action Plan for Mojave desert tortoise in the Upper Virgin River Recovery Unit.

Addressed in Draft Amended HCP:

No. This is another major omission because if agency staff time is prioritized on Zone 6, conservation measures will not be implemented in the Reserve to the extent that they were between 1995 and 2019. This is especially concerning following the summer 2020 wildfires that burned 20% of the Reserve, causing the need for new surveys and habitat restoration. Conversely agency staff time cannot be prioritized in Zone 6, conservation actions will fail to be adequately implemented there.

107 - Determine the Relationship between the NCH and HCP Purpose.

Addressed in Draft Amended HCP:

No. The document fails to address how the NCH violates the purpose of the Reserve which was established to offset the take of 350,000 acres in the plan area and cannot continue to do this if it is fragmented by the NCH.

108- Disclose the number of construction-related mortalities that have occurred post-clearance on construction sites in Washington County since 1995.

Addressed in Draft Amended HCP:

No.

109- Disclose the number of tortoises that have been found and reported post-clearance and successfully rescued prior to construction.

Addressed in Draft Amended HCP:

No. Though it's difficult to track, the Amended HCP must attempt to get a sense of the number of MDT taken due to covered activities authorized in the 1995 HCP in order to accurately calculate MDT declines in the plan area.

110- Include analysis of literature that explains the most successful clearance practices available today. These practices should be implemented in Washington County.

Addressed in Draft Amended HCP:

No. The document states that the County will continue to implement the clearance protocols (last amended in 2008) that are part of the Utility Development Protocols. However, the UDP's were amended before publication of the *2009 DESERT TORTOISE (MOJAVE POPULATION) FIELD MANUAL (Gopherus agassizii)* which provides guidance on the most recently-approved clearance methods.

111- Address Protocols for Construction Clearance Activities.

Addressed in Draft Amended HCP:

Not adequately addressed. The document fails to address any protocols beyond those contained in the existing UDP's, but fails to show that these protocols have been successful by providing data on the number of MDT that have been taken post-clearance.

112- Disclose information related to the mitigation ratios that will be used in the WCHCP and justification for why the ratio was selected that is grounded in the latest science and standard practices used across the tortoise's range.

Addressed in Draft Amended HCP:

Not adequately addressed. The document proposes to carry forward mitigation ratios ranging from 1:1 to 6:1, based on 1991 guidance from the Desert Tortoise Management Oversight Group, but fails to justify why those ratios were selected. It also fails to share criteria for why some projects would be mitigated at 1:1 and others would be mitigated at 6:1. Given MDT declines in the UVRU and Reserve, the 6:1 ratio should be used to protect additional habitat for the MDT. Additionally, the Amended HCP should consider establishing endowment and enhancement funds for the land acquired to provide for permanent conservation.

113- Disclose a plan for acquiring the remaining non-federal parcels inside the Reserve during the duration of the proposed 25-year WCHCP.

Addressed in Draft Amended HCP:

Not adequately addressed. The document fails to consider how acquisition of non-federal parcels in Zone 6 will interact with, or prioritize, acquisition of remaining non-federal parcels in the Reserve. The Amended HCP must prioritize Reserve acquisitions.

114- The acreage of remaining private inholdings should be disclosed.

Addressed in Draft Amended HCP:

Yes.

115- We are concerned with the proposed use of conservation easements for acquiring private inholdings. An easement only grants some but not all of the real property. Fee simple or quit claim acquisitions of inholdings are generally much better than dealing with the potential problems from easements.

Addressed in Draft Amended HCP:

Not adequately addressed. The document states that conservation easements are an acceptable tool for achieving Reserve acquisitions. It fails to address the issue with conservation easements not acquiring all of the real property. The document says that easements should be in perpetuity, but opens the door for term conservation easements in circumstances where perpetual easements are not practicable.

116- No Surprises Assurances and Changed Circumstances: List all potentialities being considered in the WCHCP under the umbrellas of “No Surprises Assurances” and “Changed Circumstances.”

- Disclose how the 1,000-acre threshold for triggering wildfire response was determined. Why is the threshold so high in a Reserve that is still recovering from the devastating effects of previous wildfires? Could the threshold be lower? What actions are prompted by this trigger?
- Disclose how the 25% threshold for triggering response to Mojave desert tortoise disease was arrived at. Why is the threshold so high in a small and vulnerable recovery unit?
- What plan is there for coping D4–Exceptional Drought Phase triggers? Aside from stopping translocation?
- What plan is there for municipality non-participation?
- What happens if an in-holder threatens to develop their property within the Reserve after the new HCP is adopted?

Addressed in Draft Amended HCP:

Not adequately addressed. We are pleased to see that mention of the 1,000-acre threshold for triggering wildfire response did not appear in the Amended HCP and suggest that language should be added clarifying that wildfires of any size in the Reserve will trigger a response. We are also pleased to see a response plan for D-4 Exceptional Drought, but believe that it needs to include a detailed plan for potential road/trail closures and community outreach focused on preventing catastrophic wildfire during D-4 droughts.

We note that the document fails to justify setting the 25% threshold for observed incidence of URTD in a Reserve that is small in size; has shown a 41% decline in MDT between 1999 and 2020; and has recently experienced wildfires that burned 20% of the land.

117- Provide Clarification and More Detail on Unclear Items, including:

- How the Reserve Boundary and federal ownership will be assessed at the time the activity occurs, as noted in Appendix H.
- The transfer of authorized take to HCP partners, as noted in Appendix H.
- The surrogate metric and how it is calculated, as noted in Appendix H.

- The habitat modification proxy, as noted in Appendix H.
- Comparison of updated MDT habitat/density metrics as noted in Appendix H.
- Retiring of previously authorized take from Zone 6 and White Reef as noted in Appendix H.

Addressed in Draft Amended HCP:

Not adequately addressed. The document fails to discuss the implications of transferring authorized take to HCP partners, and how this could mechanism could be used to accommodate projects that cause take inside the Reserve.

118- Specific mitigation measures must be provided for individual developments when the presence of a covered species is found on a development site. Individual developments related to the NCH would include the multiple phases of its construction, the associated highway projects that link to it, and any future utilities that would be constructed in the ROW and their yearly maintenance.

Addressed in Draft Amended HCP:

No.

119- Speculative future investigation and evaluations should not be included in the WCHCP. Language on future enhancement and restoration programs needs to be clear and specific, and include management, funding, responsible parties, timelines, and other issues.

Addressed in Draft Amended HCP:

Not adequately addressed. Under “No Surprises Assurances: Establish Reserve Zone 6” information on restoration programs, management of recreation, education and outreach and law enforcement is lacking. The Amended HCP fails to address in detail how damaged lands in Zone 6 will be rehabilitated and how illegal uses and damaging recreation types will be curtailed, especially on the 3,255 acres of SITLA land. See additional discussion elsewhere in the comments.

120- MDT Take Minimization and Mitigation: clearly define and support with data how this condition is met.

Addressed in Draft Amended HCP:

Not adequately addressed. The draft HCP fails to show how the same conservation measures outlined in the 1995 HCP can mitigate or minimize the take of 66,301 occupied and potential MDT habitat acres in the Permit Area or reverse the declines of MDT inside the Reserve. Additionally, the Amended HCP fails to show how the NCH can be minimized or mitigated for damage caused by the NCH to the Reserve.

121- Plant Species Mapping: Hundreds of plant species have been identified in this region, and each species needs to be identified and mapped as part of the DEIS analysis.

Addressed in Draft Amended HCP:

No. The document includes only generalized mapping of vegetation communities.

122- Accounting of the take authorized in the original WCHCP.

Addressed in Draft Amended HCP:

Yes.

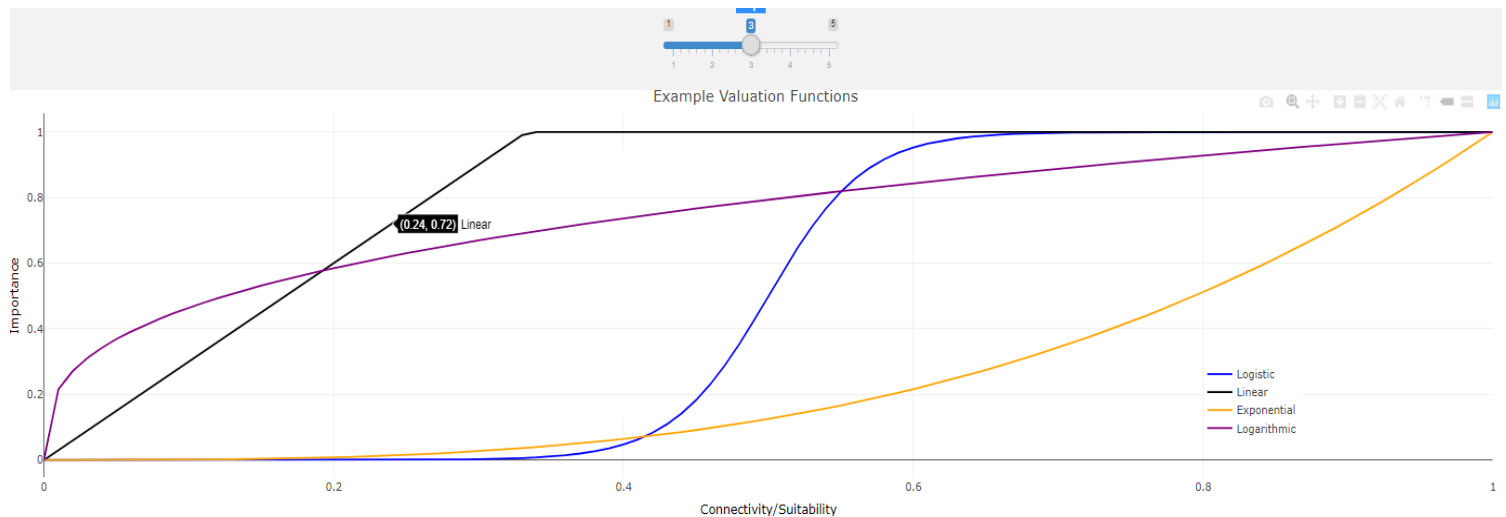
Appendix 2. Web Application Methodology, Defenders of Wildlife, September 2020

Defenders of Wildlife has developed an analytical approach to prioritize landscapes for tortoise conservation that can be accessed on a web app:

<https://defendersofwildlifeis.users.earthengine.app/view/tortoise2>. Conservation prioritization seeks to determine which places are most important to protect, often using maps of habitat suitability, connectivity, or other ecological measures. This app demonstrates an approach to habitat prioritization for the Mojave Desert Tortoise that is designed to be maximally transparent, explicit, and repeatable. The habitat and connectivity models are those described in Defenders of Wildlife 2019 and Gray et al. 2019.

The process consists of three steps. The first step is to define up-front how to value tortoise habitat suitability and connectivity. We do this before looking at maps of habitat to avoid biasing our choices. The graph below shows ways we might theoretically value different measures of habitat. For instance, an exponential function (orange) assigns a low ‘Value’ score to all but the highest levels suitability or connectivity. Conversely, the logarithmic function (purple) assigns a relatively high Value to most levels of habitat suitability or connectivity.

We can fine tune these functions by adjusting their slope. For instance, a logarithmic function using a slope of 5 will more quickly rise to a Value of 1 than one with a slope of 2.



The second step is to assign value to habitat. We may value different ecological measures differently. In the case of the tortoise, we might choose different functions and slopes to convert habitat suitability and connectivity to value. Together, the outputs are combined to create a surface of possible values for every possible combination of suitability and connectivity.

Value is standardized, and the range of scores will always be 0 to 2. That lets us apply a consistent set of thresholds if we need to divide areas into bins (e.g. ‘High’, ‘Medium’ and ‘Low’).

You can use the selectors to change the slopes of the valuation functions for habitat suitability and connectivity and see how these choices create the surface of possible values. With each different surface, the number of observations falling into consistent high, medium, and low conflict bins will change.

The third step is to map values across the landscape. Once we select the functions and slopes we want to use to convert habitat suitability and connectivity to Value, we calculate this score in every place on the map based on the observed suitability and connectivity.

Appendix 3. References

Section 1- Introduction

1. Scoping Comments on the Proposed Environmental Impact Statement for the Northern Corridor Highway in Washington County (UT) Submitted by the Red Cliffs Conservation Coalition

Section 2 - Major Considerations

1. August 2020 Washington County E-News on the Northern Corridor, “Washington County has been talking about a Northern Corridor”
2. Washington County Republican Party Message on the Northern Corridor, dated 9/3/2020, “Join the Fight for the Northern Corridor!”
3. The Desert Tortoise Council’s Comments on the Draft Environmental Impact Statement and Draft Habitat Conservation Plan Amendments addressing actions related to the Northern Corridor Highway in Washington County, Utah
4. Washington County E-News on the Northern Corridor, dated 9/8/20, “4 Myths About the Northern Corridor”
5. Omnibus Public Land Management Act of 2009, H.R. 146, 111th Cong., 1st Sess. (2009) (enacted).
6. Northern Corridor – Highway Right of Way with Associated Issuance of an Incidental Take Permit and Resource Management Plan Amendments Scoping Report, BLM and FWS, April 2020
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Section 3 - Issues with the Draft Environmental Impact Statement

Sections 3.2 and 3.22 Vegetation Communities and Fire

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- Relationship to Fire Frequency, Seasonality, and Ignitions.” *Biological Invasions* 20 (6): 1493–1506. <https://doi.org/10.1007/s10530-017-1641-8>.
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Section 3.5 Special Status Wildlife

Compilation of News Articles Related to OHV Use.

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