

Comment 941 (continued)

Response
Section in
Chapter 32



Exhibit N

Comment 941 (continued)

Response
Section in
Chapter 32



The Nature Conservancy in Utah
559 East South Temple
Salt Lake City, UT 84102

tel [801] 531-0990
fax [801] 531-1003
nature.org/utah

March 25, 2011

Mr. Randy Jeffries
UDOT
West Davis Corridor Project
466 North 900 West
Kaysville, Utah 84037

32.14.2H

Dear Mr. Jeffries:

Once again, The Nature Conservancy appreciates the opportunity to provide comments on the most current alignments and other issues related to the West Davis Corridor project. We can appreciate both the effort and the difficulty as your team proceeds with the planning process.

As you know, The Nature Conservancy, with the Utah Reclamation Mitigation and Conservation Commission and many other private and public partners, has for the last 27 years worked to purchase wetland and upland properties to create the Great Salt Lake Shorelands Preserve in Davis County. The Preserve is a key migratory stopover for tens of thousands of migratory birds and is the largest naturally-functioning wetland/upland complex on the eastern shore of Great Salt Lake.

Not only a critical hemispheric stopover site for tens of thousands of migratory birds, the Preserve provides important benefits for the surrounding communities through its visitor facilities and property ownership -- education, open space, recreation, wildlife viewing and solitude - at no cost to the public. Additionally, the wetlands are economically important to the County and residents by providing nutrient recycling and contaminant filtering, as well as providing storm drain and flood control services.

The acquisition and management of the Preserve has been made possible by generous contributions from URMCC, other federal and state agencies, major Utah foundations, corporations, individuals and members. Our pledge to these constituents was that The Nature Conservancy would manage and protect the important natural values of the Preserve *in perpetuity*. Any loss of currently-protected properties is a serious issue for our staff, Board, members, partners and the hundreds of donors who made a financial commitment of over \$25 million to establish the Preserve.

Comment 941 (continued)

Response
Section in
Chapter 32

Our goal by engaging in this process is to protect our property and investment, limit any damage and loss of property/wetlands to a minimum, and ensure that resulting project mitigation will be meaningful in light of the damage caused. We are very sensitive to the possibility that the Preserve might be considered for "more than its share" of loss of property and habitat due to the final alignment adjustments that will be made in the ensuing months, and would resist an alignment where all or most of the sacrifice for highway placement in the area of the Preserve is borne by our property. We believe impacts should be shared equitably by all stakeholders.

With this as background, we submit the following comments by alignment section.

Farmington Area

The Nature Conservancy strongly supports the North Option (Shepherd Lane) alternative for the Farmington area. The South Option, in the calculations presented by UDOT, clearly shows that it will increase negative impacts in every Measures category (except archaeological sites). Both alignments would require 10 residential acquisitions, but the South Option would impact: 3 more businesses; 1 more park; 2 more trails; 2 more public parks; 7.9 more wetland acres; 110 more acres of wildlife habitat; and 88 more acres of floodplain. The public's price tag for construction would also increase by \$67-85 million. We believe that the South Option does not meet the criteria of wetland avoidance where possible. Additionally, we cannot support an alignment in the floodplain that, in light of the 1980's flooding in this area, could cost the public dearly in the future and potentially have a lakewide, lake level impact. Building major public transportation infrastructure in the floodplain will require defending it (turning on the pumps or shoring up roadways as they transition from roads to dikes) should the lake level rise.

The South Option alignment will also have negative impacts to existing and planned wetlands educational facilities at the Nature Center the Farmington Bay Waterfowl Management Area. This property immediately south of Glover's Lane is currently owned by the URMCC. The Nature Center has been a cooperative effort with Davis County, Farmington City, Davis County School District, Utah Wildlife in Need, Utah Division of Wildlife Resources and many volunteers. The South Option will also traverse a 400-acre Farmington City wildlife and agricultural easement, part of Farmington Ranches Subdivision. It is our understanding that a law suit would be required to lift the easement.

Shepherd Lane to Schick Lane

The proposed single alignment in this area is where the proposed roadway first impacts Preserve property. We can support this alignment as long as the alignment crosses the powerline corridor (from east side to west) as it is presently located (just north of TNC's Webster2 property). We cannot support an alignment that crosses the powerline corridor south of this point, due to additional Preserve property and wetland losses.

Comment 941 (continued)

Response
Section in
Chapter 32

Weaver Lane to Gentile Street

As the proposed alignment moves north past Kays Creek Estates, it moves "on top" of the bluff. Though there are wetland impacts in the transition, we support this alignment as it avoids additional wetlands that would be damaged if the alignment stayed below the bluff at this point. It also appears to be a reasonable balance between wetland impact/avoidance in this particular section. We can also support the proposed location (as you move north along the bluff) where the highway would "drop down" off the bluff just before reaching Gentile Street – even though there is some wetland damage at this point.

Gentile Street Northward

A. Bluff Road Rejected Alternative

We were disappointed to see the Bluff Road Alternative dropped from final analysis as we continue to support this alternative for inclusion in further EIS analysis. In discussions with UDOT staff, the primary reason for dropping this alternative from consideration was the occurrence of a high number of wetland impacts along the route from Gentile to Antelope Drive. Because this route avoids all negative impacts to wetlands, uplands and high quality farm lands further to the west and north (Alternatives A, B & C), we request that additional, more detailed analysis be conducted to determine the sources of water to the wetland acres, determination of wetland quality, a projection of the long-term viability of the wetlands in light of anticipated development and growth around them, the future alteration of water supplies due to conversion of water from agricultural use to culinary, and the increased use of storm drain structures for removing surface water. Pending more detailed analysis, The Nature Conservancy continues to support the Bluff Road Alternative.

Additional factors in support of the Bluff Road Alternative include the fact that the alternative has been in the various city plans for many years and apparently over \$8 million of public money has already been spent on acquiring sections of this corridor.

B. Alignments A, B & C from Bluff Road to Antelope Drive

The new proposed Alignments A, B & C, though they have direct impact to Preserve property in only one location, are problematic for a number of reasons. In general, the major impacts to farmland that buffers the Preserve and provides valuable resting/foraging areas to many bird species and other wildlife will be a loss to the natural values of the Preserve – as well as a loss of open space for the communities. All three of these proposed alternatives will have a major impact on the Black Island Farms Conservation Easement, eliminating approx. 11 acres of the 39-acre Easement on the edge of the Preserve – the very first project funded by the state's LeRay McCallister Fund and brokered by the Quality Growth Commission, the Utah Department of Agriculture and the Conservancy.

Comment 941 (continued)

Response
Section in
Chapter 32

Alignment A

The Nature Conservancy cannot support this alignment due to its impact on Preserve property and wetland and other values. In UDOT's Alternatives Comparisons materials, Alignment A would have a direct impact on 4 more businesses; 9 additional acres of wetlands; 23.4 more acres of wildlife habitat; 1 additional archaeological site; and 3.8 acres of 100-year floodplain. We also believe that the survey conducted by UDOT was not accurate and that there are additional high-quality wetland acres that would be identified in a more detailed inventory. For these reasons and the issue of "avoidance" not being followed in Option A near the North Davis Sewer Treatment Plant, we cannot support carrying this alternative forward.

Alignment A & B

Alignment A & B does not have significant wetland, wildlife or floodplain impacts, but would be largely disruptive and damaging to the existing farmers, farm practices and land use in a broad swath of this portion of west Davis County. Like Alignment A, we do not feel this is the best alternative to select for continued analysis.

Alignment C

Alignment C (or an alignment in this general area) has advantages in our mind when compared to A or A & B. Though it is still a major impact for the farming community, it is a shorter alignment and leaves a larger, unfragmented block of agricultural land to the west. The Nature Conservancy is not an expert on how the farms in this general area operate in detail, but we understand that there is much cooperation between the farms that make it economical for all to survive in an always-tough economic world, and that issues of access, loss of currently-cultivated ground and connectivity between farms, and fragmentation of agricultural lands are vital issues to the agricultural community. The agricultural community knows well the subtleties and details of what will and won't work for their operations on the ground. Should the Bluff Road Alternative remain in a rejected status, The Nature Conservancy suggests that UDOT and the agricultural community meet and try to negotiate an alignment that is in the area of Alignment C that would meet both highway and agricultural community needs.

Finally, besides alignment analysis and selection, The Nature Conservancy would like to convey our interest in participating as appropriate in other aspects of the project to be analyzed and formulated in the coming months as part of the EIS process. These topics and the decisions made concerning them will have a direct impact on The Nature Conservancy's Great Salt Lake Shorelands Preserve's current and future natural values and its human management and function.

1. Mitigation Determination, Location and Mitigation Philosophy (consolidate and expand already protected areas of sufficient size to be viable over time)
2. Decisions protective of the Preserve's character and purpose (access, lighting, noise, surface and subsurface water movement and water delivery to Preserve, others)

Comment 941 (continued)

Response
Section in
Chapter 32

3. Designation as a Parkway with certain Parkway features (speed limit, potential prohibition of trucks, no billboards, noise reducing pavement, landscaping, others)

Please contact The Nature Conservancy at a time that is appropriate for us to have some input and involvement in the above topics.

Thank you again for your continuing efforts and for your careful consideration of our concerns.

Sincerely,


Dave Livermore
Utah State Director
The Nature Conservancy

Comment 941 (continued)

Response
Section in
Chapter 32



Exhibit O

Comment 941 (continued)

Response
Section in
Chapter 32



Meeting Notes West Davis Corridor EIS UDOT Project No. *SP-0067(14)0

Meeting Name: TNC & URMCC Update Meeting

Meeting Date: October 6, 2011

Meeting Time: 2:00 pm – 3:30 pm

Meeting Location: TNC, Salt Lake City

Meeting Organizer: Chris Montague, TNC

Meeting Purpose: Discuss TNC & URMCC comments on revised WDC alternatives

Attendees:

Randy Jefferies, UDOT
Chris Montague, TNC
John Rice, URMCC
Richard Mingo, URMCC
Kevin Kilpatrick, HDR
Vince Izzo, HDR (via teleconference)
Elizabeth Kitchens, TNC
Mike Weland, URMCC
Dave Livermore, TNC
Chris Brown, TNC
Kara Butterfield, TNC
Gen Green, TNC
Dan Adams, TLG

Discussion

Chris Montague started the meeting by thanking everyone for their continued involvement and opportunities for comment on the WDC project. Chris then went over the TNC and URMCC's previously stated goals and objectives for the WDC project.

Chris stated that the TNC had felt that the alignments released in February 2011 had seemed reasonable from the TNC's perspective, but that the TNC had concerns about the alternatives that had recently been released in August 2011. Chris clarified that the TNC did not endorse the changes to the WDC alignments in Kaysville and Layton included as part of the August 2011 alternatives, as the TNC did not feel that these alignments minimized the loss of Great Salt Lake Shorelands Preserve (Preserve) properties. Mike Weland stated that URMCC concurred with TNC's feelings about the revised alternatives in Kaysville and Layton, and stated that he may have miscommunicated in the previous meeting with the WDC team, and that URMCC was not endorsing the changes to the alignments in Kaysville and Layton shown in the August 2011 maps. TNC stated that reducing impacts for others felt like impacts were then being shifted to TNC. TNC knows there will be impacts for everyone but wants to ensure that impacts are shared equitably. They are not just looking to preserve wetlands, they are looking to preserve contiguous property of wetlands and uplands.

Comment 941 (continued)

Response
Section in
Chapter 32

The group discussed the changes to the alignments in Kaysville and Layton. Randy Jefferies described why the changes had been made in Kaysville and Layton. The Kaysville segment had changed based on updated wetlands data, information provided by Rocky Mountain Power, and engineering design. Randy stated that the WDC team had determined, based on the updated information, that an alignment on the east side of the power corridor through Kaysville would be more impactful to residences and more expensive than they had previously estimated, and that these costs and impacts would not be reasonable to avoid about 5 acres of wetlands. The group discussed and agreed that an alignment on the west side of the power corridor from View Crest Drive would be the most reasonable alignment in this area. The group agreed that an alignment on the west side of the power lines in the immediate area of the built homes was reasonable, but TNC/URMCC felt that because of this home avoidance, UDOT had then shifted the entire alignment to the west from the last house all the way to Kays Creek Estates, causing significant additional loss of upland habitat and potential wetlands (to be determined upon formal delineation). Randy Jefferies stated that part of the reason for the move was the existence of platted subdivisions near the alignment in this area. TNC questioned the legality/validity of deciding to avoid property that has not yet been developed/built upon, especially since the per acre value invested in the uplands by TNC/URMCC immediately adjacent was determined by appraised and purchased as developable land – and may be very comparable to the cost of the potential subdivision land. The

TNC and URMCC both requested, and Randy agreed, to consider shifts in the alignment to the north and east to the south of 200 North (?) in Kaysville to minimize the direct and indirect impacts to Preserve properties in this area. The TNC noted that the evaluation of alignments should also consider the fact that TNC land in the immediate area of the platted subdivisions is also currently developable and the cost to TNC for this land was based on its development potential, cost differential between impacting-platted subdivisions versus TNC land. They also noted that there were not just impacts to wetlands west of the power corridor but critical upland habitat that is necessary to manage the preserve. The TNC was concerned that the evaluation was focused on wetlands and not the overall ecosystem.

In the Layton area, Randy noted that the alignment had shifted further to the west to minimize impacts to high quality farmlands and existing development along 2200 West and 1000 South. Randy also noted that this shift in alignment had been made based partially on the discussions in the previous meeting with URMCC in July 2011. TNC felt that this was possibly one instance where the directive to avoid wetlands wherever possible/practicable (impacts to a small number of residences with potentially willing sellers) was warranted. Randy noted that the WDC team was still considering and evaluating other options in the Layton area, and agreed to take another look at the different alignment options in the Layton area. TNC noted that without any change to the current alignment and in the absence of any mitigation information, TNC/URMCC is being asked to suffer a net total loss of 135 acres of Preserve wetlands/uplands.

The group discussed other issues, including access points and water conveyance facilities. Vince asked the TNC or URMCC to provide this information and their preferred alignment to the WDC team if it was available in GIS format so that the WDC could assess it and accommodate these facilities where possible during the Draft EIS and engineering design process. The TNC agreed to provide this information to the WDC team. TNC also requested that the WDC team consider the impacts to uplands as well as wetlands when assessing the impacts to the Preserve. The TNC noted that the impacts to uplands become even more important during high water years when many of the wetland areas are inundated, and suggested that UDOT acquire aerial photos of the years 1983-86 to confirm.

The group also discussed the mitigation process. TNC is ready to begin discussions on mitigation. TNC recommended that areas south of Gentile Street and west of the WDC alternatives not currently within the Preserve should be targeted and prioritized as mitigation areas for the WDC project. The TNC stated that they were opposed to using existing credits for mitigation or using the land being offered for mitigation by Buffalo Ranch. TNC also stated that they expected fair monetary compensation for any land taken (footprint property, parcels isolated by the highway, etc.) impacts to from TNC owned properties or uneconomic remainders, (as would any other landowner), and TNC also expected and that other direct and indirect impacts to wetlands and key uplands in the Preserve would be addressed through the mitigation process (likely resulting in UDOT protecting, enhancing or creating new wetlands or critical uplands). The TNC explained that they needed to be able to show their Board of Directors and donors

Comment 941 (continued)

Response
Section in
Chapter 32

that the Preserve would come out better as a result of the mitigation process in order for TNC to support the WDC project and process. TNC prefers cash compensation for impacts over other forms of mitigation. Should UDOT wish to eventually transfer mitigation properties to TNC, TNC also desires would require an endowment to manage UDOT mitigation lands in perpetuity and will expect this to be a subject of future negotiations. URMCC concurred with this approach, but stated that they prefer land transfers or swaps to compensation for impacts to Preserve parcels owned by the U.S. government. TNC and URMCC both advocated for a creative approach to mitigation that might involve not just wetland acres preserved, enhanced or created, but also the purchase of permanent water rights, adjacent uplands or other mitigation actions.

Mike Weland reiterated his comments from prior meetings, that the Mitigation Commission considers the entire Shorelands Preserve as a single ecological unit and that FHA and UDOT should consider all lands within the Preserve as 4(f), not just those in the name of the United States.

Vince clarified that final mitigation agreements are generally not finalized until the Record of Decision and Clean Water Act 404 permitting process, but said that general mitigation approaches and locations will be described in the Draft EIS.

TNC and URMCC requested, and Randy agreed, to meet again to discuss the alignments in the Kaysville and Layton areas and mitigation.

Action Items:

The WDC team will consider eastern shifts to the WDC alignments in Kaysville south of 200 North, and in the Layton area.

TNC will provide the WDC team with GIS data on their preferred alignment and for access points and water conveyance facilities.

Comment 941 (continued)

Response
Section in
Chapter 32



Exhibit P

Comment 941 (continued)

Response
Section in
Chapter 32



32.14.2D

UTAH RECLAMATION
MITIGATION
AND CONSERVATION
COMMISSION

230 South 500 East Suite 230 Salt Lake City, UT 84102-2045
Phone: (801) 524-3146 – Fax: (801) 524-3148

COMMISSIONERS
Jody L. Williams, Chair
Don A. Christensen
Brad T. Barber
Dallin W. Jensen
James Karpowitz

January 26, 2012

Mr. Randy Jeffries
UDOT West Davis Corridor EIS
466 North 900 West
Kaysville, UT 84037

Subject: Great Salt Lake Shorelands Preserve

Dear Mr. Jeffries:

We appreciate the time and effort you and your team have given to coordinating the NEPA planning for the proposed West Davis Corridor in order to minimize adverse impacts on the Great Salt Lake Shorelands Preserve. As we prepare to meet next week to discuss possible mitigation for the impacts of proposed project, and to begin to come to closure on the preparation of a Draft EIS, we feel it necessary to clearly state the nature of the Federal interests that could be significantly impacted.

The Central Utah Project Completion Act of 1992 established the Mitigation Commission and authorized the acquisition of wetland habitats around the Great Salt Lake. The Commission immediately recognized that the greatest value for Federal taxpayers would be obtained by entering into a partnership with The Nature Conservancy of Utah in its Great Salt Lake Shorelands Preserve. Over 20 years ago, TNC had the foresight to establish the Preserve to conserve this critically important and internationally significant habitat to protect it from encroaching development. After millions of dollars of private and public investment, the value of the Preserve has increased greatly as more and more shoreland habitat around the Great Salt Lake has undergone conversion to other uses. Ideally, all development would have recognized the investments in the Preserve and avoided any encroachment within its boundaries. Instead, development continued to move toward the Lake without preserving a buffer zone for public utilities such as pipelines and highways, and now UDOT is faced with the unenviable task of trying to avoid impacts to both the Preserve and to land development that has occurred in the last several years.

In each of our meetings with your team, we have been faced with incremental encroachments of various corridor alignments into the Preserve, some with significant impacts, such as the loss of agricultural acres that comprise a critical feeding area. Since the Commission's investments have been intended to make up for losses of wetlands resulting from construction and operation of Federal Reclamation projects in Utah, complete avoidance of any impact on Federal ownership would be justified and defensible on public policy grounds. However, we have been

Comment 941 (continued)

Response
Section in
Chapter 32



willing to consider some impact to the Preserve based on assurances that mitigation would be provided.

As we have stated repeatedly, the Preserve is a dynamic natural ecosystem that must be viewed as a single management unit. Its value, and the impact of the highway corridor, cannot be calculated on an acre-by-acre basis. The Federal government would not have invested millions of dollars in mitigation and conservation of isolated parcels of habitat; the benefit to the Federal government is in conserving and maintaining the full ecological value of the entire Preserve. We believe that acquisition of all privately owned lands and associated water within the Preserve that are west and south of the proposed corridor, including several parcels within the northern boundary of the Preserve, would provide appropriate and justified mitigation. We are confident that your NEPA analysis will also document the impacts to the Preserve not only of the lost acreage that will be taken for the corridor, and the ecological and management functions those lands provide, but also the lost water from surface and storm runoff and the impacts to water quality throughout the Preserve resulting from the corridor itself. In addition, the indirect impacts resulting from land development at interchanges and along the corridor should also be described in the NEPA document. As we have also discussed, the NEPA analysis should also address impacts on the ecology and management of the Preserve from air quality, light and noise pollution, and increased trespass concerns.

Thank you again for your dedicated efforts to protect the Preserve as you carry out your very difficult task of balancing conflicting interests.

Sincerely,



Michael C. Weland
Executive Director

cc: Chris Montague, The Nature Conservancy

Comment 941 (continued)

Response
Section in
Chapter 32



Exhibit Q

Comment 941 (continued)

Response
Section in
Chapter 32

See
Response
to
Comment
#769



United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
Denver Federal Center, Building 67, Room 118
Post Office Box 25007 (D-108)
Denver, Colorado 80225-0007



August 14, 2013

ER-13/0343

James Christian, Division Administrator
FHWA Utah Division
2520 West 4700 South, Suite 9A
Salt Lake City, UT84118

Dear Mr. Christian:

The Department of the Interior (Department) has reviewed the Draft Environmental Impact Statement (DEIS) and Draft Section 4(f) Evaluation for the West Davis Corridor Project in Davis and Weber Counties, Utah and offers the following comments.

DRAFT ENVIRONMENTAL IMPACT STATEMENT COMMENTS

General Comments

The US Fish and Wildlife Service (USFWS) is a cooperating agency on the West Davis Corridor (WDC) project and appreciates the extensive coordination with the Utah Department of Transportation (UDOT) and the Federal Highway Administration (FHWA). We acknowledge the effort UDOT has made to maintain the flow of information and dialog throughout the planning process, and appreciate the opportunities provided throughout the NEPA process to provide technical assistance relative to fish and wildlife issues.

USFWS's involvement in this project stems from their interest in ensuring that project planning is done in a manner that retains the important wildlife values of the Great Salt Lake (GSL) ecosystem. The GSL ecosystem is an irreplaceable and immitigable resource due to its location within an arid region, large size, diversity of habitats for migratory birds, and the sheer number of birds, estimated at 7.5 million per year (UDNR 2013). Located approximately midway through an avian migration route between northern Canada and South America and located between the arid desert to the west and rugged mountains to the east, the GSL and its associated wetlands become a vital bird staging area in an otherwise arid region. The importance of the GSL ecosystem to wildlife on a national and international level is well documented.

Comment 941 (continued)

Response
Section in
Chapter 32

Mr. James Christian

2

The GSL is part of the Western Hemispheric Shorebird Reserve Network (WHSRN), a distinction afforded to only seven areas in the lower 48 states (Manomet 2013). To meet requirements of the WHSRN, an area must support more than 20,000 shorebirds, or 5% of a flyway population. The GSL ecosystem easily exceeds the WHSRN standards, with impressive numbers of Wilson's phalarope (500,000; largest staging concentration in the world), red-necked phalarope (240,000), American avocet (250,000; exceeds any other wetland in the Pacific flyway), black-necked stilt (65,000; exceeds any other wetland in the Pacific flyway), and marbled godwit (30,000; the only staging area in the interior USA) (Paul and Manning 2002). Waterfowl populations are equally impressive with the GSL ecosystem providing sufficient habitat to support 75% of the western population of tundra swans and 25% of the continental pintail population (UDWR 1997). In addition to shorebirds, waterbirds, and waterfowl the GSL wetlands and associated uplands provide habitat for a diverse array of wildlife species. One of the nation's largest populations of wintering bald eagles is located at Farmington Bay (Oring et al. 2000).

The GSL ecosystem includes the saline open waters as well as the surrounding freshwater marshes, wet meadows, seasonal wetlands and playas, uplands, and agricultural fields. Wetlands of the GSL ecosystem account for approximately 75% of the wetlands in the state of Utah; wetlands comprise only 1.5% of Utah's total land area. Up to 90% of bird use associated with the GSL is concentrated along the eastern shore due to the variety of habitats present.

These areas provide nesting habitats for many species as well as critical resting and feeding grounds for enormous numbers of migrating birds. Uplands associated with wetlands and riparian areas provide critical nesting habitat for shorebirds and waterfowl. Hayfields are used by shorebird species as foraging sites (e.g., long-billed curlew and killdeer) and for nesting (e.g., killdeer, Wilson's phalarope, and long-billed curlew) (Oring et al. 2000). The mosaic of uplands and wetlands is of great value to the GSL's wildlife.

Overall, the GSL ecosystem provides unique and important values to migratory shorebirds, waterfowl, and other wildlife. The proposed alignments for the WDC traverse and border some of the last undeveloped and unprotected habitats on the eastern shore. These areas would be impacted by the roadway and would be vulnerable to future development. It is critical that UDOT and FHWA recognize the irreplaceable resource of the GSL ecosystem; select the least damaging alternative; design, construct, and operate the facility such that the impacts are minimized; and fully mitigate the direct, indirect, and cumulative impacts of this project.

Comments on Build Alternatives

The DEIS proposes two main alternatives (A and B), each with two options in the south and two options in the north, creating a total of eight alternatives. All build alternatives would cause significant, permanent impacts to the wetland and wildlife resources associated with the GSL ecosystem.

We note that a local coalition has proposed another alternative which has been termed the "Shared Solution." We encourage UDOT to fully vet this alternative as it did with all 23 preliminary alternatives, and to provide its agency resources to further develop and assess its

Comment 941 (continued)

Response Section in Chapter 32

Mr. James Christian

3

details. Should this Shared Solution alternative be viable and meet the project purpose and need, it would broaden the range of alternatives and could provide an alternative with fewer impacts to wetland and wildlife resources. We support further development of this alternative.

The alternatives proposed in the DEIS all share the alignment in Layton and Kaysville where the corridor traverses immediately adjacent to important shore line habitats including the Great Salt Lake Shorelands Preserve (Preserve); there is no alternative alignment presented for this shared segment that may be less environmentally damaging. If a new corridor is determined necessary, it is imperative to analyze all direct, indirect, and cumulative impacts of the alternatives, select the least damaging alternative, and fully mitigate all unavoidable impacts.

Of the build alternatives evaluated in the DEIS, we believe Alternative B would have the least overall (direct, indirect, and cumulative) impact to wildlife and wildlife habitat. The Alternative B alignments are generally further from the Great Salt Lake shore land habitats, including the high-value Preserve. While Alternative B would directly impact more wetlands, these wetlands and the wildlife habitat they provide are generally already more fragmented, surrounded by more development, and of lesser wildlife value than those of Alternative A. We believe that the EIS's wildlife habitat quality assessment, habitat fragmentation analysis, and buffer zone analysis support this conclusion. For example, a comparison of the Alternatives A (Table 14-17) and B (Table 14-31) from Gentile Street (where they diverge) northward reveals approximately twice the amount of high value habitat within 393 meters (1,300 feet) of Alternative A (191 acres) versus Alternative B (98 or 73 acres, depending on the northern option). We believe the wildlife buffer zone analysis would more clearly highlight the difference if it were conducted to a distance of 1,200 meters (3,937 feet) (a distance supported by current road ecology science, as discussed below under *Indirect Impacts to Wildlife Habitat*). The GSL shore lands extending to the west of Alternative A rate nearly exclusively as high value habitats, whereas the habitats adjacent to Alternative B in Syracuse are more fragmented, impacted by surrounding development, and largely low or medium value.

Of the southern options for Alternative B, we believe the Glovers Lane alignment (Alternatives B1/B2) would cause greater impacts than Shepherd Lane (Alternatives B3/B4) due to indirect impacts to the high value shore land habitats of Farmington Bay west of the Glovers Lane. We can compare the Glovers Lane and Shepherd Lane options using tables 14-31 and 14-37; habitat value for the southern segment ("S. Terminus to Central Davis Sewer Treatment Plant") are identified as low, medium, and high quality. These tables show the Shepherd Lane alignment to have 323 acres of medium and high value habitats within 393 meters (1,300 feet), while the Glovers alignment, adjacent to Farmington Bay, has 830 acres of medium and high value habitats within 393 meters (1,300 feet). Again, if the buffer zone analysis were extended to 1,200 meters (3,937 feet), we believe the difference between the two options would be even clearer. The Farmington Bay Waterfowl Management Area (FBWMA) lies within 140 meters at its closest point to the Glovers Lane alternative, while the Shepherd Lane alignment is over 3,000 meters from the FBWMA; we believe the Glovers Lane option would significantly impact the habitat value of the FBWMA. In addition, the shore land habitats north of the FBWMA and west of and immediately adjacent to the Glovers Lane alignment are primarily high value and would incur substantial impacts from a new road corridor. The floodplain impacts similarly

Comment 941 (continued)

Response Section in Chapter 32

Mr. James Christian

4

show a large difference (201.2 acres for Glovers Lane and 61.8 acres for Shepherd Lane), illustrating the proximity to the lake shore of the Glovers Lane alternative.

Of the northern options for Alternative B, the more western alignment, 4800 West (Alternatives B2/B4), approaches within approximately 720 meters of high-value shore land habitats, which would result in greater indirect impacts to the shore land habitats than the more easterly 4100 West alignment (Alternative B1/B3), over 1,400 meters from the high-value shore land habitats. Because the DEIS buffer zone analysis extends only to 393 meters (1,300 feet) it does not reveal this difference; if it extended to 1,200 meters (3,937 feet), the indirect impacts to the high-value shore land habitats would be properly illustrated. The 4100 West (Alternatives B1/B3) has 4 more acres of direct wetland impacts (14.7 versus 10.4), but these wetland habitats lie in a more fragmented and suburbanizing environment. Because the shore lands of the GSL are a unique and irreplaceable resource, we recommend prioritizing the protection of these habitats and selecting the alignment that is furthest from the GSL shoreline.

We recommend that the FEIS extend the wildlife buffer zone analysis to a fourth zone, extending 1,200 meters from the roadway edge. USFWS initially agreed with the WDC team to limit the buffer zones analysis to 393 meters (1,300 feet) on the premise that a greater distance would create overlapping zones between the alternatives, "washing out" the differences, and making a comparison of alternatives less clear. This agreement was made despite the evidence in the road ecology literature that indicates wildlife impacts occur to a much further distance. However, now that they have reviewed the analysis based on 393 meters (1,300 feet), USFWS concludes that it does not provide a satisfactory evaluation of habitat impacts, and thus recommend a larger fourth zone be incorporated to more clearly depict and compare the indirect effects to wildlife associated with each alternative. We recommend a fourth zone extend to 1,200 meters because many studies (Van der Zande et al. 1980, Findlay and Houlihan 1997, Green et al. 2000, Milsom et al. 2000, Forman et al. 2002, Eigenbrod et al. 2009) conclude that highways impact wildlife impacts at that distance or beyond (see *Indirect Impacts to Wildlife Habitat*, below).

Comments on Locally Preferred Alternative

The DEIS presents Alternative B1 as UDOT's Locally Preferred Alternative. This alternative proposes the WDC follow the Glovers Lane option in the south, the more easterly Alternative B alignment through Syracuse, and the 4100 West option in the north. From the action alternatives presented in the DEIS, we believe UDOT's selection of Alternative B in Syracuse and the 4100 West option to the north would be less damaging to the Great Salt Lake shore land habitats than other alternative alignments.

However, we conclude that the Glovers Lane option would be significantly more damaging to GSL shore land wetland and wildlife habitats than the Shepherd Lane option. Glovers Lane would result in the construction of a 4-lane freeway adjacent to the lake shore which would permanently and irreparably degrade the wildlife values of the shore land habitats, including those of the FBWMA and habitats to the north of the FBWMA and west of the alignment.

We do not believe that Alternative B1 is the Least Environmentally Damaging Alternative under Section 404 of the Clean Water Act. We therefore recommend UDOT reconsider the selection

Comment 941 (continued)

Response Section in Chapter 32

Mr. James Christian

5

of the Glovers Lane option and encourage UDOT and the FHWA to select the Shepherd Lane option.

Indirect Impacts to Wildlife Habitat

Our greatest concern with this project regards the indirect impacts to the wetland and upland wildlife habitats of the GSL shore lands. The DEIS describes some of these impacts, leaves some unaddressed, and abstains from making any substantive conclusions regarding permanent degradation of the habitat or effects to the wildlife community structure that will likely result from this project. Moreover, the DEIS does not provide any commitment to mitigate for the impacts to this unique resource. We recommend the FEIS contain a more comprehensive analysis of the indirect effects, discussing all potential factors, evaluating their effects both individually and cumulatively, and drawing conclusions based on the best available science.

Many published studies have investigated the effects of roads on wildlife populations, the substantial majority concluding some level of negative effects of roads. While each study is specific in its geographic region, habitat, focal species, and particular study design, several themes have emerged from the body of science that has developed through the years.

At UDOT's request, USFWS conducted a review of the road ecology literature, compiled an annotated bibliography, and extracted the studies most applicable to the WDC project (in terms of similar habitat types, species, and traffic volumes) in order to provide a better understanding of the best available science on the subject. They submitted a white paper to UDOT and FHWA, *Indirect Effects of Roads to Wildlife* (USFWS 2013), which provided their review of the literature, conclusions regarding the best available road ecology science, and recommendations for conducting an indirect effects analysis that would quantify impacts and calculate compensatory mitigation.

As part of the analysis in the white paper (USFWS 2013), USFWS found several recent literature reviews and meta-analyses (statistical analyses of the cumulative data) which aggregate the results from many studies and are helpful in assessing the "body of science" on the subject. These reviews strongly support the conclusion that roads have indirect effects on wildlife (Table 1).

Table 1. Road ecology literature reviews and meta-analyses.

Citation	Species	Study Conclusions
Benitez-Lopez et al. 2010	birds & mammals	Meta-analysis of 49 studies of 234 mammal and bird species: bird populations decline within 1 km of roads and other infrastructure and mammals decline within 5 km.
Fahrig and Rytwinski 2009	birds, amphibians, reptiles, mammals	Review of the empirical road ecology literature found 79 studies examining 131 species. Negative effects were concluded for 114 species; positive effects for 22 species; and neutral for 56 species. Amphibians and reptiles show mostly negative effects. Birds showed mainly negative or no effects. Positive effects generally found only for species which can avoid on-road mortality and are attracted to roadsides for food or

Comment 941 (continued)

Response Section in Chapter 32

Mr. James Christian

6

		lack of predators.
Reijnen and Foppen 2006	breeding birds	Review of 18 studies concludes negative impacts of road traffic on breeding bird species density far outweigh positive impacts. - Approximately 50% species have reduced abundance near roads with traffic volume similar to the West Davis Corridor (22,000-30,000 vehicles/day). - Approximately 40% of breeding bird species in open habitats have reduced abundance.
Rytwinski and Fahrig 2012	birds, amphibians, reptiles, mammals	Meta-analysis of 75 studies identifies common traits of species most affected by roads: - Wide-ranging large mammals with low reproductive rates; - Mobile birds w/ large territories; - Herptiles (especially frogs and toads); - Slow-moving species that are attracted to roads; - Species that are disturbed by traffic.

In summary, USFWS found the best available science, documented in published, peer-reviewed studies, supports the following conclusions:

- Species richness (number of species), abundance (number of individuals), nesting density, and nesting success decrease with proximity to a road. Habitat close to roads is less favorable for a variety of activities, including nesting and foraging.
- The degree and distance of effects to wildlife species increase with higher traffic volumes and tend to be greater in open habitats than in forests.
- All taxa are affected, including birds, herptiles (amphibians and reptiles), mammals and plants. While not every species is affected negatively, literature reviews indicate the majority of species experience neutral or negative effects.
- Causal factors vary, and may include noise, light, and visual disturbance; on-road mortality; movement barriers; habitat degradation from pollution, invasive plant species, decreased water quality; and edge effects.
- Some species appear more abundant near roadways, but experience higher mortality or reduced reproduction rates which create an ecological "sink" for the population.
- Although not all species are negatively affected, the loss of habitat and habitat use for even a portion of species create changes in community composition, prevalence of "urban-adapted" species, the loss of more sensitive, disturbance-intolerant species, and decreased species diversity.

We conclude that the construction of the WDC, a new 4-lane freeway adjacent to the GSL shore lands would have significant, irreparable impacts to the wildlife populations that rely on those habitats, would substantially degrade the value of that habitat, and would permanently alter the composition of the wildlife community in the area. These impacts would extend large distances

Comment 941 (continued)

Response Section in Chapter 32

Mr. James Christian

7

from the road, over a kilometer for many species, with substantial effects to the GSL shore land wildlife communities.

The DEIS does not make the same conclusions. The DEIS describes several indirect effect factors, including fragmentation, collision mortality, noise disturbance, water pollution, and artificial light disturbance. It does not, however, address many other important factors including weed introduction, movement barriers, visual disturbance, roadway avoidance, or edge effects. All direct and indirect effects should be included and evaluated in the FEIS and appropriate minimization and mitigation measures incorporated as feasible into roadway design, construction, and operation. USFWS offers their continued assistance in developing these measures.

The DEIS provides a substantial discussion of the impacts of noise on wildlife, relying largely on the Legacy Avian Noise Research Program (LANRP) findings. We have several concerns regarding the extent to which UDOT bases its conclusions on the LANRP findings and reference The Nature Conservancy's report (*Review of the "Legacy Avian Noise Research Program: Final Report"* [Cavitt 2013]) for details of the study's limitations, difficulty in controlling variables, and inconclusive findings. Further, the LANRP Final Report was never published, and thus never went through the rigorous peer review process required of all scientific journal publications. We therefore conclude the indirect effects analysis relative to noise should not be based on the LANRP, but instead on the existing body of peer reviewed, published science. We recommend the FEIS accordingly reduce its discussion of the LANRP, particularly relative to substantive conclusions on the effects of noise based on the LANRP Final Report.

The DEIS does not properly evaluate the combined effects of the indirect effect factors. The DEIS discussion addresses indirect effect factors individually, describing impacts and identifying measures by which the impacts of each could be reduced. Fragmentation, collision mortality, noise disturbance, water pollution, and artificial light disturbance are each specifically discussed. Ultimately the DEIS discounts any overall negative impact on wildlife communities by addressing each factor only individually, describing its effects, how they would be mitigated, and concluding its impacts are insignificant. However, the literature is clear that there are a variety of causal factors that can act synergistically to cause wildlife to avoid roadways and adjacent habitats. Accordingly, we recommend the FEIS take a more comprehensive approach to the indirect effects analysis, evaluating every factor specifically and all cumulatively with respect to habitat impacts.

USFWS is working with UDOT to address these concerns through efforts of the WDC Wildlife Working Group, comprised of UDOT, Utah Division of Wildlife Resources, Utah Reclamation, Mitigation, and Conservation Commission, Environmental Protection Agency, and the Corps of Engineers. This group seeks common ground regarding the analysis of indirect impacts to wildlife habitats and the mitigation of those impacts. We continue to encourage UDOT to understand the irreplaceable value of the GSL ecosystem and to ensure that all impacts to this unique resource will be fully mitigated. Should the group successfully define an approach to indirect effect analysis and mitigation that is acceptable to the participating agencies, we recommend UDOT and FHWA incorporate these findings into the FEIS.

Comment 941 (continued)

Response Section in Chapter 32

Mr. James Christian

8

Specific Comments

Sec. 14.3.1.1, Methodology for Assessing Wildlife and Habitat, p.14-7 – As USFWS has commented previously, the Western yellow-billed cuckoo requires large tracts of riparian habitat, creating an unusually high standard for the habitat assessment. While a tract of riparian habitat may not be of suitable extent or quality for the cuckoo, it may provide good lowland riparian habitat for a suite of other avian species. Riparian habitats support a greater variety of wildlife than any other habitat type, provide critical nesting and foraging habitat for migratory birds, and yet comprise the smallest percent of habitat type in Utah. We are concerned that this may have resulted in riparian habitat being under-ranked and therefore undervalued within the study area. We recommend that all riparian areas, regardless of their score in the habitat assessment, be avoided to the extent possible, and unavoidable impacts be replaced or restored with an equivalent or greater acreage.

Sec. 14.3.1.1, Methodology for Assessing Wildlife and Habitat, p.14-8 – As USFWS has commented previously, we question the merits of averaging the habitat assessment scores within a given parcel, rather than using the highest single-species score. Essentially, if the parcel provides excellent habitat for a particular species, then it is excellent habitat and should be scored accordingly.

Sec. 14.3.1.2, Threatened, Endangered, and Sensitive Species, p.14-20 – The DEIS narrowed the geographic scope of analysis for potential Threatened/Endangered/Sensitive (T/E/S) species to the WDC study area; previously USFWS understood the analysis area to be the Ecosystem Impact Analysis Area (EIAA). The WDC study area is too narrow a focus for determining potential for T/E/S species occurrence within the study area based on Natural Heritage data elemental occurrences. Because birds and many mammals are sufficiently mobile, the WDC study area has not previously been extensively surveyed, and the WDC team did not conduct surveys within the study area for this project, we believe the FEIS should re-broaden its scope to the EIAA to determine the potential for T/E/S species occurrence. We believe this was what was originally intended, but for some reason did not occur.

Sec. 14.4.1, Habitat Degradation, p. 41-31 – Much of the available scientific literature is focused on noise impacts of highways to wildlife. However, there are an increasing number of studies that identify other causes for wildlife road avoidance such as lights, vehicle movements, pollution, and mortality (Green et al. 2000, Mumme et al. 2000, Ingelfinger and Anderson 2004, Coffin 2007, Kociolek et al. 2011, Summers et al. 2011, Dietz et al. 2013). As discussed in the *Indirect Impacts to Wildlife* section above, we recommend the FEIS take a more comprehensive view toward discussion of the factors that lead to habitat impacts adjacent to roads. In addition, the DEIS (last paragraph of this section) states: "...species responses to the potential degradation factors appear to vary widely..." This is quite inconclusive and non-committal; we recommend the FEIS include a more definitive statement: "there is substantial scientific evidence to show that negative effects from roadways extend to many species well beyond the roadway itself."

Sec. 14.4.3.3, Legacy Parkway Avian Study, p.14-42 – The title of this section is somewhat misleading, as it was not limited to the Legacy Parkway area and it was not a broad avian study but was focused only on the effects of noise. We recommend the section be re-titled.

Comment 941 (continued)

Response
Section in
Chapter 32

Mr. James Christian

9

Sec. 14.4.3.3, Legacy Parkway Avian Study, p.14-43 – The Legacy Avian Noise Research Program report does not conclude a “very weak” relationship (the p-value is actually cited as being 0.000), as the DEIS states. Rather, the report says, “...the relationship between species diversity and highway noise was significant...as was the relationship between species richness and noise.” The report actually does not discuss whether the relationship was positive (greater diversity and richness with higher noise levels) or negative (lower diversity and richness with higher noise). We recommend the FEIS more accurately report the conclusion of the Legacy noise study.

Sec. 14.4.3.3, Comparison of Noise Data between the WDC and Legacy Parkway, p.14-43 – The DEIS states that noise levels from the WDC would be similar to those of Legacy Parkway; however, Legacy Parkway was constructed with quieting pavement, trucks and trailers are not allowed to use the Parkway, and the speed limit is reduced to 55 miles per hour. The FEIS should identify these differences. We also recommend UDOT commit to a similar construction material that would similarly reduce the WDC noise levels.

Sec. 14.4.3.3, Comparison of Noise Data between the WDC and Legacy Parkway, p.14-44 and 14-45 – It cannot be said that the Legacy Report found that Legacy Parkway “...caused only one instance of negative noise effects and caused many neutral or positive noise effects on wildlife in the areas adjacent to Legacy Parkway.” The report itself warned that the “analyses...are inconclusive” and that “inferences about highway noise on the effects (sic) of both avian abundance and nesting success should be treated cautiously...” We recommend that statements regarding the Legacy study’s conclusions be more carefully reported.

Sec. 14.4.3.3, Summary of WDC Noise Levels and Potential Effects, p.14-45 – The Legacy Avian Noise Research Program report does not conclude a “very weak” relationship (the p-value is actually cited as being 0.000), as the DEIS states. Rather, the report says, “...the relationship between species diversity and highway noise was significant...as was the relationship between species richness and noise.” The report does not discuss whether the relationship was positive (greater diversity and richness with higher noise levels) or negative (lower diversity and richness with higher noise). We recommend the FEIS more accurately state this conclusion of the Legacy noise study.

Sec. 14.4.3.7, State of Utah Sensitive Species, Table 14-11, p.14-52 and 14-53 – The geographic scope of analysis is too narrow and should include past observances of species within the broader Ecosystem Impact Analysis Area. In addition, it is unclear why the table indicates “no impact” for bald eagle when the species is seasonally prevalent within the study area and a nest exists in the Ogden Bay Waterfowl Management Area. We recommend the footnote be removed and the table be adjusted to show that impacts to bald eagles are likely to occur.

Sec. 14.4.3.7, General Discussion of Impacts to Sensitive Species, p.14-54 – We recommend UDOT determine if the bald eagle nest site in the Ogden Bay Waterfowl Management Area is within one mile of any construction activities. Construction activities should occur outside of the one mile protective buffer or avoid the bald eagle nesting season (January 1 – August 31). In addition, if the nest is within one mile, the FEIS should discuss the potential impacts to this nest

Comment 941 (continued)

Response
Section in
Chapter 32

Mr. James Christian

10

site, including the potential for nest abandonment, loss of foraging resources, and highway mortality of fledgling eagles.

Sec. 14.4.3.7, General Discussion of Impacts to Sensitive Species, p.14-54 and 14-55 – This section contains many references to a “WDC wildlife survey crew,” a misleading title given that there were not any wildlife surveys conducted. We are guessing this crew might have been the “WDC wildlife habitat assessment crew.” Also several of these species have had species occurrences within the EIAA, a more appropriate geographic scope to consider when evaluating the potential for occurrences within the project area. As commented previously, we recommend the scope be broadened to include the entire EIAA.

Sec. 14.4.3.8, Impacts to Conservation Areas, 14-57 – The DEIS conclusion regarding noise levels and the associated impacts to avian species should not be based entirely on the inconclusive results of the Legacy Avian Noise Research Program, given the body of peer-reviewed science available on the subject. Further, the Legacy report does not conclude a “very weak” relationship (the p-value is actually cited as being 0.000), as the DEIS states. Rather, the report says, “...the relationship between species diversity and highway noise was significant...as was the relationship between species richness and noise.” The report does not discuss whether the relationship was positive (greater diversity and richness with higher noise levels) or negative (lower diversity and richness with higher noise). We recommend the FEIS more accurately state this conclusion of the Legacy noise study and re-evaluate the applicability of the study’s results to the WDC project.

Sec. 14.4.4.1, Alternative A1, Wildlife, Habitat Loss, p.14-60 – It is unclear why the DEIS focuses on the value of habitats only for nesting or “other reproductive uses” when the GSL ecosystem habitats are of equal, if not greater, value for migratory stopover (feeding and resting) habitat. We recommend the FEIS broaden the discussion here and in each of the corresponding alternatives’ Habitat Loss sections.

Sec. 14.4.4.1, Alternative A1, Migratory Birds, p. 14-65 – Noise is but one of a variety of factors which could cause a reduction in habitat quality near the roadway; it is unclear why only noise is mentioned here. We recommend the FEIS also identify and evaluate the other potential factors that diminish habitat quality near roads, including on-road mortality, light and other visual disturbance, and habitat degradation from pollution, invasive plant species, decreased water quality; and edge effects. In addition, the document incorrectly states impacts “...would affect individual birds but not affect bird populations.” Bird populations (defined as a group of individuals of a given species using the same area of habitat) in fact would be affected by the WDC roadway disturbance if they abandon use of an area. We recommend the text in the FEIS be modified to reflect this population-level effect. These comments apply to each of the corresponding alternatives’ Migratory Birds sections.

Sec. 14.4.7, Recommendations to Minimize Growth Impacts to the Ecosystem, p.14-110 – The purpose of this section is unclear, as UDOT is not proposing or recommending any action but merely providing information. We support the dissemination of this information; however this section is insufficient. We recommend UDOT take a more active role toward guiding the future growth that will be induced by the construction of the WDC. By creating the

Comment 941 (continued)

Response Section in Chapter 32

Mr. James Christian

11

infrastructure for growth (i.e., the WDC), UDOT takes a large amount of responsibility for where and how quickly that growth will occur. We recommend UDOT take an active role in facilitating “smart growth” principles; partnering on “smart growth” conversations, workshops, and planning efforts; and incorporating “smart growth” components into the road design (e.g., locating interchanges and designing access to direct intelligent development and promote natural area protection).

Sec. 14.4.6.1, Mitigation Measures for Impacts to Wildlife and Wildlife Habitat – We have several comments in this section:

- Impacts to Nesting Birds, page 14-106 – We recommend UDOT determine whether the bald eagle nest site in the Ogden Bay Waterfowl Management Area is within one mile of any construction activities. Construction activities should occur outside of the one mile protective buffer or avoid the bald eagle nesting season (January 1 – August 31). In addition, if the nest is within one mile, the FEIS should adequately discuss the potential impacts to this nest site, including the potential for nest abandonment, loss of foraging resources, and highway mortality of fledgling eagles.
- Noise Impacts, page 14-107 – Noise impacts to habitat will not be limited to the Preserve, as indicated in the DEIS. Other noise-affected areas would include the shore land habitats to the south and west of the Glovers Lake alignment, northwest of the Central Davis Sewage Treatment Plant, and east of Howard Slough WMA. The statement “...other land... is either suburban land or farmland that has marginal or no wildlife habitat” is inaccurate. These areas were mostly assessed as high quality habitat with some medium and medium-high quality parcels. The FEIS should identify and evaluate all areas impacted by noise from the WDC.
- Vegetation, page 14-108, 6th bullet – We recommend UDOT commit to mitigating all impacts to lowland riparian habitats, a rare and important habitat type for a diversity of wildlife. Where losses are permanent, riparian habitat should be re-established elsewhere at a minimum 1:1 ratio or enhanced at a minimum 3:1 ratio.

SECTION 4(f) EVALUATION COMMENTS

Wildlife/Waterfowl Areas

Great Salt Lake Shorelands Preserve

The Great Salt Lake Shorelands Preserve (Preserve) would be impacted, directly and indirectly, by all action alternatives, more so by Alternative A which traverses a greater extent of the Preserve boundary. The draft Section 4(f) evaluation proposes a *de minimis* determination for the Preserve, with compensation proposed only for the 17-18 acres of Utah Reclamation, Mitigation, and Conservation Commission (URMCC)-owned parcels that would be directly impacted by the roadway. A *de minimis* determination can be made only if, after minimization and mitigation measures are employed, there are no adverse impacts to the features, attributes, or activities of the Preserve.

Comment 941 (continued)

Response Section in Chapter 32

Mr. James Christian

12

The proposed mitigation is inadequate to compensate for the impacts of the WDC project for two reasons. First, the Preserve lands were acquired by URMCC in conjunction with The Nature Conservancy (TNC) to ensure an ecologically whole unit and should not be treated separately; impacts to or fragmentation of the TNC portions impact the function of the Preserve unit as a whole. We recommend FHWA and UDOT consider the entire Preserve property, not just the publicly-owned parcels, when determining measures to minimize harm.

Second, UDOT and FHWA propose to compensate only the direct impacts of the roadway without considering the substantial permanent indirect impacts to habitat quality that result from a new freeway on the Preserve’s northern boundary. We refer to our comments in the *Indirect Effects to Wildlife Habitat* section earlier in this letter. Thus, the wildlife habitat values would need to remain the same as the current baseline. We recommend UDOT and FHWA consider both direct and indirect impacts to the Preserve when determining measures to minimize harm in order to achieve a *de minimis* determination.

Farmington Bay Waterfowl Management Area

The Farmington Bay Waterfowl Management Area (FBWMA) would be impacted by the action alternatives utilizing the Glovers Lane option (A1, A2, B1, and B2). The alignments would lie approximately 465 feet from the northern edge of the FBWMA at the closest point. The impacts to wildlife habitat would be indirect, and would affect the features, attributes, or activities of the FBWMA. We refer to our comments in the *Indirect Effects to Wildlife Habitat* section earlier in this letter.

FHWA and UDOT made the preliminary determination that the WDC would not adversely affect the FBWMA. This determination was based on the presence of Glovers Lane and a transmission line between the Glovers Lane alignment and the FBWMA, and that there would be no direct use of the property. The size and traffic volume of the proposed WDC facility, however, far exceeds that of the existing Glovers Lane, with impacts to the FBWMA’s habitat values correspondingly much greater. In addition, a new freeway facility in such proximity to the FBWMA would introduce a suite of impacts very different from that of a transmission line, including: noise, light, and visual disturbance; habitat degradation from pollution, invasive plant species, and decreased water quality from winter salting operations, contaminants, and trash; on-road mortality; and barriers to movement. These impacts would cumulatively lead to the loss of habitat value on the FBWMA.

We recommend UDOT and FHWA consider the indirect impacts and the loss of habitat value to the FBWMA in the Section 4(f) Evaluation. The proposed Glovers Lane alignment would adversely affect the activities, features, or attributes of the FBWMA. A *de minimis* determination could likely be made with appropriate mitigation.

We concur that there is no feasible or prudent alternative to the use of wildlife/waterfowl areas under Preferred Alternative selected in the document. While a variety of mitigation measures are included in the 4(f) evaluation, there is no documentation that the “officials with jurisdiction” concur in them or the proposed *de minimis* findings. In addition, we note (Section 27.7) that

Comment 941 (continued)

Response
Section in
Chapter 32

Mr. James Christian

13

additional consultation and coordination with these officials is ongoing. Accordingly, we cannot at this time concur that all measures to minimize harm to wildlife/waterfowl resources have been incorporated into the project. We would be willing to reconsider this position at such time as the officials' concurrences in both proposed mitigation and *de minimis* findings have been obtained.

Historic Properties

We acknowledge that this project will have adverse effects to historic properties. Further, we understand that UDOT is preparing a Programmatic Agreement (PA) or a Memorandum of Agreement (MOA) in consultation with the Utah State Historic Preservation Office and consulting to minimize these adverse effects. Although the document does not contain a draft MOA, measures to minimize harm are identified elsewhere in the document. These measures, as well as any other measures as needed, should be incorporated into the MOA.

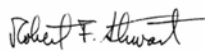
Following our review of the Section 4(f) Evaluation, we concur that there is no feasible or prudent alternative to the use of historic properties under Preferred Alternative selected in the document. Contingent upon execution of the MOA amongst the consulting parties, we would also concur that all measures have been taken to minimize harm to these resources.

Parks and Recreation Areas

We concur that there is no feasible or prudent alternative to the use of park and recreation areas under Preferred Alternative selected in the document. While a variety of mitigation measures are included in the 4(f) evaluation, there is no documentation that the "officials with jurisdiction" concur in them or (with one exception) the proposed *de minimis* findings. In addition, we note (Section 27.7) that additional consultation and coordination with these officials is ongoing. Accordingly, we cannot at this time concur that all measures to minimize harm to park and recreation resources have been incorporated into the project. We would be willing to reconsider this position at such time as the officials' concurrences in both proposed mitigation and *de minimis* findings have been obtained.

We appreciate the opportunity to review this document and provide these comments. Should you have questions about waterfowl/wildlife comments, please contact Betsy Herrmann, Fish and Wildlife Service, at (801) 975-3330 ext 139. Please direct comments related to historic properties and park/recreation areas to Cheryl Eckhardt, National Park Service, at 303.969.2851.

Sincerely,



Robert F. Stewart
Regional Environmental Officer

cc:
SHPO-UT Cory Jensen (coryjensen@utah.gov)
UDOT Brandon Weston (brandonweston@utah.gov)

Comment 941 (continued)

Response
Section in
Chapter 32

Mr. James Christian

14

Literature Cited

Benitez-Lopez, A., R. Alkemade, and P.A. Verweij. 2010. The impacts of roads and other infrastructure on mammal and bird populations: A meta-analysis. *Biological Conservation* 143: 1307-1316.

Cavitt, J.F. 2013. Review of the "Legacy Avian Noise Research Program: Final Report." The Nature Conservancy. Unpublished Report. Salt Lake City, Utah. 16pp.

Coffin, A. 2007. From roadkill to road ecology. *Journal of Transport Geography* 15: 396-406.

Dietz, M., C. Murdock, L.M. Romero, A. Ozgul, and J. Foutopoulos. 2013. Distance to a road is associated with reproductive success and physiological stress response in a migratory land bird. *The Wilson Journal of Ornithology* 125(1): 50-61.

Eigenbrod, F., S. J. Hecnar, and L. Fahrig. 2009. Quantifying the road-effect zone: threshold effects of a motorway on anuran populations in Ontario, Canada. *Ecology and Society* 14(1): 24.

Fahrig, L., and T. Rytwinski. 2009. Effects of roads on animal abundance: an empirical review and synthesis. *Ecology and Society* 14(1): 21.

Green, R.E., G.A. Tyler, and C.G.R. Bowden. 2000. Habitat selection, ranging behaviour and diet of the stone curlew (*Burhinus oedicnemus*) in southern England. *Journal of Zoology* 250:161-183.

Ingelfinger, F. and S. Anderson. 2004. Passerine response to roads associated with natural gas extraction in a sagebrush steppe habitat. *Western North American Naturalist* 64(3): 385-395.

Findlay, C.S. and J. Houlihan. 1997. Anthropogenic Correlates of Species Richness in Southeastern Ontario Wetlands. *Conservation Biology* 11(4): 1000-1009.

Forman, R.T.T., B. Reineking, A.M. Hersperger. 2002. Road traffic and nearby grassland bird patterns in a suburbanizing landscape. *Environmental Management* 29(6): 782-800.

Kociolek, A.V., A.P. Clevenger, C.C. St. Clair, and D.S. Proppe. 2011. Effects of road networks on bird populations. *Conservation Biology* 25(2): 241-249.

Milom, S.D. Langton, W.K. Parkin, S. Peel, J.D. Bishop, J.D. Hart and N.P. Moor. 2000. Habitat Models of Bird Species' Distribution: An Aid to the Management of Coastal Grazing Marshes. *Journal of Applied Ecology* 37(5): 706-727.

Oring, L.W., L. Neel, and K.E. Oring. 2000. Intermountain West Regional Shorebird Plan. [web page] <http://www.shorebirdplan.org/regional-shorebird-conservation-plans> [August 1, 2013].

Comment 941 (continued)

Response
Section in
Chapter 32



Mr. James Christian

15

Reijnen, R. and R. Foppen. 2006. Impact of road traffic on breeding bird populations. In: Davenport, J. and J.L. Davenport (eds), *The ecology of transportation: managing mobility for the environment*. Springer, Dordrecht, pp. 255-274.

Rytwinski, T. and L. Fahrig. 2012. Do species life history traits explain population responses to roads? A meta-analysis. *Biological Conservation* 147: 87–98.

Summers, P.D., G.M. Cunningham, and L. Fahrig. 2011. Are the negative effects of roads on breeding birds caused by traffic noise? *Journal of Applied Ecology* online. <http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2664.2011.02041.x/full>

Manomet Center for Conservation Science. 2013. Great Salt Lake Western Hemisphere Shorebird Reserve Network Site. [web page] <http://www.whsrn.org/site-profile/great-salt-lake> [May 14, 2013].

Mumme, R.L., S.J. Schoech, G.E. Woolfenden, and J.W. Fitzpatrick. 2000. Life and death in the fast lane: Demographic consequences of road mortality in the Florida scrub-jay. *Conservation Biology* 14(2): 501-512.

Paul, D.S. and A.E. Manning. 2002. Great Salt Lake Waterbird Survey Five Year Report, 1997 – 2001. Utah Division of Wildlife Resources Publication Number 08-38. 56 pp.

Utah Department of Natural Resources. 2013. Great Salt Lake Ecosystem Program. [web page] <http://wildlife.utah.gov/gsl/birds/index.php> [May 14, 2013].

Utah Division Wildlife Resources. Biological Assessment, West Davis Highway. April 25, 1997. 53pp.

U.S. Fish and Wildlife Service. 2013. Indirect Effects of Roads to Wildlife. Unpublished Report. May 23, 2013. West Valley City, Utah. 25 pp.

Van der Zande, A.N., W.J. ter Keurs, and W.J. van der Weijden. 1980. The impacts of roads on the densities of four bird species in an open field habitat – evidence of a long-distance effect. *Biological Conservation* 18: 299-321.

Comment 941 (continued)

Response
Section in
Chapter 32



Exhibit R

Comment 941 (continued)

Response
Section in
Chapter 32

See
Response
to
Comment
#1612



FARMINGTON CITY

September 6, 2013

SCOTT C. HARRERTSON
MAYOR
JOHN BILTON
CORY E. RITZ
CINDY ROYBAL
JIM TALBOT
JAMES YOUNG
CITY COUNCIL
DAVE MILLHEIM
CITY MANAGER

VIA U.S. MAIL AND E-MAIL

Paul Ziman
FHWA Utah Division
2520 West 4700 South, Suite 9A
Salt Lake City, UT 84118

**Re: Farmington City's Comments on Draft Environmental
Impact Statement and Section 4(f) Evaluation for the
West Davis Corridor**

Dear Mr. Ziman:

I. GENERAL COMMENTS

Farmington City appreciates the obvious time and effort that has been invested to date in this process, but unfortunately, the DEIS falls short of the mark required by applicable law and does not provide the public with sufficient relevant information to allow meaningful feedback and discussion regarding whether such a road is needed, whether the trade-offs required are worth it and whether less damaging or more feasible and prudent alternatives have been fairly analyzed.

Farmington City has provided its comments on the West Davis Corridor ("WDC") in an effort to protect its territorial and proprietary interests from direct harm and indirect and cumulative impacts to its wildlife, water, city-owned property interests, ecosystem resources and Conservation Easements. The current preferred alignment of the Project frustrates the City's intention to remain a rural community with planned areas of functioning commercial development, will injure the quality of life of its residents, will injure the quality of the environment, will create economic losses and create other environmental injuries.

Based on the information in the DEIS, it is currently unclear whether this Project is needed at all for the Region in 2040 and it is clearly not needed by that point in time in Farmington City. The problematic road segments under the 2040 model located in the northern portion of the Study Areas are close to I-15 and are located almost exclusively on the East/West roads. Only certain discrete portions of I-15 in the Study Area appear not to meet an acceptable LOS in 2040. With the high local employment increases projected for both Davis and Weber Counties, we question whether the assumptions regarding future North/South travel demand are accurate, especially in view of the noted preferences of the younger workers in the Region to find local employment and to not become commuters. An outdated travel and

160 S MAIN • P.O. BOX 160 • FARMINGTON, UT 84025
PHONE (801) 451-2383 • FAX (801) 451-2747
www.farmington.utah.gov

Comment 941 (continued)

Response
Section in
Chapter 32

transportation paradigm may have been applied here and in the modeling, which needs to be corrected.

The Need issue is further complicated by the scope and extent of the selected Study Area. To fully understand Regional Need and to provide the most effective and efficient Regional solutions, the Study Area needs to include all of the lands East of I-15 and to the North with a connection to I-15 North of Ogden. If a Need can be demonstrated for the WDC, we also question whether Centerville, Farmington City and Kaysville should be part of the Study Area, as so little Need appears to exist there. We also believe it is critical to fully explore at least one alternative interchange located on I-15 to the North of Farmington City.

There are significant problems with the Section 4(f) Evaluation ("4(f)"). The fundamental problem is that the Farmington City Conservation Easements qualify as properties that must be protected under Section 4(f) under applicable law and they are not accorded that status, nor are they included in that analysis and Evaluation. Not only do these Conservation Easements perform significant recreational, park, open space, farmland and wildlife, waterfowl and wetland habitat functions, they are perpetually protected for those purposes and owned by the City. While the trails to, through, and around these conservation easements have been accorded 4(f) status, the properties containing the very conservation values protected by the Conservation Easements which those trails use as a destination are completely ignored. This is a serious legal flaw and makes no sense. The trails were designed and built concurrently with the establishment of the Conservation Easements they serve and the two must be considered unitary 4(f) resources. Farmington City is required by contract to protect these Conservation Easements from encroachment in perpetuity and intends to do so.

The cumulative impacts to and the direct and indirect effects on the Conservation Easement properties are also insufficiently explored in the Chapters of the DEIS designed to array and explore the impacts to and effects on parks, recreation areas, wildlife refuges, area habitat, farmland, wetlands, community cohesion, community facilities and otherwise. This is an issue separate and apart from the incorrect 4(f) legal status of these properties.

The Direct Effects Chapters represent noticeable effort by the Preparers, but generally they do not go far enough, as set forth in Section V(A) hereof. Specific comments regarding the Indirect Effect analysis are set forth in Section V(B) hereof, but that effort is fundamentally flawed due to the failure to provide an alternative-by-alternative analysis of the comparative Indirect Effects and to discern all of the Indirect Effects. The failure to adequately discuss the Indirect Effects on the Farmington City Conservation Easements and the Indirect Effects created by the preferred alignment off of those properties as they relate to the rest of Farmington City

Comment 941 (continued)

Response
Section in
Chapter 32



is also problematic. Lastly, because of these problems with the Direct and Indirect Effects analysis, the Cumulative Impacts analysis fails as well. The problems with that effort are further discussed in Section V(C) hereof.

The problems with this DEIS are significant and far reaching enough that a new or revised DEIS must be undertaken before a final EIS may be prepared. The issues concerning the size of the Study Area and Purpose and Need, including the failure to rely on the current local planning for Farmington City disable not only those Sections, but the entire DEIS. The 4(f) issue created by the failure to accord the Farmington City Conservation Easements 4(f) status disables the Alternatives Analysis and the 4(f) Evaluation and forecloses the use of the Glover's Lane Alternatives.

There are issues with the Shepard Lane Alternatives, but they are far less than Glover's Lane. Further effort must be invested in the Alternatives Analysis to include the roads located in the entire corrected Study Area and allowing for full review of an alternative or alternatives that do not require the WDC. If it is concluded that a portion of the currently contemplated WDC is required based on a revised effort on the Need for the Project, then interchanges located North of Farmington City must be studied.

II. STUDY AREA

The selected Study Area is improperly drawn in several respects. The first is the decision to use I-15 as a boundary. It is clear the purpose of the Project is to find a solution to an alleged Regional set of problems and Need. Arbitrarily bisecting the Region by a North/South line at I-15 forecloses the review of the entire Regional Need and the review of all reasonable alternatives. It is also our belief that the logical terminus lies at I-15 somewhere North of 12th South in Ogden. As currently contemplated, the Project basically ends in no man's land and will not provide a complete future route through and around Ogden. To the South, even the 2040 traffic numbers show (at best) minimal Need in Farmington and Kaysville, save on I-15 North of Shepard Lane. Simply widening I-15 in this area should solve that problem and that alternative must be studied. The improperly drawn Study Area has failed to capture all of the Regional Need and has resulted in the selection of a preferred alignment that creates severe, irreversible and unnecessary impacts, because all reasonable alternatives were not reviewed.

III. ALTERNATIVES SCREENING AND SELECTION

As previously mentioned, the improper selection of the boundaries of the Study Area foreclosed the review of all reasonable alternatives, so this effort must again be undertaken. US 89, I-84 and the East/West roadways East of I-15 might well contribute to a Regional solution that does not require the WDC. In that the only Need-based problem located South of 200 North in

Comment 941 (continued)

Response
Section in
Chapter 32



Kaysville in 2040 is on I-15, the focus should be on simply widening I-15 not on the Shepard Lane and Glover's Lane alternatives. If the Need for the WDC proves real, then a new Interchange must be explored near 200 North in Kaysville to connect to the undeveloped area to the North.

The geography of the Farmington/Kaysville area basically dictates this result due to the bottleneck created by the Great Salt Lake and the mountains, as there is insufficient space with existing and planned land uses to fit either of the contemplated southern interchanges. Of those two Interchanges, Glover's Lane cannot be built due to the 4(f) nature of the Farmington City Conservation Easements and while Shepard Lane does not cross those Easements, it has some traffic and design related issues such as infringement on the Business Park area, access to Lagoon and Station Park, impact to the golf course and motorist confusion. Shepard Lane is still an option, but a new interchange Alternative must be studied to the North if the WDC is actually needed. That Need must be demonstrated based on the enlarged Study Area and a full review of the potential contributions that may come from US 89, I-84 and all of the East/West roadways. The alternatives must be reviewed again with all of this in mind.

IV. PURPOSE AND NEED

The articulated Purposes are vague but generally acceptable. However, this Section and effort is fatally flawed. First, the Study Area was reduced in size to the point where it was impossible to capture the true Regional Need and to then discuss and review all of the reasonable alternatives available in the Region to meet that Need. There are also two levels of Need -- regional and local. By way of example, as to Regional Need, the 2040 employment numbers for Davis and Weber Counties are high, (42% and 66% respectively). It would appear local employment opportunities are increasing and the anticipated use of I-15 for North/South commuter traffic may not come to pass. More work must be accomplished in this regard, together with a review of the preference of the younger workers in the area to work locally. Also, one of the articulated future Needs is to facilitate freight trips, yet the DEIS states that trucks will account for only 6% of the trips on the WDC in 2040. This does not make sense from a logical or a planning perspective.

A. The Project is Not Consistent with the Farmington City Plan.

It appears insufficient effort was made to understand local Needs as well. We will now turn to Farmington City as an example of that problem and a document entitled *Technical Supplemental Memo in Support of Farmington City WDC DEIS Response*, dated September 5, 2013 is attached hereto as Exhibit A.

Comment 941 (continued)

Response
Section in
Chapter 32



The authors of the DEIS consistently mention the importance of City governments as part of the NEPA process (S.4, p. S-6), and state great deference is given to locally adopted General Plans and Transportation Plans. These plans constitute one of the primary reasons the WDC project was initiated (S.1, p S-1; S.1.2, p. S-5). Notwithstanding, UDOT's preferred alignment is B1 and that Alternative is not consistent with the Purpose and Need for the WDC in the Farmington. The B1 alignment is not compatible with the Farmington City General Plan, nor its Master Transportation Plan, it does not improve mobility (or safety) in this area, nor does it enhance peak-period mobility over the no action alternative. The DEIS states East/West congestion will continue to increase in the Study Area, which includes Farmington City. The B1 alternative does not provide inter-connection of transportation modes for the community, it does not sufficiently facilitate continuous pedestrian and bicycle facilities, and it does not support local growth objectives.

The Farmington City Master Transportation Plan (MTP) (back when the City supported the WDC) recommended interchanges on the WDC at 950 North and 1100 West near Glover's Lane. Alternative B1 does not. Section 1.6.2 discusses local transportation planning and delineates where local jurisdictions show elements of the Regional Transportation Plan ("RTP") in their respective plans. Sub-section 1.6.2.1 discusses conditions in Farmington, but fails to mention that the City's MTP shows local connection(s)/interchanges consistent with the "Corridor Connection" area set forth on the RTP.

The Farmington City Trails Master Plan (TMP) shows a continuous future Great Salt Lake Shoreline Trail. Alternative B1 does not fully support such a trail. In addition, this Alternative detrimentally impacts the trails that access Farmington City's Conservation Easements along the shore of the Great Salt Lake and will destroy the Conservation Easements, the Purposes for which they were entered and the numerous conservation values they are designed to protect.

The Farmington City General Land Use Plan and Zoning Ordinances, and local RDA plans supported by the County, School District, and other entities show a major 500 acre employment/mixed use center between I-15 and the UTA tracks, north of Clark Lane, and south of Shepard Lane. The DEIS incorporates old 2009 demographic data for this area (see 1.5, p. 1-11 to 1-12). In the intervening 4 years, the General Plan and Zoning Ordinances have changed. Market and demographic projections for this area have and will increase dramatically over the 2009 figures. Nevertheless, alternative B1 shows no opportunity for access to this 500 acres even though the west edge of this area is only 3/4 mile away from the B1 alignment and the City has already provided most of the right-of-way necessary to make connection

Comment 941 (continued)

Response
Section in
Chapter 32



happen by carefully preserving corridors consistent with its Transportation Plan.

The B1 alternative also provides no local access to the area between 200 North in Kaysville and Parrish Lane in Centerville. The corridor bypasses west Kaysville and west Farmington and sustains the no-action deficiencies for these communities. These deficiencies are set forth in Section 1.4.2 of the DEIS for the entire Study Area and include, but are not limited to increased East/West congestion, user delay and lost productivity, inadequate connection of transportation modes, and lack of continuous pedestrian/bicycle facilities.

1. Improve Region Mobility (1.4.1, p 1-9). This will not occur for Farmington City. UDOT's preferred alignment does not show an interchange between 200 North in Kaysville and Glover's Lane and I-15/Legacy Highway in south Farmington—a distance of approximately 7 miles and no local access is proposed between the 200 North in Kaysville and Parish Lane in Centerville—a distance of approximately 10 miles. The Glover's Lane interchange on I-15 does not provide local access, only system to system mobility.

2. Automobile and freight trips. The existing Park Lane/I-15/US 89/Legacy Highway interchange represents one of the largest regional transportation hubs on the entire UDOT system. Nevertheless, UDOT's preferred alignment curtails the regional movement of automobile traffic from the WDC to this hub. For instance, for automobiles traveling southbound from Kaysville, one must travel approximately 9 miles to access this interchange, even though the interchange is physically less than two miles from the WDC. Such movements do not reduce use delay or enhance peak-period mobility. Alignment B1 does not reduce or mitigate the ever increasing congestion from the growing areas of west Kaysville and west Farmington east to I-15, because alignment B1 does not provide a second option for access to these areas.

3. Transit. Transit facilities that serve Davis County include, among other things, Front Runner commuter rail service (which was identified as an element of the preferred alignment of the 1995-1998 Western Transportation Corridor Major Investment Study (1.3.1, p. 1-6)) and several north to south bus routes, including the 470 and the 455, primarily on SR 106 in Farmington. Only four commuter rail stations exist in the Study Area, which include stations in Farmington, Layton, Clearfield, and Roy. East to west connectivity exists between the latter 3 and the B1 alignment of the WDC, but no east to west connectivity is available under the B1 alignment for the Farmington station. Such a result is untenable. The same distances apply for one attempting to access transit from the WDC and those traveling to the Park Lane interchange by automobile.

Comment 941 (continued)

Response
Section in
Chapter 32

4. **Safety and Emergency Vehicle Response Time.** Because there is no interchange providing local access between 200 North in Kaysville and Parrish Lane in Centerville, emergency service providers must travel up to 10 to 12 miles (or more) before arriving at the scene of an accident. Such events can close down an entire facility, which would leave motorists stranded in traffic with no way out because there is no local access planned for the WDC between these two points. Such an access failure is inconsistent with traffic planning nationwide and should not be countenanced here.

5. **Support local growth objectives.** (See Section 1.4.1, p. 1-9). A major 500 acre regional employment/mixed use center is planned in the vicinity of I-15, US 89, Legacy Highway, and the WDC. Almost half of the acreage has already been built in the last two years, but the preferred alignment provides no access to this major Regional employment and shopping center. Three of these four facilities (I-15, US 89, and Legacy Hwy.) support this growth objective, but under the preferred alignment the WDC does not, because it passes by and provides no access to this area. The preferred alignment also provides no access to a business development site located near Glover's Lane.

6. **Increase bicycle and pedestrian options.** (See Section 1.3.1, p. 1-9). The Farmington TMP shows a shoreline trail running the full length of the City and with the intent to extend to points north and south, and with the potential for a multitude of access points to this trail (especially near the Farmington Bay Water Fowl Management area). Alignment B1 reduces the number access possibilities to these options. Farmington City has the highest number of developed trail miles per resident in the State. The preferred alignment limits trail opportunities under the City Master Plan and detrimentally impacts current and future trails. In the case of the Conservation Easements, it will destroy the destinations for a number of trails.

7. **Cost.** A proposed multi-million dollar interchange is planned on I-15 at Shepard Lane, which is identified as a phase one project on the WFRC's RTP. It is the understanding of Farmington City that the cost of this interchange is included in the overall cost of alternatives A3, A4, B3 and B4, but is not incorporated as part of the cost of the other alternatives (including UDOT's preferred alignment)¹. This misguided methodology skews the cost

¹ 1) Shepard alternative includes a local access interchange on the alignment between the D&RG and I-15 + a Shepard Lane interchange (serves both I-15 and Shepard alignment) + local access to Park Lane from the Shepard Lane alternative. These "improvements" are all reflected in the EIS cost estimate, but it is actually an independent project slated for construction in phase 1 of the WFRC Long Range Plan.

2) Glovers Lane alternative includes NO local access to Farmington as a part of its cost estimate. To make it an apples to apples comparison, you must add the cost of the Shepard Lane interchange, which is on the WFRC Long Range Plan (Phase I) with a price tag of \$73 million or subtract it from the cost of the Shepard Lane alternative.

(http://www.wfrc.org/new_wfrc/UnifiedPlan/Unified%20Plan%20Booklet%20Web%20Version%20Final%2006%20Aug%202011.pdf - see page 36, 6th line up from bottom of pg) + the cost of a local access interchange in the Mink Farm area (perhaps \$20-30 million).

Comment 941 (continued)

Response
Section in
Chapter 32

figures in favor of the remaining alternatives A1, A2, B1, and B2 (Table S-3, p. S-22; Table S-5, p. S-24).

The value of the Conservation Easements to Farmington City is irreplaceable. There is no mention of how or what must be paid to the City in the Glover's Lane cost figures, nor is the cost of mitigation included, should these Conservation Easements be taken. It is Farmington City's opinion that these losses cannot be mitigated.

B. Traffic Analysis

UDOT did not obtain or incorporate the correct land uses assumptions for Farmington. As a result, all future traffic volume projections are significantly low and future traffic operations analyses elements are inaccurate.

UDOT did not meet with the City to discuss or confirm the roadway network assumptions included in Chapter 1. Several improvement assumptions are listed in Table 1-2. This table contains several errors in what was assumed for "Local Transportation Projects Included in City Master Plans" that we expect could have an impact on the modeling results. Errors include: Widening Shepard Lane (Farmington): Frontage Road to 1875 West from 2 to 4 lanes. This represents new construction on a new alignment not widening to 4 lanes. New Construction 1100 West (Farmington): Shepard Lane to 100 North; 2 Lanes. This future roadway will be at least 4 lanes, not 2. Widening Park Lane (Farmington): Main Street to 1100 West from 2 to 4 lanes. This roadway has been 4 lanes for some time with no planned improvements other than restriping. Widening Clark Lane (Farmington): I-15 to 1100 West from 2 to 4 lanes. There are no plans for this roadway to be widened to 4 lanes. The provision for a future WDC local access interchange located near 1100 West/Glovers Lane was not included. The provision for a future WDC local access interchange located on 950 North was also not included. New construction of 950 North out to the WDC was not included either.

It appears that there are additional 2040 roadway network "Improvements" that are shown in Figure 1-6 but which are not included in Table 1-2. There are also discrepancies in the roadway functional classifications depicted in Figure 1-7 within Farmington as follows: State St/Clark Lane is depicted as a collector but it should be a minor arterial; all of Shepard Lane is shown as a collector but portions are minor arterials; and 200 West is shown as an arterial, but it is a collector

The Existing Conditions Report (Technical Memorandum 06) incorrectly shows Main Street, State St, 200 West and 200 East as Arterial roads (Figure 9). Figure 10 incorrectly shows Shepard Lane as having two

Comment 941 (continued)

Response
Section in
Chapter 32



lanes rather than four lanes between US-89 and Main Street. 200 West between 200 South and State Street is incorrectly shown as a two lane road instead of a four lane road.

Based on the results of the transportation analysis (Chapter 7: Transportation), it is clear that there is no advantage to any of the "A" or "B" Alternatives in comparison to the No-Action Alternative in 2040 within the Farmington City area. Likewise, there is little, if any, difference with traffic operations on Farmington's Key Roadways and Intersections between the No-Action Alternative (2040) and the four "A" Alternatives (2040) and four "B" alternatives (2040). (See Tables 7-4, 7-5, 7-9 & 7-10)

Tables 7-4 and 7-5 indicate that the No-Action Alternative (2040) for Farmington's Key Roadway Segments and Intersections maintains very acceptable traffic operations in 2040. This is in error as the 2013 peak hour operating conditions are already below what is being projected for 2040 under the No-Action Alternative. Tables 7-9 and 7-10 indicate little if any difference between operating conditions on Farmington's Key Roadway Segments and Intersections between the No-Action Alternative, the four "A" Alternatives, and the four "B" alternatives.

The purpose of Technical Memorandum #19 was to compare and evaluate the Shepard Lane and Glovers Lane interchange options at the southern termini for the WDC. This comparison is misleading in that it does not take into account, discuss, or consider how the lack of "local access" to/from the WDC in the Glovers Lane option affects the comparison. The Shepard Lane option provides three connections (New East/West connection between I-15 and the D&RG trail, Shepard Lane, Park Lane) whereas the Glovers Lane option provides no local connections to Farmington.

The Conclusion Section (4.0) notes that, "The Glovers Lane option performed better than the Shepard Lane option in every measure, having higher speeds, reduced travel times, and significantly less delay." This is an obvious yet meaningless conclusion for any option that provides no local access. This is similar to saying that an express bus is a "better" option over a local bus because it has a higher speed, lower travel time and less delay. A road with no local access (but everything else pretty much the same) will always have higher speeds, lower travel times and less delay than one with local access.

Other comments are as follows: Table 1, Average Network Speed: The description for this element includes the statement, "Higher speeds reflect better operation." This is misleading because it assumes that the primary function of the WDC (with the Glovers Lane option) is to move vehicles past Farmington, which cannot be the case. Table 3, Minimizes Number and Size of Structures. The length of several bridge structures in the Glovers option are

Comment 941 (continued)

Response
Section in
Chapter 32



clearly greater than those in the Shepard option. The greater length increases maintenance and motorists exposure to icy/snowy conditions. This is not considered. Also not considered are the significant and historically documented fog conditions that exist in the West Farmington City along the Glover's Lane alignment. This will likely produce more accidents at higher speeds.

Table 3, Provides Independent Bypass Route. There are freeway facilities all over the country that do not have an adjacent/parallel "independent bypass route." In Maryland, I-270 between I-495 and I-370 is an example of a high capacity, limited right-of-way, collector/distributor freeway corridor without an independent bypass facility. The need for an independent bypass is overstated. Table 3, Provides Local Interchange Access at Shepard Lane. The Glovers Lane option actually provides NO local access options. The statement that an "Interchange is not precluded but would remain as a planned future project" is misleading. The interchange would provide access only to I-15 with no connection/relationship to the WDC. The Shepard Lane option provides an independent access point directly to/from the West Davis between I-15 and the D&RG trail. The interchange footprint/area for each option should be considered. The Glovers Lane options clearly results in the loss of a greater amount of developable land and impacts Farmington City's only light manufacturing area, which possesses valuable developable land.

In addition to the problems present in the DEIS with respect to Regional Need, the Needs of Farmington City have not received the attention they are legally due in the DEIS. This Chapter must be redone, but first the entire focus must be recalibrated based on a revised Study Area.

V. IMPACTS AND EFFECTS ANALYSIS.

A. Direct Effects Analysis:

1. Impacts Review in general. Alternative B1 creates the largest number of impacts of the B alternatives with regard to conservation easements, wetlands, wildlife habitat loss, floodplains, and also involves 20 combined impacts to Section 4(f) properties. Also, because the Direct Effects to the Farmington City conservation easements are generally ignored, the Direct Effects analysis fails. The A Alternatives suffer the same fate, for the same reason and both Alternative groups also fail for reasons that will be more specifically discussed below. It should be noted that the entire discussion of impacts appears designed to result in the forgone conclusion that Alternative B1 would be the preferred alignment. Much of the problem in this regard is due to the foreshortened or non-existent impact and effects analysis with respect to the various alternatives.

Comment 941 (continued)

Response
Section in
Chapter 32

2. Land use impacts (Chapter 3): The fundamental problem with this analysis in the Southern portion of the Project is that it ignores the planning of Farmington City as discussed in Section IV(A). The main conclusion of this Chapter, which is restated throughout, is that growth will occur with or without the WDC and because of that, there is a minimal review of the actual induced growth impacts created by the WDC. As a result, the DEIS contains a limited review and discussions of the actual indirect effects and cumulative impacts, despite the fact that the DEIS also concludes "[t]he WDC would shift and affect the pace and type of some of the projected development planned by the Cities in certain locations." (3-16) This change in type and pace of growth that will be induced by the WDC must be analyzed in detail for the public in the DEIS, so the citizens may understand the future impacts of this road and because such an approach is required by law.

In Farmington City, there are a number of detrimental impacts whose scope and impact is unknown. First, there are the issues relating to access regarding the planned business developments located near Glover's Lane and Station Park/Shepard Lane. Also, no interchange is planned on the WDC for the entire length of the road in Farmington City, which basically leaves the west side of Farmington City as an isolated area with no access benefits provided for these properties. This road has a large footprint, will create significant noise in a formerly quiescent areas and will create many other detrimental impacts to the natural environment and to the existing uses. What are the expected impacts in this report to the existing and new developments? Will those neighborhood lots sell? Will the remaining open space be converted to other uses?

There are serious detrimental impacts to the Conservation Easements from the preferred alignment, as well as the other Alternatives that rely on the Glover's Lane option. These qualify as 4(f) properties and must be protected as such by FHWA. Putting that issue aside for the moment, there is no review of the impacts of the preferred alignment on the values and purposes for which these Conservation Easements have been perpetually preserved. These values include open space, wetlands, wildlife habitat and refuge, farmland, parks, community cohesion, viewshed and others. One reason the Conservation Easements were acquired in concert with the adjacent and nearby approved development to provide a buffer from development, and the DEIS has selected a route for the Project that will cannibalize them. It may be that the road will ultimately destroy all of the conservation values and purposes of the Farmington City Conservation Easements, yet there is little or no review of such impacts, much less mitigation or recompense provided.

Farmington City was recently recognized by CNN/Money Magazine as the 14th most livable City in the United States. Much of this award was based on the land use plans, which clustered housing near transit opportunities. Those same land use practices created the very Conservation

Comment 941 (continued)

Response
Section in
Chapter 32

Easements UDOT wishes to cannibalize for its preferred alignment. This is the sort of value the preferred alternative will strip from Farmington City, yet it is not discussed in the DEIS, nor is any mitigation or recompense for the losses provided.

3. Farmlands: (Chapter 4) at P. 4-22: Agriculture Protection Areas: Alternatives B1 and B3 have the least impacts to Agriculture Protection Areas (4-22). The DEIS states UDOT will not relocate these alternatives away from the farmlands protected by this Utah Statute, because that would move the alternatives into developed areas. The DEIS states that result would render the alternatives unreasonable and imprudent, so they may not be utilized.

The alternatives analysis here should be analogous to the one performed under Section 4(f) – of course avoiding protected farmland will require additional relocations of developed property. The whole point is to protect farmland from these types of projects because it is usually the most attractive for transportation agencies. Just because a different alternative requires more taking of developed property does not necessarily mean the alternative is unacceptable. Also, the Farmington City Conservation Easements were designed to perpetually protect certain farmland operations. These are 4(f) properties and must be avoided in favor of the use of developed property. Lastly, the farmland protected by the Farmington City Conservation Easements is ignored in the analysis, as are the impacts thereto.

4. Community Impacts (Chapter 5): As previously mentioned, the Farmington City Conservation Easements will basically be destroyed by this road, as will the benefits provided thereby to the remainder of Farmington City, such as viewshed, recreational opportunities, quality of life, community facilities and community cohesion. These Conservation Easements also function as community facilities and parks, as well as neighborhood and recreational resources, yet there is little or no mention of the significant impacts created by this alignment on the Conservation Easements and on the larger Farmington City community.

It is noted at page 5-21 that park and recreational opportunities are a benchmark and priority for the quality of life in Farmington City. At 5-24 it is noted that recreation, city parks, and open space are important to the community. As previously mentioned, the only reason the development was approved in the vicinity of the Conservation Easements was because the Conservation Easements were required to be transferred to Farmington City to facilitate preservation of each of these community resources and to perpetuate the conservation values protected under the Conservation Easements. In addition to avoiding the designation of these obvious 4(f) resources as 4(f) properties, there is little or no discussion in this Chapter of the impacts to these Conservation Easements by the road, to the resources protected by these

Comment 941 (continued)

Response
Section in
Chapter 32



Conservation Easements from the road, nor to the impact the loss of these resources will work on the remainder of the Farmington community. That impact will be felt all the way to the East benches due to the impact on the viewshed and the members of the community will no longer be able to enjoy the resources they present. It is unacceptable to not include these Conservation Easements in the tables relating directly to Recreational Facilities (5-25 and 26).

The DEIS states the following at page 5-42:

"The natural beauty of the area comes from features such as The Great Salt Lake and associated wetlands. However, The Great Salt Lake Shorelands Preserve and various conservation easements are in place, which prohibit development in the flood plains and would help retain the look and feel of the impact analysis area."

This statement will no longer be true once this road cannibalizes the Farmington City Conservation Easements. The mitigation measures suggested for community cohesion, quality of life, recreation resources and community facilities cannot mitigate the loss of these values currently protected by these Conservation Easements. Conspicuously, they are not even mentioned in the analysis, nor in the Mitigation Section (5-65 to 5-67).

Page 5-67 of the DEIS states "of these resources, the WDC action alternatives would not have any substantial adverse effects on recreation resources, community facilities, public safety, or public services and utilities." Because of the impacts to the Conservation Easements, this is untrue as to the first two resources, as is the statement that the WDC's impact to community cohesion and quality of life is limited to residences adjacent to the highway. As to public health and safety, the lack of access to Farmington City from the preferred alignment is potentially life-threatening. Lastly, it is unknown how or even if the Conservation Easements could possibly be managed (or even used) should this roadway be placed on them and those outcomes are not discussed.

5. Transportation (Chapter 7): As previously mentioned, the Study Area needs to be much larger and include all of the land East of I-15 to the mountains and North to I-15 above Ogden. That would allow the review of other roads within the complete regional Study Area and a review of additional alternatives to meet the actual Regional Need.

As to Local Need in Farmington, this Chapter supports the City's contention that the problems with congestion, delay and LOS do not exist during the 2009 timeframe (7-5) and are not expected to exist in 2040. In fact, the No Action Alternative performs just as well as any of the

Comment 941 (continued)

Response
Section in
Chapter 32



suggested alternatives in the area within Farmington City (7-11). The vast majority of the traffic issues within the Study Area in 2040 are located to the North of Kaysville (Figure 1-9), yet it appears no alternative interchange in that location to the North of Farmington City was given serious consideration in the DEIS.

6. Economics (Chapter 8): An inconsistency appears to be created by some of the information in this Chapter. At 8-2 it is noted that employment was up in Davis County by 61.8% and in Weber by 41.9% from 1990-2011 and the 2040 numbers demonstrate an increase of 49% for both counties. With this significant increase in employment in the area it would appear the commuter-based Need for North/South traffic has been and will continue to decline. It may be that a paradigm shift has begun to occur that will continue through 2040. The trend is toward more local employment and living, rather than a more traditional, commuter-based, suburban lifestyle. Additional work in this regard must be accomplished by the Wasatch Front Regional Council, FHWA and UDOT to ensure that roads are not being built based on the old paradigm.

Simply looking at whether the land will be converted for development and not at the impacts created by the timing of the development or changes in the type of use created by the Project is an unacceptable approach. Also, the nature of the WDC preferred alignment and the failure to provide connections to the WDC in Farmington City will have a negative impact on its growth, none of which is discussed in this document. It is hard to imagine an overall increase in property values for the Farmington City portion of the WDC Study Area due to this project (See 8-20). Rather, they are likely to decrease because of lack of access to Farmington City under the preferred alignment.

The DEIS also fails to discuss the economic impact to property and other related values due to the placement of this road directly on properties preserved as open space, on the viewshed of all of Farmington City. There is also no discussion of the type of development that will occur near the Project due to these changes in the Conservation Easement. The Conservation Easements provide significant economic value throughout the City and this is not recognized nor discussed.

Farmington City intentionally created its economic development and land use plans around the area where I-15, US 89 and the Legacy Parkway come together in the vicinity of Park Lane. The preferred alignment not only does not respect this prior planning and investment by Farmington City, it ignores it and will reduce its economic value.

7. Joint Development (Chapter 9): This entire section fails due to the fact that impacts to the Farmington City trail system are

Comment 941 (continued)

Response
Section in
Chapter 32

basically ignored, as are the Conservation Easements that provide most of the destinations for the use of these trails.

8. Consideration Related to Pedestrians and Bicyclists (Chapter 10): This Chapter does not adequately discern and discuss the nature of these resources, the reason why these resources exist, the purposes they are trying to meet, nor the impacts on not only the trails, but the areas they access (the Conservation Easements). Rather than speaking in terms of impacts to these resources, the DEIS simply discusses the ability to relocate the trails. Maps showing the existing and future trails within Farmington City are attached hereto as Exhibit B with the Glover's Lane and Shepard Lane Alternatives juxtaposed upon them. This Section needs to be entirely redone with this in mind.

9. Air Quality (Chapter 11): The DEIS recognizes that the State of Utah is currently finalizing the PM_{2.5} SIP for the region where the WDC is located. This SIP is expected to be completed in 2013. Part 11.4.2 of the DEIS fails to review the Technical Support Document or TSD for the proposed PM_{2.5} SIP. This document provides the technical basis for the decisions made in the proposed PM_{2.5} SIP for this area including the emissions inventories, modeling, and control strategies. Because it is likely this Project will not be constructed until after the proposed SIP is adopted, the DEIS should have studied whether the Project will comply with the proposed PM_{2.5} emissions limitations in this area.

The MSAT's analysis only modeled alternatives A3 and B1. Both of these alternatives showed an increase in MSAT's from 3.79 in 2009 to 6.14 and 6.16 respectively. However, the other alternatives were not modeled and the reader is unable to compare or determine if other alternatives would have less of an impact from MSAT's. The same is true for the DEIS' review of greenhouse gas emissions.

Finally, the DEIS relies on the example in the preamble to the March 10, 2006 rule (71 FR 12491) requiring project level quantitative analyses for projects in non-attainment areas that will have more traffic than "125,000 average daily traffic (AADT) and 8% or more such AADT is diesel truck traffic." The DEIS goes on to conclude that because the WDC's projected traffic numbers are far below this example, the local conformity analyses is not required. The DEIS ignores the other factors in the regulations that require local conformity analyses, including: (i) New highway projects that have a significant number of diesel vehicles, and expanded highway projects that have a significant increase in the number of diesel vehicles; (ii) Projects affecting intersections that are at Level-of-Service D, E, or F with a significant number of diesel vehicles, or those that will change to Level-of-Service D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project;...(v) Projects in or affecting

15

Comment 941 (continued)

Response
Section in
Chapter 32

locations, areas, or categories of sites which are identified in the PM₁₀ or PM_{2.5} applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation." 40 CFR §193.23(b)(1). Here, there is a proposed PM_{2.5} SIP for the area that could very well require the quantitative local analyses for PM_{2.5} that the DEIS has completely ignored.

10. Noise (Chapter 12): The impacts analysis area used to study noise impacts is vague. It states this area was the land adjacent to the proposed alternatives that could be affected by changes in noise levels. (12-1) The boundaries of this area are never defined and it is therefore unclear which areas were studied for noise impacts. Also, the impacts of noise on the purposes of and values preserved by the Farmington City Conservation Easements were never discussed and they could be severe, especially as to wildlife. Likewise, there is insufficient discussion of noise impacts on the nearby residential and other users. If the impacts to the resources that are protected by the Farmington City Conservation Easements were fairly considered from a noise standpoint, it is unlikely the Glover's Lane could have been advanced.

11. Water Quality (Chapter 13): The DEIS completely fails to identify impacts to water quality that will be caused by construction of the project, and specifically, 7 new stream crossings in the study area. The Project will impact these streams if petroleum products or other construction-related wastes, such as cement, solvents, and/or disturbed and eroded soil, are discharged into storm water runoff and/or groundwater during construction and operation. The Construction Impacts, Chapter 20, Section 20.3.4 refers the reader to the mitigation measures in Chapter 13, Section 13.4.5. This section fails to describe any mitigation measures that will be used during construction other than acquiring a Storm Water General Permit for construction activities and the requirement to adopt a Stormwater Pollution Prevention Plan.

The DEIS also contains no specifics as to where runoff is expected from the proposed WDC and where specific design features for storm water management will be placed (revegetation, erosion control measures, etc.) and more importantly, why. These features are identified in the roadway plan drawings in the appendices to the DEIS, but the water quality analysis fails to inform the public of the logic behind the decisions to locate these features where they are shown on the drawings. The DEIS should have included an estimate of potential increases in storm water runoff at these locations, the volume, and rationale for the specific design features that would minimize the discharges.

12. Ecosystem Resources (Chapter 14): There are significant problems in this area and the major one is the scope and extent of the Study Area. At page 14-12 it is telling that there is no mention of the

16

Comment 941 (continued)

Response
Section in
Chapter 32



Farmington City Conservation Easements in the conservation areas, wildlife habitats, wetlands and water and uplands sections. This is unacceptable. At page 14-17, there is no discussion of the impact the road will work on habitat fragmentation, or on any related wildlife issues should the Great Salt Lake level rise and force wildlife inland. This would appear to be a significant wildlife mobility and fragmentation issue, yet it is not sufficiently discussed. Likewise, the other buffer areas may change and the impacts in that regard must be reviewed and discussed.

The 300 foot buffer from right-of-way adopted for noise is not acceptable for the purposes of wildlife and, again, should the Great Salt Lake increase in elevation there is no discussion of what impacts will occur. The future changes in the Great Salt Lake's elevation is also problematic for the wildlife habitat and fragmentation discussion and it is clear that no conclusive information was gathered as to the actual impact on all aspects of wildlife including invertebrates, reptiles, amphibians, fish, birds and mammals. Until these impacts are better understood, no aspect of this Project that may affect them may be undertaken. Likewise, the impacts of lighting are not well understood with respect to the status quo, nor as to impacts that may arise as the elevation of the Great Salt Lake changes.

The impacts to the conservation areas ignores the impacts to the Farmington City Conservation Easements and there is no effort to review the impacts to the Conservation Easements with respect to wildlife, wildlife habitat fragmentation, general habitat buffer zones, noise impacts, and artificial lighting in that regard for each alternative. No mitigation is suggested that will deal with these problems. Ironically, at page 14-110, the DEIS contains the suggestion that "compact development" is the desired outcome, yet the preferred alignment completely unravels Farmington City's attempt to do just that by clustering development and acquiring the Conservation Easements to perpetually preserve the open space and many other resources contained therein.

As to wetlands, Alternative B1 has the largest number of impacts to wetlands as compared to the other alternatives. The CWA guidelines specifically require that "no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences." 40 CFR 230.10(a). Based on this provision, the applicant is required in every case (irrespective of whether the discharge site is a special aquatic site or whether the activity associated with the discharge is water dependent) to evaluate opportunities for use of non-aquatic areas and other aquatic sites that would result in less adverse impact on the aquatic ecosystem. *A permit cannot be issued, therefore, in circumstances where a less environmentally damaging practicable alternative for the proposed discharge*

17

Comment 941 (continued)

Response
Section in
Chapter 32



exists (except as provided for under Section 404(b)(2)). Here, the agency did not do a complete wetlands delineation for the DEIS and is saving that for the Section 404 permitting process.

The agency also appears to be relying on the other B alternatives direct impacts to Section 4(f) properties as justification that this is the only practicable alternatives, because the other alternatives have significant adverse environmental consequences. However, those alternatives affect fewer Section 4(f) sites combined than does alternative B1 (notwithstanding the issue regarding the inclusion of the Farmington City Conservation Easements). Further, those alternatives have less impacts to wildlife habitat and floodplains, impacts to conservation easements, etc. The agency also did not consider impacts to the Farmington City Conservation Easements under Section 4(f). Had they done so, Alternative B1 would directly affect and significantly impact or destroy at least 2 or 3 additional Section 4(f) properties. In reality, Alternative B1 is the alternative that has the most adverse environmental consequences.

13. Floodplains (Chapter 15): This section is far too conclusory and fails to explore the impacts in detail. All the issues related to habitat and habitat fragmentation mentioned above apply here, yet the flood plains preserved in the Farmington City Conservation Easements are nowhere mentioned, nor are the impacts thereon. It should be noted that in a summary contained at page 15-21 the transverse crossings are the same for the alternatives utilizing Shepard Lane and Glover's Lane, yet the longitudinal crossings required by the Glover's Lane Alternative is over three times larger than those required by Shepard (201.2 vs. 61.8). The habitat and other wildlife related issues also require additional inquiry and more detailed discussion in the cumulative impact section.

14. Visual Resources (Chapter 18): This section is far too spare with respect to the review of the major impacts created by the preferred alignment on the visual resources of Farmington City. The Key Observation Points (KOP) do not include much of Farmington City proper and include none of the bench areas. There are an insufficient number of KOPs in Farmington City and overall and no KOPs that will deal with the issue of the magnitude of losses on and impacts to the rest of the City from the impacts on the Farmington City Conservation Easements. This Chapter must be significantly revised.

15. Irreversible and Irrecoverable Commitment of Resources (Chapter 22): It is acknowledged there will be irreversible and irretrievable commitments of wetlands, farmland, wildlife habitat, together with historic, archaeological and paleontological resources, but the comparative scope of these sorts of impacts between the various alternatives is not discussed. Of greater importance is the failure to discuss the impact on the Farmington City

18

Comment 941 (continued)

Response
Section in
Chapter 32



Conservation Easements. Farmington City is legally obligated to perpetually protect all of the conservation values and purposes articulated therein, yet the preferred alignment will destroy them. Farmington City is obligated to resist this alternative by all means at its disposal and it may be that UDOT's power of eminent domain is not sufficient to allow a taking of these public interests, even if they were correctly valued.

B. Indirect Effects Analysis. Chapter 23:

As previously mentioned there is no comparative alternative-by-alternative analysis for the indirect effects on land use. The DEIS generally states the indirect effects for all of the action alternatives as a whole. The CEQ regulations, however, require the DEIS to study all indirect effects including "growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems." 40 CFR 1508.8(b). The DEIS failed to do this by generalizing the analysis of some of these categories of impacts, many of which will have different impacts on the rate of change of land use in the area. For instance, the impacts to the Farmington City Conservation Easement land from alternative B1 will hasten changes to the area that will not happen as quickly under other alternatives, yet there is no analysis of the indirect effects thereon as a parcel of property, much less as property protected under 4(f). Also, if the Purposes of these Conservation Easements is frustrated by this road, which is likely, what will the ultimate use be and how will it be developed? These issues may not be ignored.

The DEIS does contain an alternative-by-alternative analysis for indirect impacts to Ecosystem Resources and Wildlife, then returns to a conclusory analysis for Farmlands and Land Use without an alternative-by-alternative analysis. The same is true for economics, community and noise. Remarkably, no induced growth issues are shown to exist until near 200 North in Kaysville (See Figure 23-1). This is simply impossible and underscores the inadequate examination of all aspects of the indirect effects was undertaken.

It is not simply about induced growth and land development, as the DEIS Chapter would have the reader believe; there are as many other elements to the inquiry as there are under direct impacts. It is also improper to eliminate the review of indirect effects East of I-15 and the lack of access into Farmington City will create significant indirect effects as well by inhibiting growth. There will also be significant, yet undisclosed indirect effects to social resources, recreation resources, community facilities, public safety and security, public facilities and services, transportation, bicyclists and pedestrian resources and visual resources.

Comment 941 (continued)

Response
Section in
Chapter 32



Farmington City hereby adopts the comments provided by the United States Department of the Interior dated August 14, 2013 with respect to the many failures to review impacts and effects to Ecosystem Resources and otherwise.

C. Cumulative Impacts Analysis (Chapter 24):

Cumulative impacts include the direct and indirect impacts to the area combined with reasonable foreseeable future actions. 40 CFR 1508.7. Since the indirect impacts analysis is incomplete, the cumulative impacts analysis is also distorted. This review is inadequate.

D. Mitigation Summary (Chapter 26):

This section is far too conclusory and lacks significant detail. It also fails to deal with mitigation for the impacts mentioned in the comments. By way of example, the only mitigation for the enormous magnitude of loss created by impacts to the Farmington City Conservation Easements is monetary. There is basically no mitigation for the impacts to community cohesion, quality of life, recreation resources and community facilities due to the loss of these Conservation Easements. Mitigation for trails and wildlife as well as the visual impacts to and from the loss of the Farmington City Conservation Easements are again not mentioned, nor is mitigation for the impacts to emergency services.

VI. SECTION 4(f)

The DEIS was required to treat the Farmington City Conservation Easements as Section 4(f) properties. The federal guidance on the topic supports this argument. (See Section 4(f) Policy Paper July 20, 2012). In a letter from Vincent Izzo on behalf of the WDC Project Team to Dave Millheim, City Manager of Farmington City dated April 27, 2012, Mr. Millheim was asked a series of questions based on this Policy Paper. Mr. Millheim responded to these questions in a letter dated May 11, 2012, which response is attached hereto as Exhibit C. A review of these responses reveals that these Conservation Easements perform all of the functions typically associated with 4(f) properties.

For instance:

"Each easement, as expressly stipulated therein, possesses unique and sensitive natural scenic, open space, wildlife, farmland, floodplain, and/or wetland conservation values, and was recorded for the purpose of preserving and maintaining these uses. Publicly-owned parks, recreation areas or wildlife/waterfowl refuges are allowed within the easement

Comment 941 (continued)

Response
Section in
Chapter 32



area. Presently, for example, the City has an improved trail approximately 3 miles in length (and additional 1.3 miles of trail soon to be improved) available to the public across all three easements and the yet to be recorded 4th easement.

Farmington City is legally responsible and must expend public monies to enforce violations of the easement and ensure that parks, recreation areas, or wildlife/waterfowl uses of the easement are still available to the public."

These lands were acquired to preserve the open space and the listed resources in perpetuity and the Conservation Easements were designed to enhance community cohesion, the ecosystems, recreational opportunities and the viewshed of all Farmington City. Furthermore, when determining if a Property is a Section 4(f) property, Courts have held that the Secretary "may properly rely on, and indeed should consider...local officials' views." *Concerned Citizens on I-90 v. Secretary of Transp.*, 641 F.2d 1, 7 (1st Cir. 1981). The views of the officials with jurisdiction is also required by the Policy Paper. (Part II, Question 1B). Those officials are at Farmington City.

Remarkably, the trails to, through, and around these Conservation Easements accorded 4(f) status in the DEIS, but the Conservation Easements were not. This makes no sense and is a clear violation of the law. As a result, no avoidance alternatives were developed, nor were any attempts made to avoid these Conservation Easements. There was also no review of the use and harm to the Conservation Easements by the Preferred Alignment and no attempt was made to minimize that harm. The fact that these tasks were not undertaken is a fatal legal flaw. The Glover's Lane Alternative could not have moved forward in the process had these been 4(f) properties.

In addition to the fundamental 4(f) issue, there are numerous other failures regarding impact analysis and review with respect to the Conservation Easement. These lands were obtained under the Farmington City General Plan and Zoning Ordinances and were necessary to meet the requirements thereof. They are "significant" because of the numerous and varied conservation values conserved thereon and for the current and future purposes for which they were acquired. Despite the fact that these are unique and sensitive, natural, scenic, open space, wildlife, farmland, floodplain and/or wetlands, the impacts thereto were not reviewed in the Chapters of the DEIS devoted to direct effects, indirect effects, and cumulative impacts. It should also be noted that parks, recreation areas, recreation uses, community open space, educational structures, water structures, and wildlife and waterfowl refuges are allowed future uses and those resources were not reviewed as to impacts and effects either.

Comment 941 (continued)

Response
Section in
Chapter 32



Specifically, Farmington Meadows Phase I and Farmington Ranches Phase VI contain wetlands and wildlife habitat with some permitted uses for pasture and farmlands. Buffalo Ranch permits a farm, but includes significant areas of wetlands and wildlife habitat. All of these easements support floodplains, natural and scenic areas, open space and are a critical aspect of the Farmington City viewshed. They also provide for recreational uses such as hiking, bicycling, bird watching and equestrian uses, which are allowed by the public and facilitated by the adjacent trails.

Other problems with this Chapter are as follows. The entire table located at 27-45 is flawed. Impacts are missing. There is a distinct preference for quantity of 4(f) impacts versus quality of 4(f) impacts, so the conclusions are skewed. Had the Conservation easements been included, the impacts could not be minimized, as the use is permanent. Because the use of the Conservation Easements was not reviewed, all of the sections discussing use of parks, use of recreational areas, use of refuges, community cohesion impacts, community facility impacts, wildlife habitat and wetland impacts and farmland impact in the DEIS are flawed.

Not only were the Farmington City Conservation Easements not accorded their rightful status as 4(f) properties, the direct effects, indirect effects and cumulative impacts to these Conservation Easements were not fairly arrayed in the respective sections of the DEIS as required. The result of this is that the 4(f) overall harm table located at 27-36 is inaccurate and the preferred alignment cannot be said to create the least overall harm. This conclusion as to 4(f) is exacerbated by the failure to review and compare the impacts to the Conservation Easements vis-à-vis the other Alternatives in the DEIS.

It should be noted that the same treatment is accorded The Nature Conservancy (TNC) Conservation Easements, which are interspersed with the land acquired by the URMCC. These properties were acquired as a block, at essentially the same time and perform the same functions with respect to protection of the ecosystem, preservation of open space and many of the other natural resources protection performed by the Farmington City Conservation Easements. Despite that, the TNC Easements are not considered 4(f), even though the URMCC properties are. This is another serious flaw.

VII. CONCLUSION

In view of the many problems and issues set forth in detail herein and summarized in the General Comments in Section I, Farmington City requests the DEIS be revised in accordance with these comments and then re-issued. First, however, all of the relevant information must be assembled and analyzed.

Comment 941 (continued)

Response
Section in
Chapter 32
↳

We look forward to continuing to work with the local, state and federal officials involved in this Project.

Sincerely yours,



Dave Millheim
City Manager

1247291

Comment 941 (continued)

Response
Section in
Chapter 32
↳

EXHIBIT A

Comment 941 (continued)

Response
Section in
Chapter 32



FARMINGTON CITY

SCOTT C. HARRINGTON
MAYOR
JOHN BELTON
CORY R. RIFE
CINDY FEVRAAL
JIM TALBOT
JAMES YOUNG
CITY COUNCIL
DAVE MILLER
CITY MANAGER

To: FHWA
From: David E. Petersen, Community Development Director
Date: September 5, 2013
SUBJECT: Technical Supplemental Memo in Support of Farmington City
WDC DEIS Response

The purpose of this memo is to supplement Farmington City's response to the WDC DEIS. It provides comments specific to narrative, figures, tables, etc. in support of, but not explicitly set forth in the response.

1. The Farmington Master Transportation Plan (MTP) is "correctly" referenced in Section 1.6.2.1 (p 1-6). However, it should be emphasized that Farmington adopted the 2009 MTP in such a manner because at the time UDOT informed Farmington that any similar alignment to the now Shepard Lane alternative was not an option. And Farmington officials did not want the DRG&W option, which at the time was UDOT's preferred alignment. This matter was later set straight as to the City's preferred alignment (the Shepard Lane alternative) by resolution. Attached is the 2009 Roadway Functional Classification Plan, which is part of the Farmington City MTP.
2. Corridor maps RD1-01, RD1-02, RD1-03 show no future interchanges on the Glover Lane alternative, this is inconsistent with the Farmington City MTP.
3. Table 24-1 (p. 24-10) does not include the South Davis Corridor Transit Study.
4. Access to the Davis County owned "Sheep Road" is blocked south of Glover's Lane by the Glover's Lane alignment (RD1-01). Although access to this corridor is provided further south via a proposed local street from 650 West, it appears that the Glovers Lane option will forever preclude the County road as a viable north to south corridor in the future. This is one of the few continuous north to south routes in this geographically narrow area of the County that does not impact wetlands. Losing a corridor like this, in an increasingly urbanizing area, will detrimentally impact growth in Farmington City. It also is not identified in the "Other North-South Corridors" in 27.5.2.5 (p. 27-28).
5. The DEIS suggests that the US 89 corridor does not serve areas west of I-15 and therefore does not meet the purpose and need for the project (27.5.24, p. 27-27 and 27-28). However, in Farmington, the US 89 corridor connects to the Park Lane interchange, and directly impacts areas west of I-15.

160 S MAIN P.O. BOX 160 FARMINGTON, UT 84025
PHONE (801) 451-2383 FAX (801) 451-2747
www.farmington.utah.gov

Comment 941 (continued)

Response
Section in
Chapter 32

6. Davis School District's major transportation facility for school busses for south Davis County is located in Farmington. Did the DEIS account for the need to enhance local traffic patterns for this facility?
7. Section 1.7.5 (p. 1-29) discusses the lack of east/west bicycle facilities in the Study Area, yet some of these east/west facilities exist in Farmington. Nevertheless, the Glovers Lane alternative compromises one of these east/west facilities planned for the future. Attached is the Farmington City Trails Master Plan.
8. The possible need for local BRT/light rail is not discussed when it could have been (p. 2-40).
9. In describing the Glover alternatives, the DEIS fails to mention that these options are not consistent with the Farmington MTP in that they do not allow 1100 West (a major collector) to connect to Glover's Lane-another major collector (2.2.6 (beginning p. 2-55, and elsewhere).
10. Thus far, the Glovers Lane alignment is not designed to accommodate an interchange at 1100 West and the WDC, even though the DEIS acknowledges that this is in the future plan for the City.
11. Table 24-2 (p. 24-13) identifies a new "school" but it should be mentioned that this is a "high school"; also as this table describes growth in other municipalities it reported anticipated dwelling units related to those cities, but not in Farmington. It is anticipated that Farmington will add another 3,430 units in west Farmington by 2040-this number should be added to the table. Attached are updated demographic tables for Farmington City.
12. Section 26.4.5 (p. 26-7) regarding "Mitigation Measures for Impacts to Public Health and Safety" fails to mention that the lack of local access to the Glover's Lane Alignment in Farmington and southwest Kaysville will severely compromise emergency and public safety operations.
13. Updated employment data from Farmington City will increase 2040 projections more than shown on Chart 1-1 (1.5.2) (p 1-12). Attached are updated demographic tables for Farmington City.
14. Figure 1-5 significantly underestimated employment growth. West Farmington may experience employment totals up to 27,000 people. Attached are updated demographic tables for Farmington City.
15. Figure 3-2 shows the existing Station Park area as "open space" when almost 950,000 s.f. of commercial and 200,000 s.f. of office is now built, occupied, and/or under construction.

Comment 941 (continued)

Response
Section in
Chapter 32



16. Figure 23-2 Developed Land map (2005) is not accurate.
17. Figure 23-3 Developed Land map (2030) is not correct. It still shows, among other things, the Station Park area as "Agriculture". Attached is the future Land Use Plan/General Plan map for Farmington City.
18. Trail Mitigation Measures in 10.4.5 and 26.9 do not address Farmington Creek trail or the Haight Creek Trail in the Hunters Creek subdivision. The Glovers Lane Alignment prevents these trails from connecting to trails in Farmington Bay and the Great Salt Lake Shoreline Trail.
19. Figure 13-1 ("Water Bodies and Watersheds") is missing some of the Creeks in Farmington City.
20. The DEIS states that the land use impact analysis area encompasses existing and planned land-use patterns (3.1 (p. 3-1))—but it did not accurately do so in Farmington City.
21. Figure 5-2 ("Subdivisions and Neighborhoods") is out of date.
22. Figure 5-5 ("Non-school Community Facilities") does not show the County Fairgrounds or Justice Complex (and jail); and it is missing a church.
23. Figure 5-6 ("Schools") shows an extra school in west Farmington City that does not exist.
24. The Bangerter farm was not adequately addressed (Section 26.3.3, p. 26-5).
25. Figure 4-4 ("Croplands") is not completely accurate.
26. Glovers Lane Alignment makes the Buffalo Ranch difficult to operate as agriculture or ranch property (RD1-02).
27. The wetlands depicted in Farmington City's office park area are not as widespread as shown on Figure 14-2.
28. Sections 2.4.2.2 and 3.3.5, and Figure 3-4 and 14.3 do not mention or illustrate the existing and soon to be recorded Hunter Creek's conservation easements (pg. 2-82 and 3-12).
29. Section 27.4 "Identification of Section 4(f) Resources" does not identify Farmington City's conservation easements as 4(f).
30. The Glover's Lane alignment disrupts all of the Farmington City conservation easements as shown on map RD1-02.

Comment 941 (continued)

Response
Section in
Chapter 32



31. Section 2.4.2.2. shows that the Glovers Lane option would affect 173 acres of flood plain while the Shepard Lane option would impact 34 acres. Yet the DEIS states that actual impacts of flood plain functions with the Glover Lane option are considered less (p. 83). The DEIS then compares the two very different flood plains—one an immense multi-regional flood plain, and the other—a very localized flood plain on a small creek which is the drainage tributary for an exponentially smaller area. It erroneously demonstrates that the Glovers Lane impacts (.0007% of the Great Salt Lake Flood Plain) is less than the Shepard Lane option (which impacts 100% of the Haight Creek Flood Plain). Moreover, regarding Haight Creek, it appears from the information presented that the Shepard Lane Alignment may occupy 100% of the "FEMA" floodplain, but it certainly does not occupy 100% of the remaining Haight Creek floodplain outside the FEMA designation.
32. It appears that the flood plain in the Shepard Lane alignment is much less than 34 acres (see Figures 15-3 and 15-4).
33. The bald eagle habitat is not correctly addressed along Farmington Creek (Section 14.2.2 (p. 14-4)).
34. The City overview in Section 23.5.1.2 (p. 23-9) is not correct in that it states that 1100 West (a major collector will eventually connect to Glover's Lane (another major collector) under all of the alternatives; however, it will only do so under the Shepard Lane Options—it appears that it will never do so under the Glover Options.
35. Section 23.5.1.2 (p.23-9) of the DEIS incorrectly quotes Farmington City planners as follows: 1) the 4,218 elevation mark is a "development boundary" (not "the" development boundary as referenced in the study)—and it is not the "Great Salt Lake floodplain elevation" also referenced in therein; 2) the Section also states: "Since most of the land west of Alternatives A1 - A2 and B1 - B2 is lower than this elevation, no development would occur in this area", but development can occur in this area—just at lower densities; 3) the Section further states: "Current and planned development would occur out to the location of the conservation easement the City has in place to restrict development in western Farmington near the Great Salt Lake. Therefore, Alternatives A1--A2 and B1-B2 would not induce development in this part of the Western Farmington". This is not true—it would induce development. This is a big issue for Farmington City. These alignments would unravel years of the planning efforts—these indirect and cumulative impacts are huge for the community.
36. Table 23-1 "Summary of indirect effects of the WDC by City" (p.23-14) is incomplete. More indirect impacts should be listed as conservation easement and long standing General Plan designations will likely change if the Glover's Lane alignment is chosen. It will dramatically change west Farmington.
37. Figure 23-1 ("Location of Potential Indirect Effects") should be updated to the indirect negative impacts in Farmington City related to Glover's Lane alignment.

Comment 941 (continued)

Response
Section in
Chapter 32



38. In Section 23.5.2 the potential indirect effects of farmland in west Farmington City related to the Glovers Lane alignment are not discussed (p. 23-20).
39. Page 23-21 of Section 23.5.2 discusses the indirect effects on economics due to interchanges along the WDC. Farmington City is conspicuously absent from this discussion because no interchanges are planned on the Glovers Lane alignment in our community. Any interchange in Farmington City would have a positive indirect effect; however, because there is not an interchange on the Glovers Lane alignment, it is a negative economic effect for the City.
40. Page 23-22 of Section 23.5.2 states the potential indirect effects of noise are anticipated to be negligible. Notwithstanding this, in west Farmington City they will be significant in the future if the Glovers Lane alignment is chosen.
41. The indirect effect of future growth in Farmington City are more certain than described in Section 23.6. If no local access is provided on the Glovers Lane alignment economic growth will be slowed.
42. Indirect impacts are very significant in Farmington City and they should be considered as an "Important Cumulative Impacts Issue", but they are not (see 24.3.1.2 (p. 24-5); and 26.21.7 (p. 26-9)).
43. Figure 2-16 does not show connections from the sidewalks and roads to the trails themselves so that bikes/peds on Shepard Lane and Clark Lane can access the trails after they are grade separated; nor is the trail crossing at Shepard Lane designed such that it also helps transition the Haight Creek Trail across the WDC.
44. Table 10-1 shows all three classes of trail facilities while Table 10-2 only shows Class 1 facilities, but it is not obvious that Table 10-2 shows only the Class 1 facilities.
45. Section 2.1.6.2 states in part: "UDOT would consider implementing the trail improvements listed below only if there is coordination and support from the local governments. The following trail improvements would be implemented by local governments and UDOT...". The meaning of this is vague. Is the intent to give notice that the local governments will have to pay for the improvements but that UDOT will actually construct those improvements along with the WDC as a betterment? Or is the intent to say that if the communities are interested in implementing certain improvements that UDOT will include those items in the WDC project budget?
46. Both unpaved and paved trails show up under the moniker of "Class 1", and some side paths along rights of way are also erroneously identified as Class 1 facilities.
47. Section 10.1, 2nd paragraph, 3rd sentence incorrectly states that both Class 2 and 3 facilities are "typically considered a bicycle 'route'..." when this is a term usually reserved for Class 3 facilities.

Comment 941 (continued)

Response
Section in
Chapter 32



48. Some maps (e.g. Figure 2-16) show the Kays Creek Trail between the D&RG Trail and the WDC alignment. Other maps (e.g. Figure 10-2) show that there is a gap west of the D&RG Trail. Meanwhile, the EIS highlights that the WDC will provide a connection from the D&RG Trail to the Emigrant Trail.

ATTACHMENTS:

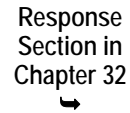
- A. 2009 Roadway Functional Classification Plan (part of the Farmington City MTP).
- B. Farmington City Master Trails Plan.
- C. Future Land Use Plan/General Plan map for Farmington City.
- D. Updated Demographic Tables.

Comment 941 (continued)

Response
Section in
Chapter 32

Comment 941 (continued)

Response
Section in
Chapter 32



Response
Section in
Chapter 32
➡



32B-770



Response Section in Chapter 32

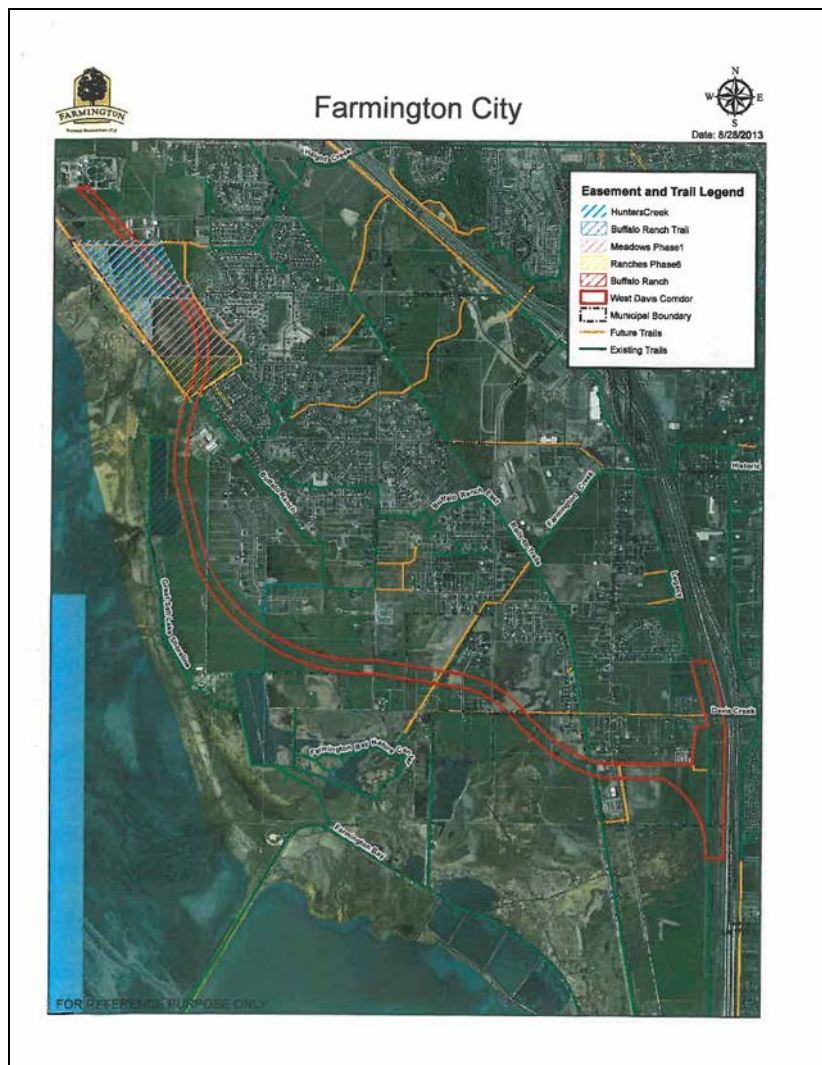
Farming										Residential										Commercial										Other									
2040 Socio-Economic Data Estimate										2040 Socio-Economic Data Estimate										2040 Socio-Economic Data Estimate										2040 Socio-Economic Data Estimate									
Selected Traffic Analysis Zones (TIAZs)										Selected Traffic Analysis Zones (TIAZs)										Selected Traffic Analysis Zones (TIAZs)										Selected Traffic Analysis Zones (TIAZs)									
Submitted 2008, Revised December 2012										Submitted 2008, Revised December 2012										Submitted 2008, Revised December 2012										Submitted 2008, Revised December 2012									
Residential Estimates																																							
TIAZ										TIAZ										TIAZ										TIAZ									
Population										Population										Population										Population									
Revised										Revised										Revised										Revised									
Dwelling Units										Dwelling Units										Dwelling Units										Dwelling Units									
Household Size										Household Size										Household Size										Household Size									
267	1,407	31	415	1,055	9	3.39				267	1,407	31	415	1,055	9	3.39				267	1,407	31	415	1,055	9	3.39				267	1,407	31	415	1,055	9	3.39			
273	1,486	2,395	654	2,227	2,227					273	1,486	2,395	654	2,227	2,227					273	1,486	2,395	654	2,227	2,227														
274	2,011	2,516	885	1,108	2,227					274	2,011	2,516	885	1,108	2,227					274	2,011	2,516	885	1,108	2,227														
275	629	1,641	277	723	2,227					275	629	1,641	277	723	2,227					275	629	1,641	277	723	2,227														
279	376	311	166	137	2,227					279	376	311	166	137	2,227					279	376	311	166	137	2,227														
TOTAL										TOTAL										TOTAL										TOTAL									
5,909										6,893										2,397										3,032									
2,575										2,715										38										38									
4,316										36										65										4,152									
24,626										6,765										11,220																			
Non Residential Development Estimates (by square feet in 1,000s)																																							
Retail										Retail										Industrial										Other									
Revised										Revised										Revised										Revised									
Industrial										Industrial										Other										Other									
Total										Total										Total										Total									
267	0	169	0	0	0	0	0	0	0	267	28,070	273	34,722	274	275	279				267	28,070	273	34,722	274	275	279													
1,892	1,145	0	0	0	0	0	0	0	0	1,892	1,892	1,892	1,892	1,892	1,892	1,892				1,892	1,892	1,892	1,892	1,892	1,892	1,892													
2,038	831	0	0	0	0	0	0	0	0	2,038	2,038	2,038	2,038	2,038	2,038	2,038				2,038	2,038	2,038	2,038	2,038	2,038	2,038													
476	2,141	38	65	795	1,189	1,189	1,189	1,189	1,189	476	476	476	476	476	476	476				476	476	476	476	476	476	476	476												
1,214	40	0	0	0	0	0	0	0	0	1,214	1,214	1,214	1,214	1,214	1,214	1,214				1,214	1,214	1,214	1,214	1,214	1,214	1,214													
TOTAL										TOTAL										TOTAL										TOTAL									
365										365										365										365									
19,955										19,955										19,955										19,955									

Response
Section in
Chapter 32



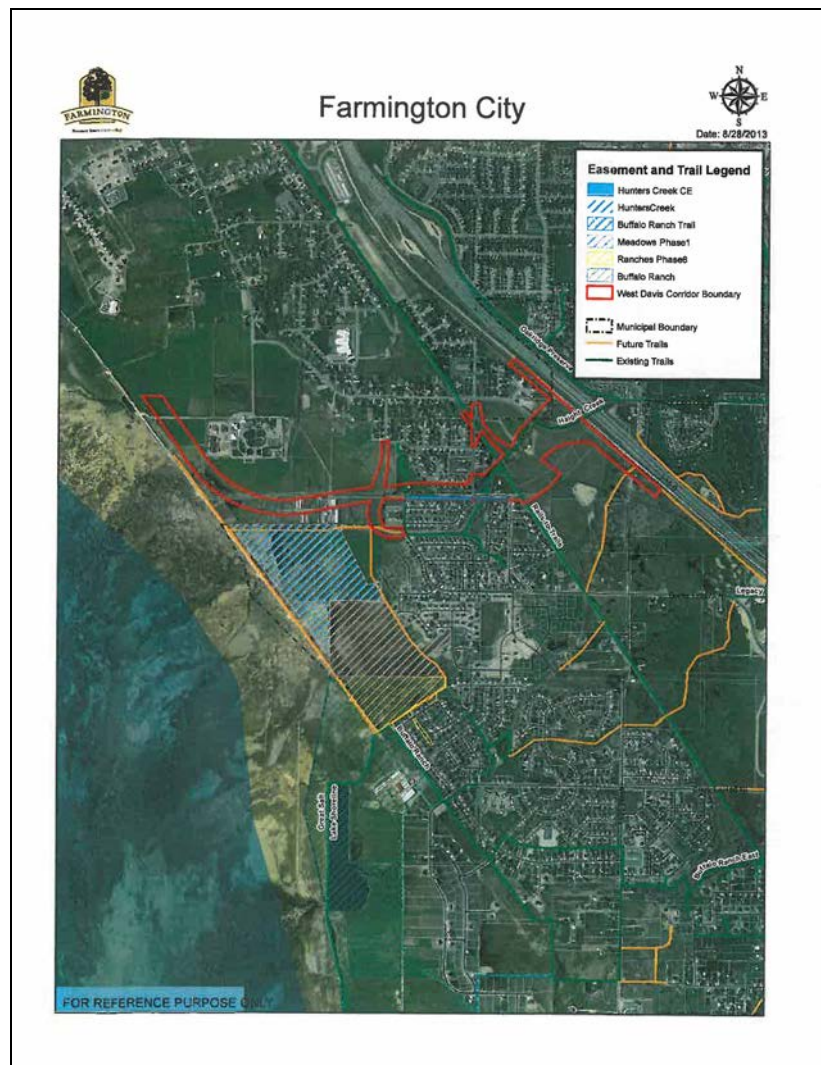
Comment 941 (continued)

Response
Section in
Chapter 32



Comment 941 (continued)

Response
Section in
Chapter 32



Comment 941 (continued)

Response
Section in
Chapter 32



EXHIBIT C

Comment 941 (continued)

Response
Section in
Chapter 32



FARMINGTON CITY

SCOTT C. HARRINGTON
MAYOR
JOHN BRYSON
CORY R. REZE
CINDY ROYBAL
JIM TALBOT
JAMES YOUNG
CITY CLERK
DAVE MILLER
CITY MANAGER

May 11, 2012

Vincent Izzo
HDR Engineering
West Davis Corridor Consultant Project Manager
466 North 900 West
Kaysville, Ut 84037

Mr. Izzo:

I received your request for a written response to eight questions presented in your letter to me dated April 27, 2012. Thank you for taking the time to seek Farmington City's input regarding the large tracts of open space preserved on the west side of our community. Your questions are set forth below, with my response following each question:

1. Does the City of Farmington, as the public body with jurisdiction over the Farmington conservation easements, consider these land and easements, or delineated portions of them, to be publicly-owned parks, recreation areas or wildlife/waterfowl refuges? Please provide any documentation of their designation or management for these purposes.

Yes. The public owns the easements, they are under the ownership of Farmington City. The City acquired these easements through in-kind compensation of comparable value by substantially increasing in the number of lots available to the then existing property owners for their proposed developments. Our records show that three conservation easements (please see attached documents), and soon to be a fourth, encumber the ground in the path of the proposed westerly alignment of the West Davis Corridor (WDC) [note: the conservation easement for the Hunters Creek development will be recorded soon and will be similar to the others].

Each easement, as expressly stipulated therein, possesses unique and sensitive natural scenic, open space, wildlife, farmland, floodplain, and/or wetland conservation values, and was recorded for the purpose of preserving and maintaining these uses. Publicly-owned parks, recreation areas or wildlife/waterfowl refuges are allowed within the easement area. Presently, for example, the City has an improved trail approximately 3 miles in length (and additional 1.3 miles of trail soon to be improved) available to the public across all three easements and the yet to be recorded 4th easement.

Farmington City is legally responsible and must expend public monies to enforce violations of the easement and ensure that parks, recreation areas or wildlife/waterfowl uses of the easement are still available to the public (see enclosed easements). The City has taken such enforcement action in the past when debris has been dumped on the property, when property owners have desired to encroach on conservation land with buildings or unauthorized improvements, or to construct buildings beyond what the easements would allow, etc.

160 S MAIN P.O. BOX 160 FARMINGTON, UT 84025
PHONE (801) 451-2383 FAX (801) 451-2747
www.farmington.utah.gov

Comment 941 (continued)

Response
Section in
Chapter 32

2. Does the City of Farmington consider these lands, or delineated portions of them to be "significant" (as defined in the quote above) as parks, recreation areas, or refuges?

Yes. The lands are significant due to their location along the shore of the Great Salt Lake, and their unique conservation values previously mentioned, and the lands are identified on the City's Resource and Site Analysis Plan (an element of the City's General Plan) and must be preserved for such things as parks, recreation areas or wildlife/waterfowl refuges. The lands are also significant because of the magnitude of the size of area that they encompass. They cover hundreds of acres.

3. How and by which department does the City manage or oversee these lands and terms of the easements?

AND

4. What group or organization actively manages the land for the purpose stated in the conservation easements.

The Farmington City Community Development Department, with the assistance of its legal consultants, enforces and oversees the lands in terms of the conservation easements, and the City's Public Works and Parks and Recreation Departments, and the City's Trail Committee, manage and oversee these lands in terms of trail use. A "Trail Boss" (or in certain circumstances more than one trail boss) is assigned by the Trails Committee to walk and inspect the trails/lands on a regular basis.

5. How are conservation easements currently used?

Recreation (trails), natural scenic open space, wildlife habitat, farmland, floodplain and wetland preservation, and green space, preservation of streams, stream corridors, and water courses.

6. How does the City view the similarities and differences among the easements (including mentions of agriculture, trails, recreation and wildlife), the City's land use plan, and the city's zoning plan? Are other parks or conservation areas in the City designated with the same zoning and land use as the conservation easements?

I will answer this question in three parts because it appears that one can construe the first question in this section regarding "similarities and differences" in two ways. Section A and B below deal with the first question and Section C is in response to the question in the last sentence.

A. Similarities and differences among the easements, the land use plan, and zoning [ordinance]: The easements, the City's land use plan (or General Plan), and the city's zoning plan (or Zoning Ordinance) are similar in purpose and function. Farmington views no differences in purposes among the three documents. They are extremely compatible.

All the easements were obtained consistent with purposes set forth in Section 11-12-010 of the Farmington City Municipal Code including, among other things, 1) "conservation of open space land, including those areas containing unique or natural features such as meadows, grasslands, tree stands, streams, stream corridors, flood walls, berms, watercourses, farmland, wildlife corridors and/or habitat, historical buildings and/or sites, archeological sites, and green space, by setting them

Comment 941 (continued)

Response
Section in
Chapter 32

aside from development"; 2) "provide incentives for the creation of greenway systems and open space within the City for the benefit of present and future residents"; and 3) "create neighborhoods with direct visual and/or recreational access to constrained sensitive and conservation land".

The purposes of this Section of the Municipal Code (as well as the easements) are consistent with goals, objectives, policies of the General Plan. These include, but are not limited to the following: 1) "The Farmington City General Plan is based on the overall goal of creating within the community a healthy, attractive, and pleasant living environment for its residents. This is the most significant element underlying the General Plan", 2) "Maintain Farmington as a community with a rural atmosphere, preserving its historic heritage, and the beauty of the surrounding countryside", 3) "Develop a trails system in the City which includes bike paths, jogging/hiking trails, and equestrian trails, etc.", 4) "Explore the potential of preserving open space and greenbelt areas for recreation purposes and for use as buffer zones in developed areas where appropriate and cost efficient", 5) "Encourage the maintenance of farmland and other open lands if they are historically or environmentally unique", 6) "The acquisition and development of open space and park property should be a priority of the Capital Improvement Program", 7) "Continue to conserve conservation and open space land including those areas containing unique or natural features such as meadows, grasslands, tree stands, streams, stream corridors, flood walls berms, watercourses, farmland, wildlife corridors, and/or habitat, historical buildings and/or archeological sites, and green space by setting them aside from development", 8) "Foster an environment within the City in which agriculture lands can co-exist in urbanized areas", 9) "Explore alternatives for preservation of agriculture lands as open space through purchase, lease, conservation easements, or otherwise", and 10) "Maintain Farmington as a predominately low density residential community".

As mentioned previously the easements also protect sensitive land resources identified on the City's Resource and Site Analysis plan, and element of the City's General Plan.

B. Similarities and differences among the easements. The three existing conservation easements include the easement recorded in conjunction with the Farmington Meadows Phase 1 Subdivision dated October, 12, 2007, the easement associated with Farmington Ranches Phase 6 dated December 22, 2005, and the easements regarding the Buffalo Ranch project dated July 3, 2003. All easements were recorded for the purpose of preserving and maintaining the same unique and sensitive natural, scenic, open space, wildlife, farmland, flood plain, and/or wetland values; and three additional values were contained in the recitals to Farmington Meadows easement: aesthetic, ecological, agriculture and recreational values [note: the other easements mention farmland but the Farmington Meadows easement does not]. It is anticipated that the soon to be established easement with the Hunters Creek subdivision will be recorded with similar purposes.

The first two easement primarily encompass wetlands and wildlife habitat with some acreage available for pasture and farm land. Meanwhile, the Buffalo Ranch Easement constitutes a horse farm, with several out-buildings. Nevertheless, this easement also includes significant areas of wetlands and wildlife habitat. All three easements include flood plains, natural and scenic areas, and open space. Public recreational opportunities including but not limited to, hiking, bicycling, bird watching, equestrian uses, etc., are also prevalent to all three easements.

Comment 941 (continued)

Response
Section in
Chapter 32



C. Yes, there are other parks or conservation areas in the City designated with the same zoning and/or land use as the conservation easements. These include, but are not limited to 1) the public trail and quasi-public park in the Hunter's Creek subdivision, 2) the public park in the Spring Creek Estates subdivision, 3) the public park and public trail system in the Farmington Ranches subdivision, 4) the public trail and board walk system in the Farmington Greens Planned Unit Development, 5) the addition of public park property to the Farmington Pond park, 6) public trails and trail access/trail heads in the Deer Pointe, Shepard Heights, Oakwood Estates, Compton's Pointe, Farmington Manner, Silverwood, Farmington Ranches, Farmington Ranches East, Chestnut Farms, Eagle Creek, Miller Meadows, Deer Hollow, Sunset Hills, Mountainside, Hughes Estates, Tuscany Cove, Tuscany Village, and Willow Creek subdivisions/PUDs.

7. Are the conservation easement land, or delineated portions of them, specifically open to the public or closed/restricted?

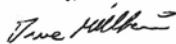
Yes, portions of the conservation easement lands are open to the public. The easements contain the Great Salt Lake Shoreline Trail, a segment of the City's Trail Master Plan, an element of the Farmington City General Plan. Approximately, 3 miles of this trail are improved with 1.3 miles still to be developed.

8. Are there designated areas within the easement lands that are specifically planned to be developed for park, recreation, or waterfowl/wildlife refuge purposes? Please provide any documentation showing official intent to develop these lands for such purposes.

Yes, these areas include the trail system as discussed above. Enclosed for your review are photos of the trail. Copies of the easements enclosed herein also delineate the trails.

Thank you for your efforts regarding the EIS for the WDC. If you are in need of further information, please contact me at [redacted] or contact our Community Development Director, David Petersen at [redacted] or by email at [redacted]

Sincerely,



Dave Millheim
City Manager

cc: Mayor and City Council

This space intentionally blank.

Comment 942

Response
Section in
Chapter 32



Comment #: 942
Date: 9/6/2013
Source: Email
Name: Jacque and (Tyler) Son? Wright
Location: Kaysville

Comments:

To whom it may concern,

32.2.13B
32.2.6A
32.14.2E

I am grateful to all of those who have spent so much time in considering the possible routes for a new road. If there must be a new road built, Glovers lane is the clearest choice. There will be no homes lost, and only 37 homes, as opposed to 214 homes, will be within 300 ft. It is interesting to know that with the installment of Legacy Highway the bird population has improved, meaning that little impact to the environment will be made. At said in the article written by Congressman Bishop and Mayor Hiatt, found in Deseret News, "We should accept a route that harms the fewest families rather than a route that harms the fewest wetland areas." (<http://www.deseretnews.com/article/765606649/West-Davis-Corridor-Protecting-our-neighbors-while-paving-the-way-to-the-future.html?pg=all>) . They also stated, "It is our firm belief that the West Davis Corridor can be built in harmony with both urban and ecological needs." We can do this. We can make the choice that protects human safety, property, and growth, while at the same time building a road that is ecologically sound.

32.2.13B

Please know that the choice to build the Glovers Lane route is the right choice with the least impact on Utah families and communities.

Thank you for all your time,
Jacque Wright, Homeowner and mother of 4 children near Shepard Ln.

Comment 943

Response
Section in
Chapter 32



Comment #: 943
Date: 9/6/2013
Source: Email
Name: Amy Jones
Location:

Comments:

I support the UDOT's decision to build the west davis corridor on the Glovers Lane Route.

32.2.13B

Comment 944

Response
Section in
Chapter 32



Comment #: 944

Date: 9/6/2013

Source: Email

Name: Jason Fielding

Location: Kaysville

Comments:

<See email attachment on next page, titled 0944_Jason_Fielding_9-6-13>

To the West Davis Corridor (Draft) EIS Team:

Attached is a PDF file titled "West Davis Corridor Alternatives and Davis County Channels.pdf" It contains several maps indicating Davis County drainages and how they may be affected by the proposed alignments for the West Davis Corridor. We will also deliver a CD with the same maps to the WDC EIS Team at 466 North 900 West in Kaysville.

32.5.5E

Comment 944 (continued)

Response
Section in
Chapter 32



West Davis Corridor Alternatives and Davis County Channels



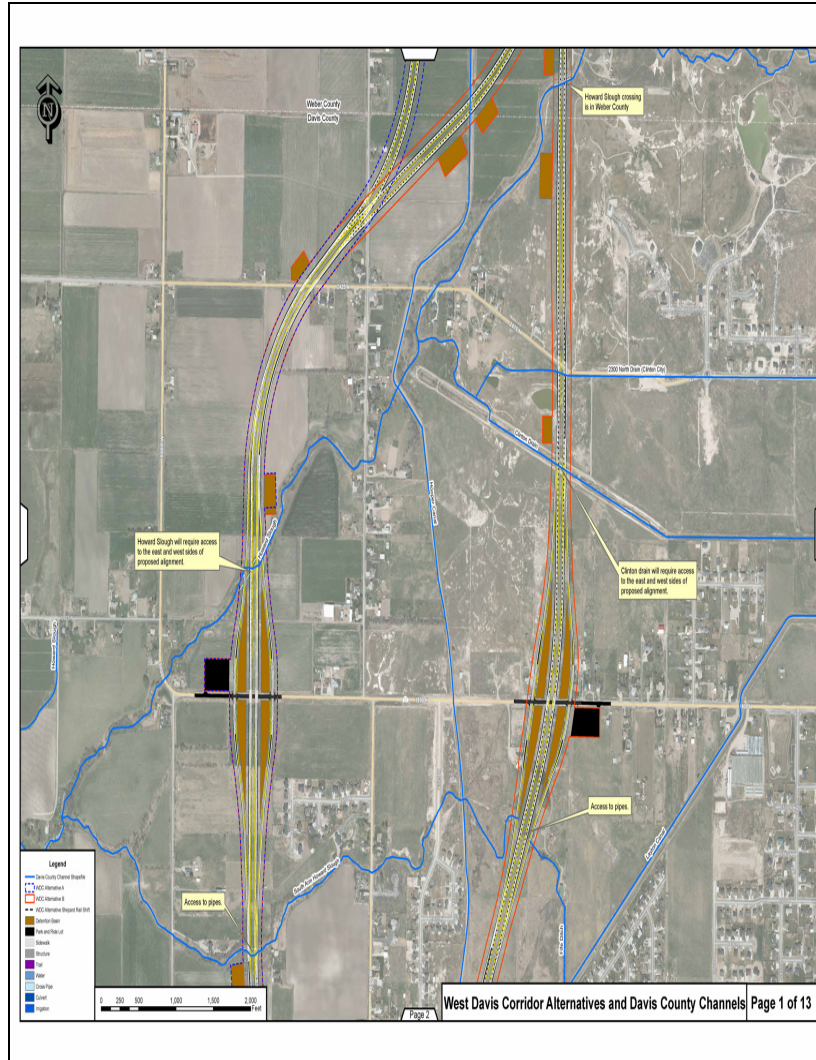
Davis
COUNTY

These maps have been prepared by Davis County Public Works using the May 14, 2013 update of the West Davis Corridor Alternatives Map posted to ArcGIS online. Davis County drainages and channels have been overlayed on top of the maps to indicate how the proposed alternatives will impact Davis County's system.

September 2013

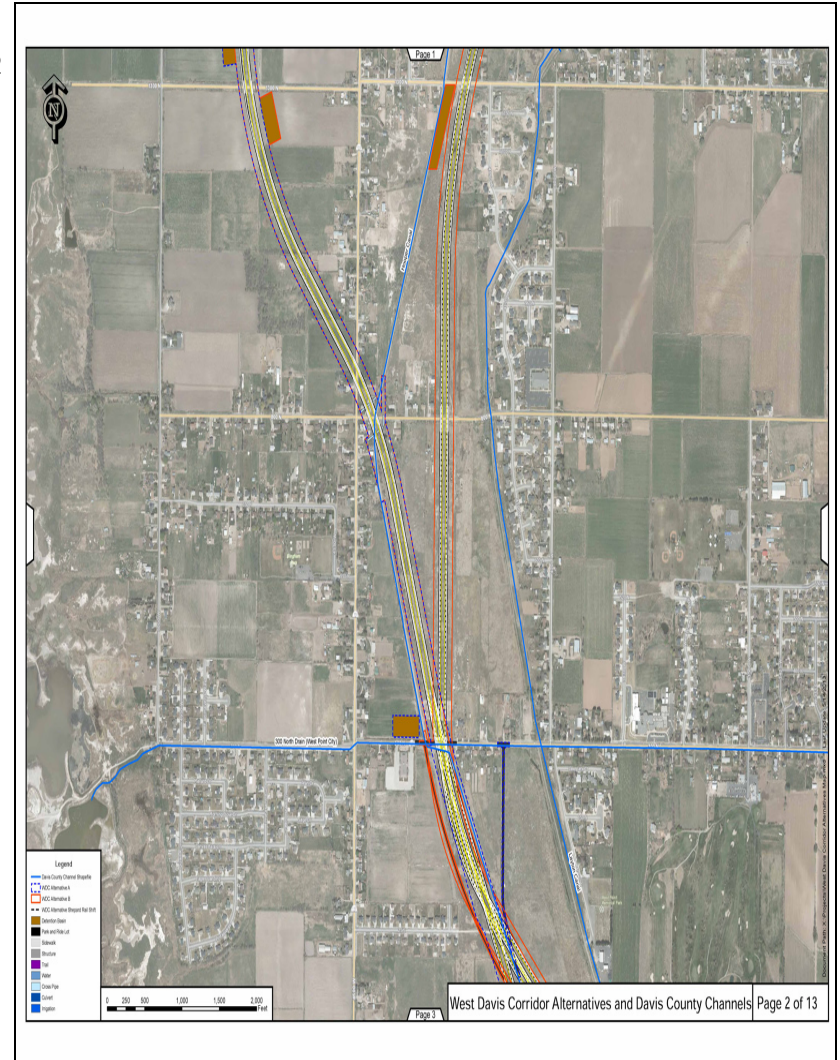
Comment 944 (continued)

Response
Section in
Chapter 32

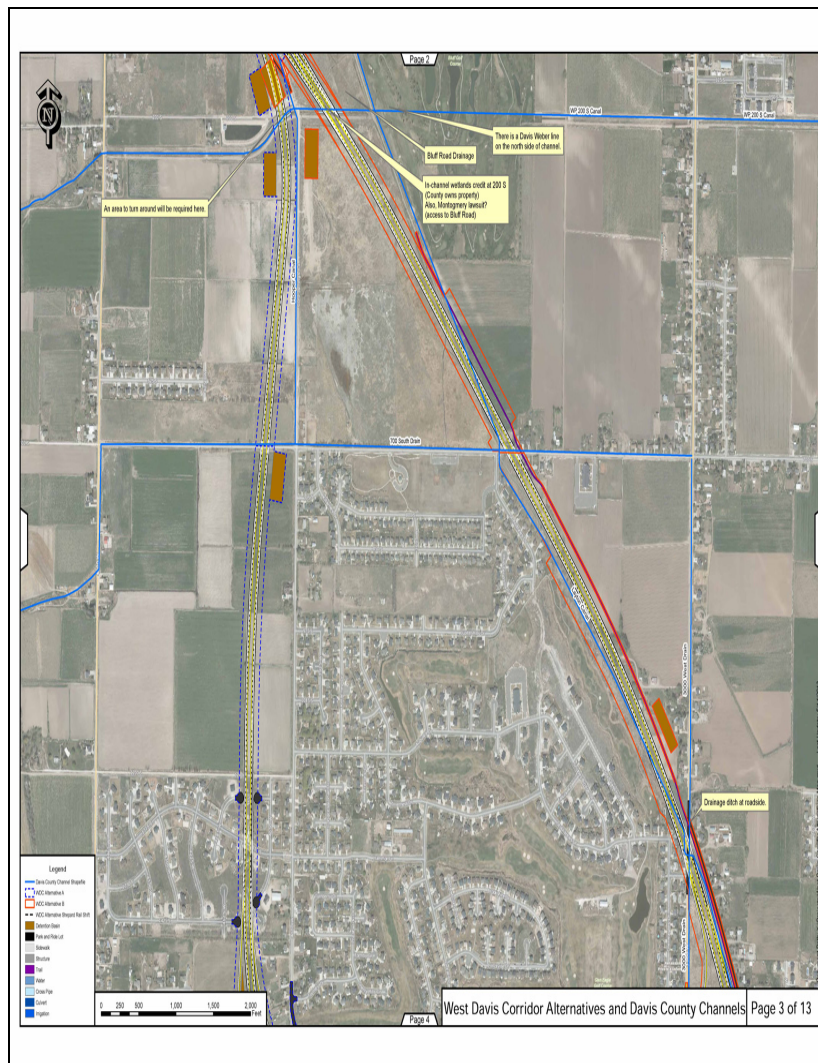


Comment 944 (continued)

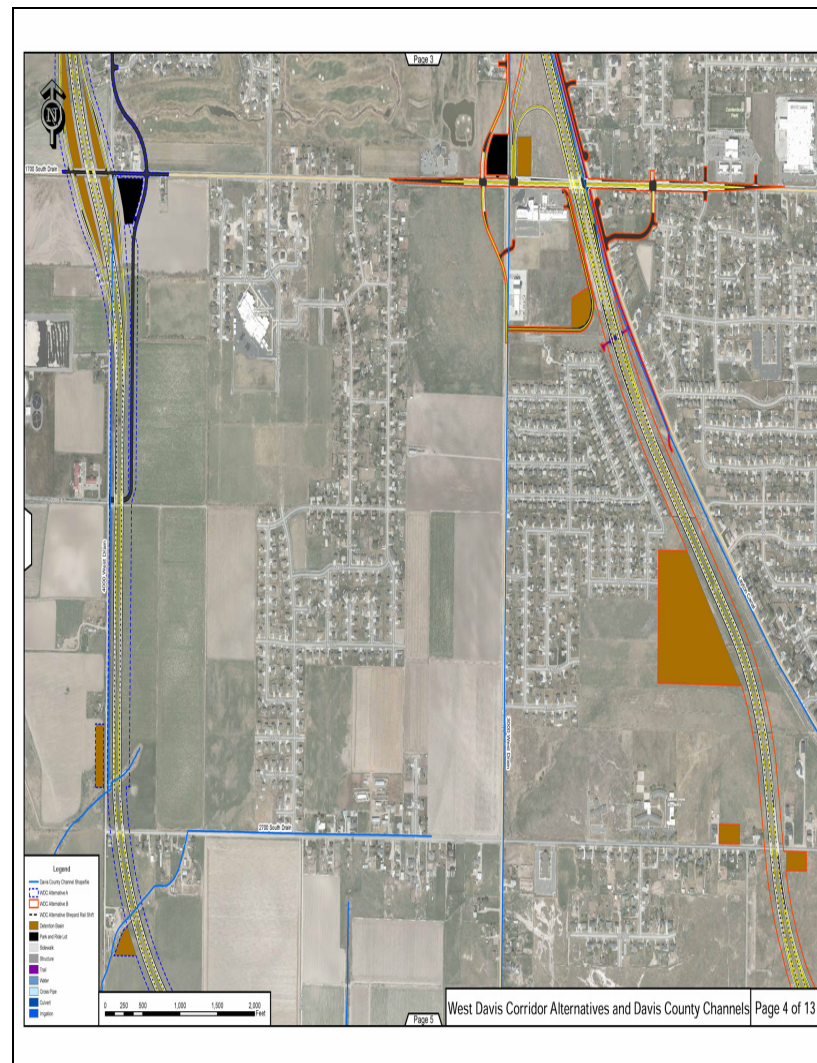
Response
Section in
Chapter 32



Comment 944 (continued)

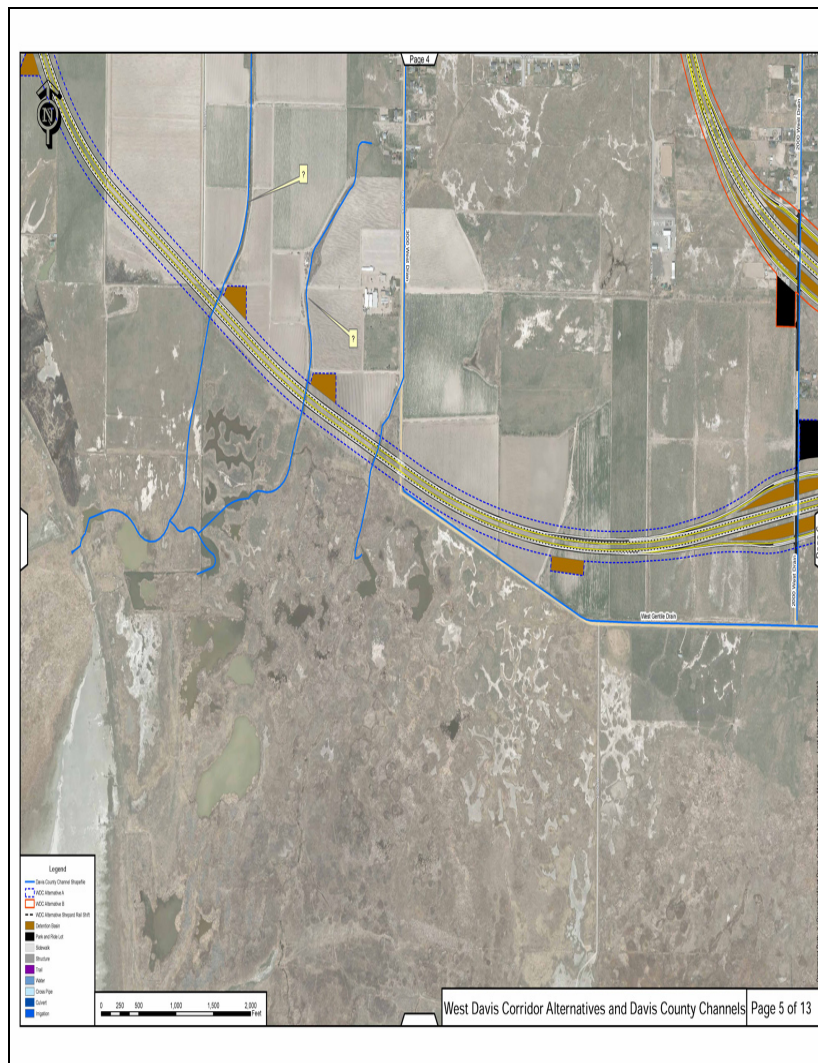
Response
Section in
Chapter 32

V

Response
Section in
Chapter 32

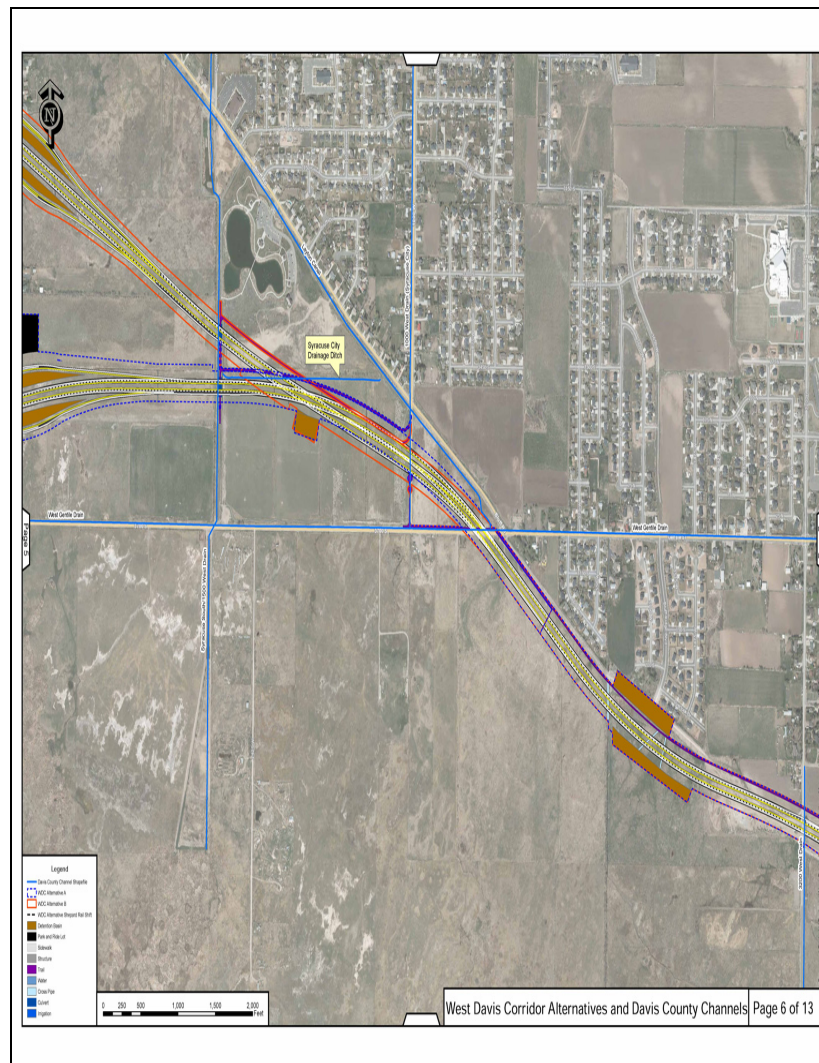


Comment 944 (continued)

Response
Section in
Chapter 32

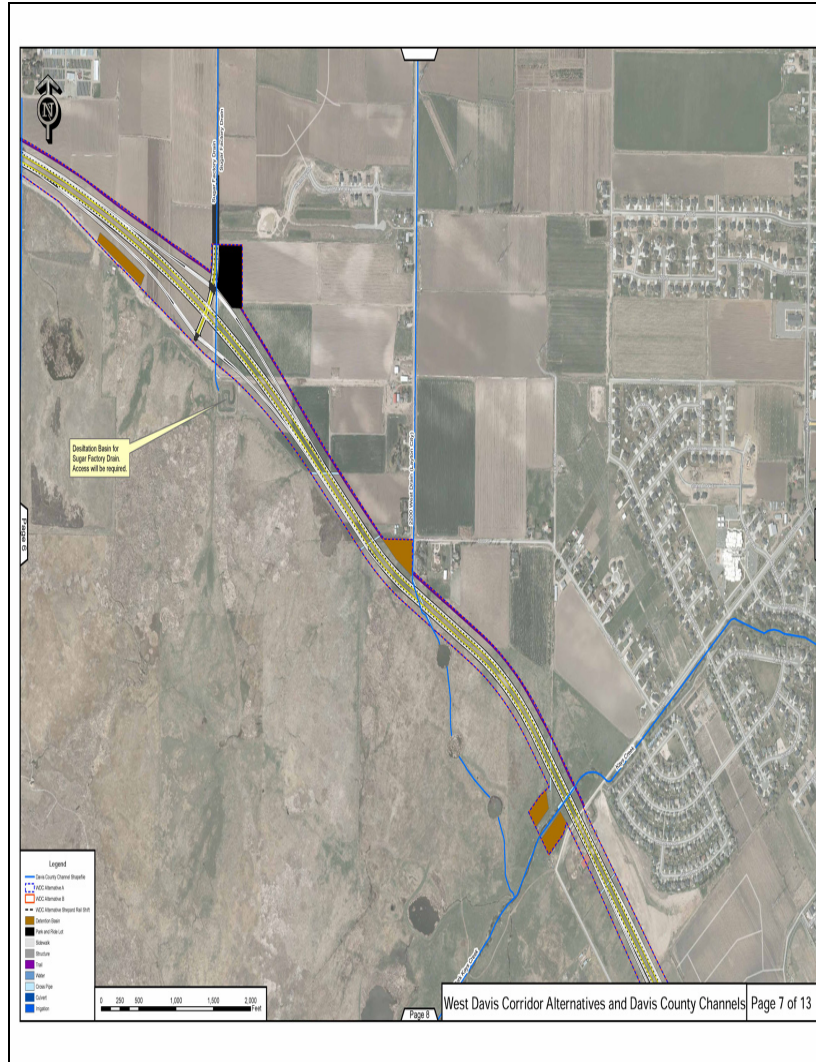
Comment 944 (continued)

Response
Section in
Chapter 32



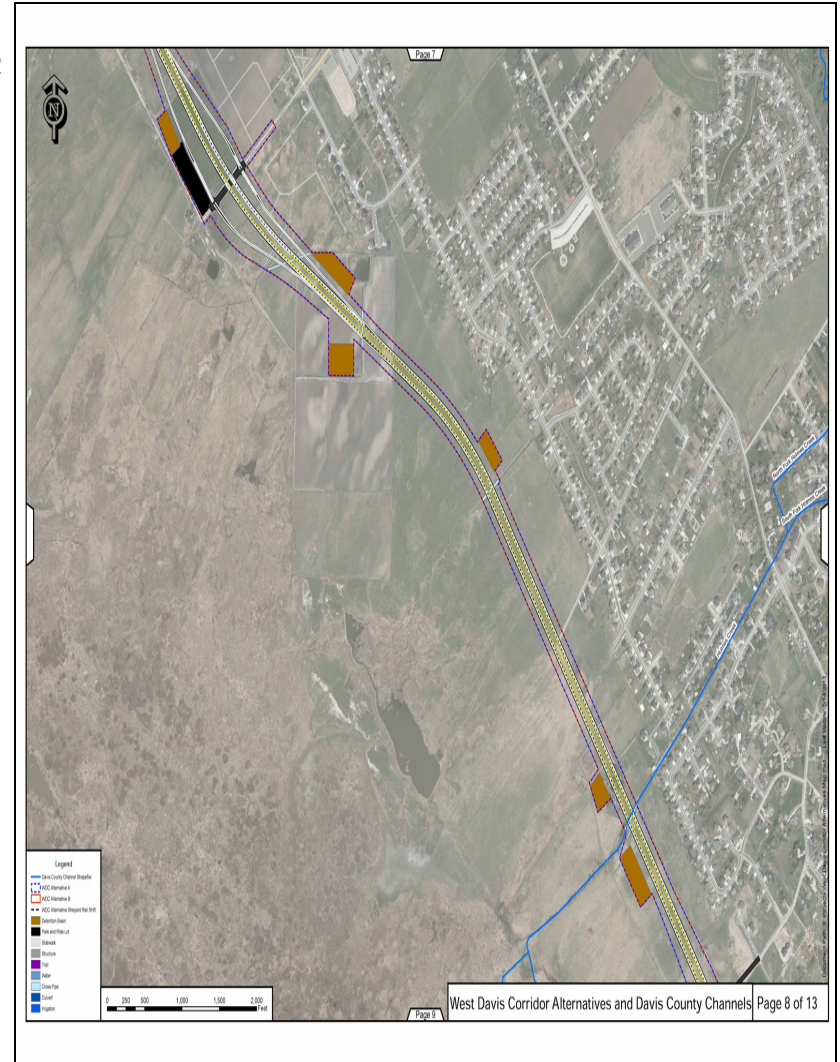
Comment 944 (continued)

Response
Section in
Chapter 32



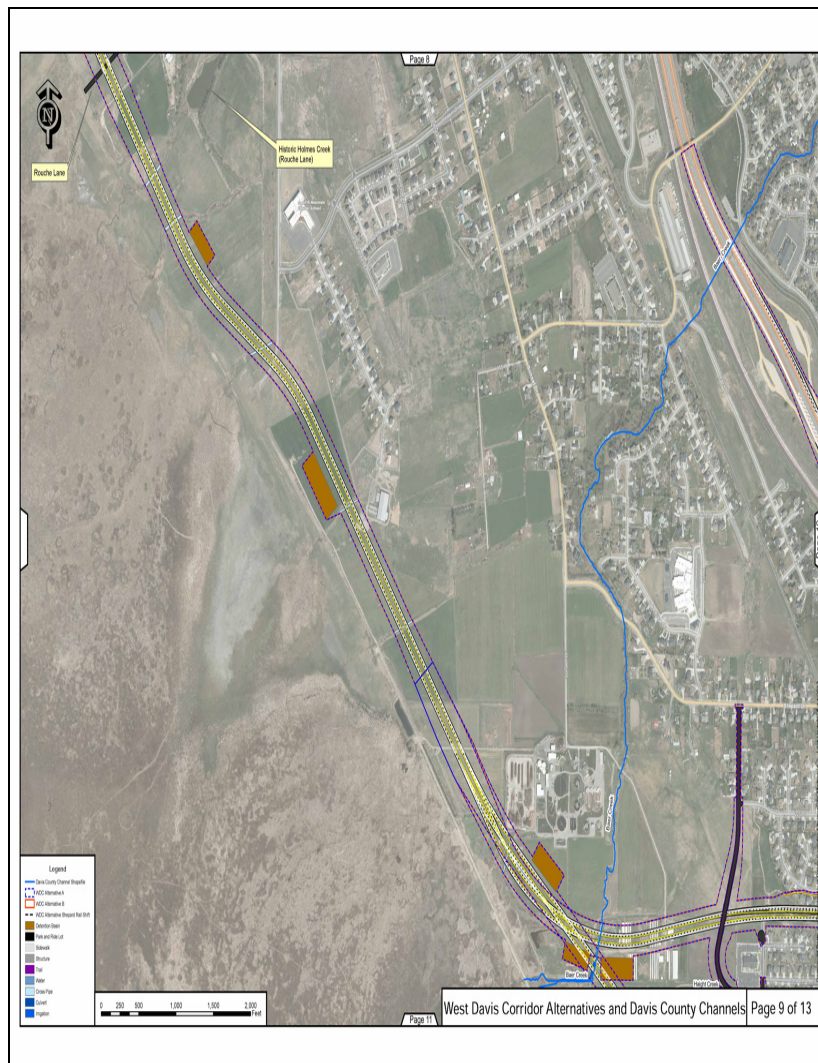
Comment 944 (continued)

Response
Section in
Chapter 32

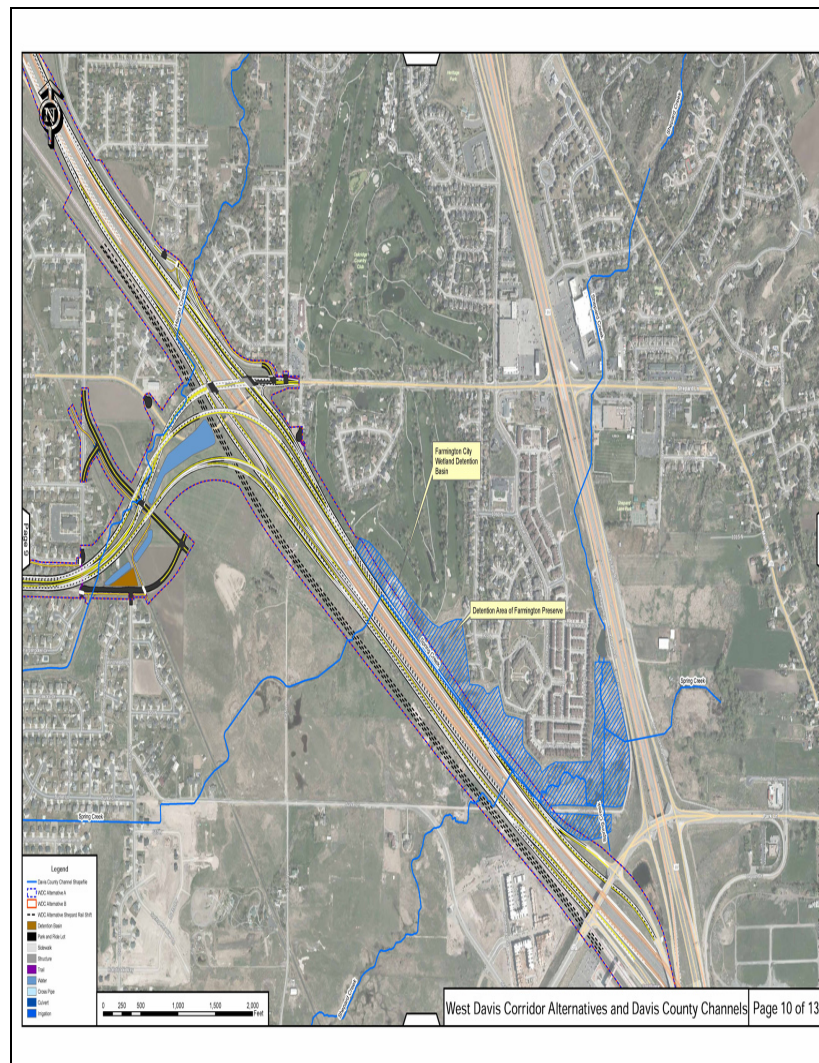




Comment 944 (continued)

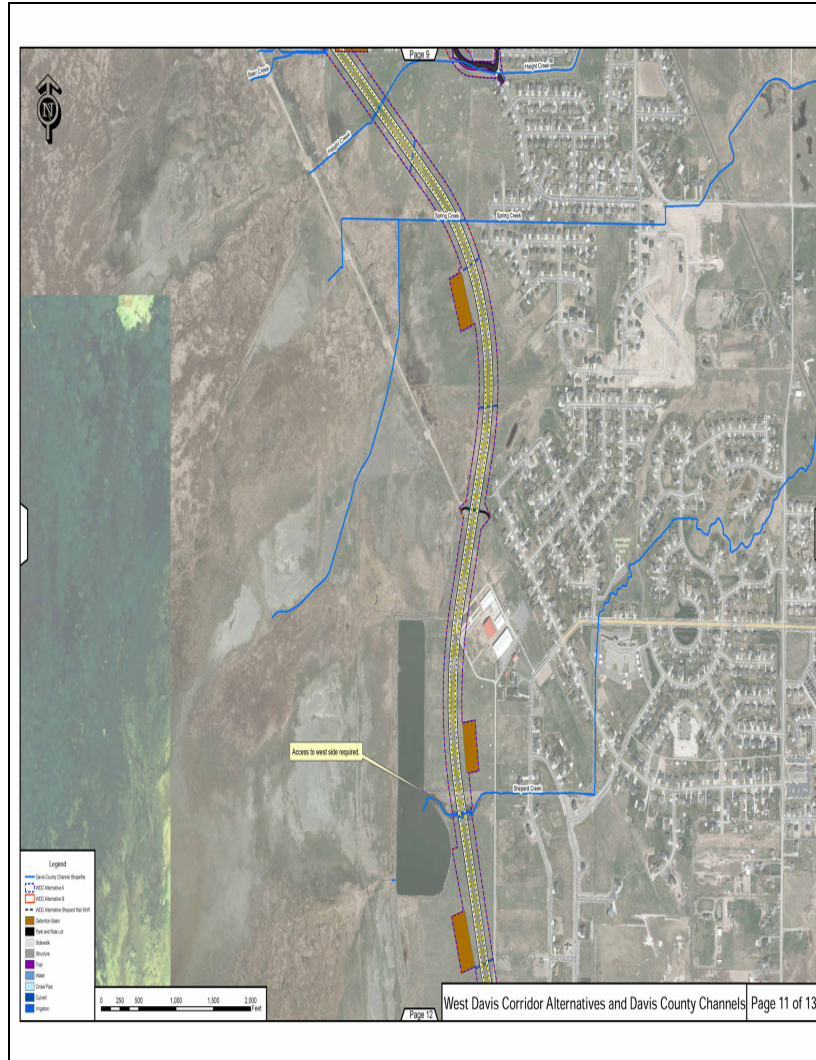
Response
Section in
Chapter 32

Comment 944 (continued)

Response
Section in
Chapter 32

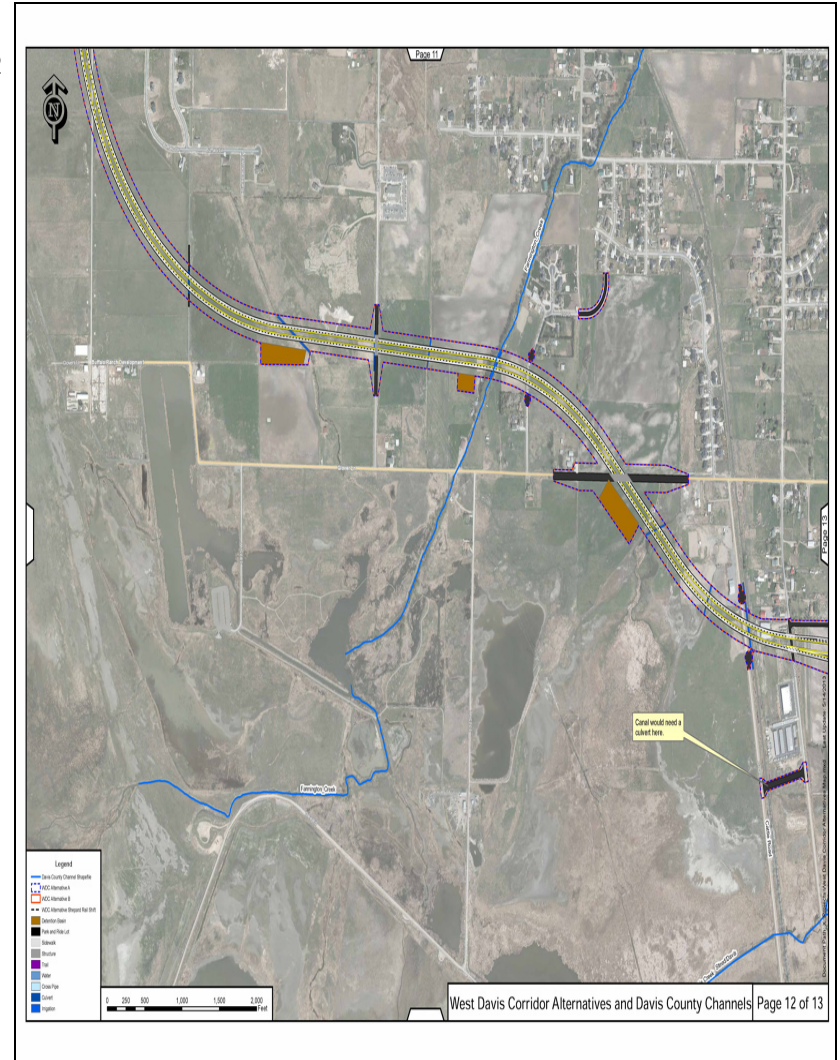
Comment 944 (continued)

Response
Section in
Chapter 32



Comment 944 (continued)

Response
Section in
Chapter 32





WEST DAVIS
CORRIDOR

Comment 944 (continued)

Response Section in Chapter 32



Comment 945

Response
Section in
Chapter 32

Duplicate
of
Comment
936

32.2.13B

32.2.6A

32.2.1G

Comment #: 945

Date: 9/6/2013

Source: Email

Name: Bill McGuire

Location:

Comments:

I understand that today is the final day to make comments on the West Davis Corridor. I strongly support the decision of UDOT to use the Glover Lane option and would also strongly oppose the selection of the Shepard Lane option. There are several reasons for this decision.

First, UDOT has stated that in 22 out of 25 criteria selected, Glovers was equal to (7) or better than (15) the Shepard option. Just by those criteria the correct decision was made.

Second, going with the Shepard option would create significant traffic congestion. We would be joining all of the various highways (I-15, Legacy and the West Davis) in a single area of highway for approximately one mile. There is no real reason to create the congestion and the possibility of accidents that would occur when we have a ready alternative. The Glovers option would allow seamless transition between the highways and greatly decrease the possibility of congestion.

Third, the Glovers route provides a completely separate north/south highway allowing traffic to still flow if something happens on one of the routes. We have experienced shut downs on several occasions on I-15 which resulted in the impact of side streets. A separate north/south route would lessen the impact of those situations.

Fourth, there is a real impact on the people of those in the Shepard route if it was chosen. Ten homes would be taken, and those remaining would have significant financial impact decreasing their property values. No homes would be taken on the Glovers route. In times like we have suffered through the last couple of years, taking financial means away from families is an important consideration in this decision. Where government impacts the family in such a significant financial way, it should be careful in making a decision in that manner.

Finally, beyond the financial impact, there is a health factor that should be considered. There are 214 homes within 300 feet of the Shepard route. This would impact those residents in many ways including noise and other pollution factors. This compares with only 37 on the Glovers route.

While I understand that there is concern that Glovers impacts the bird population and other factors, the above concerns overwhelm those issues. I would request that you support the selection of the Glovers Lane. In the absence of that I would suggest that what has been called the Shared Solution be considered.

Thank you for your consideration of this opinion and input.

Bill McGuire

Comment 946

Response
Section in
Chapter 32



Comment #: 946
Date: 9/6/2013
Source: Email
Name: Martin Hestmark
Location:
Comments:
<See attachment on next page, titled EPA_Letter_9-6-13.pdf>

Comment 946 (continued)

Response
Section in
Chapter 32



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
1595 Wynkoop Street
DENVER, CO 80202-1129
Phone 800-227-8917
<http://www.epa.gov/region08>

SEP -5 2013

Ref: 8EPR-N

Mr. James Christian, Division Administrator
FHWA Utah Division
2520 West 4700 South, Suite 9A
Salt Lake City, UT 84118

Re: West Davis Corridor Draft Environmental
Impact Statement, CEQ # 20130131

Dear Mr. Christian:

The U.S. Environmental Protection Agency Region 8 (EPA) has reviewed the Federal Highway Administration's (FHWA) West Davis Corridor (WDC) Draft Environmental Impact Statement (EIS), sponsored by the Utah Department of Transportation (UDOT). Our review was conducted in accordance with the EPA's responsibilities under section 102 of the National Environmental Policy Act (NEPA), 42 U.S.C. § 4332(2)(c), and Section 309 of the Clean Air Act, 42 U.S.C. § 7609.

The WDC project would improve regional mobility and enhance peak-period mobility in Utah's Davis and Weber counties along the eastern shore of the Great Salt Lake (GSL). Eight action alternatives (Alternatives A1 through A4, and B1 through B4) and a no-action alternative are analyzed in the Draft EIS. All eight alternatives propose a four-lane divided highway connecting with I-15 at one of two locations in Farmington at the south end, and terminating along one of four alignments in Weber County at the north end. The FHWA did not identify its Preferred Alternative in the Draft EIS. The UDOT has selected Alternative B1 as its "Locally Preferred Alternative." Alternative B1 begins on Glovers Lane at the south end, utilizes the Bluff Road alignment in the middle segment, and the 4100 West alignment in the northern segment. Because the Draft EIS does not identify a federal Preferred Alternative, this letter evaluates and provides a rating for each action alternative. Our comments on the Draft EIS focus on avoiding impacts to aquatic resources, including wetlands within the nationally significant Great Salt Lake (GSL) ecosystem. Our enclosed *Detailed Comments* include additional wetland and other identified concerns. The EPA remains committed to working with FHWA through this NEPA planning process to identify a project solution that meets the transportation need while remaining consistent with requirements in the Clean Water Act (CWA) and its implementing regulations.

Impacts to Wetlands and Aquatic Resources

All action alternatives include substantial and permanent direct, indirect and cumulative impacts to GSL wetlands and associated habitats. The GSL ecosystem consists of an irreplaceable mosaic of wetland and terrestrial habitats that together provide nesting, breeding and feeding areas for migratory birds and other wildlife dependent on aquatic habitat areas. As such, impacts to the terrestrial habitat areas within this system can have a significant, albeit indirect, effect on the wildlife functions provided by the wetland and aquatic habitats of the GSL shorelands ecosystem. The Draft EIS documents the national and international significance of the GSL aquatic ecosystem to migratory birds (p. 14-11). The GSL is designated as a Hemispheric Site of Importance by the Western Hemisphere Shorebird Reserve Network (<http://www.whsm.org/site-profile/great-salt-lake>); this designation is shared by only seven such sites in the lower 48 states (<http://www.whsm.org/sites/map-sites/sites-western-hemisphere-shorebird-reserve-network>). The U.S. Fish and Wildlife Service describes the GSL ecosystem as a critically important and irreplaceable resource due to its location, size, and ecological features – in particular, the

32.14.2H

Comment 946 (continued)

Response Section in Chapter 32

32.14.2H

open waters, shorelines, and adjacent mix of wetlands and uplands provide a critical migratory bird staging area in an otherwise arid region.¹ The maintenance of the GSL ecosystem, and its component areas and functions, is of utmost importance to the continued productivity and biodiversity of migratory birds and other wildlife species dependent upon the GSL aquatic ecosystem. The impacts from all action alternatives, in combination with the cumulative impacts of roadway and human development in the project area, have the potential to permanently and significantly impact this important and irreplaceable resource.

The eastern shore of GSL has already experienced significant cumulative impacts, which have reduced wetland and wildlife extent and functions by 58% in the impact analysis area (p. 24-15), limiting the current availability of high quality habitat areas and generally narrowing available shoreline habitats. The WDC project, and the associated growth expected to be induced by the project, will further impact and constrict habitat for aquatic dependent wildlife species along the eastern shore. We therefore recommend the FHWA designate as the Preferred Alternative, an alignment that avoids direct, indirect and further cumulative impacts to GSL wetlands where there are practicable alternatives. Where there are not practicable alternatives to avoid wetlands, we recommend consideration of additional opportunities to minimize adverse impacts through alignment modification and project design features.

The following is a segment-by-segment summary of the project's aquatic resource impacts and the EPA's recommendations for reducing or avoiding environmental impacts. The impacts from this project include direct wetland loss from fill within the highway footprint, loss of wetland extent due to hydrologic changes where the highway intersects natural drainage patterns, reduced or lost wetland function due to changes in water quality or quantity, and reduced aquatic habitat quality and capacity due to the presence of a highway and associated development adjacent to that habitat. The reductions in aquatic habitat functions are especially pronounced where the project alternatives would result in significant impacts to the GSL ecosystem, in particular the GSL Shorelands Preserve and Farmington Bay Wildlife Management Area, which contain critically important shoreland habitats (both terrestrial and aquatic) that maintain the productivity and biodiversity of aquatic dependent wildlife species who use these areas as breeding, feeding and nesting areas.

Southern Segment:

The Draft EIS analyzes two practicable alternative alignments in the project's southern segment: 1) the Glovers Lane alignment; and 2) the Shepard Lane alignment. The Glovers Lane alignment (Alternatives A1, A2, B1 and B2), the most southern connection with I-15, runs adjacent to the GSL ecosystem, agricultural buffer habitats and within 500 ft of the Farmington Bay Wildlife Management Area. The Glovers Lane alignment, would impact 7.8 acres of wetlands within the right of way, including 6 acres of medium and high quality wetlands. Additionally, this alternative would impact nearly 1,108 acres of wildlife buffer habitat within 1,300 ft, including approximately 420 acres of aquatic habitats, 460 acres of medium and 370 acres of high quality habitat areas. The Glovers Lane alignment is located entirely within the GSL 100-year floodplain, and would fragment and constrict this narrowest portion of the high quality GSL habitat corridor in the project area. Impacts to protected areas along Farmington Bay, including the Farmington Bay Wildlife Management Area from the Glovers Lane alignment, are especially significant as impacts to either terrestrial or aquatic habitats within these areas can affect the management, productivity and biodiversity of aquatic dependent wildlife species that utilize these areas as breeding, feeding and nesting areas. In addition to the habitat functions provided by terrestrial areas, these areas serve as upland buffers which protect adjacent wetlands from functional losses associated with roadway and other encroaching development. The Glovers Lane alignment passes through and impact terrestrial buffer areas that have been preserved and protected as mitigation components of previous development projects (e.g., Buffalo Ranch), and/or with the intent of protecting adjacent wetland quality from encroaching development. In comparison, the Shepard Lane alignment (Alternatives A3, A4, B3 and B4) connects with I-15 three miles further north and almost entirely avoids impacts to GSL wetlands and adjacent habitat areas in this portion of the project area. The Shepard Lane alignment would impact 7.3 acres of aquatic resources primarily along the Haight Creek and its riparian wetlands. The aquatic resources impacted by Shepard Lane do not provide the same high quality habitat functions as those wetlands more adjacent to GSL.

¹ Draft EIS Comments for the West Davis Corridor Project. U.S. Department of the Interior, August 14, 2013.

Comment 946 (continued)

Response Section in Chapter 32

32.14.2H

Specifically, according to the Draft EIS, selecting the Shepard Lane alignment in this segment would avoid the following Glovers Lane alignment impacts:

- Loss of 6 acres of medium and high quality GSL wetlands within the Right of Way (ROW),
- 15.2 acres of hydrology/water quality/aquatic habitat impacts to medium and high quality GSL wetlands within 300 ft of the ROW,
- Loss of 39.3 acres of GSL wildlife habitat in the ROW,
- 634.65 acres of impacts to GSL wildlife habitat function/capacity, including areas of the Farmington Bay WMA, and including 265.9 acres of impact to aquatic habitat types within 1300 ft of the ROW, and
- 139.4 acres of impact to the GSL floodplain.

Based on the information in the Draft EIS, the Shepard Lane alignment appears to be less environmentally damaging to the GSL ecosystem, including the wetlands and aquatic-dependent wildlife species, compared to the Glovers Lane alignment. For this reason, the EPA recommends FHWA select the Shepard Lane alignment as the federally Preferred Alternative in order to avoid these significant adverse impacts to the GSL ecosystem. We also recommend the FEIS identify additional minimization and mitigation opportunities for both Shepard and Glovers Lane alignments, including alignment changes and design features to reduce and offset direct and indirect aquatic resource impacts, particularly in areas adjacent to the GSL ecosystem. Our specific mitigation recommendations are outlined below.

Shared Alignment Segment:

All eight alternatives share a 7.5-mile alignment from approximately the Farmington-Kaysville boundary to the Layton-Syracuse boundary near Gentile Street along the edge of the GSL Shorelands Preserve. This segment has substantial impacts to GSL wetlands and aquatic dependent wildlife species, and the alternatives screening process was not able to identify a practicable alternative alignment that could avoid these impacts. The impacts to the GSL Shorelands Preserve are especially significant, as impacts to either terrestrial or aquatic habitats within and adjacent to the Preserve can affect the management, productivity and biodiversity of aquatic dependent wildlife species that utilize these areas as breeding, feeding and nesting areas. In addition to the habitat functions of terrestrial areas, these areas serve as upland buffers which protect adjacent wetlands from functional losses associated with roadway and other encroaching development. In addition, we understand that areas of the Preserve have been acquired as mitigation for the Central Utah Project, and thus were intended to be protected and maintained in their current land use in perpetuity. In this segment, according to the Draft EIS, all alternatives would have the following impacts:

- Loss of 8.8 acres of GSL wetlands, including 3.4 acres and 4.9 acres of medium and high quality wetlands, respectively (7.7 acres of the direct wetlands impacts are within the GSL Shorelands Preserve);
- At least 26.9 acres of wetlands within the GSL Shorelands Preserve would be impacted through loss of hydrology/water quality/aquatic habitat functions within 300 ft. of the ROW (DEIS p. 14-56);
- Loss of 60-61 acres of upland wildlife habitat in the GSL Shorelands Preserve and segmentation and isolation of an additional 45 acres of wildlife habitat from the main Preserve; and
- 1,132.4 acres of impacts to wildlife habitat functions within 1,300 feet of the ROW, including at least 812.4 acres of impacts to the Preserve (DEIS p. 14-56) and 191.6 acres of GSL aquatic habitats.

Given the high value of the resources associated with the GSL Shorelands Preserve and GSL ecosystem affected by the shared alignment, it is important to seek additional opportunities to avoid and minimize impacts to wetlands and aquatic dependent wildlife species through alignment modifications and design features where available. The Draft EIS does not specify how environmental resource impacts would be mitigated, or how much mitigation is proposed. We recommend the Final EIS identify minimization and mitigation measures to reduce and offset the direct and indirect aquatic resource impacts from this segment and from the project overall. Our specific mitigation recommendations are outlined below.

Middle Segment:

The Draft EIS evaluated two practicable alignments in the middle segment of the project. The A Alternatives loop west toward the GSL wetlands, the Preserve and agricultural buffer habitats, while the B Alternatives stay inland following Bluff Road. In this segment, the Draft EIS states that the B alignment would have greater direct wetland

Comment 946 (continued)

Response Section in Chapter 32

32.14.3L

32.14.3L

and wildlife impacts than the Alternative A alignment. While the acres of direct and indirect wetland impact are greater in the B alignment, the B Alternative would have substantially less adverse impact to the GSL ecosystem, including GSL wildlife habitats, due to its more eastern location. These GSL wildlife habitats serve to maintain the productivity and biodiversity of the greater GSL ecosystem, and impacts to these terrestrial and aquatic resources can affect the function and condition of neighboring GSL wetland habitats and aquatic dependent wildlife species. Furthermore, the resources along the B alignment are fragmented and surrounded by existing development, and do not provide the same high level of GSL ecosystem functions as the resources impacted by the A alignment.

Selecting the B alignment (Bluff Road) as the federally Preferred Alternative would avoid the following impacts associated with the A alternatives:

- 4.4 acres of hydrology/water quality/aquatic habitat impacts to GSL Shorelands Preserve wetlands within 300 ft of the ROW,
- 660 acres of impacts to GSL wildlife habitat function/capacity, including 204.7 acres of GSL Shorelands Preserve habitat, and including 238 acres of impacts to aquatic habitat types within 1,300 feet of the ROW,
- Loss of designated "prime and unique farmlands" and Agricultural Protection areas adjacent to the GSL that serve as habitat and as a terrestrial buffer to GSL aquatic resources.

In this segment, the B alignment avoids significant adverse impacts to the nationally significant GSL ecosystem, including impacts to the GSL Shorelands Preserve and terrestrial habitats utilized by aquatic dependent wildlife species for nesting, breeding and feeding. Consequently, the EPA recommends selecting the B alignment for the middle segment and encourages continuing to seek ways to minimize and mitigate for the substantial direct and indirect aquatic resource impacts along this alignment.

Northern Segment:

The Draft EIS evaluated four practicable alignments in the northern segment. The Draft EIS documents that all alignments in this segment avoid impacts to GSL wildlife resources within 1300 feet of the right of way. The EPA's review evaluates the two A alignments, and the two B alignments separately.

A Alignments: The Draft EIS discloses that the two northern A alignments (5100 West and 4700 West) have similar environmental impacts. However, both northern A alignments are components of the A alternative that includes impacts to GSL along the middle segment (see above), and the EPA therefore recommends that neither of the A alignments be selected. If alterations are made to the alternatives in the Final EIS that result in the A alignments avoiding or significantly minimizing impacts to GSL resources in the middle segment, the 4700 West alternative would be preferable to 5100 West. 4700 West is the more eastern alternative and would allow better opportunities to avoid GSL wetland impacts if WDC is expanded to the north in the future.

B Alignments: Between the two B alignments (4800 West and 4100 West), our review finds that 4100 West, UDOT's Locally Preferred alternative, directly intersects and impacts a large wetland complex that could be avoided by selecting the 4800 West alignment. Selecting the 4800W alignment in the north would avoid the following impacts associated with the 4100 W alignment:

- Loss of 4.3 acres of wetlands within the ROW, including 2.8 acres of medium quality wetlands,
- 25.4 acres of impact to medium and high quality wetlands within 300ft of the ROW,
- Loss of 52 acres of wildlife habitat within the ROW, and
- 162.9 acres of impact to high and medium quality wildlife habitats within 1300 ft of the ROW.

The aquatic resource impacts of 4100 West are significant and avoidable through selection of 4800 West, and thus, an alternative with less adverse impacts to the aquatic ecosystem is available. The EPA recommends selecting the 4800 West alignment for the northern segment, while continuing to seek ways to further reduce impacts through alignment or design modifications and mitigate for the substantial aquatic resource impacts along this alignment.

Comment 946 (continued)

Response Section in Chapter 32

32.14.3R

32.14.3M

Aquatic Resource Mitigation

EPA believes that developing and including information in the Final EIS on the amount, type and potential locations of mitigation for unavoidable aquatic resource and other environmental impacts will help inform the FHWA's forthcoming selection of its Preferred Alternative. Additionally, EPA recommends considering alignment changes and design features which may further minimize aquatic resource impacts prior to determining the necessary level of mitigation for unavoidable impacts. The Draft EIS defers specific mitigation details until later in the process, and only general examples are mentioned for potential mitigation, such as creating new wetlands from uplands, restoring wetlands in areas that have become uplands, and enhancing and or preserving existing wetlands. We recommend that a more specific commitment to mitigation be included in the Final EIS to address direct and indirect wetland impacts and wetland functions lost or impacted by the FHWA Preferred Alternative. We recommend the mitigation proposal in the Final EIS include a commitment to mitigate for direct wetland losses and for impacts to wetland functions outside of the ROW. We offer the following specific recommendations for mitigation site commitments in the Final EIS to offset any unavoidable project impacts:

- Because hydrologic modifications (ditches, dikes and fills) appear prevalent along much of the eastern GSL shore, there are likely many opportunities within the project area to restore lost wetland acreage and functions.
- Prioritize mitigation sites that are not immediately adjacent to roadways or developed areas, and to wetland mitigation sites that include protected upland buffer areas to protect these areas from future development encroachment.
- Prioritize mitigation sites which provide opportunities to restore and preserve large, undeveloped, unfragmented GSL wetland complexes and aquatic dependent wildlife habitats at risk from future development. The CWA implementing regulations prioritize mitigation sites that are located within the same watershed and represent an in-kind replacement of wetland type and function. In this case, sites should be located within the areas adjacent to GSL in order to preserve and maintain the functions of this critical ecosystem.
- Apply higher mitigation ratios where necessary to account for the method of compensatory mitigation (e.g., creation vs. restoration), the likelihood of success, differences between functions lost at the impact site and the anticipated functional lift.
- Apply higher mitigation ratios for impacts to any areas currently established or protected as mitigation for previous development projects, including conservation easements and areas of the GSL Shoreland Preserve. These ratios should account for the functions lost at these mitigation sites in addition to the functions lost at the original impact site for which these areas provide compensatory mitigation. Temporal losses, in other words the time past between completion of future mitigation and the timing of the original impact, should also be considered in calculating these higher ratios.
- Consider avoidance, minimization and mitigation for impacts to both jurisdictional and non-jurisdictional wetlands in a manner consistent with Executive Order 11990.
- Apply design modification and further minimization actions wherever possible to minimize or shift the ROW for all alternatives through sensitive, higher quality wetland areas and adjacent terrestrial areas that support aquatic dependent wildlife species, including the GSL Shorelands Preserve. In particular, we recommend that UDOT consider relocating the ROW, wherever possible, to preserve an upland buffer between wetlands and roadway development, and to reduce the indirect impacts to these resources.

CWA Section 404

The CWA § 404 implementing regulations at 40 C.F.R. Part 230 require consideration of direct, indirect (secondary) and cumulative impacts by the Corps in making CWA Section 404 permitting decisions for the discharge of dredged or fill material into waters of the U.S.. Given these considerations, and based upon the

Comment 946 (continued)

Response
Section in
Chapter 32

32.14.3L

32.14.3M

information presented in the DEIS, several of the alternatives do not appear to satisfy certain CWA § 404 requirements. Specifically, the Corps can only issue a permit for the discharge of dredged and fill material into waters of the U.S. under CWA Section 404 for the least environmentally damaging practicable alternative (LEDPA) to the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences. This letter identifies two highway segments with this specific concern because they have significant impacts to GSL ecosystems, including wetlands and aquatic dependent wildlife species, and have a practicable alternative in the Draft EIS that would avoid GSL ecosystem impacts for those segments. The two segments with significant GSL impacts and an identified practicable alternative are the southern and middle project segments where the western alignment alternatives are adjacent to GSL. These two segments would have approximately 14 acres of direct impact to GSL wetlands and over 600 acres of impacts to GSL wetland functions outside the ROW. While the eastern alignments may have comparable or greater direct impacts to aquatic resources, the resources affected are more fragmented and impacted by current development, and these eastern alignments almost entirely avoid indirect impacts to GSL ecosystem functions. Six of the Draft EIS alternatives (A1-4, B1, B2) include these two highway segments.

The EPA is equally concerned about the impacts to valuable GSL resources along the shared alignment segment. Although the Draft EIS does not identify a practicable alternative that reduces aquatic resource impacts in this shared alignment segment, the CWA §404 implementing regulations require these aquatic resource impacts be avoided and then minimized to the extent possible. As such we recommend UDOT consider any opportunities to avoid and minimize impacts in these segments that may arise through public comments, including alignments or modifications that further avoid GSL ecosystem impacts, and present this information in the Final EIS.

In order to develop a complete CWA Section 404 permit application, to determine the appropriate level of mitigation, and to understand all avoidable and unavoidable project impacts, it will be important to conduct a full wetland delineation and functional assessment the final preferred alternative prior to seeking a CWA Section 404 permit.

The EPA's Rating and Rationale

As noted above, all alternatives include substantial direct, indirect and cumulative impacts to wetlands and associated ecosystem components, and the project's impacts to GSL ecosystem are both substantial and long-term. The presence of a highway in and along the edge of GSL's ecosystem will permanently degrade their significant ecological functions across hundreds of acres of shoreline habitat thereby reducing the habitat capacity of the GSL ecosystem. Consistent with Section 309 of the CAA, it is the EPA's responsibility to provide an independent review and evaluation of the potential environmental impacts of this project. The EPA has rated the environmental impact of all WDC action alternatives in the Draft EIS as "EO" - Environmental Objections. The EO rating indicates that the EPA review has identified significant environmental impacts that should be avoided in order to provide adequate environmental protection. EPA intends to work with the lead agency to reduce these impacts. We have rated the quality of the DEIS as "2" - Insufficient Information. The 2 rating indicates the Draft EIS does not contain sufficient information for the EPA to fully assess project impacts that should be avoided in order to fully protect the environment. We also suggested additional information that may be necessary for forthcoming permit applications. A description of the EPA's rating system is enclosed.

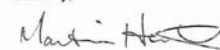
We appreciate the opportunity to participate in the review of this project, and we are committed to working with you in the coming months. If we may provide further explanation of our comments during this stage of your

Comment 946 (continued)

Response
Section in
Chapter 32

planning process, please contact me at [redacted] or your staff may contact Melanie Wasco, Lead NEPA Reviewer, at [redacted]

Sincerely,



Martin Hestmark
Assistant Regional Administrator
Office of Ecosystems Protection and Remediation

Enclosures

cc: Carlos Bracerias, UDOT