

I. DECISION

This Record of Decision (ROD) documents the decision by the Utah office of the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS) to disburse Emergency Watershed Protection Program (EWPP) funds for the Green River Diversion Rehabilitation project in Emery and Grand counties, Utah. Because the EWPP is a Federal program, activity associated with the EWPP is subject to the provisions of the National Environmental Policy Act of 1969 (NEPA). Federal funding, along with matching funds from project stakeholders, will be used to implement the proposed project.

The ROD is issued pursuant to NEPA (42 U.S.C 4321 et seq.), the Council of Environmental Quality (CEQ) NEPA regulations (40 CFR Parts 1500-1508), and the Environmental Protection Agency's (EPA) NEPA implementing regulations (40 CFR Part 6, Subpart F). The Bureau of Land Management (BLM) participated in the development of the Green River Diversion Rehabilitation project Final Environmental Impact Statement (FEIS) as a cooperating agency, with the NRCS as the lead agency. The decision to implement the diversion improvements is based upon the analysis in the FEIS, which identified the Replace In Place With Passages as the environmentally preferred alternative. A Notice of Availability of the Draft Environmental Impact Statement (DEIS) was published in the Federal Register by NRCS on March 14, 2014. A public meeting was held in Green River, Utah on April 10, 2014. A Notice of Availability of the FEIS was published in the Federal Register by the NRCS on June 27, 2014. NRCS's response to comments on the DEIS are included in Appendix A of the FEIS.

II. INTRODUCTION

The Green River Diversion is located on the Green River approximately 6 miles upstream from the town of Green River, Utah. The Green River watershed is nested within the Colorado River watershed, which serves about 27 million people and irrigates nearly 4 million acres of land across several states of the Western United States.

The diversion is adjacent to the Tusher Wash and is often referred to as the Tusher Diversion. The diversion structure spans the 750-foot width of the river and diverts water to water right holders (irrigators and hydropower users) on both sides of the river. The diversion consists of four features: the main diversion structure, the west side raceway, the East Side Canal, and the water wheel.

Flooding in 2011 heightened concerns that a catastrophic failure of the diversion could result in significant losses to the local agricultural economy. The effects of recent flooding include cracking and chipping of concrete, undercutting of the downstream foundation sediments, and cracks associated with structural failure. This damage prompted the Green River Conservation District and UDAF to move forward with plans to rehabilitate the existing diversion.

The purpose of the project is to rehabilitate the existing Green River Diversion. The project would rehabilitate the diversion due to damage caused by past flood events, upgrade the diversion infrastructure to current design standards, maintain the level of water delivery to the existing water rights holders, and comply with applicable Federal rules and regulations. The project is needed to maintain existing functions of the diversion for water delivery to water rights holders.

Project objectives include:

- Rehabilitate the Green River Diversion, which is necessary due to damage caused by past flood events; upgrade the diversion infrastructure to current design standards; maintain the level of water delivery to the existing water rights holders; and, comply with applicable Federal rules and regulations.
- Meet Emergency Watershed Protection Program (EWPP) requirements.
- Meet BLM permitting requirements.
- Meet State of Utah Forestry, Fire and State Lands (FFSL) permitting requirements.
- Meet U.S. Fish and Wildlife Service (USFWS) Endangered Species Act (ESA) requirements and Upper Colorado River Endangered Fish Recovery Program guidelines.
- Meet Utah State Historic Preservation Office (SHPO) National Historic Preservation Act (NHPA) requirements.
- Meet U.S. Army Corps of Engineers (USACE) Clean Water Act (CWA) permitting requirements.

The Utah Department of Agriculture and Food (UDAF) is the local sponsor of the project. The project will affect BLM lands, and the BLM participated in the NEPA process as a cooperating agency.

III. DESCRIPTION OF PROJECT ALTERNATIVES

NEPA requires that agencies consider alternatives to the proposed action that address the significant issues identified during the scoping process. NEPA also requires that the alternatives analysis include a No Action Alternative.

Initial Alternatives

A range of alternatives and options was considered for study early in the project scoping phases. Project components were identified through agency and public scoping efforts. Initial analysis included the following general types of diversion alternatives, but most were eliminated from detailed study because they did not meet the purpose and need, were considered infeasible, would not be consistent with established engineering practices or NRCS design criteria, or were deemed too costly for the project.

The following general alternative concept types were the baseline for all others that have been analyzed as part of the process:

Dam Decommissioning:

Complete removal of the diversion (dam) would entail the excavation and disposal of the entire concrete diversion and reclamation of the river channel and banks to match existing contours. A new stable channel would allow unobstructed flow through the upstream and downstream reaches of the Green River. Complete removal of the diversion would not allow any water to be diverted for irrigation purposes, and would also involve the buyout of the Thayne Hydropower plant. The elimination of water diversion altogether does not meet the purpose and need for this federally funded project and supplemental methods would be required to acquire the same water volume as allotted by water right. The cost estimate for acquiring new water sources (new wells, water purchase, new dam, etc.) and the buyout would cost between \$10,000,000 and \$15,000,000. Therefore, the dam decommissioning concept was eliminated from detailed study.

Replace Diversion Far Upstream or Downstream:

Complete diversion removal and replacement far upstream or downstream in a different location would entail the excavation and disposal of the entire concrete diversion and reclamation of the river channel and banks to match existing contours. A new stable channel would allow unobstructed flow through the upstream and downstream reaches of the Green River. The project would also involve the construction of new canals and laterals to provide water to the East Side and Green River canals, as well as the buyout of the Thayn Hydropower plant. Complete removal of the diversion would lower the water surface at the existing location, rendering the Hastings Water Wheel unusable. Connecting the diversion to the existing canals would require canal connections which, depending on the structure's distance upstream, could be prohibitively expensive. The project footprint would be substantially larger, potentially impacting environmental resources. Supplemental methods would be required to acquire the same water volume as allotted by water right. The cost estimate for constructing connections to water conveyances would be prohibitively expensive. Therefore, the replace far upstream or downstream concepts were eliminated from detailed study.

Replace Diversion with a Different Structural Type or Shape:

Replacement diversion types assessed were of a stop-log type, bladder weir, riprap stepped channel, or a different shape such as straight or downstream arc. While some of these types would provide irrigation to water users and could provide adequate fish passage, disadvantages such as higher operation and maintenance demands; increased bank instability and scouring; vegetation losses; and a high risk of vandalism rendered these eliminated from further study.

Rehabilitate or Replace Diversion:

The existing diversion structure has been operated and maintained in its existing form and location for over 80 years. This design would divert water to the canals and include components for fish and boat passage. Operation and maintenance could be similar to what is currently done and would allow for improvement in terms of efficiency. Therefore, the rehabilitate or replace diversion (in the same location) concept was carried forward to be analyzed. This concept was expanded into the alternatives evaluated as part of this process.

Alternatives Analyzed**No Action Alternative**

The No Action Alternative would consist of using no Federal money to rehabilitate the Green River Diversion. Due to the cost associated with the rehabilitation of the diversion, it is likely that no repairs would be made by the stakeholders to the severely damaged structure; it would not be upgraded to current engineering standards and technology, and would provide very limited fish passage and no boat passage. The sediment control/slucice gates would also remain in their current condition. This alternative, therefore, represents the scenario in which the diversion may likely fail during an extreme flood event in the future.

Replace In Place Alternative

This baseline alternative would replace the diversion structure at the same historic location as the existing diversion. The diversion structure or "weir" length would remain the same as the existing. The rehabilitate alternative would maintain the existing east side and west side tie-in locations to the bank, where feasible. The alternative would upgrade the structure to current engineering standards and technology. The 750-foot, arc-shaped crest of the weir

would be leveled at 4086.7' to ensure delivery to water users. This alternative would include one new gate for water control and sluicing; and a new bulkhead gate structure and 80-foot raceway to the water wheel on the east side at the Hastings Ranch to maintain existing water rights. As part of the diversion rehabilitation, all existing water rights would be maintained.

On the west side of the diversion, the Green River Canal and west side raceway would be controlled by the existing gate bridge/structure. To reduce debris collection and as a safety measure, two deflection log booms would be positioned across the raceway entrance. The 100-foot long west side and 170-foot long east side log booms would tie into a sluice gate in order to pass the debris past the weir and avoid blockages. At the east side, a new siphon intake for the East Side Canal would be constructed.

Downstream fish passage across the diversion would not be provided by this alternative. Upstream fish passage would be restored to pre-2011 flood conditions on the east side of the structure.

The diversion structure itself would be designed for safe passage over the diversion by boats during passable flows by creating a gradual slope that does not form an eddy that could trap boaters underwater. Boater warning signs would be placed at locations above the diversion on both banks.

Replace In Place With Passages Alternative

This alternative would demolish the existing diversion and install a new diversion in the same historic location. This alternative would replace the existing diversion along the current alignment and upgrade the structure to current engineering standards and technology. The 750-foot, arc-shaped crest of the weir would be leveled to 4086.7' to ensure delivery to water users. This alternative would include two new gates for water control and sluicing; and a new bulkhead gate structure and 80-foot raceway to the water wheel on the east side at the Hastings Ranch to maintain existing water rights.

On the west side of the diversion, the existing gate structure would be replaced to provide more efficient water control and sluicing capabilities for the Green River Canal and west side raceway. To reduce debris collection and as a safety measure, two deflection log booms would be positioned across the raceway entrance. The 100-foot long west side and 170-foot long east side log booms would tie into a sluice gate in order to pass the debris over the weir and avoid blockages. At the east side, a new siphon intake for the East Side Canal would be constructed.

Downstream fish passage across the diversion would be provided along the length via notches in the structure. Adjacent to the water wheel raceway would be an upstream fish passage channel (10 feet wide and approximately 180 feet in length) that would be designed to accommodate fish during low flows. Passive integrated transponder (PIT) tag detectors would be placed at each downstream fish passage notch and at the entrance/exit of the upstream fish passage to sense and record fish movement over and around the diversion. A fish screen would be placed in the East Side Canal near the river, with passage back to the river. All concentrated fish passage areas would have PIT tag detectors to estimate population movement and numbers.

Boat passage components would provide additional debris removal benefits. This notch in the diversion structure would be located at the center of the channel. The boat passage

section would consist of a stepped opening 20-feet wide by 2-feet deep in the diversion with a more gradual slope into the tailwater of the diversion to provide safer rafting over the diversion. The boat passage would be lined with concrete and flows could be regulated using a weir at the entrance. The diversion structure itself would be designed with a gradual slope for safe passage over the diversion during passable flows. Boater warning signs would be placed at locations above the diversion on both banks.

The Concept Design Report offers recommendations for construction means and methods. A cofferdam could be installed upstream of the new structure to allow work to be performed in the dry, and demolition of the existing diversion could possibly take place in two phases for dewatering purposes. This alternative includes the use of cobbles and gravel that have been deposited into the river channel below the diversion and at the confluence of Tusher Wash. This alternative would also require the temporary use of approximately 5.5 acres of BLM-managed public lands, 15.9 acres of state sovereign lands (Green River itself), and 2.3 acres of private lands for staging and access during construction. The cost to implement this alternative is \$6,700,040.

Alternatives Considered, But Eliminated From Further Study

- Stoplog Dam
- Dam at Canyon Outlet
- Bladder Weir
- Straight Concrete Diversion
- Downstream Arcing Diversion
- Riprap Ramp
- Rock Weir Series
- Riprap Ramp Series
- Far Upstream Diversion
- Decommissioning, Pumping, and Buyout
- Low Diversion and Buyout
- Water Park Style Diversion
- Replace Alternatives with Hastings Berm Improvement
- Replace Alternatives with Hastings Field Drain Outlet
- Replace/Rehabilitate Diversion
- Repair Diversion In Place
- Replace Diversion Upstream or Downstream

Environmentally Preferable Alternative

NEPA Section 1505.2(b) requires that, in cases where an EIS has been prepared, the Record of Decision identify “alternatives which were considered to be environmentally preferable.” The environmentally preferable alternative is the alternative that causes the least damage to the biological and physical environment; it also means the alternative that best protects, preserves, and enhances historic, cultural, and natural resources.

The FEIS states that the Replace In Place With Passages Alternative is the *action* alternative that would be the environmentally preferable alternative. However, the No Action Alternative is environmentally preferable to the Replace In Place With Passages Alternative. The No Action Alternative would indirectly but adversely affect the economy of the area because of the potential

for dam failure, and therefore could result in regional land-use changes. However, when compared to the action alternatives, the No Action Alternative would not cause significant damage to the biological and physical environment, and it would not affect any historic, cultural, or natural resources. Because of this, the No Action Alternative is, overall, the environmentally preferable alternative.

The No Action Alternative was not selected because it would not meet the project purpose and need. See Section IV for detailed information regarding NRCS's decision to select the Replace In Place With Passages Alternative, which is the environmentally preferable *action* alternative.

IV. SELECTED ALTERNATIVE

The selected alternative is the Replace In Place With Passages Alternative, identified in the FEIS. It will rehabilitate the diversion in the following manner:

- Replace existing diversion structure.
- Level structure crest to ensure water delivery to irrigation systems and provide sufficient water for bypass flows at fish protection systems.
- Move sediment through the system and maintain floodwater conveyance.
- Replace existing gate and bridge at the west side raceway ("8-gate structure") and provide sufficient water for bypass flows at fish protection systems.
- Improve east side raceway to water wheel.
- Reinforce the diversion structure with riprap.
- Dredge the large deposition area at the mouth of Tusher Wash for a source of cobble and gravel during construction.
- Construct a new siphon intake at the East Side Canal.
- Install deflection log booms at the east and west ends for public safety and structure protection.
- Provide upstream fish passage past diversion structure.
- Provide downstream fish passage via notches in the diversion structure.
- Provide passive integrated transponder (PIT) tag detectors to sense and record fish movement over and around the diversion.
- Install fish screen and bypass at the East Side Canal.
- Provide both dry and wet downstream boat passage past the diversion structure.
- Install boater warning signs upstream of the diversion for public safety.

Unavoidable Effects and Mitigation

The selected alternative will not cause any significant environmental effects. However, the FEIS identifies unavoidable, significant effects and measures that will minimize some of those effects. As the local sponsor, UDAF will have primary responsibility for implementing the mitigation measures adopted as part of the selected alternative. NRCS will work with UDAF throughout the design and construction process to ensure that applicable mitigation measures are implemented.

Table 3-1. Summary of Direct and Indirect Resource Impacts

Resource	Preferred Alternative - Replace In Place With Passages
Soils	<i>Direct Impacts:</i> Approx 1100 cubic yards of cobble and gravel removed from the Tusher Wash deposition area and used to construct and/or support the diversion.
Water Resources – Water Quality, Hydrology, Floodplains	<i>Direct Impacts:</i> 0.2 ac of clearing and grubbing in the floodplain.
Waters of U.S. including Wetlands	<i>Direct Impacts:</i> 1.3 ac impact to surface waters and 70 sq ft impact to emergent wetlands.
Plants – Riparian Zone and Other	<i>Direct Impacts:</i> 0.5 ac of impact to riparian community.
Threatened and Endangered Species	<i>Direct Impacts:</i> 1.3 ac of impact due to new riprap in channel; no fish or wildlife kills anticipated. 0.5 acres of wildlife habitat impacted (riparian). Enhancement of passages and installation of monitoring tools for improvement of habitat.
Fish	<i>Direct Impacts:</i> 1.3 acres of impact due to new riprap in channel.
Wildlife	<i>Direct Impacts:</i> 0.5 acres of wildlife habitat impacted (riparian).
Socioeconomics	<i>Direct Impacts:</i> None. Alternative beneficial in the provision of a more reliable supply of water for irrigation and hydropower. <i>Indirect:</i> Possible increase in tourism, economy in the vicinity due to provision of boat passage.
Cultural/Historic	<i>Direct Impacts:</i> Structure demolition and East Side Canal improvements a significant adverse effect.
Recreation/Public Health & Safety	<i>Direct Impacts:</i> Enhanced recreation opportunities for the boating community due to provision for boat passage. <i>Indirect:</i> Reduction of loss-of-life potential.

Conservation Practices and Adopted Mitigation Measures

It has been determined that the selected alternative will not cause significant effects to the natural environment. The project will cause significant effects to one aspect of the human environment, the National Register of Historic Places (NRHP)-eligible Tusher Diversion (also known as the Green

River Diversion). The following conservation practices and mitigation measures are identified in the FEIS and will minimize the potential impacts of the selected alternative and/or mitigate for those impacts where necessary.

Soil Resources

- The project is self-mitigating in that efforts to reduce sediment in the main channel and west side raceway will be implemented with the installation of radial gates. The Operation and Maintenance Plan, which will be finalized prior to construction, will specify under which conditions the new radial gates at the diversion and the raceway will be activated.
- The Interim Draft Sediment Management Plan introduces an adaptive management process that will monitor the effects of sediment sluicing on downstream water quality.
- Erosion may occur on disturbed and cleared areas within the project boundary during precipitation events. Proper conservation and best management practices will be implemented to prevent and control soil erosion.

Water Resources

Hydrology

- Stream hydrology will be further assessed during an independent modeling and final design review exercise, which will add monitoring and documentation procedures to identify unforeseen construction or post-construction impacts.

Water Quality

- The Interim Draft Sediment Management Plan includes a commitment to the basic elements necessary for water quality monitoring protocol. The plan and protocol will be developed during final design, adjusted during project startup, and implemented and reported for five years.

Waters of the U.S., including Wetlands

- Compensatory mitigation will not be required for impacts to jurisdictional surface waters of the U.S. Mitigation for impacts to jurisdictional wetlands will be achieved through on-site riparian planting and invasive species removal. Consultation with the USACE will be ongoing throughout the final design phase to ensure accuracy in permitting applications.

Air Quality

- No mitigation measures will be required to further minimize effects to air quality as described in the FEIS.

Plants

- All disturbed areas not associated with direct structure repair will be revegetated with approved UDWR plant species.
- Special precautions will be taken to avoid spreading common reed grass on- or off-site during construction.
- Methodology for integration of an overall strategy for replanting and seeding will be formalized into a Post Construction Rehabilitation Plan.
- Riparian trees will not be removed unless they are non-native and/or specified in the plans. On-site riparian restoration will be conducted for impacts to endangered fish species; further detail on the restoration plan is outlined in the section titled "Animals" in this document.
- All disturbed areas resulting from the project will be smoothed, shaped, contoured, and rehabilitated to as near their pre-project construction condition as practicable. After completion of the construction and restoration activities, disturbed areas will be seeded at

appropriate times with weed-free, native seed mixes having a variety of appropriate species (especially woody species where feasible) to help hold the soil around structures, prevent excessive erosion, and to help maintain other riverine and riparian functions. The composition of seed mixes will be coordinated with wildlife habitat specialists.

- Weed control on all disturbed areas will be required.

Animals

Endangered and Threatened Species, Species of Concern

- The USFWS Biological Opinion states that the level of anticipated take is not likely to result in jeopardy to Federally-listed species or destruction or adverse modification to designated critical habitat.
- The project includes built-in mitigation opportunities applicable to impacts to all fish species. It includes components that will provide downstream fish passage (stepped fish passage notch incorporates a downstream grade control design for stability and to facilitate fish passage at low flow), upstream fish passage (channel), and PIT tag readers to enhance research, monitoring, and data management opportunities. These components have been developed in accordance with USFWS policy and in conjunction with the Upper Colorado River Endangered Fish Recovery Program. The project may contribute to the continued recovery of endangered species.
- Fish entrainment in the East Side Canal will be reduced through the installation of a screen.
- Mitigation efforts to reduce fish entrainment in the west side raceway and radial gates include the preparation of an Operation and Maintenance Plan (to be finalized prior to construction) that specify under which conditions the new radial gates at the diversion will be activated. These flow conditions will be coordinated with the Recovery Program and UDWR to identify when fish are expected to be present.
- Mitigation for permanent impacts to designated critical habitat, the Green River's 100-year floodplain, will be achieved through completion of on-site riparian planting and invasive species removal implemented at a minimum 3:1 ratio. There will be 2.7 acres of riparian habitat restoration in order to offset 0.9 acres of permanent impact to critical habitat. All mitigation will be developed, implemented, and monitored in coordination with the NRCS, UDWR, and the USFWS.

Fish and Wildlife Habitat

- Project components such as downstream fish passage notches open up the corridor for migration, and PIT tagging will enhance opportunities for monitoring and data collection.
- Mitigation efforts to reduce fish entrainment in the west side raceway and radial gates include the preparation of an Operation and Maintenance Plan (to be finalized prior to construction) that will specify under which conditions the new radial gates at the diversion will be activated.
- Habitat disturbed from construction activities will be restored using native plant species. Native seed mixes will have a variety of appropriate species (especially woody species where feasible).
- During construction and until the restoration area was fully established, the area will be maintained on a regular basis to prevent the establishment of noxious weeds and invasive plant species.
- Riparian trees will not be removed unless they are non-native and/or specified in the plans.

Human Environment

Cultural/Historical Resources

- Mitigation of the adverse effects will occur through implementation of a treatment plan that has been formalized in a Memorandum of Agreement (MOA). If unknown cultural/historical resources are encountered during excavation activities, construction will stop and the appropriate agencies will be notified. The Treatment Plan commits to the following:
 - Supplemental archaeological site documentation
 - Professional-quality article manuscript for the history of the Tusher Diversion Historic District
 - National Register of Historic Places Registration for the District
 - Archaeological monitoring and report
 - Museum-quality permanent display to be installed in the Green River Archives at the John Wesley Powell Museum in Green River, Utah.

Recreation

- The project has the potential to contribute to the overall enhancement of area recreation, rather than have an adverse impact on the resource.

Socioeconomics

- No additional mitigation measures will be required to further minimize project effects to social and economic resources as described in the FEIS.

Construction Impacts

The following resources will be temporarily impacted by the project as identified in the FEIS.

Soil Resources

- Potential soil disturbance and sediment into Green River during construction. Temporary disturbance to access roads and staging areas during construction.

Water Resources

- Temporary disturbance to river channel - 15.9 ac of temporary impact to open waters; 1.9 ac of temporary impact to ephemeral stream (Tusher Wash); 0.2 ac of temporary impact to wetlands. Construction activities will temporarily impact 2.3 acres due to construction activities occurring in the floodplain.
- Flows in the river will be temporarily altered to accommodate construction activities in the channel. Construction means and methods will be determined during the final design of the project. The Concept Design Report includes general recommended Construction Phasing and Dewatering Plans, which show the potential use of berms, dewatering bladders and pumps.

Air

- Construction activities will temporarily affect air quality in the project area.

Plants

- Approximately 7.8 ac of bare ground, existing road/driveway, and native vegetation disturbed from construction activities will be restored using native plant species. Successful revegetation efforts will be monitored and reported along with photos of the completed project.

Animals***Endangered and Threatened Species, Species of Concern****Yellow-billed cuckoo, southwestern willow flycatcher:*

- Presence/absence surveys will be conducted by NRCS if construction is scheduled to occur between May 15 and August 31st.
- The contractor will not remove riparian trees unless it is either a non-native tree or specified in the construction drawings.

Colorado pikeminnow, razorback sucker, humpback chub, bonytail:

- 15.9 ac of disturbance to the channel during construction (fish habitat; designated critical habitat).
- Indirect impacts to species could occur from vibration.
- To minimize turbidity and sediment mobilization during dredging and construction, silt curtains will be installed around work areas.
- Fish habitat will be temporarily obstructed and degraded due to in-channel work; however, implementation of construction BMPs will minimize this potential.
- The allowable construction work window for the project includes the following:
 - Fish (Green River): November 1st through March 31st

Migratory Birds

- Nesting surveys (presence/absence) will be completed by NRCS if construction is scheduled to occur between May 15 and August 31st.
- The contractor will not remove riparian trees unless it is either a non-native tree or specified in the construction drawings.
- The allowable construction work window for the project includes the following:
 - September 1st through May 31st.

Human Environment***Cultural and Historic Resources***

- Temporary impacts to NRHP-eligible historic sites due to construction activities, staging of equipment and materials, and river access.

Land Use and Rights

- Temporary easement (approx. 5.5 ac.) for BLM access during construction. Special Use Lease (State of Utah) – 15.9 ac (temp. construction).

Public Safety

- During construction, the river itself will be closed to the public due to the safety hazards. Signage will be posted warning boaters and fishermen of the construction activities.

Aesthetics and Scenic Beauty

- Site aesthetics and scenic beauty will be temporarily degraded during construction.

V. EXPLANATION OF THE DECISION

In identifying the preferred alternative, NRCS carefully considered the requirements and intent of the EWPP and the expected beneficial and adverse environmental consequences of each action alternative and the No Action Alternative. NRCS's decision to identify the Replace In Place With Passages Alternative as the selected alternative is based on the following considerations:

The Replace In Place With Passages Alternative best fits the EWPP objective of relieving imminent hazards to life and property while delivering water rights in a manner that is economical with minimal impacts on the environment.

Factors Considered in the Decision

EWPP Regulations and Guidance

The EWPP regulations (7 CFR 624) and manual (EWPP Manual, Title 390, Part 511) identify specific requirements for program funding. These requirements include but are not limited to the following:

- Sponsors must contribute their share of the project costs. The NRCS contribution cannot exceed 75% of the project cost (7 CFR 624.7[b]).
 - The selected alternative was the least-costly action alternative studied. Selecting this alternative ensures that NRCS can contribute a level of funding that is within its budget and that is commensurate with initial funding projections.
- NRCS can provide assistance only for measures that provide protection from additional flooding or soil erosion; that reduce threats to life or property from a watershed impairment, including sediment and debris removal; that restore the hydraulic capacity to the maximum extent practical; and are economically and environmentally defensible and technically sound (7 CFR 624.6[c]).
 - The selected alternative will protect the Green River Diversion from future flooding and erosion events thereby reducing the potential for loss-of-life and property that may occur in a dam failure event.
- EWPP funds cannot be used to solve watershed or natural problems that existed prior to the natural disaster (Title 390, Part 511.4[v]).
 - The selected alternative will solve the problem of structural damage incurred during flood events on the Green River Diversion.
- EWPP funds can be used for structural, enduring, long-life conservation practices including, but not limited to, grassed waterways, terraces, embankment ponds, diversions, and water-conservation systems except where the recovery practices are eligible for assistance under the Emergency Conservation Program (ECP) administered by the Farm Service Agency (7 CFR 624.6[b][3]).
 - The selected alternative will rehabilitate the Green River Diversion which is a structural, enduring, long-life conservation practice that is not eligible for assistance under ECP.
- When planning the recovery practices, NRCS will emphasize measures that are the most economical and are to be accomplished using the least damaging practical construction techniques and equipment that retain as much of the existing characteristics of the landscape and habitat as possible (7 CFR 624.6[e]).
 - The selected alternative can be constructed using simple construction techniques and will concentrate construction in the same location as the existing diversion structure.
- NRCS may determine that a measure is not eligible for assistance for any reason, including economic and environmental factors or technical feasibility (7 CFR 624.6[f]).
 - It has determined that the selected alternative as proposed in the FEIS (including associated mitigation measures) is economically, environmentally, and technically feasible given the amount of EWPP funding available.

Other Federal Regulations and Guidance

NRCS also based its decision on Federal regulations and guidance that apply to the project. The regulations and guidance considered in detail include the following:

Section 404 of the Clean Water Act. The selected alternative will require work within jurisdictional waters of the U.S. A USACE Section 404 permit will be required to complete the construction activities associated with the project. Project plans show a temporary impact to waters of the U.S. Consultation with the USACE will be performed once the project design has advanced to identify dredge/fill impacts (area and volume) to jurisdictional waters. All necessary permits will be obtained prior to commencement of emergency EWP program actions.

Wetlands (Executive Order 11990). The selected alternative will permanently affect wetlands due to clearing and grubbing. Wetlands are considered waters of the U.S., and will be permitted as such (see above).

National Historic Preservation Act. The selected alternative will impact resources regulated under Section 106 of the NHPA. These resources included the Green River Diversion itself and the East Side Canal, both of which are eligible for listing on the National Register of Historic Places.

Section 7 Endangered Species Act. Formal consultation with the USFWS concluded in the determination that the selected alternative May Affect, and is Likely to Adversely Affect Federally-listed species. The Biological Opinion dated March 13, 2015 states that the level of anticipated take will not jeopardize the continued existence of Federally-listed species or destroy or adversely modify designated critical habitat.

Floodplains (Executive Order 11988). The selected alternative will require work within mapped FEMA floodplains. However, hydraulic modeling output has shown that only slight differences in the flood elevation will occur upstream of the diversion. Analysis revealed that the difference in water depth between existing conditions and post-project conditions will be negligible.

Environmental Justice (Executive Order 12898). The selected alternative will not cause any disproportionate adverse human health or environmental effects to environmental justice populations.

Tribal Consultation and Coordination (Executive Order 13175). Input was solicited from tribal representatives during the EIS process. Tribal representatives did not respond to coordination letters. The selected alternative will not affect any known tribal resources.

Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.). The selected alternative will require work on BLM property. NRCS coordinated with the BLM regarding the project. A temporary use permit will be required for the staging and access for the construction activities associated with the project. Consultation with the BLM will be ongoing, and once the project design has advanced further coordination will be necessary for modification of the rights-of-way and/or easements. Further coordination with the BLM will be performed as the project progresses during final design.

Federal Power Act (16 U.S.C. 791 et seq.). NRCS consulted with the Federal Energy Regulatory Commission (FERC) due to the diversion's association with the Thayn hydropower/hydroelectric facility (FERC Project # 6643). The Thayn facility is currently exempted from FERC licensing;

however, implementation of the selected alternative will require an amendment from FERC in order to maintain the exempt status.

VI. PUBLIC INVOLVEMENT

The public involvement process is presented in the FEIS. The following presents a summarized chronology of the public involvement process through scoping, DEIS and FEIS:

October 2012 – May 2013	Early Scoping Process, including public meetings
June 3, 2013	Notice of Intent to develop an EIS published in the Federal Register
March 14, 2014	Notice of Availability of the DEIS published in the Federal Register
April 10, 2014	DEIS Public Meeting held in Green River, Utah
June 27, 2014	Notice of Availability of the FEIS published in the Federal Register

VII. RECOMMENDATION

As the State Conservationist for the NRCS, I am the responsible Federal Official for all NRCS projects in Utah. I conclude that:

1. The proposed Green River Diversion Rehabilitation project uses all practicable means, consistent with other essential considerations of national policy, to meet the goals established in NEPA.
2. The project will serve the overall public interest.
3. The FEIS has been prepared, reviewed, and accepted in accordance with the provisions of NEPA as implemented by the department's guidelines for the preparation of environmental impact statements.
4. The project meets the needs of the local sponsor.

I propose to implement the Green River Diversion Rehabilitation project as the selected alternative.

By:



David C. Brown
State Conservationist
Natural Resources Conservation Service, United States Department of Agriculture

Date: 4-2-15