US Army Corps
of Engineers ®
Walla Walla District
BUILDING STRONG®

LEVEE REHABILITATION PROGRAM ASSISTANCE
PUBLIC LAW 84-99

GOODING DIVERSION FLOOD REDUCTION PROJECT
LITTLE WOOD RIVER
GOODING COUNTY, IDAHO

ENVIRONMENTAL ASSESSMENT

In compliance with the
National Environmental Policy Act of 1970

ADMINISTRATIVE RECORD – DO NOT DESTROY

PROJECT FILE NUMBER: PPL-C-2018-0031

September 2018

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b. Flood Control and Coastal Emergency Act (PL 84-99)
c. 33 CFR 203 (and ER/EP 500-1-1) Emergency Employment of Army and Other Resources
d. 40 CFR 1500-1508 Regulations for the Procedural Provisions of the National Environmental Policy Act
e. ER 200-2-2 (33 CFR 230) Environmental Quality Procedures for Implementing the National Environmental Policy Act

1.3 Project Location

The Gooding Diversion Flood Reduction Project is located on the Little Wood River in south-central Idaho, in the City of Gooding (Figure 1-1). The proposed action area is located at Range 15 east, Township 5 south, Sections 25, 26, 28, and 36, Boise Meridian.

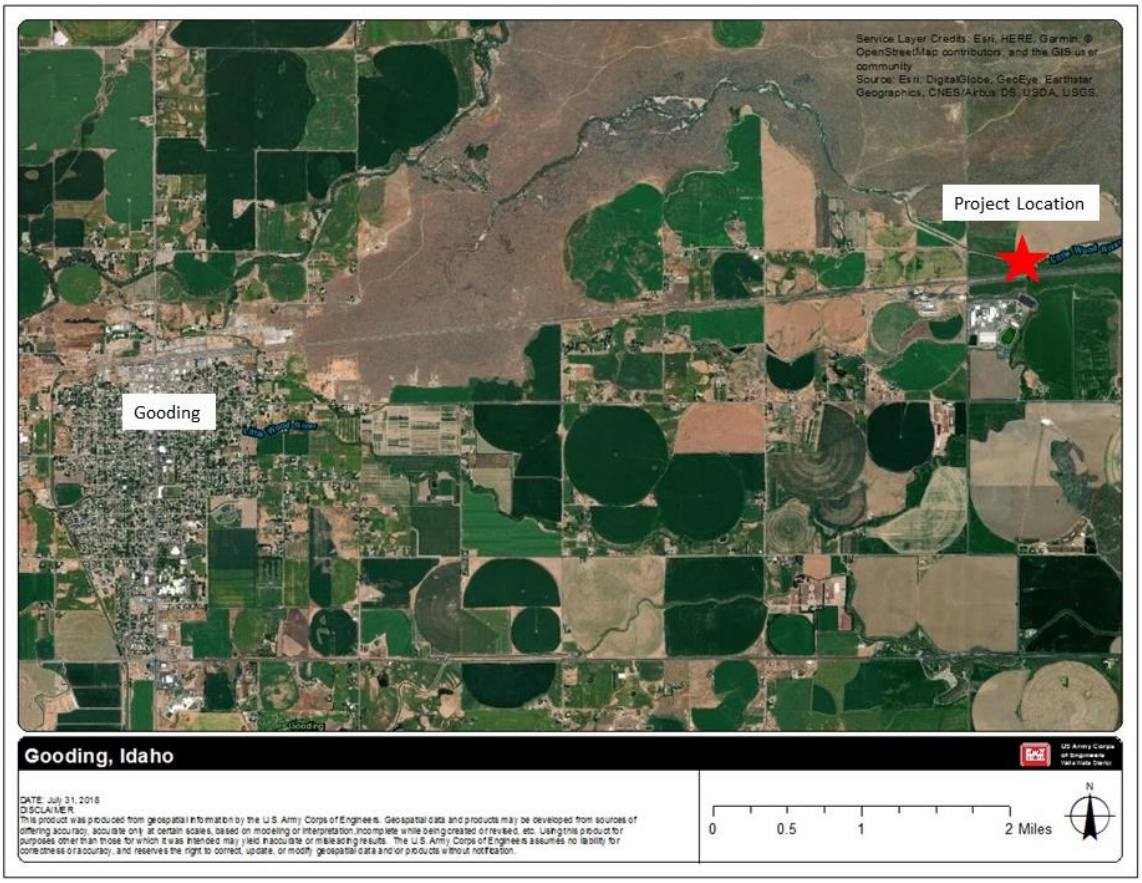

Figure 1-1: Project location in Gooding, Idaho

1.4 Background Information

The City of Gooding (City) has a population of about 3,567, and occupies approximately 1.5 square miles near the confluence of the Big Wood River and Little Wood River, which merge to form the Malad River.

Gooding is situated between Boise and Twin Falls, Idaho and is considered the trading center of one of the richest irrigated agricultural districts in the United States. Cattle and sheep ranching, irrigated and dry farming contribute much to the economy.

The Little Wood River is a large tributary of the Malad River (hydrologic unit code 17040219) in south-central Idaho, with headwaters in the Pioneer Mountains. The Little Wood River is approximately 130 miles long and drains an area approximately 1,132 square miles. The Little Wood River drains into the Malad River west of the City. The Malad River drains into the Snake River just west of the Malad Gorge State park and north of Hagerman, Idaho.

1.4.1 Project Description

The U.S. Army Corps of Engineers Walla Walla District (Corps) proposes to repair the Safety way diversion structure (part of the Gooding Diversion Flood Reduction Project) and the left and right bank channel walls along the Little Wood River in Gooding, Idaho.

The diversion structure and bank channel walls were damaged during a high water event during the 2017 flood season.

The Gooding diversion project consists of flood reduction channels (safety way channel and outlet channel) and two concrete diversion structures; the safety way diversion structure (river right) is the focus of this rehabilitation (Figure 1-2). The safety way diversion structure consists of three hydraulically operated, 6-foot wide rectangular gates. The safety way channel is approximately 3,800 feet in length. The safety way channel is an unlined excavated earth channel for approximately 3,600 feet; the last 200 feet of the flood channel has steeper side slopes and a channel bottom width of 34 feet. The safety way channel has a design capacity of 600 cubic feet per second (cfs). The purpose of the safety way diversion structure is to divert flood water from the Little Wood River to the Big Wood River as shown in Figure 1-3.

Figure 1-2. Aerial view of the diversion structure and the safety way channel.

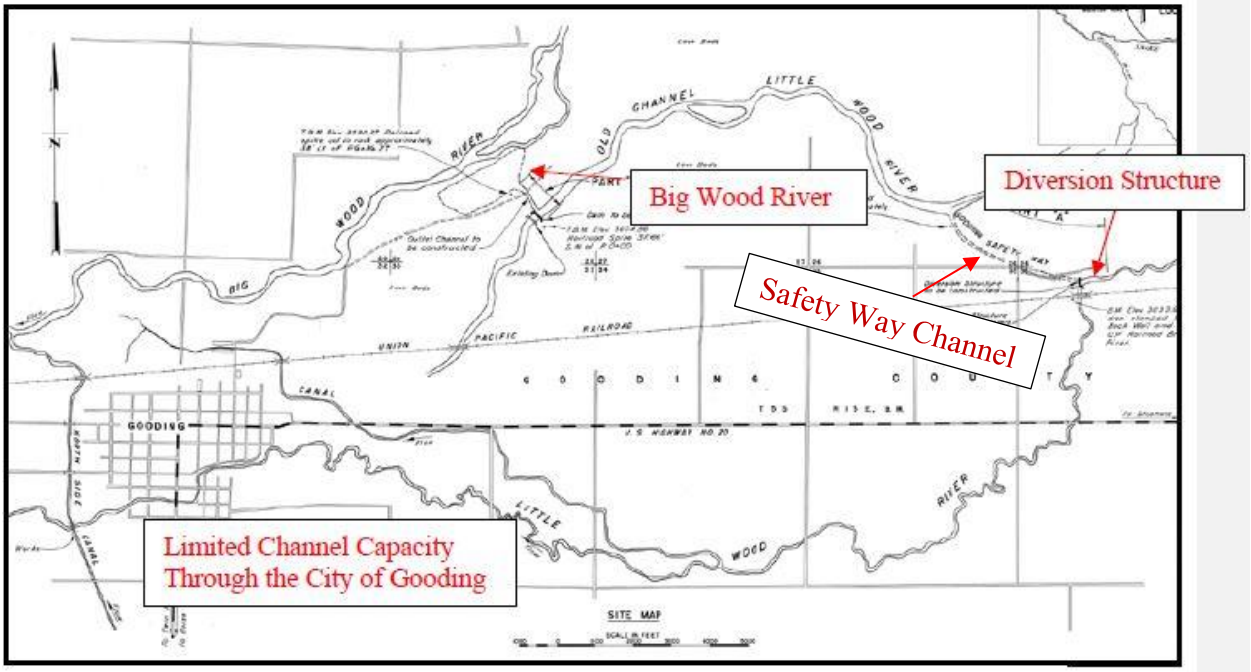

Figure 1-3. Overview Map showing location of diversion structure, the City of Gooding and the Big Wood River.

The Little Wood River experienced high flows (around 700 cfs) as a result of an above normal snowpack and subsequent snow melt and run off during the spring of 2017. The high flows caused undermining of the safety way diversion outlet apron, headcutting (abrupt vertical drop), and erosion of the channel. The end wall separated from the outlet apron leading to the undermining of the apron and end wall (Figures 1-4 and 1-5). Additionally the bank channel walls directly downstream of the safety way diversion structure have eroded (Figures 1-6 and 1-7).

Figure 1-4. View of end wall of concrete outlet apron.

Figure 1-5. View of concrete outlet apron from right bank.

Figure 1-6. View of diversion structure and eroded left bank channel wall facing upstream.

Figure 1-7. View of eroded right bank channel wall facing slightly downstream.

The Little Wood River through the City has limited channel capacity. Based on the 1985 FEMA Flood Insurance Study the channel capacity is around 700-cfs which is between a 50 and a 100-year flood event. The Little Wood River near the City and the safety way channel are both ungaged reaches. During the 2017 high water event, the diversion gates were operated to reduce the chance of flooding through the City. There was some local runoff that caused the channel through the City to reach bankfull and the four gates of the safety way channel were fully opened to reduce the chance of flooding in the City. Based on the best available data, two upstream river gages nearly 65 miles away, it was estimated that the Little Wood River through the City was at bank-full (675-cfs) and the safety way channel reached its design capacity (700-cfs) during the high flow event.

If the repairs are not done to restore the structure to its original functionality, more of the diversion structure and channel would erode causing further damage which would ultimately lead to complete failure. It has been estimated that an event as small as a 40-year flood could cause enough erosion that it would lead to major flood damage to the City.

Areas at risk of being flooded include the main city center of Gooding and the surrounding residential and commercial areas. There are 1062 structures in the leveed area, which includes 982 residences, 65 commercial and industrial buildings, 4 agricultural buildings, and 11 public and educational facilities. Figure 1-8 shows the areas within the 100 year floodplain that are at risk of being flooded. Whereas, if the repairs were made, the diversion structure and channel could withstand nearly a 200-year flood event.

Figure 1-8. Gooding diversion structure, canal centerline, and area at risk of being flooded.

This Environmental Assessment (EA) was prepared in accordance with Engineer Regulation (ER) 200-2-2, *Procedures for Implementing NEPA,* and the Council on Environmental Quality (CEQ) *Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (NEPA),* Title 40 CFR, Part 1500-1508. The objective of the EA is to evaluate potential environmental effects of the proposed levee rehabilitation action and determine if significant effects would result. If such effects are less than significant based upon context and intensity of effect, a Finding of No Significant Impact (FONSI) would be issued and the Corps would proceed with the proposed action. If the environmental effects are determined to be significant, an Environmental Impact Statement (EIS) would be prepared before a decision is reached on whether to implement the proposed action. Applicable laws under which these effects would be evaluated include but are not limited to, NEPA, the Endangered Species Act, the Clean Water Act, the Clean Air Act, and the National Historic Preservation Act.

NEPA is a full disclosure law, providing for public involvement in the NEPA process. All persons and organizations that have a potential interest in this proposed action – including the public, other Federal agencies, state and local agencies, Native American Tribes, and interested stakeholders – are encouraged to participate in the NEPA process.

1.4.2 Authority

On September 7, 2017, the city of Gooding (City) requested assistance from the Corps to repair the damage to the flood diversion structure under the Flood and Coastal Storm Emergencies Act (PL 84-99), which amended Section 5 of the Flood Control Act of 1941 (33 USC 701n). Under this law, the Secretary of the Army, acting through the Chief of Engineers, is authorized to undertake activities including disaster preparedness, Advance Measures, emergency operations (Flood Response and Post Flood Response), rehabilitation of flood control works threatened or destroyed by flood, protection or repair of Federally authorized shore protective works threatened or damaged by coastal storm and provisions of emergency water due to drought or contaminated source. The Corps implements PL 84-99 in accordance with its regulations (33 CFR 203 and ER/EP 500-1-1). In response to the City's request for rehabilitation assistance, the Corps prepared a "Rehabilitation Project Information Report for Gooding diversion flood reduction project Little Wood River, Idaho" which was determined acceptable by the U.S. Army Corps of Engineers Northwestern Division on February 12, 2018.

1.5 Purpose and Need

The Corps proposes to repair the Gooding Diversion Flood Reduction Project (safety way diversion structure and right and left bank channel walls) along the Little Wood River in Gooding County, Idaho, under the authority of PL 84-99. The purpose of the proposed action is to rehabilitate damaged flood works features that provide flood risk management to affected areas of the community of Gooding, Idaho. Rehabilitation would include repairing the diversion structure and left and right bank channel walls to the "as-was condition" in a manner that would not change the character, scope, or size

of the original design. The action is needed because the flood diversion structure and channel protects nearby homes, agricultural land, and municipal facilities that are now at increased risk from flood damages.

1.6 Timeline

Construction would occur during September and October, 2018 and possibly into November, if needed. It is anticipated that construction activities would take approximately one month.

2 - Alternatives

Two alternatives are evaluated in the EA; the No Action Alternative and Alternative 2 - Restore Outlet Apron and Channel Walls to as-was condition (the Proposed Action Alternative). The statutory objectives/scheme supporting an action can serve as a guide to determine the reasonableness of objectives outlined in the EA – in this case assistance under PL 84-99. Additionally, an agency's obligation to consider alternatives under an EA is a lesser one than under an Environmental Impact Statement. Consequently, only the No Action and Proposed Action Alternatives were analyzed further. The No Action Alternative does not satisfy the project's purpose and need, but NEPA requires analysis of the No Action Alternative to set the baseline from which to compare other alternatives. No Action does not mean there would be no environmental impacts from this alternative.

2.1 Alternative 1: No Action

Under the No Action Alternative, the Corps would not re-construct the damaged diversion structures (outlet apron and channel walls) to the as-was condition. The undermining of the outlet apron would induce diversion gate failure. This would result in flood waters entering the City.

2.2 Alternative 2: Restore outlet apron and channel walls to as-was condition (Proposed Action)

Under the proposed action, the Corps would restore the safety way diversion structure to the as-was condition. The proposed action involves removing the undermined concrete section and replacing it with an outlet apron that would not be susceptible to head cutting in the near future. The existing outlet apron and side walls would be demolished. Suitable fill material and bedding for the new outlet apron would be placed in the channel. The side channel walls would also be filled and graded (Figure 2-1). A new outlet apron and side walls would be placed in the same footprint. The end of the outlet apron would include a stem wall for stability. Well graded two foot diameter (maximum) rip rap would fill the area in the channel downstream of the apron where a basin has formed due to head cutting. Figure 2-2 shows the typical cross sections for this repair. It is estimated that repairs would require 75 cubic yards of concrete to repair the apron and sloped side walls. The project would also require approximately 40 cubic yards of granular fill (< $^3/_4$ inch) to lay down between the dirt and concrete,

approximately 40 cubic yards of bankfill to re-slope the eroded channel banks, and 85 cubic yards of rip-rap.

Access to the construction site would be along a maintained gravel road (E 1700 S) on the left bank of the safety way channel. There is a bridge crossing the safety way channel to access the right bank on private farmland. Equipment would move along a primitive farm road on the right bank. The type of equipment expected includes excavators, vibratory rollers, cement mixing truck, cement forms, and rebar benders. Equipment would be staged on a gravel apron above the road on the left bank. Equipment storage Best Management Practices are outlined in the Environmental Commitments Green Sheet (Appendix A).

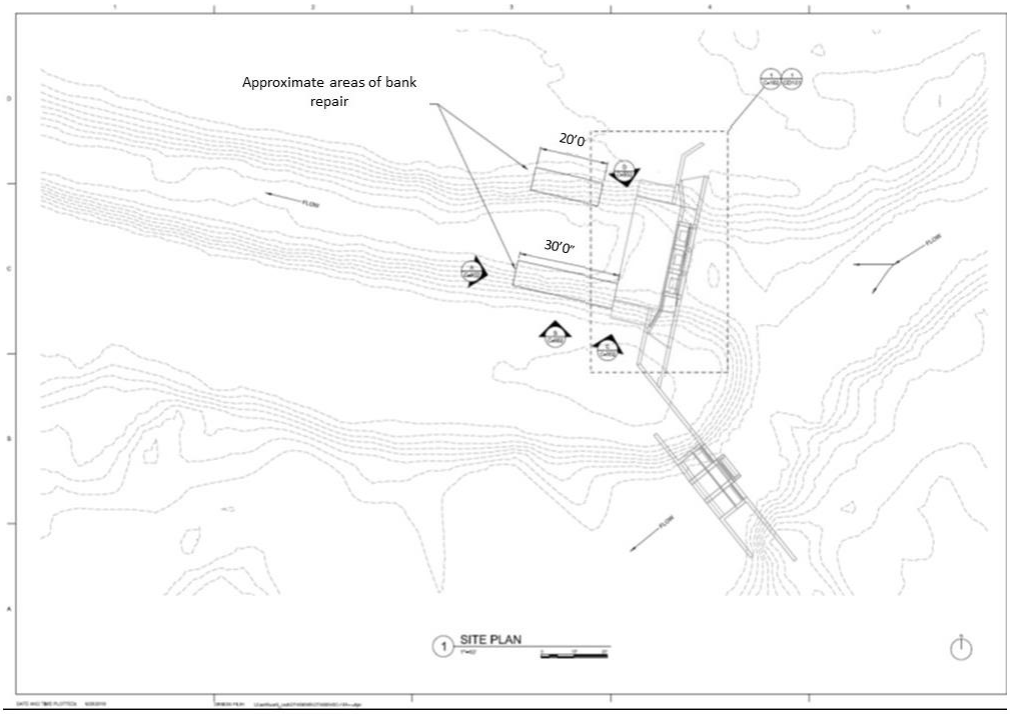

Figure 2-1. Diversion rehabilitation

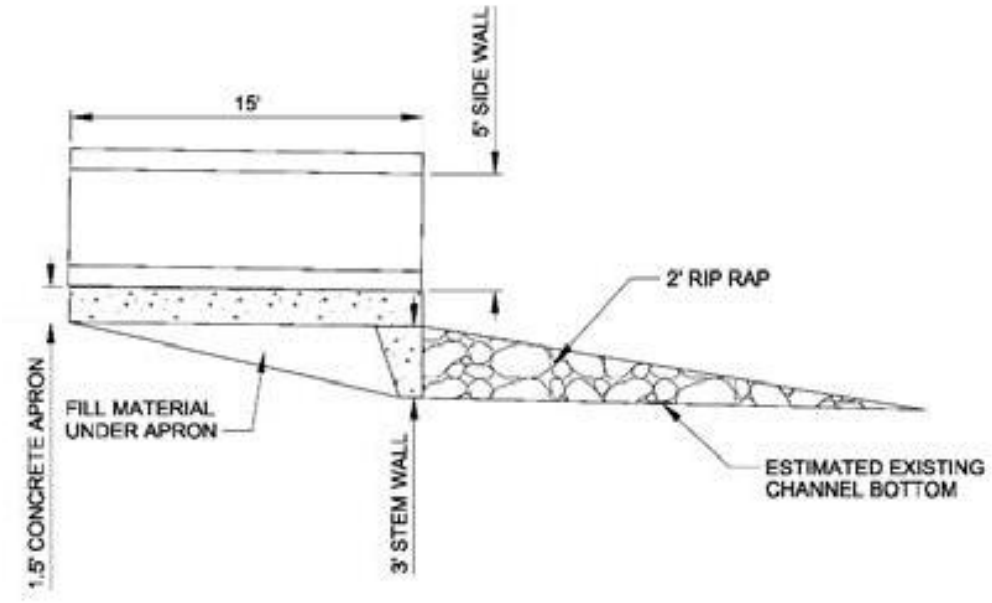

Figure 2-2. Typical cross section for slope and rip rap placement

3 - Affected Environment and Environmental Effects

This section describes the existing affected environment (existing condition of resources) and evaluates potential environmental effects on those resources for each alternative. Although only relevant resource areas are specifically evaluated for impacts, the Corps did consider all resources in the proposed project area and made a determination as to which ones to evaluate. The following resource areas were evaluated: Water Quality, Aquatic Resources, Vegetation, Wildlife, Threatened and Endangered Species, Land Use, Historic and Cultural Resources, Geology and Soils, Socioeconomics, Climate Change, and Cumulative Impacts. It was determined that it was not necessary to evaluate Aesthetics/Visual Quality, Environmental Justice, Noise, Recreation, or Air Quality as implementation of the proposed action would not affect these resources in any potentially significant way (Table 3-1).

Table 3-1. Environmental Resources not evaluated further.

Environmental Component	Explanation
Aesthetics/Visual Quality	The proposed action would restore the levee to its original condition. No noticeable permanent structure or visual obstruction would remain.
Environmental Justice	The proposed action would have no negative impacts (e.g. economically) on any minority/ethnic group or social class.
Noise	The project area is located in a remote rural area. There is one development adjacent to the project area with a house or building located on the property. The project area is surrounded by farmland and basalt outcroppings. There is a railroad track to the north. Construction noise would come from excavation and would take approximately one week. The construction would likely elevate noise above background levels, but any impacts would be minor and temporary.

Recreation	The proposed action would not affect recreational opportunities during construction or after completion. There are no public recreational opportunities at the proposed action site.
Air Quality	The project area meets Idaho State's ambient air quality standards and is in "attainment." Air quality would be negligibly impacted by the proposed action**.**

The following descriptors are used in the body of this chapter for consistency in describing impact intensity in relation to significance.

• No or Negligible Impact: The action would result in no impact or the impact would not change the resource condition in a perceptible way. Negligible is defined as of such little consequences as to not require additional consideration or mitigation.

• Moderate Impact: The effect to the resource would be perceptible; however, not severe and unlikely to result in an overall change in resource character.

• Significant Impact: The effect to the resource would be perceptible and may be severe. The effect would likely result in an overall change in resource character.

3.1 WATER QUALITY

3.1.1 Affected Environment

The Little Wood River is approximately 106.2 miles long and the impaired segment (or 303 (d) listed the Clean Water Act) is 80.8 miles long. The Little Wood River is divided up into four segments based on sources of water (Figure 3-1). Many of these water bodies were identified on the 1998 303(d) list as being impaired by bacteria, dissolved oxygen, nutrients, sediment, flow alteration, or unknown pollutants. EPA also identifies segments of the Little Wood River as being impaired by temperature. These pollutants may be impacting the beneficial uses of the subbasin, which includes cold water aquatic life (CWAL), salmonid spawning (SS), primary contact recreation, and secondary contact recreation.

Segment 1 runs from the headwaters to the reservoir. Segment 2 runs from the reservoir to the East/West Canal diversions of the Little Wood River Irrigation District. Segment 3 runs from the East/West Canal diversion to the Silver Creek confluence. Segment 4 runs from the Silver Creek confluence to the Big Wood River.

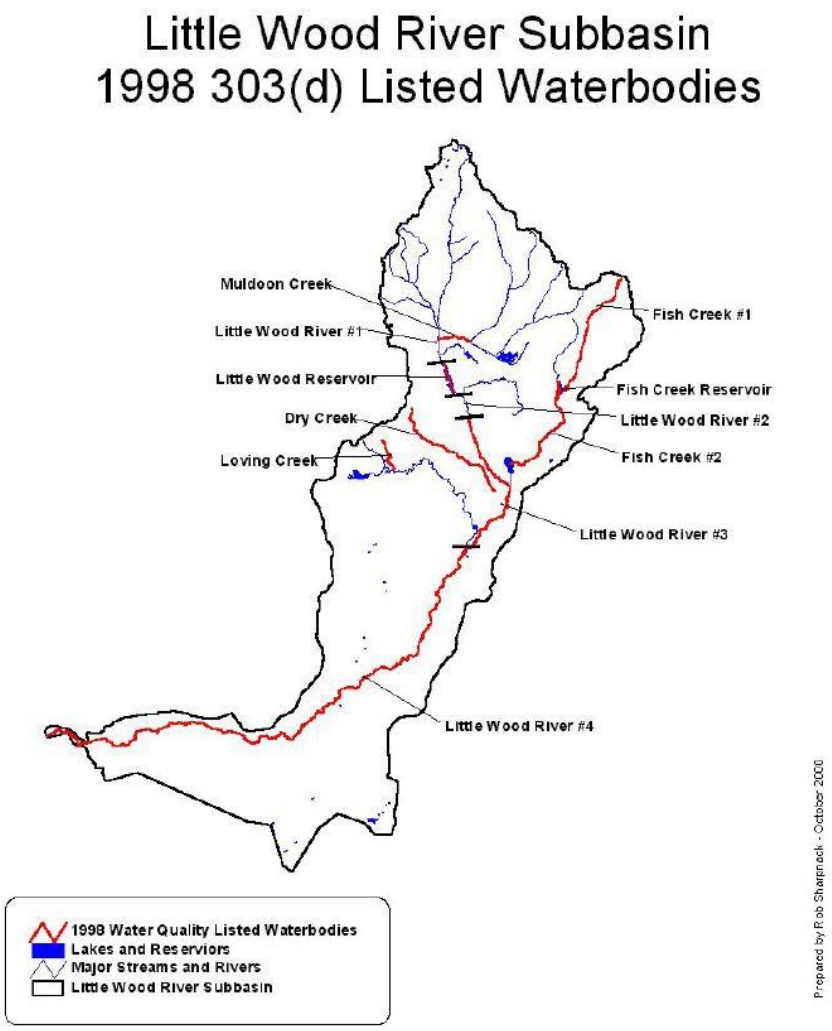

Figure 3-1. Impaired water bodies of the Little Wood River Subbasin.

The proposed action area, located in Segment 4 (Figure 3-1) of the Little Wood River, is listed as impaired for sediment, nutrients, and temperature. Bedload sediment (percent fines) average values are 3.3 mg/L which is well below the average assessment criteria of 50 mg/L. The critical period for sediment transport is typically during the spring and early summer, when flow is elevated due to runoff events however, since this is a spring-fed system and flow regulated stretch of the river, critical periods are extended to include the irrigation season (March through July). Seasonally, total suspended solids values are elevated in February (41.6 mg/L), March (51.9 mg/L), April (41.5 mg/L), May (25.9 mg/L), and June (31.0 mg/L), and are consistently low (8.5 mg/L) the rest of the year. These values, except March, remain below the average assessment criteria of 50 mg/L (Claire 2005).

Total phosphorus (TP) and total inorganic nitrogen (TIN) are likely impacting water quality. The TP average value (0.571 mg/L) is elevated above the average assessment criteria of 0.100 mg/L. The TIN average value (0.761 mg/L) is elevated above the average assessment criteria of 0.480 mg/L. While chlorophyll data is limited, two values that were elevated above 15 ug/L may indicate that nuisance aquatic vegetation is occurring in the water body as a result of the elevated TP and TIN levels. The critical

period for nuisance aquatic vegetation is typically during the late spring into the early fall months when primary production is elevated (Claire 2005).

Maximum daily and average daily temperatures from 24-hour temperature data is analyzed based on critical time periods for CWAL and SS. The critical time periods for CWAL are June 22 through September 21. The critical time periods for SS is from October 1 through July 15. Maximum and average daily temperatures for CWAL are 71.6 degrees F and 66.2 degrees F, respectively. Maximum and average daily temperatures for SS are 55.4 degrees F and 48.2 degrees F, respectively. If these temperatures are elevated more than 10% of the time, then in most cases, temperature has an impact on beneficial uses for cold water aquatic organisms. Coldwater fish such as trout need cold waters for optimum health during various stages of their lives. When temperatures are above optimum levels, fish are physically stressed and are more likely to get fungal infections and have difficulty getting enough oxygen. Thermal stress can also make fish more susceptible to toxic substances that may be present (Claire 2005).

Temperature appears to be impacting CWAL designated uses but not SS designated uses in segment 4 for the period of record (2001-2003). Daily average temperatures (75.7% exceedance) and daily maximum temperatures exceed the 10% exceedance policy for CWAL; whereas, the daily average temperatures (3.0% exceedance) nor the daily maximum temperatures (0% exceedance) do not exceed the 10% exceedance policy for SS.

Temperature elevations may be being influenced by lack of natural Little Wood River flow occurring in the system due to flow alteration. The majority of the water is from a spring-fed system, which has a tendency to have elevated temperatures due to wide stream widths and ground water influence. Additionally, the upper portion of the river runs through unweathered basalt flows and metamorphic rock. Lastly, the Little Wood River is located in southern Idaho, a desert region where air temperatures are typically hot during summer months (Claire 2005).

3.1.2 Environmental Consequences

3.1.2.1 Alternative 1: No Action Alternative

If the repairs are not done to restore the structure to its original functionality, more of the diversion structure and channel would erode causing further damage which would ultimately lead to complete failure. The No Action Alternative would result in increased erosion, turbidity, and sedimentation. The size of the flood and the degree to which the diversion structure fails would determine whether the impacts to water quality would be considered significant.

3.1.2.2 Alternative 2: Proposed Action – Restore outlet apron and channel walls to as-was condition

The diversion structure is currently used to divert 7.21 cfs of flow to recharge the aquifer from around March 15th through November 15th each year. These dates vary based on the need for flood control. The metal gates on the diversion structure would be closed during the proposed construction. The channel cannot be completely dewatered due to

leakage at the gates and potential seepage of groundwater from the Little Wood River. The amount of water expected is unknown. The contractor would be responsible for removing the water, as necessary, to complete construction. All dewatered water would be discharged upland. No water would be discharged into the safety way channel or the Little Wood River. The water would not be in contact with wet concrete or any type of debris resulting from construction so there is no possibility of contamination. The Proposed Action would have no or negligible impacts on water quality, and would prevent some erosion impacts anticipated under the No Action Alternative.

3.2 AQUATIC RESOURCES

3.2.1 Affected Environment

The Little Wood River from Silver Creek to City of Shoshone (Shoshone) has been identified as a cold water fishery. The desired game fishes for the cold water fisheries are rainbow (*Oncorhynchus mykiss*) and brown trout (*Salmo trutta*). The segment that runs through the proposed action area, from Shoshone to the mouth, has been identified as a warm water fishery. The desired game fish for the warm water fisheries is small mouth bass (*Micropterus dolomieu*). The habitat quality in the lower segment of the river is poor. This portion of the river is sometimes dewatered for irrigation and power production purposes. Anglers seasonally fish this reach but angler effort and harvest data are not available.

The Little Wood River natural alignment and vegetation was dramatically altered during the construction of the canal through the City. The creation of the Gooding Canal has contributed to a lack of fish habitat through this stretch of the Little Wood River. Limited potential to restore fish habitat along the river through town exists without substantially altering the current alignment and adjacent landscape.

The Gooding diversion structure diverts water from the lower segment of the Little Wood River into the safety way channel. Fish habitat in the safety way channel is poor due to lack of vegetation cover, channel complexity, and permanent water. Although a constant flow of 7.21 cfs is maintained, the safety way channel is not regularly used for fish passage because water drains into the ground downstream of the diversion structure; the exception would be under extremely high flows when water travels the length of the channel and diverts into the Big Wood River.

Fish species present in the Little Wood River include: brook trout (*S. fontinalis*), bridgelip sucker (*Catostomus columbianus*), Utah sucker (*C. ardens*), redside shiner (*Richardsonius balteatus*), longnose dace (*Rhinichtys cataractae*), speckled dace (*R. osculus*), Utah Chub (*Gila atraria*), mountain whitefish (*Prosopium williamsoni*), freshwater sculpin (*Cottus sp.*), and common carp (*Cyprinus carpio*).

Amphibian species include: Pacific tree frogs (*Hyla regila*), leopard frogs (*Rana pipiens*), bullfrogs (*Rana catesbeina*), western toad (*Anaxyrus boreas*), and tiger salamander (*Ambystoma tigrinum*).

Common aquatic insects include: mayflies (*Ephemeroptera* spp.), caddisflies (*Trichoptera* spp.), dragonflies (*Odonata* spp.), and stoneflies (*Plecoptera* spp.).

3.2.2 Environmental Consequences

3.2.2.1 Alternative 1: No Action Alternative

Under the No Action Alternative there would be small effects on aquatic resources in the project area. The Corps would not repair the diversion structure or stream banks, but would allow the system to operate in the damaged state. The continued erosion of the structure would have moderate impacts to aquatic resources in the area.

Implementing the No-Action Alternative may lead to structure failure, requiring flood fights that would result in a less carefully designed and implemented construction effort. Such emergency actions could have moderate impacts to aquatic resources by disrupting spawning, displacing adults, and potentially reducing reproductive success of aquatic species.

3.2.2.2 Alternative 2: Proposed Action – Restore outlet apron and channel walls to as-was condition

The metal gates on the diversion structure would be closed during the proposed construction and the channel would be dewatered. There is the potential to impact aquatic resources, especially fish species or larval aquatic insects, if they are not able to relocate to the Little Wood River. Although dewatering and construction activities could result in the death or removal of aquatic species in the safety way channel, the number of aquatic resources present during the construction period is not expected to be high and the overall impact to the Little Wood River subbasin is expected to be moderate.

3.3 VEGETATION

3.3.1 Affected Environment

Across the Intermountain West, shrubsteppe communities have been lost or degraded by extensive energy extraction, alteration of the vegetation through over-grazing, invasion by exotic plants, changes in fire frequency, and conversion to cropland. Today, less than 50% of Idaho's historic shrubsteppe remains and much of it is degraded, fragmented, and/or isolated from other similar habitats. Gooding, Idaho is located in a sagebrush-grass region of south central Idaho. Conversion to cropland has resulted in the greatest loss of shrubsteppe in the City, leading to a fragmented landscape and a differentially high loss of deep-soil communities.

The Sagebrush-grass region in the project area includes eight species of sagebrush: big sagebrush (*Artemisia tridentata*), three-tip sagebrush (*A. tripartita*), silver sagebrush (*A. cana* subspecies *viscidula*) low sagebrush (*A. arbuscula*), black sagebrush (*A. nova*), early sagebrush (*A. longiloba*), stiff sagebrush (*A. rigida*), and Owyhee sagebrush (*A. papposa*). The understory in undisturbed condition is well-developed and dominated by perennial grasses such as bluebunch wheatgrass (*Pseudoroegneria*

spicata), Sandberg bluegrass (*Poa secunda*), and Idaho fescue (*Festuca idahoensis*). Some sensitive plant species around the project area include slender moonwart (Botrychium lineare), meadow pussytoes (*Antennaria corymbosa*), mourning milkveth (*Astragalus atratus*), bugleg goldenweed (*Pyrrocoma insecticruris*), and obscure phacelia (*Phacelia inconspicua*).

Riparian vegetation in the immediate study area is basically nonexistent. Vegetation along the safety way channel is primarily agricultural or weeds which provide very little benefit to the system. Benefits would include shade and allochthonous materials (arboreal materials imported into an ecosystem) such as woody debris, plant matter, and insects.

3.3.2 Environmental Consequences

3.3.2.1 Alternative 1: No Action Alternative

Under the No Action Alternative there would be no effect on vegetation in the project area. The Corps would not repair the Gooding diversion structure or stream banks, but would allow the system to operate in the damaged state. No ground disturbing activities would take place and no alterations of the structure would occur. The continued erosion of the structure would have no negative impact to vegetation in the area.

3.3.2.2 Alternative 2: Proposed Action – Restore outlet apron and channel walls to as-was condition

Under the Proposed Action Alternative, there would be small, temporary impacts to vegetation in the proposed action area. Repair site access on the right bank and excavation would disturb vegetation. Less than an acre of vegetation would be impacted by the proposed construction. Impacts to vegetation would be moderate.

3.4 WILDLIFE

3.4.1 Affected Environment

Some of the many species of wildlife that inhabit shrubsteppe can only be found in these semi-arid communities. Greater sage-grouse (*Centrocercus urophasianus*), sagebrush sparrows (*Artemisiospiza nevadensis*), sage thrashers (*Oreoscoptes montanus*), and pygmy rabbits (pygmy rabbits) are among an elite group of species that depend on sagebrush and are termed “sagebrush obligates.” A host of other birds, mammals, reptiles, and insects are found primarily in sagebrush-steppe or other shrubsteppe communities.

Gallinaceous birds such as grouse, pheasants, quail, partridge, and chukar (*Alectoris chukar*) live in the open shrub-steppe habitat encompassing the project area. Additionally, an abundance of small mammals and reptiles live throughout the project area scattered among the rocks and vegetation. Large numbers of water fowl migrate through the project area during the spring and fall. Raptor species such as hawks, eagles, and owls fly throughout the project area and prey upon small birds, mammals,

and reptiles. Deer and pronghorn antelope (*Antilocapra americana*) use the shrub-steppe habitat in the project area as their winter range providing food for predatory species such as coyotes (*Canis latrans*), grey wolves (Canis lupus), and cougars (*Puma concolor*). Other species commonly found in the shrub-steppe habitat surrounding the project area are listed below.

Mammals: mule deer (Odocoileus hemionus), white-tailed deer (*Odocoileus virginianus*), red fox (Vulpes vulpes), American badger (Taxidea taxus), raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), cottontail (Sylvilagus nuttalli), Yuma myotis (*Myotis yumanensis*), long-eared myotis (*M. evotis*), long-legged myotis (*M. volans*), western small-footed myotis (*M. ciliolabrum*), deer mouse (*Peromyscus maniculatus*), Virginia opossum (Didelphis virginiana), common porcupine (Erethizon dorsatum), montane vole (*Microtus montanus*), North American wolverine (*Gulo gulo luscus*), bobcat (*Lynx rufus*), and black bear (*Ursus americanus*).

Game Birds: wild turkey (*Meleagris gallopano*), California quail (*Lophrtyx californicus*), ring-necked pheasant (*Phasianus colchicus*), Columbian sharp-tailed grouse (*Tympanuchus phasianellus*), grey partridge (*Perdix perdix*), and mourning dove (*Zenaida macroura*)

Waterfowl: mallard (*Anas platyrhynchos*), gadwall (*A. strepera*), cinnamon teal (*A. cyanoptera*), American wigeon (*A. Americana*), northern shoveler (*A. clypeata*), northern Pintail (*A. acuta*), green-winged teal (A. carolinensis), canvasback (*Aythya valisineria*), redhead ducks (*Aythya Americana*), lesser Scaup (Aythya affinis), ring-necked duck (*Aythya collaris*), common merganser (*Mergus merganser*), common goldeneye (*Bucephala clangula*), Canada geese (Branta canadensis), tundra swan (*Cygnus columbianus*), American coot (*Fulica americana*), pied-billed grebe (*Podilymbus podiceps*), eared grebe (*Podiceps nigricollis*), and western grebe (*Aechmophorus occidentalis*).

Woodpeckers: Three-toed woodpecker (*Picoides dorsalis*), downy woodpecker (*Picoides pubescens*), and northern flicker (*Colaptes auratus*).

Raptors: red-tailed hawk (*Buteo jamaicensis*), Swainson's hawk (*Buteo swainsonii*), Rough-legged hawk (*Buteo lagopus*), osprey (*Pandion hailaetus*), common barn owl (*Tyto alba*), western screech owl (*Otus kennicotti*), great horned owl (*Bubo virginianus*), snowy owl (*Nyctea scandiaca*), northern pygmy owl (*Glaucidium gnoma*), long-eared owl (*Asio otus*), and short-eared owl (*Asio flammeus*), golden eagle (*Aquila chrysaetos*), bald eagle (*Haliaeetus leucocephalus*), merlin (*Falco columbarius*), prairie falcon (*Falco mexicanus*), American kestrel (*Falco sparverius*), and peregrine falcon (*Falco peregrinus*).

Reptiles: sagebrush lizard (*Sceloporus graciosus*), short horned lizard (*Phrynosoma hernandesi*), Mojave black-collared lizard (*Crotaphytus bicinctores*), western skink (*Plestiodon skiltonianus*), rubber boa (*Charina bottae*), stripped whipsnake (*Masticophis taeniatus*), yellow-bellied racer (*Coluber constrictor*), great basin gopher snake (*Pituophis catenifer deserticola*), common garter snake (*Thamnophis sirtalis*), western terrestrial garter snake (*T. elegans*), night snake (*Hypsiglena torquata*), and great basin rattlesnake (*Crotalus oreganus lutosus*).

3.4.2 Environmental Consequences

3.4.2.1 Alternative 1: No Action Alternative

Under the No Action Alternative there would be no effect on wildlife in the project area. The Corps would not repair the Gooding diversion structure or stream banks, but would allow the system to operate in their damaged state. No ground disturbing activities would take place and no alterations of any structure would occur. The continued erosion of these structure would have no impact to wildlife in the area.

3.4.2.2 Alternative 2: Proposed Action – Restore outlet apron and channel walls to as-was condition

Under the Proposed Action Alternative there would be moderate, temporary impacts to wildlife in the project area. There may be some loss of small mammals during excavation, but most of the species using this habitat would simply relocate to nearby areas. There are holes in the channel banks where swallows nest, but construction is scheduled to begin after their nesting season ends in late July.

3.5 THREATENED AND ENDANGERED SPECIES

3.5.1 Affected Environment

The Corps reviewed the list of threatened and endangered species that pertains to the proposed action area under the jurisdiction of the U.S. Fish and Wildlife Service and National Marine Fisheries Service on 22 May, 2018 [USFWS Ref# 01EIFW00-2018-SLI-0112] (Appendix B). The list of protected species is shown in Table 2.

Table 2. ESA listed species that may occur in the area potentially affected by this action.

Species	Listing Status and Reference	Critical Habitat
USFWS		
Banbury Springs limpet (*Lanx sp.*)	E: 12/14/1992; 57 FR 59244-59257	No
Bliss Rapids snail (*Taylorconcha serpenticola*)	T: 12/14/1992; 57 FR 59244-59257	No
Snake River physa snail (*Physa natricina*)	T: 12/14/1992; 57 FR 59244-59257	No

The Banbury Springs limpet currently only exists at four cold-spring locations that are isolated from each other: Thousand Springs, Box Canyon Springs, Briggs Springs and Banbury Springs. Primary factors affecting the limpet in its four remaining coldwater spring complexes and tributaries are habitat modification, spring flow reduction, groundwater quality, the invasive New Zealand mudsnail and inadequate regulatory mechanisms (USFWS 2018).

The Bliss Rapids snail occurs in cold water springs and spring-fed tributaries to the Snake River, and in some reaches of the Snake River. Recent surveys indicate the species is distributed discontinuously over 22 miles, from River Mile (RM) 547-560, RM

566-572, and at RM 580 on the Snake River. The species is also known to occur in 14 springs or tributaries to the Snake River. The species does not occur in reservoirs. The free-flowing, cool water environments required by the species were impacted by, and are vulnerable to, continued adverse habitat modifications and deteriorating water quality. The deterioration of the species water quality is from one or more of the following: hydroelectric development, peak-loading effects from existing hydroelectric project operations, water pollution, inadequate regulatory mechanisms, and invasion of the non-native New Zealand mudsnail (USFWS 2018).

The known modern range of the Snake River physa snail is from Grandview, Idaho (RM 487) to the Hagerman Reach of the Snake River (RM 573). More recent investigations have shown this species to occur outside of this historic range to as far downstream as Ontario, Oregon (RM 368), with another population known to occur downstream of Minidoka Dam (RM 675) (USFWS 2018).

There are no threatened or endangered species under jurisdiction of the National Marine Fisheries Service (NMFS) in the proposed action area.

3.5.2 Environmental Consequences

3.5.2.1 Alternative 1: No Action Alternative

Under the No Action Alternative there would be no effect on threatened and endangered species in the project area. The Corps would not repair the Gooding diversion structure or stream banks, but would allow the system to operate in their damaged state. No ground disturbing activities would take place and no alterations of any structure would occur. The continued erosion of the structure would have no impact to the above listed species in the area.

3.5.2.2 Alternative 2: Proposed Action – Restore outlet apron and channel walls to as-was condition

The Corps has determined there would be no effect to any ESA listed species or their critical habitat under the Proposed Action Alternative. There are three threatened or endangered species listed on the USFWS species list, but there are no ESA listed species in the vicinity of the safety way channel. There is no designated in-water work window for the safety way channel.

3.6 LAND USE

3.6.1 Affected Environment

There are a total of 781,178 acres of land in the Little Wood River subbasin. Rangeland accounts for 71.6% of the acreage in the Little Wood River subbasin. Cropland and pasture make up 19.2% of the subbasin area, while forested land amounts to 4.7%, and rock amounts to 4.5% of the total acreage.

The majority of the Little Wood River subbasin is either publicly owned and managed by the Bureau of Land Management (BLM) (49.7%) or privately owned (35.1%). Smaller portions are publicly owned and managed by the US Forest Service (USFS) (9.2%) and the State of Idaho (5.8%) (Tollefson and Schwarzbach 2008). Publicly owned land is used for year-round outdoor recreational opportunities for hunters, anglers, water sports enthusiasts, picnickers, hikers, campers, sightseers, and photographers.

Rangeland followed by pastureland are the largest land uses in Gooding County. These lands are used to graze cattle, sheep, and horses. Gooding County is the largest dairy county in the state (149,000 head in 2009) and the fastest growing dairy producing county in the country. Many of the alfalfa hay, grain, corn, and silage crops grown in Gooding County are sold to the dairies for feed and bedding. Other top crops grown in Gooding County include wheat, barely, vegetables, potatoes, dry beans, and peas. Agriculture is the dominant land use in the area immediately surrounding the project.

3.6.2 Environmental Consequences

3.6.2.1 Alternative 1: No Action Alternative

A higher risk exists for flood damage to agricultural lands, residences, commercial properties, roads, and other infrastructure under the No-Action Alternative. Land use changes could occur as a result of increased flooding frequency and depth and duration of inundation. Decreased flood protection could cause a change in FEMA flood maps in Gooding County which could cause changes in zoning and land use for residential and commercial purposes.

Additionally, emergency flood fight efforts would likely be needed to protect lives and property during a flood event. The size of the flood and the degree to which the diversion structure fails would determine whether the impacts to land use would be considered significant.

3.6.2.2 Alternative 2: Proposed Action – Restore outlet apron and channel walls to as-was condition

After completion of the proposed action, agricultural lands, residences, commercial properties, roads, and other infrastructure would be protected from the potential damage resulting from floods up to the pre-damaged level of protection. The proposed action is to repair the existing flood diversion structure to the “as was” condition which would not directly or indirectly change land use in or around the City. Land use is expected to continue as before with no change as a result of the Proposed Action.

3.7 HISTORIC/CULTURAL RESOURCES

3.7.1 Affected Environment

The current structure was constructed in 1952. It is apparent that the 1952 project was improving upon the original 1910 diversion dam. The original, abandoned dam is comprised of a linear rock structure 10 feet wide and approximately 8 feet high that

extends approximately 65 feet between basalt bedrock outcrops. The dam exhibits a 2-course wide mortared basalt wall visible along the centerline axis with piled basalt boulders and cobbles to each side to form a rough prism. It originally diverted flows to unimproved natural channels across the lava bed terrain to eventually reach the Big Wood River approximately 3,200 feet to the north.

The Gooding diversion structure and channel is over 50 years old and therefore, may be considered eligible for listing in the National Register of Historic Places (NRHP). It retains the channelization profile, levee prism, rock dams, and overall appearance of the concrete diversion dam structure, as constructed. However, the construction with local materials, use of standardized diversion dam design and materials, and method of construction are not distinctive characteristics. Therefore, the Gooding diversion project and its components are not considered eligible for listing in the National Register under any criteria.

3.7.2 Environmental Consequences

3.7.2.1 Alternative 1: No Action Alternative

The Corps expects no immediate significant impacts to historic/cultural resources in the project area under the No Action Alternative. The Corps would not repair the damaged concrete apron and would allow the channel levee to continue to function in its damaged state. The continued erosion at the damaged area may incrementally impact the integrity of the safety way channel and, over time, could affect an expanding extent. It is conceivable, but highly unlikely, that the No Action Alternative would affect unevaluated historic properties adjacent to the damaged areas. It is unlikely that the damaged areas would result in a closure of the diversion dam and channel, therefore no immediate impact to Gooding's historic resources are foreseen.

3.7.2.2 Alternative 2: Proposed Action – Restore outlet apron and channel walls to as-was condition

Corps staff investigations and design proposals, with supplemental photographs, further indicate that the proposed repair work would be limited to the damaged concrete apron and adjacent side walls of the safety way channel, and within previously disturbed areas for a temporary staging area and access road. The proposed rehabilitation with in-kind material to the condition prior to damage would not significantly affect the original character, design, size, or appearance of the Gooding diversion system. In addition, no additional cultural resources are known to be located in the area of potential effect. The Corps determined there would be no historic properties affected by the proposed action.

3.8 GEOLOGY AND SOILS

3.8.1 Affected Environment

There are three geomorphology types in the Little Wood River subbasin. The lower elevations are plateau, the foothills are fluvial, and the high elevations are alpine glacial (erosional). Predominate geologic formations within the subbasin are silicic and basaltic

volcanic ejecta flows, basalt flows, and lava flows. Soils in the area are wind laid silts over lake laid sediments or basalt bedrock. The soil tends to have clay accumulations in the subsoil horizons. The majority of the soils found in the subbasin can be described as easily to moderately detached, with low to moderate runoff. Areas with more erosive soils occur along the Little Wood River above the Little Wood River Reservoir, above Shoshone, and along Muldoon and Fish Creeks near the reservoir (Tollefson ans Schwarzbach 2008). The top five soil types are Lava flows-Lithic Torriorthents complex, Gooding silt loam, Ackelton-Jestrick-Rock outcrop, Catchell-Gooding complex, and Gooding-McHandy-Power complex (NRCS 2018).

3.8.2 Environmental Consequences

3.8.2.1 Alternative 1: No Action Alternative

Under the No Action Alternative there could be significant negative impacts to soils in the project area. The Corps would not repair the Gooding diversion structure or stream banks. Flood protection structure failures would have greater environmental effects than those associated with a normal flood event. The soil loss from erosion and scouring would be substantially greater, because of a large amount of fast-moving water affecting a small area. Large amounts of sediment from erosion can alter the landscape and change the ecosystem.

3.8.2.2 Alternative 2: Proposed Action – Restore outlet apron and channel walls to as-was condition

Under the Proposed Action Alternative there would be moderate, short-term effects on soils in the project area. Excavation during construction would cause minor disturbances and erosion. Once the levee repair is complete, soil erosion would be reduced from current levels and future soil losses would be minimized.

3.9 SOCIOECONOMICS

3.9.1 Affected Environment

- **Population**

Gooding County currently has a population of approximately 15,124 residents, which is a 2.2% decrease from the population in 2010 (U.S. Census Bureau, 2010-2017 Census). The largest cities within Gooding County are Gooding and Wendell with 3,495 and 2,711 residents, respectively. The highest level of education among people age 25 years and older is shown in Table 3-2 below.

Table 3-2. Highest level of education among people age 25 years and older in Gooding County

Level of Education	Percent of Population
Doctorate	0.3
Professional	1.5
Master's	2.7
Bachelor's	7.6
Associates	8.1
Some College	23.1
High School	31.3
Some High School	11.9
Less than High School	10.8
None	2.7

Source: Statistical Atlas retrieved on July 6, 2018 from https://statisticalatlas.com/county/Idaho/Gooding-County/Educational-Attainment

- **Employment and Income**

Median household income in 2016 for Gooding County was $40,704 which is below the national average of $59,039 (American Community Survey, US Census 2016). The poverty rate of Gooding County is 15.6% of the population which is slightly below the national average of 16%. The unemployment rate in Gooding County as of May 2018 was 2.4%, while the national unemployment rate as of May 2018 was 3.8% (U.S. Bureau of Labor Statistics 2017).

The economy of Gooding County employed around 6,857 people in 2016. The economy is specialized in agriculture, forestry, fishing, and hunting, management of companies and enterprises, and utilities. The largest industries in Gooding County are agriculture, forestry, fishing, hunting (1,640), manufacturing (866), and healthcare and social assistance (619). The highest paying industries are professional scientific, tech. services ($62,404), utilities ($37,396), and transportation and warehousing ($34,250) (American Community Survey, US Census 2016).

- **Housing and Living**

The median property value in Gooding County is $132,200, and the homeownership rate is 66.8%; median property value in the United States in 2016 was $184,700. Most people in Gooding County commuted by “Drove Alone” in 2016, and the average commute time was 18.9 minutes; the average national commute time was 25 minutes (American Community Survey, US Census 2014).

3.9.2 Environmental Consequences

3.9.2.1 Alternative 1: No Action Alternative

The No Action Alternative could have large adverse effects in Gooding County due to increased flood frequency and duration of inundation. Increased flood frequency could decrease property values in Gooding County by increasing the flood zone on county and City flood maps. Increased flood frequency could also impact commute times due

to road closures and detours around hazardous conditions. Additionally, the Gooding diversion structure provides flood protection to the largest population center in Gooding County; if the structure is not repaired there is the potential for impacts on the health and safety of Gooding county residents.

Increased flooding and longer periods of inundation could have significant impacts on agriculture, Gooding County's top specialty. Floods have delayed the planting of many crops, reduced crop yield, and impacted the types of crops that can be planted. Even after floodwaters receded, crops would continue to suffer damage and yield resulting losses. Flooding depletes soils of oxygen and increases nitrogen loss and disease infections. Flooding not only weakens plant defenses, but the soil and water conditions prevalent during flooding favor the development of many plant pathogens, such as root and stalk rot, so crops could suffer increased disease problems even after floods (Berglund 2005).

3.9.2.2 Alternative 2: Proposed Action – Restore outlet apron and channel walls to as-was condition

The proposed action would have moderate economic benefits to local businesses in Gooding County, or surrounding counties, in 2018 as a result of contractors working in the project area.

The proposed action would have neutral socioeconomic effects in Gooding County. Flood protection to residences, commercial properties, farmland, and infrastructure would remain the same under the proposed action.

3.10 CLIMATE CHANGE

3.10.1 Affected Environment

Forecasts developed from regional general circulation models (GCM) predict increases in temperature and variable changes in precipitation over the next century that will affect snow accumulation, snow melt, glacier size, and streamflow. Indications are that average global atmospheric temperatures are trending upward over the previous several decades, and are correlated to increased atmospheric carbon dioxide levels (USGCRP 2017). In the Pacific Northwest, changes in snowpack, stream flows, and forest cover are already occurring.

Average annual temperature in the region is projected to increase by 3°-10° Fahrenheit by the end of the century. Winter precipitation in the form of rain, not snow, is projected to increase while summer precipitation is projected to decrease (Melillo et al. 2014). In transient runoff watersheds (mid-elevation watersheds with winter and spring flows driven by both snowmelt and rainfall) like the Little wood River basin, the magnitude and frequency of flooding is predicted to increase significantly in the months of December and January (Elsner et al. 2010 and Mantua et al. 2010).

3.10.2 Environmental Consequences

3.10.2.1 Alternative 1: No Action Alternative

Current effects of climate change at the proposed action location have already decreased summer baseflows (Elsner et al. 2010; Mantua et al. 2010); if winter base flows increase as expected the likelihood of the diversion structure failing in the unrepaired condition would also increase during the next flood season. Diversion structure failure could result in the flooding of downtown Gooding and substantial loss of property and livelihood.

Current effects to climate change at the repair locations are from routine levee maintenance activities. There would be no additional direct positive or negative effects on climate change under the No Action Alternative above the baseline condition that already exists for routine operation and maintenance of the structure.

3.10.2.2 Alternative 2: Proposed Action – Restore outlet apron and channel walls to as-was condition

The proposed action would repair the diversion structure to the “as was” condition which provides protection against a 200-year flood event. Climate change is not expected to have a significant impact on the proposed action. The diversion structure would be repaired to the status quo and provide flood protection against increased winter flow. There would be no additional direct positive or negative effects on climate change under the Proposed Action Alternative.

The proposed action would involve some CO2 emissions from construction activities through increased use of internal combustion engines during construction. Heavy trucks and machinery would be required for the proposed construction. The emissions from the proposed action would be part of world-wide cumulative contributions to increases in greenhouse gas emission. Given the minuscule contribution of CO2 emissions from construction activities during the proposed action to overall global emissions, effects are considered to be moderate. There would be extremely negligible effects on climate change as a result of implementing the Proposed Action Alternative.

3.11 CUMULATIVE IMPACTS

The National Environmental Policy Act (NEPA) and the Council on Environmental Quality (CEQ) regulations implementing the Act require federal agencies to consider the cumulative impacts of their actions. Cumulative effects are defined as, “the impact on the environment which results from the incremental impact of an action when added to other past, present and reasonable foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions” (40 CFR § 1508.7). Cumulative impacts can result from individually small, but collectively significant actions taking place over a period of time.

The primary goal of a cumulative effects analysis is to determine the magnitude and significance of the environmental consequences of the proposed action in the context of

the cumulative effects of other past, present, and reasonably foreseeable future actions. The Corps used the technical analysis conducted in this EA to identify and focus on cumulative effects that are "truly meaningful" in terms of local and regional importance. While the EA addresses the effects of alternatives on the range of resources representative of the human and natural environment, not all of those resources need to be included in the cumulative effects analysis – just those that are relevant to the decision to be made on the proposed action.

Based on the Corps analysis of direct and indirect effects associated with the proposed action, the Corps has determined that none of the potential environmental effects are truly meaningful and do not result in cumulative effects to the evaluated resources. The Corps determined that none of the listed environmental components would cumulatively add to past, present, and/or foreseeable future actions at a significant level.

3.11.1 Geographic and Temporal Scope of Cumulative Effects Analysis

The geographic boundary for the cumulative effects analysis is the approximate location of the proposed construction, no downstream analysis was conducted because the channel would be dewatered (Table 3-3). The timeframe of 108 years was identified based on when the original diversion structure was constructed. A timeframe of five years into the future has been considered. Only actions that are reasonably foreseeable are included. To be reasonably foreseeable, there must be a strong indication that an action/event will occur or be conducted.

Table 3-3. Summary of geographic and temporal boundaries used in this cumulative effects analysis

Geographic Boundary	Temporal Boundary
Little Wood River Mile 12.25 – 12.50	108 years

Past

Irrigated agriculture was first developed in areas along the Big Wood and Little Wood Rivers; however the modern agricultural base resulted from the construction of large-scale government irrigation projects. The Reclamation Act of 1902 provided the funding and coordination needed to build dams and large canal systems, most of which were completed in 1920. The original diversion dam near Gooding was built in 1910 during a period of agricultural growth in Gooding and the surrounding counties.

The Gooding Diversion Project has a history of periodic environmental impacts tracing back to the construction of the current structure. Any subsequent repairs to the current system have been similar in scope to the proposed action. Damaged locations were identified, repairs made, and the system returned to its original shape or condition. Impacts were temporary in nature and the disturbance was localized. Access roads to maintain and inspect the diversion structure are minimally maintained and occasionally require minor repairs. Continually maintaining and repairing the diversion structure would be considered positive. The Proposed Action Alternative would have no significant cumulative impact with past actions.

Present

Gooding County has experienced a slight increase in population and economic growth. Recent community and economic development efforts in Gooding County include a new Gooding County Memorial Hospital, a Basque Cultural Center, a new Industrial Park, and the addition of the Gooding County Historical Museum. Agriculture still remains the number one source of industry and employment in the county. The Proposed Action Alternative would have no significant cumulative impact with present community growth or actions.

A community report conducted by the Idaho Community Review Program (2009) found "The river" was the most frequent response Gooding business leaders and residents gave when asked to identify what they thought was the number one economic development issue in the community. The river wall and the designated floodplain came up repeatedly with respect to economic development and infrastructure. The deteriorating condition of the Little Wood River Canal walls are in of repair to continue protecting private property, public health, and safety. The Proposed Action Alternative to repair the diversion structure up river of the Little Wood River Canal would help ensure floodwaters won't damage the Little Wood River Canal any further and jeopardize private property, public health, or safety.

Future

Growth in Gooding County is expected to remain moderate. The growth rate within the past year was 0.20%. Agriculture is expected to remain the highest form of land use in the county, but increased use of irrigation water is not expected in the foreseeable future. The proposed action would repair the diversion structure to the "as was" condition. All repairs would be carried out in previously disturbed habitats and would not enlarge the footprint of the diversion structure. The proposed action would be beneficial to Gooding and surrounding farmlands because the diversion structure would continue providing flood protection for up to a 200-year flood event. The Proposed Action Alternative would have no significant cumulative impact with future actions.

4 – Compliance with Applicable Environmental Laws and Regulations

4.1 National Environmental Policy Act

This Environmental Assessment was prepared pursuant to regulations implementing NEPA, (42 U.S.C. 4321 et seq.). NEPA provides a commitment that Federal agencies will consider the environmental effects of their proposed actions prior to implanting those actions. Completion of this environmental assessment and signing of a Finding of No Significant Impact (FONSI), if determined appropriate, fulfills the requirements of NEPA. If a FONSI is signed, it will be posted to the Corps website and available to the public. Appendix A lists any mitigative requirements, stipulations, best management practices, or environmental commitments identified as required to ensure compliance with the laws, regulations and Executive Orders (EOs) reviewed.

4.2 Endangered Species Act

The Endangered Species Act (ESA) established a national program for the conservation of threatened and endangered fish, wildlife and plants and the habitat upon which they depend. Section 7(a)(2) of the ESA requires Federal agencies to consult with the USFWS and NMFS, as appropriate, to ensure that their actions are not likely to jeopardize the continued existence of endangered or threatened species or adversely modify or destroy their critical habitats. Section 7(c) of the ESA and the Federal regulations on endangered species coordination (50 CFR §402.12) require that Federal agencies prepare biological assessments of the potential effects of major actions on listed species and critical habitat.

The Corps has determined that the Proposed Action would have no effect on listed species or their designated critical habitats. No formal or informal consultation is required for projects that result in a no effect determination. However, the USFWS was consulted through their Information for Planning and Consultation (IPaC) website to coordinate the identification of potential listed and protected resources.

4.3 Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act prohibits the taking or possession of and commerce in bald and golden eagles, with limited exceptions, primarily for Native American Tribes. Take under this Act includes both direct taking of individuals and take due to disturbance.

Bald eagles are known to nest throughout Corps managed lands in the Walla Walla District. While all nest sites have not been documented, locations of some are unknown. No bald eagle and golden eagle nest are known to occur in or near the proposed action area. Additionally, bald eagle and golden eagle nesting season runs January – August, and proposed construct would being in September and end no later than November. Therefore, there would be no effect or take (to include disturbance) of either bald or golden eagles.

4.4 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 U.S.C. §§ 703-712, as amended) prohibits the taking of and commerce in migratory birds (live or dead), any parts of migratory birds, their feathers, or nests. Take is defined in the MBTA to include by any means or in any manner, any attempt at hunting, pursuing, wounding, killing, possessing or transporting any migratory bird, nest, egg, or part thereof.

The proposed construction (September - October) is scheduled to be conducted after the nesting season for migratory birds (April 1 - August 15) it should not impact any migratory bird species.

4.5 National Historic Preservation Act

The National Historic Preservation Act (NHPA) of 1966 as amended directs Federal agencies to assume responsibility for all cultural resources under their jurisdiction. Section 106 of NHPA requires agencies to consider the potential effect of their actions on properties that are listed, or are eligible for listing, on the National Register of Historic Places (NRHP). The NHPA implementing regulations, 36 Code of Federal Regulations (CFR) Part 800, requires that the Federal agency consult with the State Historic Preservation Officer (SHPO), Tribes and interested parties to ensure that all historic properties are adequately identified, evaluated and considered in planning for proposed undertakings.

The Corps has determined that no historic properties would be affected by this action, as proposed. The Corps did not identify any historic properties of potential religious or cultural significance to Native American tribes so no tribes were consulted. The Corps received a letter from the Idaho State Historic Preservation Officer on August 8, 2018 concurring with the Corps determination (Appendix C).

4.6 Clean Water Act

The Clean Water Act of 1972 establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. Section 401 of the federal Clean Water Act requires that any federal activity that may result in a discharge to waters of the United States must first receive a water quality certification from the state in which the activity will occur. Section 404 of the Clean Water Act established a program to regulate the discharge of dredged or fill material into waters of the United States.

The proposed action does not require compliance with Section 404 of the CWA. It is exempt under 33 CFR 323.4 dated November 13, 1986, as amended August 25, 1993. The exemption reads as follows: “Maintenance, including emergency reconstruction of recently damaged parts, of currently serviceable structures such as dikes, dams, levees, groins, riprap, breakwaters, causeways, bridge abutments, or approaches, and transportation structures. Maintenance does not include any modification that changes the character, scope, or size of the original fill design.” Emergency reconstruction must occur within a reasonable period of time after damage occurs in order to qualify for this exemption.

4.7 Executive Order 11988, Floodplain Management

This Executive Order outlines the responsibilities of Federal agencies in the role of floodplain management. Each agency must evaluate the potential effects of actions on floodplains and avoid undertaking actions that directly or indirectly induce development in the floodplain or adversely affect natural floodplain values.

The proposed action to repair an existing flood diversion structure to the “as was” condition would not directly or indirectly induce growth in the floodplain or adversely affect natural floodplain values beyond the status quo for the project.

Section 5 – Consultation, Coordination and Public Involvement

In accordance with the Corps supplemental NEPA regulations (33 CFR §230.11), the Corps will provide Notice of Availability of the EA and the FONSI (if/when signed) to concerned agencies, organizations, and the interested public through a news release issued to all area newspapers. The EA and signed FONSI will also be posted to the Corps website at http://www.nww.usace.army.mil/Missions/Environmental-Compliance/.

Section 6 – References

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Appendices

Appendix A: Environmental Commitments Green Sheet
Appendix B: U.S. Fish and Wildlife Service Species List dated May 22, 2018
Appendix C: Idaho SHPO Section 106 Concurrence Letter dated August 8, 2018