



United States Department of Agriculture

Canyon Lake Dam Access for Repair Project

Draft Decision Notice and Finding of No
Significant Impact



Forest Service

Bitterroot National Forest

Darby/Sula Ranger District

September 2019

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Appendix A – Consideration of Public Comments

Introduction

The Forest Service proposes to authorize Canyon Creek Irrigation District (CCID) adequate access to their facilities at Canyon Lake Dam and to prescribe terms and conditions related to this access as necessary to protect the National Forest. This Decision Notice and Finding of No Significant Impact incorporates by reference the updated environmental assessment (EA) for the Canyon Lake Dam Access for Repair Project dated September 2019; the 1987 Bitterroot National Forest Plan (Forest Plan) and associated Final Environmental Impact Statement and the Record of Decision; and their supporting project records.

Canyon Lake Dam is located on the Darby Ranger District of the Bitterroot National Forest within the Selway-Bitterroot Wilderness. Canyon Lake Dam is located in the southeast of Section 27, Township 6 North, Range 22 West, P.M., in the upper Canyon Creek drainage west of Hamilton, Montana. Public access to the dam is via Forest Service Trail No. 525. Distance to the dam from the trailhead is approximately 5 miles. This steep trail ascends over 2400 feet in elevation and crosses a steep, rocky slope within the last mile of the dam. Trail No. 525 is not recommended for stock use because of steep grades, rockslides with large voids, and sections of slick rock slabs.

Although recent projects have addressed a failing outlet works, increased undersized spillway capacity and completed small-scale repairs to address seepage problems, there remains the need for large-scale rehabilitation. Inspections over the past several years have recorded high seepage rates along the toe of the dam. In the past 12 years, three sinkholes have been repaired. There is a deteriorating concrete core wall and narrow dam section in the vicinity of the outlet works. CCID's engineering representative claims the existing embankment configuration results in high seepage rates and potential piping failure risk. The proposed work addresses embankment deficiencies and involves removal and replacement of existing riprap and filter fabric, leveling the subbase, possibly widening the narrow embankment section, and installing a geomembrane liner. The environmental assessment documents the analysis of effects of the proposed project on the environment.

The Forest Service is required by both the Wilderness Act and the Alaska National Interest Lands Conservation Act (ANILCA) to authorize reasonable access to valid occupancies. CCID is authorized to operate and maintain their dam and reservoir on National Forest Lands under the Acts of July 26, 1866 (43 U.S.C. 661) and March 3, 1891 (43 U.S.C. 946-949) granted by the Secretary of the General Land Office, Department of Interior. Section 5(b) of the Wilderness Act (16 U.S.C. § 1134) which provides for access to the dam for operation and maintenance, within regulations 36 CFR 251 subpart D and CFR 293.13 which implement these statutes.

Decision and Rationale

Based upon my review of the Canyon Lake Dam Access for Repair Environmental Assessment, project file, and Minimum Requirements Decision Guide Workbook, I have decided to implement the Proposed Action as described in the Canyon Lake Dam Access for Repair Environmental Assessment. This proposal includes helicopter transport (approximately 32 round trip helicopter flights) of bulky, heavy equipment and materials.

The estimated number of helicopter flights (32) needed to complete the project is based on estimates from Hydrometrics Inc. and includes the following:

- 11 flights for mobilization of equipment and materials
- 8 flights for resupply of construction materials
- 9 flights for demobilization
- 4 additional contingency flights for unforeseen problems at this remote site.

Authorization of adequate access to CCID for the valid use of its easements is non-discretionary. Based on recognized easement authorities, Forest Service may not deny reasonable use of, or access to, the dam and reservoir, and is proposing to authorize adequate access to allow for the work to be completed safely and effectively.

The Proposed Action is reasonable, feasible and best meets the purpose and need. I have reviewed this decision for compliance with laws, regulations, and policies. My decision is consistent with all laws, regulations, and policies. Findings related to major environmental laws, the Forest Plan, and the Environmental Justice Executive Order are summarized below. Compliance with other laws, regulations, and policies are listed in the EA, the project file, and the Forest Plan.

Consistency with the Forest Plan (16 U.S.C. 1604(i)): The Bitterroot Forest Land and Resource Management Plan establishes management direction for the Bitterroot National Forest. This direction is described in forest-wide and management area-specific standards. Designing and implementing projects consistent with this direction is the means to move the Forest toward the desired future condition as described in Chapter II of the Forest Plan. Management area and Forest-wide direction in the Forest Plan established sideboards for the development of alternatives to the proposed action while responding to public issues. After reviewing the EA, I find my decision is in full compliance with the Bitterroot National Forest Land and Resource Management Plan standards, guidelines, goals, and objectives, as amended.

Federal and State Dam Safety Laws: My decision is consistent with federal and state regulations established to protect public safety and property.

In the early 1970s, a series of dam safety incidents occurred and resulted in significant loss of life including the failure of Buffalo Creek Dam (West Virginia) in February 1972 and Canyon Lake Dam (South Dakota) in June 1972. Following these tragedies, Congress enacted the National Dam Inspection Act (PL 92-367) which became law on August 8, 1972. This tragic failure was a prelude to a number of federal actions which prompted President Jimmy Carter to create the Federal Emergency Management Agency (FEMA) in 1979, and eventually prompted Congress to pass Public Law 104-303 in 1996, which provided the country with a legislatively mandated National Dam Safety Program (NDSP). This program was specifically created to reduce the risk of life and property from dam failures in the U.S. NDSP secures the Nation's dam infrastructure

through state assistance funds, emergency action planning, training, public outreach, researching, and creating new guidance regarding the maintenance and construction of dams.¹

In the current litigious environment, it is essential that CCID pursue repairs since they have knowledge of embankment deficiencies (formation of sinkholes and excessive seepage). If the dam owner has knowledge of defective condition(s) and the dam failed as a result, then liability will likely ensue if remedial measures are not accomplished in a timely manner to mitigate the hazardous conditions.

Because the State of Montana regulates safety of dams on easement dams located on federal lands, then the dam owner (CCID) must comply with Montana statutes including preparation and approval of plans (acquiring construction permit) and obtaining an operating permit to ensure safe operations of high hazard dams.²

Endangered Species Act: This project is in full compliance with the Endangered Species Act. In accordance with Section 7(c) of the Endangered Species Act, as amended. The Bitterroot Forest prepared biological assessments addressing potential impacts to federally species (WILD-001 and FISH-001). The project is not likely to adversely affect any threatened or endangered species.

Clean Water Act and Montana State Water Quality Standards: Upon review of the project EA, I find that activities associated with my decision will comply with the Clean Water Act, State of Montana water quality standards, Best Management Practices, and associated monitoring requirements (EA, page 7).

National Historic Preservation Act: The project is in full compliance with the National Historic Preservation Act. Canyon Lake Dam was determined Not Eligible for the National Register on June 30, 1997. Heritage surveys of the Canyon Lake Dam area have identified two cultural sites requiring protection. If these sites are avoided no adverse effect to cultural resources will result. (HERITAGE-001).

¹ Although Canyon Lake Dam is not regulated by the Forest Service from safety of dams perspective, federal agencies that own or regulate dams on National Forest System Lands are mandated to comply with federal laws, which have become more technologically advanced and requires skilled judgment on the part of engineers and inspectors. Federal laws affecting dam safety are listed below, and state dam safety laws have followed similar progress to achieve protection of public health and safety:

1972 National Dam Inspection Act (Public Law 92-367): authorized Secretary of the Army to undertake a national program of inspection of dams.

1979 Executive Order: President Jimmy Carter established the Federal Emergency Management Agency (FEMA) as the lead in coordinating national efforts in dam safety.

1986 Water Resources Development Act: authorized USACE to maintain and update the National Inventory of Dams (NID).

1996 Water Resources Development Act (Public Law 104-303): created the National Dam Safety Program and named the FEMA Administrator as coordinator.

2002 National Dam Safety and Security Act (Public Law 107-310): added security to list of critical dam safety issues.

2006 Dam Safety Act (Public Law 109-400): added condition assessment ratings of dams to the NID.

2014 Water Resource Reform and Development Act: reauthorized the National Dam Safety Program.

² Montana Code Annotated 2017 Title 85 Water Use, Chapter 15 Dam Safety Act: 85-15-210 Preparation and Approval of Plans, and 85-15-212 Operating Permit.

Environmental Justice Order: Executive Order 12898 requires fair treatment and meaningful involvement of all citizens regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. This decision would not disproportionately impact any minority or low-income population. We have treated all citizens fairly and allowed meaningful involvement to every person regardless of race, color, national origin, or income. I find that this project and its NEPA analysis comply with the Environmental Justice Executive Order.

Alternatives Considered but Eliminated from Detailed Analysis

In addition to the selected alternative/proposal, I considered a non-motorized, non-mechanized alternative but dismissed from further analysis.

Non-motorized, Non-Mechanized Alternative

Canyon Lake dam is classified as a high hazard structure with the capability of causing damage to downstream property and environmental resources in the event of a failure. Canyon Lake Dam could also present a threat to public safety if the dam failed.

Primitive techniques were originally involved in the movement of materials exclusively. Primitive techniques were never utilized in the construction of critical elements of the dam, which include compaction of soils to a required density, installation of highly reliable mechanical elements (geomembrane liner) and batching or placement of high quality concrete or grout that meets design specifications.

The technology used to construct dams in wilderness in the late 1800's and early 1900's, or even early 1960's technology when the Wilderness Act was passed, cannot be used today to repair and maintain the dams today. Engineering designs have become more technically complex in order to meet both federal and state dam safety standards and construction quality control/quality assurance practices. Both the dam owner and their engineering representative are responsible for exercising the duty of reasonable care to protect their interests from legal liability.

The requisite standard is the duty to stay current in the field of expertise and follow industry standards and state-of-practice engineering standards in design and construction techniques. Reasonable design, construction, operation, inspection, and maintenance procedures are essential in meeting the duty of care for engineering professionals. The 2017 Montana Dam Safety Act requires that dam construction and repairs are accomplished *"in a thorough, secure, and substantial manner."*³

CCID's failure to exercise the standard of care, established by federal and state statutes and regulations, could result in legal liability to CCID and the Forest Service. The Forest Service does not have the authority to direct CCID to accomplish the work by non-motorized, non-mechanized means without also potentially becoming liable for damages in the event of catastrophic dam failure and loss of life and property. There are numerous challenges and variables at this high elevation site, and difficulties can arise with the best of circumstances.

³ Montana Code Annotated 2017 Title 85 Water Use, Chapter 15 Dam Safety Act: 85-208 Construction in a Secure Manner.

During repairs, the deficient embankment will be exposed when the existing riprap and liner are removed, leaving it even more susceptible to seepage and erosion, especially during significant storm events. If a storm event compromises the exposed embankment, resulting in loss of life and damages, then CCID would ultimately be liable.

Public Involvement

The need for this action arose in April 2018. A proposal to authorize motorized access to CCID was listed in the Schedule of Proposed Actions on 01/01/2019. The comment period for the Canyon Lake Dam Access for Repair project started on 12/07/2018 and again on 02/20/2019 (due to government shutdown during the first comment period). The Responsible Official requested comments back within 30 calendar days for both comment periods. The Forest received 12 comment letters. Eleven comment letters were supportive of the proposed action and one comment letter expressed concern that the project was not being conducted using primitive means. Appendix A to this document details how comments received were considered.

Findings Required by Other Laws and Regulations

National Forest Management Act (NFMA)

This decision is consistent with the intent of the forest plan's long term goals and objectives listed on pages II-2 through II-7 of the Bitterroot Forest Plan (FPMON-001). The project was designed in conformance with land and resource management plan standards and incorporates appropriate land and resource management plan standards for wilderness (FPMON-001, Forest Plan p. II-18).

Administrative Review and Objection Rights

The responsible official for this decision is Forest Supervisor Matt Anderson. Individuals or organizations who submitted specific, written comments during public comment periods have standing to object under 36 CFR 218, Subparts A and B. Issues raised in objections must be based on previously submitted timely, specific written comments regarding the proposed project unless the issue is based on new information arising after the designated comment opportunities.

The following address should be used for objections sent by regular mail, private carrier or hand delivery:

Objection Reviewing Officer
USDA Forest Service, Northern Region
Building 26 Fort Missoula Road
Missoula, MT 59804

Office hours are Monday through Friday, 8:00am to 4:30pm, excluding Federal holidays.

Objections can be faxed to the Objection Reviewing Officer at (406) 329-3411. The fax coversheet needs to include a subject line with "Canyon Lake Dam Access Project Objection" and should specify the number of pages being submitted.

Electronic objections must be submitted to the Objection Reviewing Officer via email to appeals-northern-regional-office@usda.gov, with “Canyon Lake Dam Access for Repair Project Objection” in the subject line. Electronic submissions must be submitted in a format that is readable with optical character recognition software (e.g. Word, PDF, and Rich Text) and be searchable. An automated response should confirm your electronic objection has been received.

The objection must meet the content requirements of 36 CFR 218.8(d), and include the following information:

- 1) the objector’s name and address, with a telephone number or email address, if available;
- 2) a signature or other verification of authorship upon request (a scanned signature for email may be filed with the objection);
- 3) when multiple names are listed on an objection, identification of the lead objector as defined in 36 CFR 218.2 (verification of the identity of the lead objector shall be provided upon request);
- 4) the name of the project being objected to, the name and title of the responsible official, and the name of the national forest and ranger district on which the project will be implemented;
- 5) a description of those aspects of the project addressed by the objection, including specific issues related to the project and, if applicable, how the objector believes the environmental analysis or draft decision specifically violates law, regulation, or policy; suggested remedies that would resolve the objection; and supporting reasons for the reviewing officer to consider; and
- 6) a statement that demonstrates the connection between prior specific written comments on the particular project or activity and the content of the objection, unless the objection concerns an issue that arose after the designated opportunity for formal comment. With certain exceptions (36 CFR 218.8(b)), all documents referenced in the objection must be included with the objection.

Implementation

If objections are filed, the responsible official may not issue a decision document approving the project until the reviewing officer has responded in writing to all objections. The project may be implemented immediately after the decision is signed.

If no objections are filed within the 45-day filing period, approval of the proposed project in a decision document may occur on, but not before, the fifth business day following the end of the objection filing period. Implementation can begin immediately after the decision is signed.

For further information concerning the Canyon Lake Dam Access for Repair Project, please contact Amy Fox at 406-363-7120 or amy.fox@usda.gov, or Terri Anderson, ID Team Leader, at 406- 363-7112 or terri.anderson@usda.gov

Approved by:

Matthew Anderson
Forest Supervisor
Bitterroot National Forest

Date

Finding of No Significant Impact

Context

The context of the environmental effects is based on the environmental analysis in the environmental assessment.

The project does not have any large or lasting effect on society as a whole, the nation, or the state. The effects are local in nature, mostly short term and ephemeral, and are not likely to significantly affect regional or national resources. The affected area is limited in size and the proposed activities and their adverse effects are limited in duration.

While the proposed action would authorize and specifically regulate activities within a part of the Selway Bitterroot Wilderness, the resulting actions and effects are limited to only a small portion, about 0.24 percent, of this 1.3 million acres wilderness. Effects from mechanized access are only anticipated to occur on a maximum of about eight to ten days. Potential users whose wilderness experience could be affected by this authorization will have numerous opportunities to find equivalent experiences nearby or, if they choose, they may find the same opportunities and experiences within the project area both before and after these limited activities are completed (EA, pp.13-17).

Additionally, the proposed actions are designed to achieve purposes recognized and validated by Congress when it established the Selway Bitterroot Wilderness and consistent with rights of access established by Congress under both the Wilderness Act and the Alaska National Interest Lands Conservation Act (EA, pp 3-4).

Additional context considerations are discussed below relative to individual intensity factors.

Intensity

Intensity is a measure of the severity, extent, or quantity of effects, and is based on information from the effects analysis of this EA and the references in the project record. The effects of this project have been appropriately and thoroughly considered with an analysis that is responsive to concerns and issues raised by the public. The agency has taken a hard look at the environmental effects using relevant scientific information and knowledge of site-specific conditions gained from field visits. My finding of no significant impact is based on the context of the project and intensity of effects using the ten factors identified in 40 CFR 1508.27(b).

- 1) Impacts may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on the balance the effects will be beneficial.**

I considered beneficial and adverse impacts associated with the proposal as presented in the EA and in the project file. The proposed authorization would facilitate necessary repair work on Canyon Lake Dam, which itself would reduce the risk of severe and long lasting adverse effects to wilderness and other aspects of the human environment, including public safety, in the long term without risking significant adverse effects in the short term. The individual and overall impacts of the selected alternative will have no significant adverse impacts.

On this basis, I conclude that the specific and cumulative adverse effects of the selected alternative are not significant.

2) The degree to which the proposed action affects public health or safety.

It is my determination that the selected alternative will have no significant adverse effects, but will have beneficial effects on public health and safety. The action is designed to protect public health and safety by repairing structural deficiencies associated with Canyon Lake Dam and to comply with dam safety requirements, so as to prevent a possible future catastrophic dam failure which could result in the loss of property and life. Design Criteria, as outlined in the EA on pages 7-9 will provide reasonable public safety precautions during the actual authorized activities.

Issues concerning public health and safety raised by members of the public regarding this proposal have been addressed. The proposed activities will result in long term beneficial effects to public safety and temporary effects will be mitigated.

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

The project area does not contain any park land, prime farmlands, wild and scenic rivers, or ecologically critical areas.

Effects on cultural resources have been analyzed. The analysis found that the proposed access and project work would not adversely affect any known cultural sites, provided mitigation measures to avoid known cultural sites by landings, equipment and supply staging, material excavation and crew camps are followed (HERITAGE-001).

The authorization and connected actions do occur within the Selway Bitterroot Wilderness. The proposed authorization facilitates a repair of an existing dam on a previously disturbed site. It would not significantly impact undisturbed sites. The dam was a pre-existing structure (established 1891) within the wilderness when the Wilderness Act was enacted and provisions have allowed for those pre-existing structures and uses. The effects of the proposal on this wilderness are limited geographically and are predominately ephemeral.

Based on these findings, I have concluded that my decision will have no significant effects on unique resource characteristics of the geographic area.

4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.

The effects of this action on the quality of the human environment are not highly controversial. We received eleven public comments; ten supportive of the proposal and one against the proposal. None of the comments raised questions of scientific controversy surrounding potential effects of this authorization. Past monitoring has determined that actual effects of similar projects are consistent with estimated effects of the proposed activities (MONITOR-001-004). The analysis did not indicate any highly controversial issues.

5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

This action is similar to past actions conducted on the Bitterroot National Forest and in the Selway Bitterroot Wilderness and the potential effects are well understood. The EA discloses potential effects, none of which are significantly unique or involve potentially significant unknown risks (EA, pp. 10-19). It is my conclusion that there are no unique or unusual characteristics in the area or project which have not been previously encountered or that would constitute an unknown risk to the human environment.

6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

The authorization would facilitate repairs to Canyon Lake Dam which maintains long-standing rights and uses established under recognized easement authorities (Acts of 1866 and 1891). This is not a precedent-setting decision. Similar actions have occurred for decades in other areas of the Bitterroot National Forest. The effects of implementing the Proposed Action are disclosed in the environmental assessment and are within the range of effects of these past similar actions. The analysis considered the effects of past actions combined with the estimated effects of the Proposed Action. I conclude there are no unique or unusual characteristics of the area which have not been previously encountered or which constitute highly uncertain or unknown risks to the human environment.

7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

The combined effects of past, present, and reasonably foreseeable future actions were considered. Past actions considered in the cumulative effects analyses include those that contributed to the baseline conditions in the project area (EA, pp. 10-12). There are no indications of significant cumulative effects to the environment. The interdisciplinary team carefully chose cumulative effects analysis areas. Based on the analysis documented in the environmental assessment and project record, I have determined that implementing the Proposed Action will not result in significant cumulative effects.

I looked particularly at the cumulative effects to wilderness. The cumulative effects to Wilderness resources are essentially non-existent (ES. p. 15). All repairs will take place within the existing footprint of prior repair activities and well within the recognized easement boundary. The cumulative effects to the environment, dam safety and related health and public safety are beneficial. There is no indication of any significant adverse cumulative effects to the environment.

8) The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in the National Register of Historic Places or may cause loss or destruction of significant cultural or historical resources.

Effects on cultural resources have been analyzed. Canyon Lake Dam has been determined **Not Eligible** for the National Register of Historic Places. The analysis found that the Canyon Lake Dam rehabilitation and access activities will have no adverse effect on cultural resources, provided the two identified cultural sites are avoided. (EA, pp. 18-19).

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

The Proposed Action will not adversely affect the viability of any threatened, endangered or candidate species that may occur in the area (WILD-001, FISH-001). Based on this analysis I find that this project will not significantly adversely affect any threatened or endangered species.

10) Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

A description of the project's compliance with applicable laws may be found the Findings Required by Other Laws and Regulations section of this decision. I find that none of the actions in this decision threatens to violate applicable Federal, State, or local laws or other requirements to protect the environment.

Based on the context and intensity of the project as discussed in the items above, I conclude there will be no significant direct, indirect or cumulative impacts from implementing the Canyon Lake Dam Access for Repair Project as described in the proposed action.

Conclusion

After considering the environmental effects described in the Canyon Lake Dam Access for Repair Environmental Assessment, and the entirety of the project planning record, I have determined that the actions associated with the Proposed Action, will not have a significant effect on the quality of the human environment considering the context and intensity of impacts (40 CFR 1508.27). Thus, an environmental impact statement will not be prepared.