



— BUREAU OF —
RECLAMATION

Kachess Dam Safety of Dams Modification Project Environmental Assessment

Scoping Report



US Department of the Interior
Bureau of Reclamation
Columbia-Pacific Northwest Regional Office
1150 N. Curtis Road
Boise, ID 83706

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Mission Statements

The Department of the Interior protects and manages the Nation's natural resources and cultural heritage; provides scientific and other information about those resources; and honors its trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

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ACRONYMS AND ABBREVIATIONS

Full Phrase

EA	environmental assessment
ID	irrigation district
Kachess SOD EA	Kachess Dam Safety of Dams Modification Project
NEPA	National Environmental Policy Act
Reclamation	Bureau of Reclamation
SOD	safety of dams
U.S.	United States
USFWS	United States Fish and Wildlife Service
VPM	virtual public meeting
WDFW	Washington Department of Fish and Wildlife
Yakama Nation	Confederated Tribes and Bands of the Yakama Nation

Chapter I. Introduction

I.1 BACKGROUND AND PURPOSE AND NEED

The Bureau of Reclamation (Reclamation) is preparing an environmental assessment (EA) for the Kachess Dam Safety of Dams (SOD) Modification Project (Kachess SOD EA), in accordance with the National Environmental Policy Act of 1969 (NEPA), as amended.

Kachess Dam, located about 14 miles northwest of Cle Elum, Washington, was constructed from 1910 to 1912. It was one of the first dams constructed by Reclamation, and it increased the storage capacity of a large natural lake, Kachess Lake. The 115-foot-high, earth-filled Kachess Dam created a reservoir with an actively managed capacity of 239,000 acre-feet.

Reclamation has identified seepage and internal erosion issues through the dam embankment along the outlet works conduit, which conveys water from the reservoir to the Kachess River downstream. In other words, water seeping through the dam embankment and the soils surrounding the conduit is carrying soil materials with it and leaving behind voids. This internal erosion creates a risk of potential dam failure. Reclamation is proposing this project to filter and monitor the seepage to prevent eroded soils from exiting the dam.

The purpose of and need for the proposed project includes:

- Implementing cost-effective measures to reduce risks per Reclamation’s public protection guidelines
- I. Maintaining water deliveries to irrigation districts (IDs), tribes, and others throughout the Yakima Basin
- Minimizing impacts on the environment
- Maintaining water flows for endangered species

As part of its SOD program mission, Reclamation is committed to ensuring its dams do not present unacceptable risk levels to people, property, and the environment. These commitments result in a need for Reclamation to implement corrective action to bring static and hydrologic risks at Kachess Dam below public protection guidelines while minimizing impacts on the environment.

On July 26, 2021, Reclamation announced the beginning of a 30-day public scoping period to solicit public comments and to identify issues. The comment period ended on August 25, 2021.

I.2 OVERVIEW OF THE SCOPING REPORT

Public involvement is a vital and legally required component of the NEPA process. It vests the public in the decision-making process and allows for full environmental disclosure. Guidance for implementing public involvement under NEPA is codified in 40 Code of Federal Regulations 1506.6.

Scoping is an open and early step in the NEPA process that helps Reclamation determine the scope of issues to be addressed and identify significant issues related to the proposed project. Information collected during scoping may also be used to develop the alternatives to be analyzed in a NEPA document.

In accordance with NEPA, Reclamation must document the public scoping results. This scoping report summarizes the scoping process and the substantive public comments received during the formal scoping period, including those provided during the agency scoping meetings.

I.3 DESCRIPTION OF THE SCOPING PROCESS

As required by NEPA and its public involvement guidance, Reclamation solicited comments from relevant agencies, tribes, and the public. Reclamation organized and analyzed all comments received. Reclamation then evaluated the position statement of each comment and extracted the overarching issue or issues to address during the NEPA process. These issues define the scope of analysis for the Kachess SOD EA and are used to develop the project alternatives.

I.3.1 Scoping

From July 26 through August 25, 2021, Reclamation sought public comments to determine relevant issues that could influence the scope of the environmental analysis, including alternatives, and guide the process for developing the EA.

Substantive comments received or postmarked by August 25, 2021, are summarized and presented in this document. To the extent practicable, the comments received past this date will be considered during the development of the Kachess SOD EA, but comments received after August 25, 2021, will not be summarized in this report.

I.3.2 Virtual Public Meeting

During the public scoping comment period, the public had an opportunity to participate in the scoping process and provide input through a web-based virtual public meeting (VPM) room that was available 24 hours a day. The VPM was structured around stations, which were modeled on the topics typically seen at open house public scoping meetings. Each VPM station was a single web page that the public could view and interact with. The welcome station provided a place for website visitors to sign in and add themselves to the project mailing list. The welcome station also contained a link that visitors could use to download all maps and documents in the VPM room. A commenting station allowed visitors to submit written comments directly through the VPM comment form and provided information on how to submit comments via mail or email. VPM stations are included in **Appendix A**, Virtual Public Meeting Website, and are also viewable at the archived Kachess SOD public scoping VPM web page¹ at <https://www.virtualpublicmeeting.com/kachess-dam-safety-ea-scoping>.

I.3.3 Media Advertisements

Reclamation advertised the public scoping period in three newspapers, as shown in **Table I-1**, below.

**Table I-1
Newspaper and Online Advertisements for Kachess SOD EA Scoping**

Newspaper	Publication Date
<i>Yakima Herald</i>	July 26, 2021
<i>Northern Kittitas County Tribune</i>	July 29, 2021
<i>Daily Record</i>	July 24, 2021

¹ The comment and question and answer functions are disabled in the archived VPM.

Reclamation also distributed public notices via a news release, emails to the project mailing list, and flyers that were placed at the Cle Elum Post Office and the Cle Elum Public Library and distributed to the local IDs (see **Appendix B**, Public Outreach Materials).

Additionally, Reclamation maintains a project website with information related to the development of the Kachess SOD EA: <https://www.usbr.gov/pn/programs/sod/kachess/index.html>. Reclamation's website was included in all scoping materials.

1.3.4 Cooperating Agency Outreach

Because of the nature of this SOD project, there has been no cooperating agency outreach, and there are no cooperating agencies at this time. However, there are consulting parties, coordinating agencies, and a coordinating government participating in the project. These terms are defined below. Reclamation will continue engagement with the parties listed throughout the NEPA process.

Consulting Parties²

- Confederated Tribes of the Colville Reservation
- Confederated Tribes and Bands of the Yakama Nation (Yakama Nation)
- Washington Department of Archaeology and Historic Preservation

Coordinating Agencies³

- US Forest Service
- Washington Department of Fish and Wildlife (WDFW)
- US Fish and Wildlife Service
- National Marine Fisheries Service⁴

Coordinating Government⁵

- Yakama Nation

On August 10 and 12, 2021, Reclamation held two virtual public scoping meetings via Zoom from 5:00 to 6:30 p.m. Pacific daylight time. The purpose of these meetings was to educate the public on the project, answer questions on the proposed action, and identify issues of concern to the public for inclusion in the EA. During the meeting, Reclamation management and resource specialists were available to discuss project information and answer questions from teleconference participants. Attendees were also encouraged to provide written scoping comments to identify issues more fully. Reclamation provided a short presentation followed by a question-and-answer session and a formal comment session. Attendees could participate via computer, tablet, or smartphone, and information on how to attend was available on

² Consulting parties are those tribal agencies and state historic preservation agencies participating in the project in compliance with Section 106 of the National Historic Preservation Act.

³ Coordinating agencies are those agencies that are not formally participating as cooperators but are involved due to various legal requirements as part of this NEPA effort. For instance, the WDFW and the US Fish and Wildlife Service are coordinating with Reclamation to ensure protection of biological resources in the project area and as a part of the biological assessment pursuant to Section 7 of the Endangered Species Act.

⁴ The National Marine Fisheries Service is currently listed as a coordinating agency because it may also become involved with the biological assessment at a later date.

⁵ In addition to its status as a consulting party, Reclamation considers Yakama Nation a coordinating government, given the additional cooperation between the agency and the tribe through other agreements in the area, such as the Yakima River Basin Integrated Plan.

the VPM website and the Reclamation project website. There were a total of 26 participants who attended these two virtual public scoping meetings. Reclamation answered a total of 43 questions from the public and received no official scoping comments. Questions and answers from these meetings can be found in **Appendix C**, below.

I.4 METHOD OF COMMENT COLLECTION AND ANALYSIS

As noted above, all written comment submissions received on or before August 25, 2021, were evaluated and are considered in this scoping summary report. This report provides an overall summary of the types of comments received related to each issue. Reclamation received comments by email and directly through the VPM website.

Reclamation received three submissions during the public scoping period; the number of substantive comments extracted from each submission varied. Overall, Reclamation identified 11 substantive comments.

To ensure public comments were properly captured and that none were overlooked, Reclamation used a multiphase management and tracking system. Reclamation gave submissions a unique identifier and logged them into the comment response and analysis database. Each submission was reviewed, and individual substantive comments were extracted.

Reclamation reviewed each comment to determine whether it was substantive and if any project issues were identified; each comment was assigned to one of the two following categories:

- Substantive comments related specifically to the Kachess SOD EA
- Comments that were non-substantive or pertain to issues beyond the scope of the Kachess SOD EA

Comments similar to each other were grouped under a topic heading based on the content of the comment. Reclamation drafted a statement summarizing the issues contained in each group of comments. Reclamation used these issue statements to inform the analysis and alternatives development for the EA.

The results of the comment analysis are summarized in **Chapter 2**, Comment Summary.

I.4.1 Definitions

The terms listed below are provided to help understand the method of comment collection and analysis.

Comment

A distinct statement or question about a particular topic, such as:

- Purpose of and need for action
- Alternatives to analyze in the EA
- Any aspect of potential environmental impacts arising from the proposed action and no-action alternatives
- Reclamation's implementation of the NEPA process
- Matters outside the scope of the EA

Substantive Comment

Substantive comments are those that provide new information or suggest an alternative to the proposed project, identify a different way to meet the project need, suggest alternate methodologies for analysis and the reason(s) why they should be used, or make factual corrections or identify sources of credible research or data.

Commenter

This term includes any and all potentially interested or affected parties, whether private citizens; state, local, or tribal governments; environmental groups; water users or IDs; civic and community organizations; or businesses.

Issue Category

The issue category is the resource topic or issue to which a comment is addressed. This may include the NEPA process, including alternatives development; the affected environment or environmental consequences sections of the EA; or a specific resource such as water quality.

Comment Submission

A written version of comments submitted by a commenter. This may be a letter, email, US mail, or written comment submitted via the VPM. A comment submission may contain any number of comments.

Issue Summary

A summary capturing the essence of similar substantive comments on a given comment category and the summary response to those comments.

Chapter 2. Comment Summary

Reclamation received and reviewed a total of three comment submissions, all of which were considered unique and substantive. Statements that expressed personal opinions or preferences that had no relevance to the development of the EA, or that represented commentary on resource management that is outside the scope of the planning process, were not considered substantive. Subsequently, these non-substantive statements are not addressed further in this scoping report.

Input was provided by one state agency during the comment period: the WDFW. Other federal, state, local, and tribal agencies are welcome to comment on the project, and their input will be incorporated and considered as appropriate. However, such input, should Reclamation receive it, will not be included in this report, as the comment period has ended.

Table 2-1 shows comment submissions by commenter affiliation.

Table 2-1
Comment Submission by Commenter Affiliation

Commenter Affiliation	Number of Comment Submissions
Individual	2
Federal agency	0
State agency: WDFW	1
Tribal	0
Total	3

Table 2-2 summarizes the number and proportion of comments received by issue category. Reclamation identified 11 substantive comments and categorized them into nine issue categories. Of all the substantive comments, most fell under issues related to biological resources (36 percent); this was followed by the range of alternatives (18 percent), which involved suggestions for changes to the modification of the dam. The results of the comment analysis are summarized in Chapter 3, Issue Summaries.

Table 2-2
Number of Individual Substantive Comments by Issue Category

Issue Category	Number of Individual Comments	Percentage of Total Comments
NEPA	—	—
Cooperating/participating agency relationships	1	9
Purpose and need	1	9
Range of alternatives	2	18
Cumulative impacts	1	9
Biological Resources	—	—
Fisheries and aquatic ecosystem	2	18
Botanical resources	1	9
Wetlands	1	9
Geology and Soils	1	9
Socioeconomic Resources	1	9
Total	11	100

Chapter 3. Issue Summaries

This section provides a summary of the substantive public comments received during the public scoping period. Issue summaries focus on the general themes provided in public comments or notable specific comments.

3.1 ISSUE 1: PARTICIPATING AGENCY RELATIONSHIPS

The project will require a hydraulic project approval from the WDFW. As plans develop, close consultation with the WDFW is encouraged to ensure the permit process is successful.

3.2 ISSUE 2: PURPOSE AND NEED

How—exactly—does Reclamation intend to accomplish the goals implied when it says, “The proposed federal action is to modify and improve elements to reduce risk of internal erosion failure of the Kachess Dam”? What elements are Reclamation referring to and how will they be modified or improved, and how will this reduce the risk of internal erosion at the dam?

3.3 ISSUE 3: RANGE OF ALTERNATIVES

Issue 1: The current repair plans do not appear to be defined as substantive reconstruction; thus, fish passage at the Kachess Dam is not a requirement of the project. However, should the project expand and a more complete rebuild of the dam is deemed necessary, the WDFW may revisit this topic of fish passage. In the EA, Reclamation needs to fully describe the repairs that are required, both the preferred option and the maximum potential extent of repairs.

Issue 2: To protect water quality (shade and sediment control) of the outlet as it flows into Kachess River, the WDFW would like to see a buffer of at least one to two rows of trees retained around the outlet channel. Reclamation should include this option in the EA.

3.4 ISSUE 4: CUMULATIVE IMPACTS

How will the Kachess Dam repairs impact (time wise or otherwise) the proposed Kachess Drought Relief Pumping Plant?

3.5 ISSUE 5: FISHERIES AND AQUATIC ECOSYSTEMS

Issue 1: The EA should examine the impacts on fish life within Kachess Reservoir and Kachess River associated with the project. Particularly, would construction timelines necessitate that dam operations and flow management be different from that of typical operations? If so, how would that flow management affect any fish within the reservoir and how would any change in downstream flow management affect spawning, rearing, or migrating fish in Kachess River or Yakima River environments? If the proposed alternative would result in impacts on flow management that could impact fish life, the WDFW would expect that mitigation options would be included in the EA, and those options would be discussed with the WDFW.

Issue 2: Though no fish were found during one survey in the spring 2021 conducted by the WDFW in the wetlands/outflow channel that the proposed access road would cross, that outflow channel has fish connection potential with the Kachess River; impacts on those waters should be evaluated with fish in mind. Water crossing structures should be designed to meet WDFW (or federal) fish passage criteria to provide for fish passage. The WDFW would be open to further discussions and would provide recommendations on appropriate sizing and design of a fish-passable water crossing structure.

3.6 ISSUE 6: BOTANICAL RESOURCES

Issue 1: To offset habitat impacts from the project, the WDFW would like to see that trees, which must be cleared from the site, go to habitat restoration projects, either within the Kachess watershed or to nearby areas, such as those of the upper Yakima River and its tributaries. Reclamation should include this option in the EA. The WDFW would be open to further discussions; the WDFW also would provide recommendations on appropriate projects for the trees and would coordinate the details with one of its habitat partners.

3.7 ISSUE 7: WETLANDS

The proposed access road modifies the current slope grade significantly and requires substantial cut and fill under the proposed layout. As this hillslope is directly above the Kachess River and wetlands that feed into the Kachess River, the WDFW is concerned with the steepness of the slope and the amount of cut and fill material associated with the proposed access road construction, particularly directly above both the wetlands that drain into the Kachess River and the Kachess River itself.

3.8 ISSUE 8: GEOLOGY AND SOILS

A geotechnical analysis should be included in the EA to demonstrate that the proposed grade modification would not destabilize the hillslope or fill, which could lead to erosion or environmental impacts on both the wetlands and Kachess River. That analysis also needs to include slope stability measures to ensure the exposed or eroding soil would not negatively impact either the wetlands or Kachess River.

3.9 ISSUE 9: SOCIOECONOMIC RESOURCES

Have the IDs paid for their share of the repairs to Keechelus Dam? A commenter requested detailed information on which IDs were required to pay, what percentage of the total cost, and if they have paid on schedule. This commenter felt this information is pertinent to the Kachess Dam project, to get a sense of whether the IDs are actually paying on their current obligations to Keechelus Dam repairs and would pay a reasonable portion of the costs of the Kachess Dam repair. Additionally, this commenter requested information on how much the public (through Reclamation or other public entities) would have to pay for the Kachess Dam repairs.

Appendix A

Virtual Public Meeting Website

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Kachess Dam Safety of Dams Modification Project Environmental Assessment



Aerial photograph of Kachess Dam and Reservoir taken by
Reclamation.

Thank you for visiting the U.S. Department of the Interior, Bureau of Reclamation virtual public scoping meeting website for the Kachess Dam Safety of Dams modification project environmental assessment.

The Bureau of Reclamation invites the Tribes and the public to identify issues or alternatives for consideration in the development of an environmental assessment for

the Kachess Dam Safety of Dams modification project. The 30-day public comment period will be open from July 26, 2021, to Aug. 25, 2021. The project area is located in Kittitas County, two miles north of Easton, Wash.

The public can provide input and participate in the scoping process through two, live virtual public meetings held Aug. 10 and 12, from 5 p.m. to 6:30 p.m. PDT. During these meetings, subject matter experts will be available to answer questions about the project. Attendees can participate via computer or phone. Materials from the two live virtual public meetings are available as a [zip file download](#). This virtual meeting room will also be accessible 24 hours a day. Visitors can view information about the project, pose questions, view answers, and submit formal comments. Comments must be submitted/postmarked by Aug. 25.

To attend either of the two live virtual public meetings, you can [register in advance](#). After registering, you will receive a confirmation email containing information about joining the webinar.

How to Use The Virtual Public Meeting Site

By clicking on the following links, participants can do the following:

- Move from station to station to read project information and meeting materials.
- [Provide scoping comments](#) on affected resources, issues to be considered, and potential alternatives.
- Read [frequently asked questions and answers](#).

Information is also available on Reclamation's [Kachess Dam Safety of Dams modification project environmental assessment website](#).

Virtual Public Meeting Stations

Station 1: Welcome

Station 2: NEPA and Public Involvement

Station 3: Project Overview

Station 4: Providing Scoping
Comments

Station 5: Frequently Asked Questions

All of the Kachess Safety of Dams environmental assessment virtual public scoping meeting files on this site are available as a [zip file download](#).

For more information on virtual public meetings, [email us](#), visit [EMPSi's website](#), or [our Virtual Public Meetings home page](#).

Kachess Dam Safety of Dams Modification Project Environmental Assessment

Welcome



Aerial photograph of Kachess Dam and Reservoir taken by Reclamation.

Welcome to the virtual public scoping meeting website for the Kachess Dam Safety of Dams modification project environmental assessment.

The Bureau of Reclamation invites the Tribes and the public to identify issues or alternatives for consideration in the development of an environmental assessment for the Kachess Dam Safety of Dams modification project. The 30-day public comment period will be open from July 26, 2021, to Aug. 25, 2021. The project area is located in Kittitas County, two miles north of Easton, Wash.

As part of its Safety of Dams program mission, Reclamation is committed to ensuring its dams do not present unacceptable risk levels to people, property, and the environment. These requirements result in a need for Reclamation to implement corrective action to bring static and hydrologic risks at Kachess Dam below public protection guidelines while minimizing impacts to the environment.

Reclamation is conducting the scoping period in accordance with the National Environmental Policy Act and will be gathering information from Tribes, government agencies, interested parties, and the public to identify relevant comments, concerns and/or issues that will inform the scope of the EA and guide its development. The public will have the opportunity to participate in the scoping process and [provide input](#) through this virtual meeting room from **July 26 to Aug. 25**. The public also can provide input and participate in the scoping process through two live virtual public meetings held Aug. 10 and 12, from 5 p.m. to 6:30 p.m. PDT. All scoping comments must be submitted/postmarked by Aug. 25.

Please sign in and let us know you visited our site

Name *

First Name

Last Name

Email *

Address

Address 1

Address 2

City

State/Province

Zip/Postal Code

Country

I would like to be added to the project mailing list.

Submit

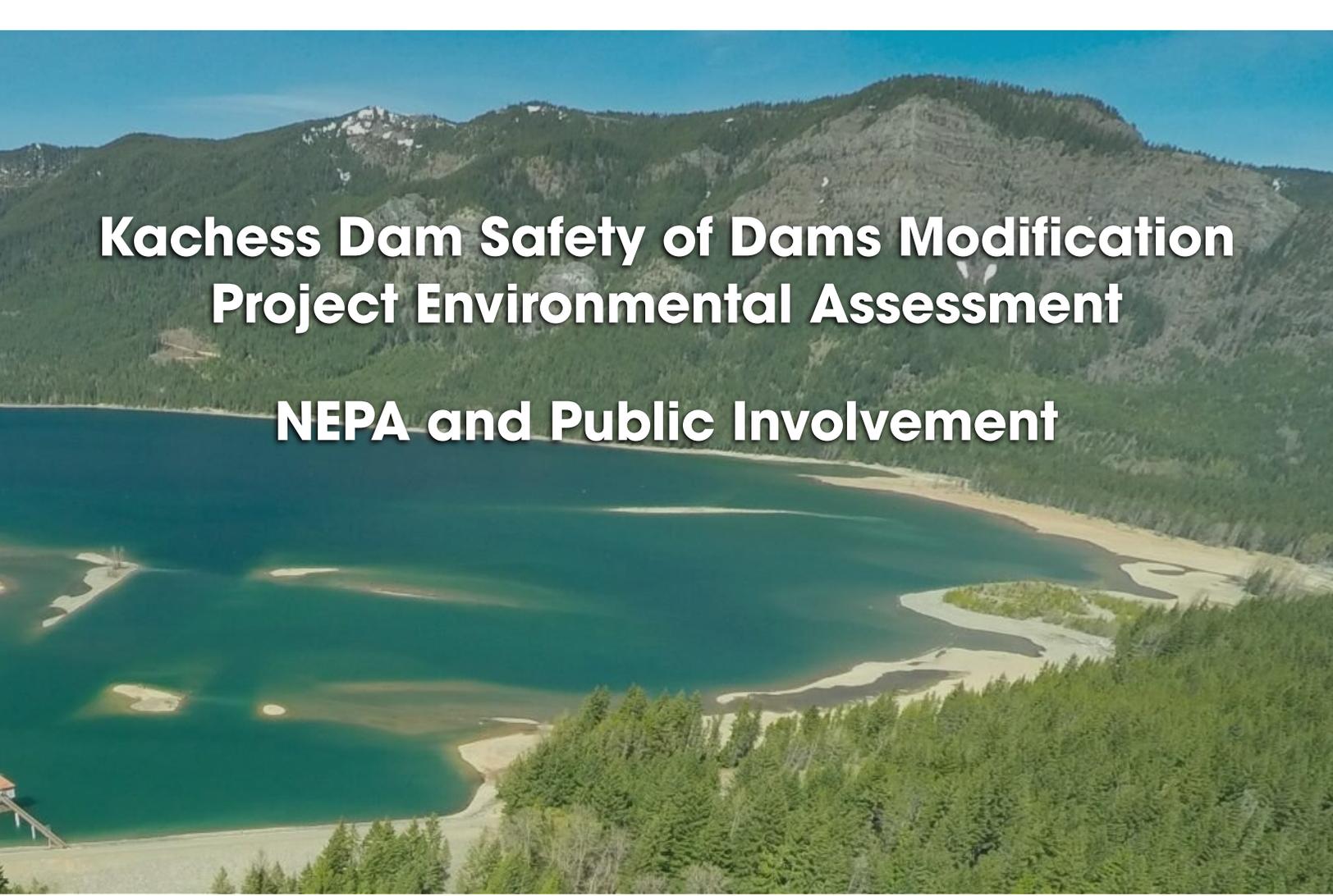
Next Station: NEPA and Public Involvement

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For more information on the Kachess Dam Safety of Dams modification project environmental assessment, please contact Jonathan Penman-Brotzman, Environmental Protection Specialist (BOR-SHA-KSODNEPA@usbr.gov).

To be added or removed from the mailing list, please contact Alli Yamnitsky (alli.yamnitsky@empsi.com).

For more information on virtual public meetings, [email us](#),
visit [EMPSi's website](#), or [our Virtual Public Meetings home](#)

An aerial photograph of the Kachess Dam and Reservoir. The reservoir is a large, deep blue-green body of water with several smaller, shallower areas and islands. The surrounding landscape is a mix of dense evergreen forests and rocky, sparsely treed hills under a clear blue sky.

Kachess Dam Safety of Dams Modification Project Environmental Assessment

NEPA and Public Involvement



Aerial photograph of Kachess Dam and Reservoir taken by Reclamation.

NEPA and the Scoping Process

NEPA requires that federal agencies engage the public during preparation of an EA. Scoping is the process that continues throughout the planning and early stages of EA preparation. Agencies use scoping to engage various stakeholders, including state, local, and Tribal governments and the public in the early identification of affected resources, issues to be considered, and potential alternatives.

Engaging the Public

This virtual public meeting website will be accessible 24 hours a day during the scoping period. Additionally, the public can provide input and participate in the scoping process

through **two live virtual public meetings held Aug. 10 and 12, from 5 p.m. to 6:30 p.m. PDT.**

During the virtual meetings, subject matter experts will be available to answer questions about the project. Attendees can participate via computer or phone. Reclamation will be accepting verbal comments during the two virtual public meetings.

To attend either of the two live virtual public meetings, you can [register in advance](#). After registering, you will receive a confirmation email containing information about joining the webinar.

Live Virtual Public Meetings

The two live virtual public meetings were recorded and are available for viewing by clicking the video thumbnails below. Additionally, the presentation and transcripts from the meetings are available as a [zip file download](#).





from **EMPSi Webmaster**

1:43:10 |



KachessSOD_EA_VPM_20210812

from **EMPSi Webmaster**

1:44:40 |



Next Station: Project Overview

[Return to Home Page](#)

For more information on the Kachess Dam Safety of Dams modification project environmental assessment, please contact Jonathan Penman-Brotzman, Environmental Protection Specialist (BOR-SHA-KSODNEPA@usbr.gov).

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Kachess Dam Safety of Dams Modification Project Environmental Assessment

Project Overview



Aerial photograph of Kachess Dam and Reservoir taken by Reclamation.

Project Overview

Kachess Dam, located about 14 miles northwest of Cle Elum, Wash., was constructed from 1910 to 1912. It was one of the first dams constructed by the U.S. Reclamation Service and increased the storage capacity of a large natural lake. The 115-foot-high, earth-filled Kachess Dam created a reservoir with an actively managed capacity of 239,000 acre-feet.

Reclamation has identified seepage and internal erosion issues through the dam embankment along the outlet works conduit, which conveys



water from the reservoir to the Kachess River downstream. In other words, water seeping through the dam embankment and the soils surrounding the conduit is carrying soil materials with it and leaving behind voids. This "internal erosion" creates a risk of potential dam failure. Reclamation is proposing this project to filter and monitor the seepage so as to prevent eroded soils from exiting the dam.

Purpose and Need

The purpose and need of the proposed project include:

- 1) Implement cost effective measures to reduce risks per Reclamation's Public Protection Guidelines.
- 2) Maintain water deliveries to irrigation districts, Tribes, and others throughout the Yakima Basin.
- 3) Minimize impacts to the environment.
- 4) Maintain water flows for endangered species.

As part of its Safety of Dams program mission, Reclamation is committed to ensuring its dams do not present unacceptable risk levels to people, property, and the environment. These requirements result in a need for Reclamation to implement corrective action to bring static and hydrologic risks at Kachess Dam below public protection guidelines while minimizing impacts to the environment.

Project Overview Map

Proposed Action

Reclamation proposes to reduce the risk by performing the following improvements:

- construct an access road, prepare the site, develop staging areas to support construction and long-term maintenance

- extend and line the conduit, install filter and stabilization berm.

Reservoir level restrictions are not anticipated to occur, and construction of the extension and lining of the outlet works would be timed to avoid major issues with water deliveries.

Reclamation conducted extensive field surveys to identify any sensitive cultural resources, wildlife habitat, and wetlands located in the proposed project area. The results of these surveys will inform the project designs to avoid, minimize, or mitigate resource impacts.

For further information

For more information on the Kachess Dam Safety of Dams modification project environmental assessment, please contact Jonathan Penman-Brotzman, Environmental Protection Specialist (BOR-SHA-KSODNEPA@usbr.gov).

To be added or removed from the mailing list, please contact Alli Yamnitsky (alli.yamnitsky@empsi.com).

Persons who use a telecommunications device for the deaf may call the Federal Relay Service (FedRelay) at [1-800-877-8339](tel:1-800-877-8339) TTY/ASCII to contact the above individual during normal business hours or to leave a message or question after hours. You will receive a reply during normal business hours.

Information also is available on Reclamation's [Kachess Dam Safety of Dams modification project environmental assessment website](#).

[Next Station: Providing Comments](#)

[Return to Home Page](#)

For more information on virtual public meetings, [email us](#),
visit [EMPSi's website](#), or [our Virtual Public Meetings home
page](#).

Kachess Dam Safety of Dams Modification Project Environmental Assessment

Providing Comments



Aerial photograph of Kachess Dam and Reservoir taken by Reclamation.

Reclamation Wants Your Feedback

Reclamation is requesting public scoping comments on the Kachess Dam Safety of Dams modification project EA.

To be most helpful, your comments should be as specific as possible. Examples of substantive comments are as follows:

- provide new information about the proposed project
- identify a different way to meet the project need
- suggest alternate methodologies for analysis and the reason(s) why they should be used
- make factual corrections, or identify sources of credible research or data

Comments that are less helpful and considered non-substantive are those that

- vote in favor of or against the proposed action
- agree or disagree with agency policy without justification or supporting data
- don't pertain to the project area or the proposed project
- contain vague, open-ended questions

Ways to Comment

Comments can be submitted during the virtual public meetings, through the comment form below or via email at BOR-SHA-KSODNEPA@usbr.gov. Written comments can be sent to Mr. Jonathan Penman-Brotzman, environmental protection specialist, Bureau of Reclamation, Columbia-Cascades Area Office, 1917 Marsh Rd. Yakima, WA 98901. Comments must be submitted/postmarked by Aug. 25.

To attend either of the two live virtual public meetings and provide comments, you can [register in advance](#). After registering, you will receive a confirmation email containing information about joining the webinar.

Comment form:

*Denotes a required field.

Public Disclosure

Before including your address, phone number, e-mail address, or other personal identifying information in your comments, be advised that your entire comment, including your personal identifying information, may be made publicly available at any time. While you may request that we withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Name *

First Name

Last Name

Email *

Organization name

Scoping comment for the Kachess Dam Safety of Dams modification project environmental assessment *

Submit

Visit the [Kachess Dam Safety of Dams Modification Project Environmental Assessment website](#) for more information on the project.

Still have questions? Visit our [Frequently Asked Questions page](#).

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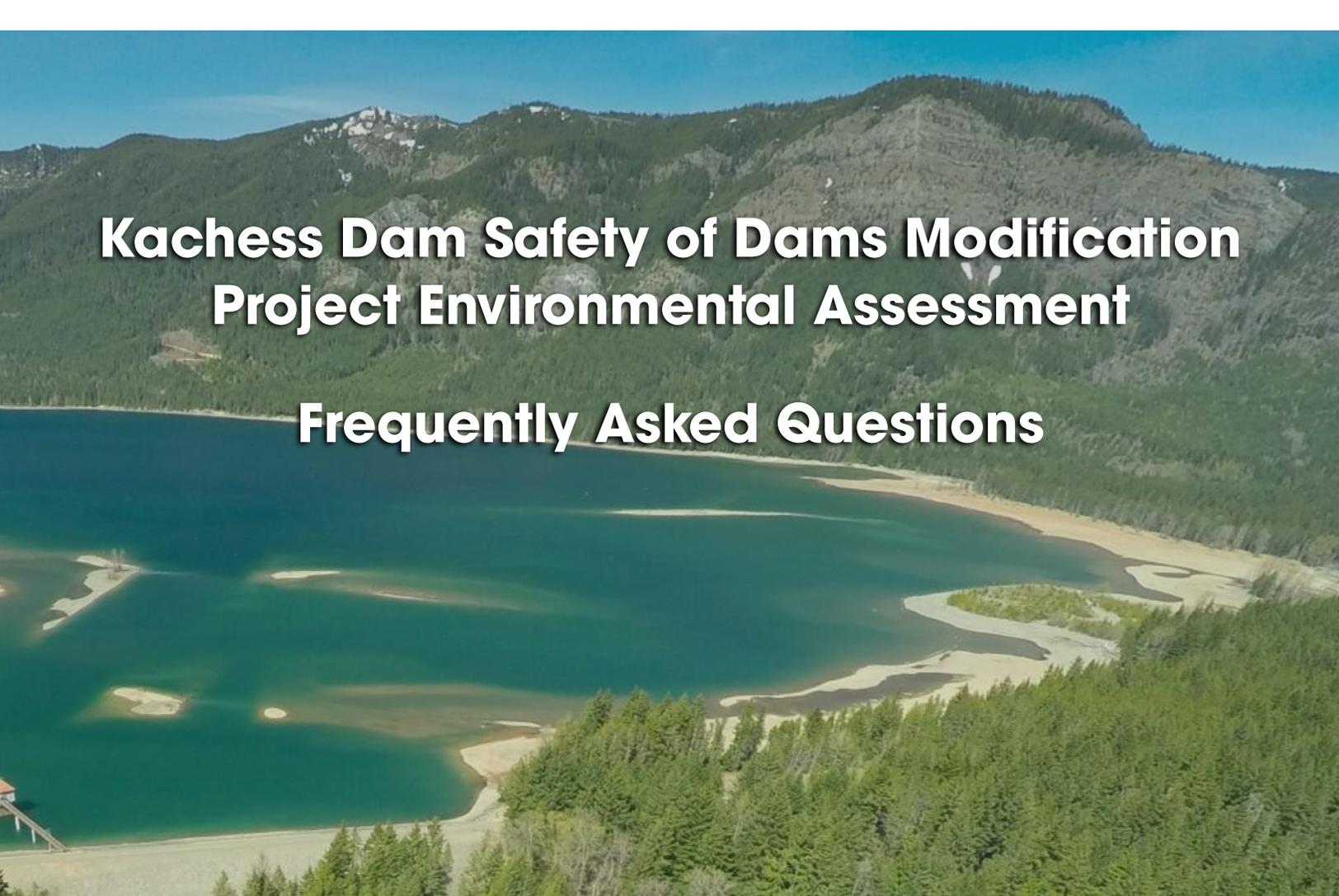
For more information on the Kachess Dam Safety of Dams modification project environmental assessment, please contact Jonathan Penman-Brotzman, Environmental Protection Specialist (BOR-SHA-KSODNEPA@usbr.gov).

To be added or removed from the mailing list, please contact Allie Yamnitsky (alli.yamnitsky@empci.com).

For more information on virtual public meetings, [email us](#),
visit [EMPSi's website](#), or [our Virtual Public Meetings home
page](#).

Kachess Dam Safety of Dams Modification Project Environmental Assessment

Frequently Asked Questions



Aerial photograph of Kachess Dam and Reservoir taken by Reclamation.

Frequently Asked Questions

1. [Can you explain how this project is different from the Kachess Drought Relief Pumping Plant \(KDRPP\) in the area?](#)
2. [What is the proposed federal action?](#)
3. [What will be included in the development of the EA?](#)
4. [Why is the proposed federal action necessary?](#)
5. [What are the benefits of the proposed federal action?](#)
6. [What are you studying in the EA, and why are you doing it?](#)

Need some clarification?

Reclamation is interested in helping clarify your understanding of the Kachess Dam Safety of Dams modification project environmental assessment. Most questions may be answered by reviewing the Frequently Asked Questions on this page. During the scoping period, questions will be answered by

7. [How will you consider comments from the public?](#)
8. [How will Reclamation engage the public during the scoping period?](#)
9. [How will Reclamation engage Native American tribes?](#)
10. [Who are the cooperating agencies?](#)

Reclamation via this website and posted at the bottom of this page. Information is also available on Reclamation's [Kachess Dam Safety of Dams modification project environmental assessment website.](#)

Name *

First Name

Last Name

Email *

Question for Reclamation *

Submit

1. Can you explain how this project is different from the Kachess Drought Relief Pumping Plant (KDRPP) in the area?

This project is completely independent of KDRPP. This project is solely related to modifying and improving the dam on the Kachess Reservoir.

2. What is the proposed federal action?

The proposed federal action is to modify and improve elements to reduce risk of internal erosion failure of the Kachess Dam. The Dam is an earthfill structure located on the Kachess River about 2 miles northwest of Easton and 14 miles northwest of Cle Elum. The Bureau of Reclamation owns and operates the Kachess Dam. Kachess Dam is a feature of the Yakima Project in Washington and was constructed by Reclamation between 1910 and 1912. The reservoir formed by the dam was built at the terminus of a natural lake and has an active storage capacity of 239,000 acre-feet at “normal water surface elevation” of 2,262 feet, or the top of active conservation pool. Kachess Dam has a structural height of 115 feet and a crest length of 1,400 feet at crest elevation 2,268 feet.

3. What will be included in the development of the EA?

The EA will include an analysis of the potential environmental effects of the proposed action, a no-action alternative, and a reasonable range of alternatives designed to respond to the project’s purpose and need.

4. Why is the proposed federal action necessary?

Internal erosion in the dam has led to seepage along the dam outlet tunnel. The risk of internal erosion is high enough (and with high enough confidence in the portrayal of risk) that it has earned a Dam Safety Priority Rating rating of DSPR 2, or “urgent” priority category. Permanent action to reduce risk is justified. Accordingly, the goal of these improvement projects would reduce deterioration of the dam and the safety risk that it imposes.

5. What are the benefits of the proposed federal action?

Improvements and modifications to the dam will effectively reduce the safety risks it imposes for the downstream public.

6. What are you studying in the EA, and why are you doing it?

Reclamation will use the EA to evaluate the impacts of the project on the natural and human environment within the area of the proposed action. Resources to be evaluated include, but are not limited to ESA-listed species, water quality, wetlands and riparian areas, land use, cultural resources, sacred sites, Indian Trust Assets and environmental justice.

The NEPA process begins when a federal agency develops a proposal to take a major federal action. Federal agencies may prepare an EA to determine if a proposed federal action will significantly affect the quality of the human environment. If no significant impacts are identified, Reclamation will issue a Finding of No Significant Impact with the final EA. Should significant impacts be identified, Reclamation will begin development of an environmental impact statement.

7. How will you consider comments from the public?

Reclamation will collect comments from Tribes, the public, and other interested parties. The Reclamation team will review and consider every comment submitted and address substantive comments as appropriate. Comments received during the public scoping period will be summarized in a public scoping report that will be made available to the public before the preliminary EA is prepared. You can [provide your comments here](#).

8. How will Reclamation engage the public during the scoping period?

Reclamation is committed to an open and inclusive NEPA process. All substantive comments will be carefully considered in our review and decision(s) on meeting the agency's NEPA responsibilities and other applicable laws in this process.

The public participates in the NEPA scoping process by helping to identify EA issues and potential alternatives to the proposed action, and by evaluating the analysis of the proposed action and alternatives in the preliminary EA during the public review period for that document. All public substantive comments received are considered.

As the first step in the NEPA process, Reclamation conducted on-the-ground surveys for wildlife, wetlands, and cultural resources. The initiation of the scoping period begins on July 26 with the release of a press release and other public notices. The public scoping comment period will end on Aug. 25, 2021. Reclamation issued a news release and a newspaper ad, and distributed flyers via email to announce the public comment opportunities.

As part of the public scoping process, Reclamation will host two live, moderated video teleconference sessions on Aug. 10 and 12, 5-6:30 p.m. PDT, to talk about the proposed project and the NEPA process. Attendees can ask Reclamation staff questions during the session. More details are available [here](#).

The public can submit comments through the virtual public scoping meeting website at any time during the scoping period.

Information also is available on Reclamation's [Kachess Dam Safety of Dams modification project environmental assessment](#).

9. How will Reclamation engage Native American tribes?

Reclamation has a duty to consult with Native American Tribes on the proposed project. Reclamation will engage the Tribes to identify sacred sites, Indian Trust Assets, and other concerns. The Tribes have a long history and deep cultural ties to Kachess. Consultation under Section 106 of the National Historical Protection Act and close coordination under NEPA will be the primary means of engagement.

10. Who are the cooperating agencies?

Reclamation is the lead federal agency under NEPA for development of the EA. While there are no formal cooperating agencies for this project, Reclamation anticipates close coordination with the U.S. Forest Service, Washington Department of Fish and Wildlife, the U.S. Fish and Wildlife Service, Washington State Department of Archaeology and Historic Preservation, and the U.S. Army Corps of Engineers during the NEPA and subsequent permitting process.

If you have more detailed questions about the Kachess Safety of Dams environmental assessment, please [submit a comment here](#), or you may reach us by email or phone via the contact information below.

[Return to Home Page](#)

For more information on the Kachess Dam Safety of Dams modification project environmental assessment, please contact Jonathan Penman-Brotzman, Environmental Protection Specialist (BOR-SHA-KSODNEPA@usbr.gov).

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visit [EMPSi's website](#), or [our Virtual Public Meetings home page](#).

Appendix B

Public Outreach Materials

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EMAIL BLAST:

The Bureau of Reclamation invites you to attend a virtual public meeting to discuss the Kachess Dam Safety of Dams modification project environmental assessment. The 30-day public comment period is open from July 26 to Aug. 25. Please forward this email to anyone you think may be interested.

What: Public comment period and virtual public meetings

When: Aug. 10 and 12, 2021 from 5 p.m. to 6:30 p.m. PDT

Where: Virtual meeting room: <https://www.virtualpublicmeeting.com/kachess-dam-safety-ea-scoping>

The public can provide input and participate in the scoping process through two, live virtual public meetings and a virtual meeting room that will be available 24 hours a day. Visitors can view information about the project, ask questions, view answers, and submit comments.

Attendees can participate via computer or phone. To join the public meetings and/or the virtual meeting room, visit <https://www.virtualpublicmeeting.com/kachess-dam-safety-ea-scoping>.

Comments can be submitted during the virtual public meetings, or via email at BOR-SHA-KSODNEPA@usbr.gov. Written comments can be sent to Mr. Jonathan Penman-Brotzman, environmental protection specialist, Bureau of Reclamation, Columbia-Cascades Area Office, 1917 Marsh Rd. Yakima, WA 98901. Comments must be submitted/postmarked by Aug. 25. For more information or for project updates, visit either the meeting website listed above or the project website at <https://www.usbr.gov/pn/programs/sod/kachess/index.html>.



— BUREAU OF —
RECLAMATION

Kachess Dam Safety of Dams Modification Project Environmental Assessment

Public Scoping Period

The Bureau of Reclamation invites the public to identify issues or alternatives to be considered in the environmental assessment on the Kachess Dam Safety of Dams modification project. The 30-day public comment period will be open from **July 26, 2021**, to **Aug. 25, 2021**.

The public can provide input and participate in the scoping process through two, live virtual public meetings held Aug. 10 and 12, from 5 p.m. to 6:30 p.m. PDT. During these meetings, subject matter experts will be available to answer questions about the project. Attendees can participate via computer or phone. A virtual meeting room will also be accessible 24 hours a day. Visitors can view information about the project, pose questions, view answers, and submit formal comments. Comments must be submitted/postmarked by Aug. 25.



Follow this link to join the virtual public meetings or to visit the virtual meeting room: <https://www.virtualpublicmeeting.com/kachess-dam-safety-ea-scoping>.



Comments can be submitted during the virtual public meetings, or via email at BOR-SHA-KSODNEPA@usbr.gov.



Written comments can be sent to Mr. Jonathan Penman-Brotzman, environmental protection specialist, Bureau of Reclamation, Columbia-Cascades Area Office, 1917 Marsh Rd. Yakima, WA 98901.

For more information visit <https://www.usbr.gov/pn/programs/sod/kachess/index.html>.

NEWS RELEASE:



— BUREAU OF —
RECLAMATION

Environmental Assessment for the Kachess Dam Safety of Dams Modification Project: Public Comment Period

The Bureau of Reclamation invites the public to identify issues or alternatives to be considered in the environmental assessment for the Kachess Dam Safety of Dams modification project. The 30-day public comment period will be open from **July 26, 2021, to Aug. 25, 2021.**

The public can provide input and participate in the scoping process through two, live virtual public meetings held Aug. 10 and 12, from 5 p.m. to 6:30 p.m. PDT. During these meetings, subject matter experts will be available to answer questions about the project. Attendees can participate via computer or phone. A virtual meeting room also will be accessible 24 hours a day. Visitors can view information about the project, pose questions, view answers, and submit formal comments.

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For more information on the project visit
<https://www.usbr.gov/pn/programs/sod/kachess/index.html>



— BUREAU OF —
RECLAMATION

NEWS RELEASE

For Release: July 26, 2021

Contact: Erika Lopez, 208-378-5101, ecalopez@usbr.gov

Reclamation seeks public comment on environmental assessment for the Kachess Dam Safety of Dams modification project

EASTON, Wash. – The Bureau of Reclamation invites the public to identify issues or alternatives for consideration in the development of an environmental assessment for the Kachess Dam safety project. The 30-day public comment period will be open from July 26 to Aug. 25. The project area is located in Kittitas County, two miles north of Easton, Wash.

As part of its Safety of Dams program mission, Reclamation is committed to ensuring its dams do not present unacceptable risk levels to people, property, and the environment. The proposed project will implement cost-effective measures to reduce long-term performance risks per Reclamation's Public Protection Guidelines; maintain water deliveries throughout the Yakima basin; minimize impacts to the environment; and maintain water flow for endangered species.

Kachess Dam is performing as designed; however, over years of operation, voids have formed along the outlet works due to erosion from seepage. The proposed modifications address issues important to the long-term functionality. There is no immediate threat to the safety of the dam—the dam is being rigorously monitored for any changes in performance.

The public can provide input and participate in the scoping process through two, live virtual public meetings that will be held Aug. 10 and 12, from 5 p.m. to 6:30 p.m. PDT. During these meetings, subject matter experts will be available to answer questions about the project. Attendees can participate via computer or phone. A virtual meeting room also will be accessible 24 hours a day. Visitors can view information about the project, pose questions, view answers, and submit formal comments. To join the public meetings and/or access the virtual meeting room, visit <https://www.virtualpublicmeeting.com/kachess-dam-safety-ea-scoping>.

Comments can be submitted during the virtual public meetings, or via email to BOR-SHA-KSODNEPA@usbr.gov. Written comments can be sent to Mr. Jonathan Penman-Brotzman, environmental protection specialist, Bureau of Reclamation, Columbia-Cascades Area Office, 1917, Marsh Rd. Yakima, WA 98901. Comments must be submitted/postmarked by Aug. 25.

For more information, please visit <https://www.usbr.gov/pn/programs/sod/kachess/index.html>.

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The Bureau of Reclamation is a federal agency under the U.S. Department of the Interior and is the nation's largest wholesale water supplier and second largest producer of hydroelectric power. Its facilities also provide substantial flood control, recreation opportunities, and environmental benefits. Visit our website at www.usbr.gov and follow us on Twitter [@USBR](https://twitter.com/USBR).

Appendix C

VPM Questions and Answers

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Question Report - August 10, 2021

Question #	Question	Asker Name	Asker Email	Answer(s)
1	What would happen if Kachess Dam failed?			Kachess Dam is performing as designed, however, if the dam failed, an uncontrolled release of the reservoir would result in flooding in low lying areas and would impact residents and communities downstream.
2	When is the construction work anticipated to begin?	Anonymous Attendee		This question was answered live.
3	When will SEPA be completed?	Anonymous Attendee		This question was answered live.
4	In 1998, the Bureau discovered voids in Keechelus Dam, which cost over \$15.3 million to fix. Fish passage concerns were not addressed. Will fish passage at Kachess Dam be addressed?	Anonymous Attendee		This question was answered live.
5	How would this project, location wise, impact the proposed tax-payer funded Kachess Pumping Project?	Anonymous Attendee		This question was answered live.
6	Are you intending to jack and bore the steel liner or would you tunnel in with a temporary shoring system	Harold Reeves	harold.reeves@kiewit.com	This question was answered live.
7	Is there piping occurring along the outlet pipe on the outside of the pipe?	G. Tebb	gteb461@ecy.wa.gov	This question was answered live.
8	Keechelus Dam, Kachess Dam, and Bumping Dam are all earth-filled dams. What is the likelihood that they will all need additional work?	Anonymous Attendee		This question was answered live.
9	What is the intake elevation and what is the outflow elevation?	john reeves	johnscottreeves@live.com	This question was answered live.
10	How will the capacity of the outlet works be impacted by the proposed sleeve? Will there be a need to recoup that capacity?	Anonymous Attendee		This question was answered live.
11	Do you know the source of the water causing the erosion? Does the outlet pipe have holes or is it coming in from the upstream face of the dam and following the pipe.	Frank Immel	fimmel@gdiving.com	This question was answered live.
12	Is the intake currently screened?	Anonymous Attendee		This question was answered live.
13	What methods will be used to stabilize the berm?	Cindy Raekes	cynthia_raekes@fws.gov	This question was answered live.
14	If the water is coming in from the face of the dam, how will installing a new pipe and grouting the annulus, solve the water intrusion?	Frank Immel	fimmel@gdiving.com	This question was answered live.
15	If the intention is to use the low flow bypass, this would eliminate the possibility of construction during September 1- Oct 15 due to flip flop?	john reeves	johnscottreeves@live.com	This question was answered live.

16	It was mentioned that Yakima Irrigators may pay for some of the cost, with the assumption that the federal taxpayers (Bureau) would pay for the remainder. Would state taxpayers pay for any of this project (through the Dam Safety Progrm)?	Anonymous Attendee		This question was answered live.
17	How many CFS can the low flow transmit?	john reeves	johnscottreeves@live.com	This question was answered live.
18	If there is clearing of trees for the project, can it be used for restoration purposes within the watershed? Kittitas Conservation Trust has a restoration project in the upper Kachess River for bull trout habitat.	Mitchell Long	mlong@kittitasconservationtrust.org	There is clearing of trees which will be used for restoration purposes. We have been in contact with the Forest Service and others to facilitated reuse.
19	And one more, sorry.	john reeves	johnscottreeves@live.com	This question was answered live.
20	Does the lake elevation need to be below a certain elevation to conduct this work?	john reeves	johnscottreeves@live.com	This question was answered live.
21	If the source of the infiltration is on the lake side of the dam, the face of the pipe at the berm would need to be sealed. You must be considering a cofferdam to do that sealing/final interface work or injecting in the wet, if the lake level does not need to be dropped to do the work. Please clarify.	Harold Reeves	harold.reeves@kiewit.com	This question was answered live.
22	You mentioned two options for the erroision; leaking into the pipe through cracks or holes, or by piping around the existing conduit. Have you closed the gate to see if there is still flow through the conduit?	Frank Immel	fimmel@gdiving.com	There are cracks and screened holes in the conduit that leak water.
23	Thank you	Frank Immel	fimmel@gdiving.com	You are welcome.
24	I understood a comment by one of the panelists regarding options for construction, are they avaiable to the public?	Frank Immel	fimmel@gdiving.com	This question was answered live.
25	I am looking at the project website now, but do not see the proposed action described. It will be challenging to provide comments without a detailed proposed action.	Cindy Raekes	cynthia_raekes@fws.gov	This question was answered live.
26	Thank you. I was looking at this website for info https://www.usbr.gov/pn/programs/sod/kachess/index.html	Cindy Raekes	cynthia_raekes@fws.gov	this is the site we are reviewing now: https://www.virtualpublicmeeting.com/kachess-dam-safety-ea-scoping
27	Great. Thank you	Cindy Raekes	cynthia_raekes@fws.gov	You are welcome.
28	Thanks Keenan. Got it 0-60CFS	john reeves	johnscottreeves@live.com	Thanks, John.
29	Thank you for the information. Looks like an interesting project. Enjoy your evening.	Frank Immel	fimmel@gdiving.com	This question was answered live.

Question Report - August 12, 2021

Question #	Question	Asker Name	Asker Email	Answer(s)
1	How will this work affect the KDRPP project?	Ann Lewis	roniaspamonia@gmail.com	This question was answered live.
2	Are the voids along the pipe going to be filled?	Wayne Sonnichsen	wsonnichsen@roza.org	This question was answered live.
3	So the KDRPP won't be slowed down while this fix is put in place?	Ann Lewis	roniaspamonia@gmail.com	This question was answered live.
4	Is there an answer as to the inlet and outlet elevations?	john reeves	johnscottreeves@live.com	This question was answered live.
5	How long will the work take to complete?	Scott Schlieff	schlieff.scott@epa.gov	This question was answered live.
6	Is there a payment schedule in place for the folks that will be paying for this?	Wayne Sonnichsen	wsonnichsen@roza.org	This question was answered live.
7	A road exists, why is there a need to build a road?	john reeves	johnscottreeves@live.com	This question was answered live.
8	Will any fish ladder or other possible other fish movement system be included in this work, or taken into consideration.	Ann Lewis	roniaspamonia@gmail.com	This question was answered live.
9	No question. Just thanks for the presentation.	Ann Lewis	roniaspamonia@gmail.com	This question was answered live.
10	What sort of alteration will we see to the stream flow of the Kachess River during active times of construction?	Scott Schlieff	schlieff.scott@epa.gov	This question was answered live.
11	How is the upper end of the steel pipe going to be sealed to the existing structure?	Wayne Sonnichsen	wsonnichsen@roza.org	This question was answered live.
12	What's the lowest elevation that you would be able to deliver water through the spillway?	Wayne Sonnichsen	wsonnichsen@roza.org	This question was answered live.
13	the spillway	Wayne Sonnichsen	wsonnichsen@roza.org	This question was answered live.

14	What is the virtual public meeting website link?	Amanda Biedermann	amanda.biedermann@empsi.com	https://www.virtualpublicmeeting.com/kachess-dam-safety-ea-scoping
15	Using the low flow bypass which is limited to 60CFS, Can this work be done in the winter with a construction schedule starting October 16 and complete by spring? This would not affect water deliveries	john reeves	johnscottreeves@live.com	This question was answered live.
16	Do you anticipate the need to pump water to meet minimum flows while installing the liner? It sounds like the reservoir elevation will likely be below the spillway elevation when the liner is being installed.	Wayne Sonnichsen	wsonnichsen@roza.org	This question was answered live.
17	The website states that "Reclamation conducted extensive field surveys to identify any sensitive cultural resources, wildlife habitat, and wetlands located in the proposed project area." Can you talk a bit about the findings of these surveys?	Scott Schlief	schlief.scott@epa.gov	This question was answered live.
18	Thanks all....	Wayne Sonnichsen	wsonnichsen@roza.org	This question was answered live.
19	Yes.	Scott Schlief	schlief.scott@epa.gov	This question was answered live.
20	Perfect, thank you!	Scott Schlief	schlief.scott@epa.gov	This question was answered live.
21	Thank you all for the excellent briefing. Have a great evening!	Scott Schlief	schlief.scott@epa.gov	Thank you, scott!