



AMENDED AGENDA

IDAHO WATER RESOURCE BOARD

Board Meeting No. 6-26

Thursday, May 21, 2026

Executive Session begins at 8:00 a.m. (MT) / 7:00 a.m. (PT)

Open Meeting begins at the conclusion of the Executive Session

Water Center

Conference Rooms 602 B – D

322 E. Front Street

BOISE

Livestream available at <https://www.youtube.com/@iwrp>

Brad Little
Governor

Jeff Raybould
Chairman
St. Anthony
At Large

Jo Ann Cole-Hansen
Vice Chair
Lewiston
At Large

Dean Stevenson
Secretary
Paul
District 3

Dale Van Stone
Hope
District 1

Albert Barker
Boise
District 2

Brian Olmstead
Twin Falls
At Large

Marcus Gibbs
Grace
District 4

Patrick McMahon
Sun Valley
At Large

1. Roll Call
2. Executive Session: Board will meet pursuant to Idaho Code § 74-206(1) subsection (d) to consider records that are exempt from disclosure as provided in Chapter 1, Title 74, Idaho Code. Topic: Stream Channel Alteration Permit No. S37-20565 AND pursuant to Idaho Code § 74-206(1) subsection (f) to communicate with legal counsel regarding legal ramifications of and legal options for pending litigation or controversies not yet being litigated but imminently likely to be litigated. Topic: Water Right Application No. 63-34753 - Closed to the public.
3. Stream Channel Alteration Permit No. S37-20565*
4. Agenda and Approval of Minutes: 5-26*
5. Public Comment
6. Financial Report
7. Idaho Soil and Water Conservation Commission:
 - A. Agency Overview
 - B. Water Quality Programs
8. Big Wood River Water Right Accounting Program Update
9. South Fork Snake River Basin Plan*
10. Loan Application – Dalton Water Association*
11. ESPA Surface Water Coalition Operational Efficiency Program - Minidoka Irrigation District*
12. Regional Water Sustainability Priority List*
 - A. Criteria
 - B. Winchester Dam Repair RWSP
 - C. Mountain Home Plateau Aquifer RWSP Funding Request
13. Grant Program Criteria and Timing*
14. Fiscal Year 27 Secondary Aquifer Planning and Management Fund Budget*
15. Fiscal Year 27 Water Management Account Spending Plan*
16. House Concurrent Resolution No. 34 - Bear River Legislative Report*
17. IWRB Palisades Storage Release and Swan Falls Agreement Flows*

AGENDA

IDAHO WATER RESOURCE BOARD

Board Meeting No. 6-26

Thursday, May 21, 2026

18. ESPA Recharge Program Projects*
19. Flow Augmentation Exchange Agreement*
20. Regional Manager Update
21. Directors Report
22. Non-Action Items for Discussion
23. Next Meeting and Adjourn

The Board will break for lunch at approximately noon.

* Action Item: A vote regarding this item may be made at this meeting. Identifying an item as an action item on the agenda does not require a vote to be taken on the item. ***Americans with Disabilities***: If you require special accommodations to attend, participate in, or understand the meeting, please make advance arrangements by contacting Department staff by email mlin.ream@idwr.idaho.gov or by phone at (208) 287-4800.

MEMO



To: Idaho Water Resource Board (Board)
From: Planning & Projects Bureau Staff
Date: May 14, 2026
Subject: Executive Session

REQUESTED ACTION: Board will move to Executive Session to meet Pursuant to Idaho Code § 74-206(1) subsection (d) to consider records that are exempt from disclosure as provided in Chapter 1, Title 74, Idaho Code. Topic: Stream Channel Alternation Permit No. S37-20565 AND Pursuant to Idaho Code § 74-206(1) subsection (f) to communicate with legal counsel regarding legal ramifications of and legal options for pending litigation or controversies not yet being litigated but imminently likely to be litigated. Topic: Water Right Application No. 63-34753 - Closed to the public.

MEMO



To: Idaho Water Resource Board (IWRB/Board)
From: Brian Patton, IWRB Executive Manager
Date: May 15, 2026
Subject: Stream Channel Alternation Permit No. S37-20565

REQUESTED ACTION: Following Executive Session Discussion Regarding Stream Channel Alternation Permit No. S37-20565, Report on Any Reportable Action in Open Session.

Stream Channel Alternation Permit No. S37-20565 will be reviewed and discussed with the Board in executive session, with any reportable action to be presented and announced in open session.

Attachments:

- *None*

MEMO



To: Idaho Water Resource Board (IWRB)
From: Planning & Projects Bureau Staff
Date: May 15, 2026
Subject: Agenda and Approval of Minutes: 5-26

REQUESTED ACTION: Approve the May 21, 2026, Agenda and IWRB Minutes, as Presented

The draft minutes, as identified below, are attached for the IWRB's review and approval.

Attachment(s):

- *Minutes from IWRB Meeting No. 5-26 - Boise*



IDAHO WATER RESOURCE BOARD

MINUTES MEETING NO. 5-26

DRAFT

Water Center
Conference Rooms 602 C-D
322 E. Front Street
BOISE

March 26, 2026

WORK SESSION

Brad Little
Governor

Jeff Raybould
Chairman
St. Anthony
At Large

Jo Ann Cole-Hansen
Vice Chair
Lewiston
At Large

Dean Stevenson
Secretary
Paul
District 3

Dale Van Stone
Hope
District 1

Albert Barker
Boise
District 2

Brian Olmstead
Twin Falls
At Large

Marcus Gibbs
Grace
District 4

Patrick McMahon
Sun Valley
At Large

At 08:37 AM (MT) Chairman Raybould called the meeting to order in Boise, Idaho and on Zoom.

Agenda Item No. 1: Roll Call

Board Members Present

Jeff Raybould, Chairman
Jo Ann Cole-Hansen, Vice Chairman
Marcus Gibbs
Patrick McMahon
Brian Olmstead
Dale Van Stone
Dean Stevenson, Secretary

IDWR Staff Members Present

Mathew Weaver, Director
Brian Patton, Deputy Director and IWRB Executive Manager
Cynthia Bridge Clark
Wesley Hipke
Justin Ferguson
John Loffredo
Mary Condon
Nick Banish
Ryan McCutcheon
Daniel Hoke
David Hokema
Morgan Johnson
Milin Ream
David Graybill, *Online*
Neal Farmer, *Online*

Others Present:

Kendra Kaiser, Idaho Water Resources Research Institute
Rob Sharpnack, Idaho Soil and Water Conservation Commission, Online
Neal Shippy, Water District 65

Agenda Item No. 2: Idaho Water Resources Research Institute Update

At this time, Kendra Kaiser Director of the Idaho Water Resources Research Institute (IWRRI) provided a PowerPoint presentation to the Board. Ms. Kaiser's update included highlights of IWRRI's 2025 Idaho Water Research Priorities, accomplishments, statewide and regional topics, looking forward.

Following a short question and answer session, Chairman Raybould moved to Agenda item No. 3.

Agenda Item No. 3: Conservation Reserve Enhancement Program (CREP) Status

By way of Zoom, Rob Sharpnack, CREP Manager with the Idaho Soil and Water Conservation Commission, provided a PowerPoint summary status update to the Board. Mr. Sharpnack's presentation included slides on the program's goals and benefits, its participants and partners, and CREP Active Contracts at the end of Fiscal Year 2025 and Fiscal Year 2026 to present. Concluding his presentation, Mr. Sharpnack reviewed a series of common questions and their related answers.

With no further review or questions, Chairman Raybould moved to the next order of business.

Agenda Item No. 4: Rental Pool Procedures

A. Water District 63

B. Water District 65

Joining the meeting via Zoom, David Graybill, Idaho Department of Water Resources (IDWR) Water Resources Supervisor for the Water Supply Bank, provided redlined version(s) of the proposed amendments to the Boise River Basin Rental Pool procedures adopted by the Water District (WD) 63 Advisory Committee on December 16, 2025, and the Payette River Basin Rental Pool procedures adopted by the Water District (WD') 65 Advisory Committee on March 10, 2026. Chairman Raybould invited Daniel Hoke and Neil Shippy, Watermasters for Water District 63 and 65 respectively, to speak to the proposed amendments.

With no further review or changes to the information that was presented, Chairman Raybould thanked staff for the information.

Agenda Item No. 5: Water Supply Update

David Hoekema, Hydrologist with the Idaho Department of Water Resources, provided a detailed PowerPoint presentation update on the current water supply conditions.

Mr. Hoekema's presentation included information on SNOTEL, Snow Course, and iSnoal data. Following a brief question and answer session, Chairman Raybould thanked staff for the informative information and update.

Agenda Item No. 6: IDWR Modeling, Monitoring, and Hydrologic Studies Update

Addressing the Board, Project Manager Ryan McCutcheon provided the IWRB with a PowerPoint presentation update on IDWR Hydrology Section Projects.

Mr. McCutcheon's presentation highlighted the Hydrology Section's Projects such as Basin Characterizations, Groundwater Modeling, and current additional projects that are focused on answering specific questions or collecting specific data.

Agenda Item No. 7: IWRB Grant Program Update

Project Manager Supervisor Mary Condon addressed the Board to provide a PowerPoint presentation update on the Grant Program. Ms. Condon’s presentation highlighted a summary of the total grant awards and processing summary, Fiscal Year 2024-2026 grant awards, grant schedule, and staff’s suggested updates.

With no further review or discussion, Chairman Raybould moved to the next agenda item.

Agenda Item No. 8: Eastern Snake River Plain Aquifer Recharge Update

Addressing the Board, Technical Programs Supervisor Matt Anders provided a detailed PowerPoint presentation summarizing the Managed Aquifer Recharge Program activities. Moreover, Mr. Anders discussed implementation of the 2026 Milner Non-Divert Agreement.

Agenda Item No. 9: Cloud Seeding Program Update

Cloud Seeding Project Manager Nick Banish presented a series of slides updating the Board on the 2025–2026 Cloud Seeding Program activities. He also provided summary data on cloud seeding operations across the various basins.

Agenda Item No. 10: Administrative Rules Update

IWRB Executive Manager Brian Patton advised Chairman Raybould that staff will be skipping the subject item.

Agenda Item No. 11: Potential Legislation of Interest

At this time, Deputy Attorney General Garrick Baxter provided the Board with a review and verbal summary on legislation of interest to the Department of Water Resources and Water Resource Board, with particular emphasis on matters of interest to the Board and legislative decisions requiring Board action.

Agenda Item No. 12: Non-Action Items for Discussion

There were no items for discussion.

Agenda Item No. 13: Adjourn

Mr. Barker moved to adjourn. Mr. Stevenson seconded. **Voice vote**: 8 ayes. Motion carried. Meeting adjourned at 12:25 PM.

Respectfully submitted this 22nd day of May 2026.

Dean Stevenson, *Secretary*

Milin J. Ream, *Administrative Assistant II*

DRAFT



IDAHO WATER RESOURCE BOARD

MINUTES MEETING NO. 5-26

DRAFT

Brad Little
Governor

Water Center
Conference Rooms 602 C-D
322 E. Front Street
BOISE

Jeff Raybould
Chairman
St. Anthony
At Large

March 26, 2026

Board Meeting No. 5-26

Jo Ann Cole-Hansen
Vice Chair
Lewiston
At Large

At 08:03 AM (MT) Chairman Raybould called the meeting to order in Boise, Idaho and on Zoom. The meeting was live streamed on the Board's YouTube Channel after the executive session

Dean Stevenson
Secretary
Paul
District 3

Agenda Item No. 1: Roll Call

Board Members Present

Jeff Raybould, Chairman
Jo Ann Cole-Hansen, Vice Chairman
Marcus Gibbs
Patrick McMahon
Brian Olmstead
Dale Van Stone
Dean Stevenson, Secretary

Dale Van Stone
Hope
District 1

Albert Barker
Boise
District 2

Staff Members Present

Mathew Weaver, IDWR Director
Brian Patton, IWRB Executive Manager
Cynthia Bridge Clark
Wesley Hipke
Justin Ferguson
John Loffredo
Mary Condon
Milin Ream

Brian Olmstead
Twin Falls
At Large

Marcus Gibbs
Grace
District 4

Patrick McMahon
Sun Valley
At Large

Others Present:

Ann Yribar, AG's Office
John Williams, Bonneville Power Administration
Brian Murdock, Murdock Farms
Hattie Zobott, Ardurra, Online
Ben Sandberg, Online
Darin Vrem, Online
Wade Olorenshaw, Online

Agenda Item No. 2: Executive Session

At 8:03 AM, Mr. Stevenson moved to resolve into executive session pursuant to Idaho Code 74-206(1) subsection (f) to communicate with legal counsel regarding legal ramifications of and legal options for pending litigation or controversies not yet being litigated but imminently likely to be litigated Mr. Van Stone seconded. **Roll call vote**: Mr. Barker, aye; Ms. Cole-Hansen, aye; Mr. Gibbs, aye; Mr. McMahon, aye; Mr. Olmstead, aye; Mr. Stevenson, aye; Mr. Van Stone, aye; and Chairman Raybould, aye. 8 ayes. The motion passed.

Mr. Stevenson moved to resolve out of executive session at 8:34 AM. Mr. Gibbs seconded. **Voice vote**: All in favor. The motion carried. The executive session was closed to the public, and no action was taken during the executive session.

Agenda Item No. 3: Agenda and Approval of Minutes 12-25, 13-25, 14-25, 1-26, 3-26, and 4-26

The agenda and minutes for meetings 12-25, 13-25, 14-25, 1-26, 3-26, and 4-26 were available for approval. There were no changes to the agenda, as presented. There were some small edits to the draft Minutes of 12-25, as discussed.

Mr. McMahon moved to approve the minutes for meetings 12-25, 13-25, 14-25, 1-26, 3-26, and 4-26. Mr. Stevenson seconded. **Voice Vote**. all ayes. The motion passed.

Agenda Item No. 4: Public Comment

At this time, Chairman Raybould called for anyone wishing to speak during public comment.

Mr. John Williams with Bonneville Power Administration (BPA) addressed the Board and provided a verbal update on BPA news, announcements, and events.

Agenda Item No. 5: Financial Report

IDWR Senior Planner Neeley Miller provided the Board's financial report. The accounts as of February 28, 2026, were: Secondary Aquifer Fund: cash balance \$41,454,212, committed \$23,388,491, and uncommitted balance \$18,065,721; Revolving Development Account: cash balance \$34,921,787, committed balance \$31,950,977, loan principal outstanding and other obligations \$25,670,707, and uncommitted balance \$2,970,810; and Water Management Account: cash balance \$336,914,113, total obligated funds \$331,294,626, and unobligated funds \$5,619,487. Total obligated \$250,213,747; total expended \$161,941,802; and total remaining committed balance \$89,030,987.

Agenda Item No.6: Water Management Account Spending Plan and ARPA Spending Plan

IWRB Executive Manager, Brian Patton advised that this item was discussed during the Finance Committee (Committee) meeting, resulting in a Committee recommendation with three actions for the Board's consideration, by way of resolution(s).

At this time, Planning and Projects Bureau Chief Cynthia Bridge Clark provided the Board for consideration amendments to the Fiscal Year (FY) 2026 Water Management Account Spending Plan and ARPA Spending Plan by reviewing each of the resolutions for the Board's review.

Following review, Chairman Raybould entertained a motion from the Board.

Ms. Cole-Hansen moved to (1) Adopt the resolution to Modify the Idaho Water Resource Board's American Rescue Plan Act Funding Spending Plan and Provide Spending Authorization. (2) Adopt the resolution to Approve Amended Fiscal Year 2026 Water Management Account Spending Plan. (3) Adopt the resolution to Approve Funds from the Water Management Account for ESPA Recharge Infrastructure. Mr. McMahon seconded. **Roll call vote:** Mr. Barker, aye; Ms. Cole-Hansen, aye; Mr. Gibbs, aye; Mr. McMahon, aye; Mr. Olmstead, aye; Mr. Stevenson, aye; Mr. Van Stone, aye; and Chairman Raybould, aye. 8 ayes. The motion passed

Agenda Item No. 7: Mountain Home Plateau Regional Water Sustainability Program

IWRB Executive Manager, Brian Patton conveyed that said agenda item was discussed at length during the Aquifer Stabilization and Finance (Committee) meetings, with a recommendation to the Board for adoption, by way of resolution.

Planning and Projects Bureau Chief Cynthia Bridge Clark provided a brief review of the resolution presented for the Board's consideration. Of note, Ms. Bridge Clark advised that the resolution obligates \$8,000,000 from the IWRB Water Management Account to help fund projects under the Mountain Home Plateau Aquifer Regional Water Sustainability Program (MHPA RWS Program).

Ms. Bridge Clark further explained that the IWRB will collaborate with Elmore County to develop programs and identify special projects under the MHPA RWS Program. The Board will also authorize expenditure of funds—consistent with applicable IWRB funding criteria to support eligible projects as determined by the IWRB.

With no further review or discussion, Chairman Raybould entertained a motion.

Mr. Barker moved to Adopt the resolution to Add the Mountain Home Plateau Aquifer Regional Water Sustainability Program to the Priority List, in the Matter of the Water Sustainability and Stabilization of the Mountain Home Plateau Aquifer in Cooperation with Elmore County. Mr. Stevenson seconded. **Roll call vote:** Mr. Barker, aye; Ms. Cole-Hansen, aye; Mr. Gibbs, aye; Mr. McMahon, aye; Mr. Olmstead, aye; Mr. Stevenson, aye; Mr. Van Stone, aye; and Chairman Raybould, aye. 8 ayes. The motion passed.

Agenda Item No. 8: IWRB Grant Program Update

To allow some time for staff to pull up their presentation and related documents, Chairman Raybould called for a comfort break at 9:10 AM. The Board reconvened at 9:16 AM.

At this time, Project Manager Supervisor Mary Condon addressed the Board to review the suggested edits to the IWRB Grant Program and the Surface Water Coalition Operational Efficiencies Program by way of two resolutions for the Board's consideration.

Following review and discussion, Chairman Raybould entertained a motion from the Board.

Mr. Olmstead moved to (1) Adopt the resolution to Adopt Criteria in the Matter of Flood Management Grants. (2) Adopt the resolution to Adopt Criteria in the Matter of the Surface Water Coalition Operational Efficiencies Program. Mr. Van Stone seconded. **Voice vote:** Mr. Barker, aye; Ms. Cole-Hansen, aye; Mr. Gibbs, aye; Mr. McMahon, aye; Mr. Olmstead, aye; Mr. Stevenson, aye; Mr. Van Stone, aye; and Chairman Raybould, aye. 8 ayes. The motion passed.

Agenda Item No. 9: Rental Pool Procedures

- A. Water District 63
- B. Water District 65

IWRB Executive Manager, Brian Patton advised that said items and resolution(s) were presented, reviewed, and discussed in detail at the Board Work Session and are now presented for the Board's consideration.

At this time, Director Mat Weaver advised that he reviewed the changes proposed to both water districts and recommended the IWRB authorize and adopt the resolutions approving said amendments.

Mr. Barker moved to (1) Adopt the resolution to Approve Amended Rental Pool Procedures for 2026 in the Matter of Amended Rental Pool Procedures for the Boise River Rental Pool (WD 63) (2) Adopt the resolution to Approve Amended Rental Pool Procedures for 2026 in the Matter of Amended Rental Pool Procedures for the Payette River Rental Pool (WD 65). Mr. Van Stone seconded. **Voice vote:** Mr. Barker, aye; Ms. Cole-Hansen, aye; Mr. Gibbs, aye; Mr. McMahon, aye; Mr. Olmstead, aye; Mr. Stevenson, aye; Mr. Van Stone, aye; and Chairman Raybould, aye. 8 ayes. The motion passed.

Agenda Item No. 10: Raft River Irrigation District Regional Water Sustainability Project Proposal and Loan

Project Manager Justin Ferguson addressed the Board to present two resolutions for the Board's consideration. Providing some project background, Mr. Ferguson advised that back in 2021, Resolution No. 31-2023 the Raft River Recharge Group was added to the Regional Water Sustainability Priority List and awarded \$7,000,000. Mr. Ferguson presented the first resolution to approve the terms and conditions of the contract for expenditure of Regional Water sustainability funds.

Following review, discussion, and comments related to the Raft River Irrigation District Board structure and the relevant new legislation, Mr. Ferguson moved to the second resolution to authorize the loan request, and discussion continued.

With no further review, Chairman Raybould entertained a motion.

Mr. Van Stone moved to (1) Resolution to Adopt the Terms and Conditions in the Matter of the Raft River Irrigation District Regional Sustainability Award (2) Resolution to Authorize Loan Funding for Project to Construct Surface Delivery Infrastructure, Flood Detention, and Recharge, In the Matter of the Raft River Recharge Group and Raft River Irrigation District Loan Request. Mr. Stevenson seconded. **Roll Call Vote:** Mr. Barker, aye; Ms. Cole-Hansen, aye; Mr. Gibbs, aye; Mr. McMahon, aye; Mr. Olmstead, aye; Mr. Stevenson, aye; Mr. Van Stone, aye; and Chairman Raybould, aye. 8 ayes. The motion passed.

Agenda Item No. 11: Farmers Land & Irrigation Company Loan Program Request

Project Manager Justin Ferguson addressed the Board to present some background on the agenda item and present a resolution for the Board's consideration in relation to the Farmer's Land & Irrigation Company (FLIC); loan application.

Following review, Chairman Raybould entertained a motion.

Mr. Gibbs moved to Adopt the resolution to Authorize Loan Funding for Costs Related to the Installation of Automation Hardware and Loan Consolidation in the Matter of the Farmers Land & Irrigation

Company Loan Request. Mr. Stevenson seconded. **Roll Call Vote:** Mr. Barker, aye; Ms. Cole-Hansen, aye; Mr. Gibbs, aye; Mr. McMahon, aye; Mr. Olmstead, aye; Mr. Stevenson, aye; Mr. Van Stone, aye; and Chairman Raybould, aye. 8 ayes. The motion passed.

Agenda Item No. 12: Director’s Report

At this time, Idaho Department of Water Resources (IDWR) Director Mathew Weaver provided the Board with an informative update on the IDWR budget, Idaho Code Cleanup, department operations, related legislative matters, and water administration priorities.

Agenda Item No. 13: Non-Action Items for Discussion

There were no items for discussion.

Agenda Item No. 14: Next Meeting and Adjourn

IWRB Executive Manager, Brian Patton advised that the next Board meeting is scheduled for May 21-22, 2026, in Boise. Mr. Barker moved to adjourn. Mr. Stevenson seconded. **Voice vote:** 8 ayes. Motion carried. Meeting adjourned at 10:33 AM.

Respectfully submitted this 22nd day of May 2026.

Dean Stevenson, *Secretary*

Milin J. Ream, *Administrative Assistant II*

MEMO



To: Idaho Water Resource Board (IWRB)
From: Neeley Miller, Planning & Projects Bureau
Date: May 13, 2026
Subject: Financial Report

INFORMATIONAL ITEM

As of March 31, 2026, the IWRB’s available and committed balances are as follows:

Secondary Aquifer Planning, Management & Implementation Fund:

Cash Balance	\$41,694,675
Committed	\$23,022,745
Uncommitted/Available Funds	\$18,671,930

Revolving Development Account:

Cash Balance	\$35,615,061
Committed Balance	\$25,246,995
Uncommitted Balance/Available Funds	\$10,368,066
Loan principal outstanding	\$25,981,743

Water Management Account:

Cash Balance	\$331,187,923
Total Committed Funds	\$335,685,581
Uncommitted Funds/Available Funds	(\$4,497,657)

ARPA:

Appropriations

Received per HB 769 (2022)	\$100,000,000
Received per SB 1181 (2023)	\$24,497,544
Received per SB 1411 (2024)	\$75,502,456
<u>Pending per HB 248 (2025)</u>	<u>\$50,000,000</u>
Total	\$250,000,000

Total Obligated	\$250,153,066*
Expended	\$161,181,516
Remaining Committed Balance	\$88,958,309

**These projects have been authorized so that WMA or ARPA funds can be used for payment. Total ARPA cannot exceed \$250M.*

Attachments:

- None

MEMO



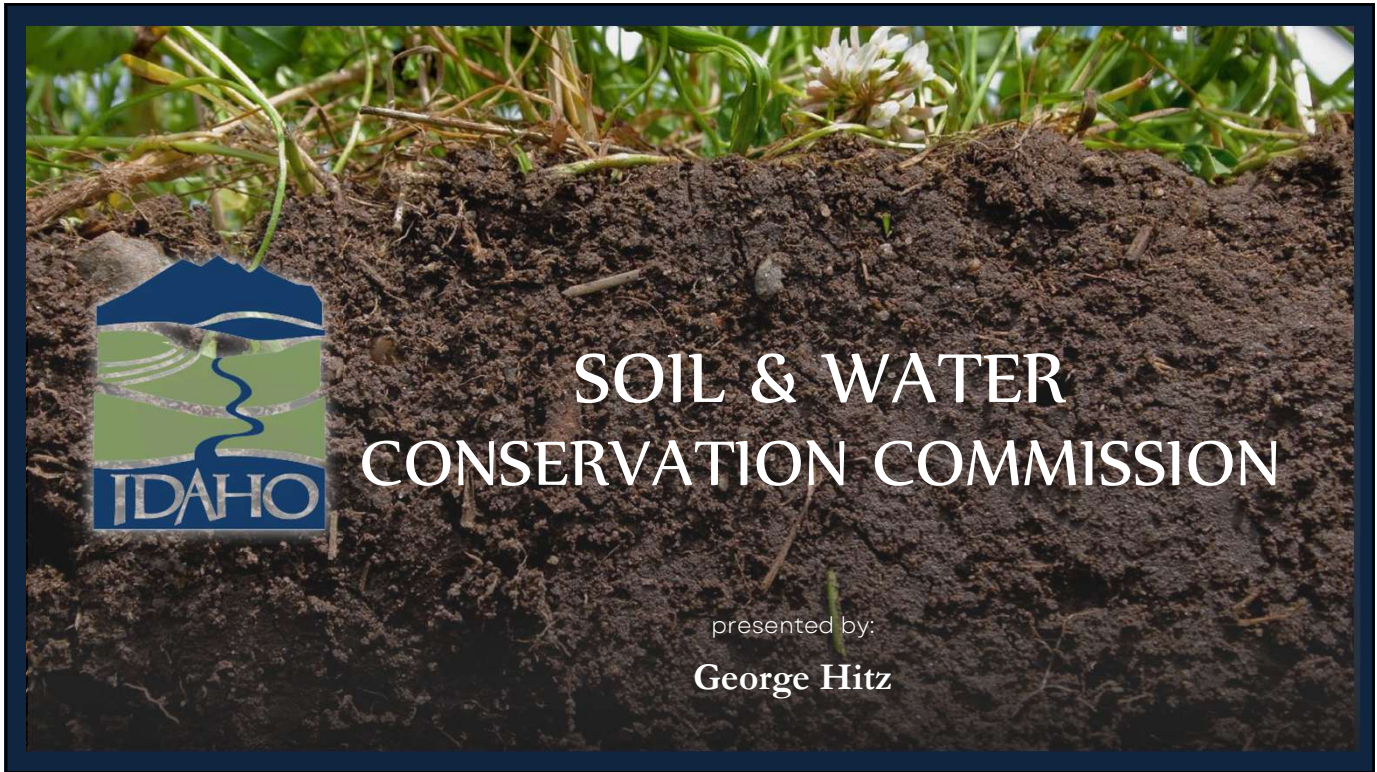
To: Idaho Water Resource Board (Board)
From: Planning & Projects Bureau Staff
Date: May 15, 2026
Subject: Idaho Soil and Water Conservation Commission Presentations

INFORMATIONAL ITEM

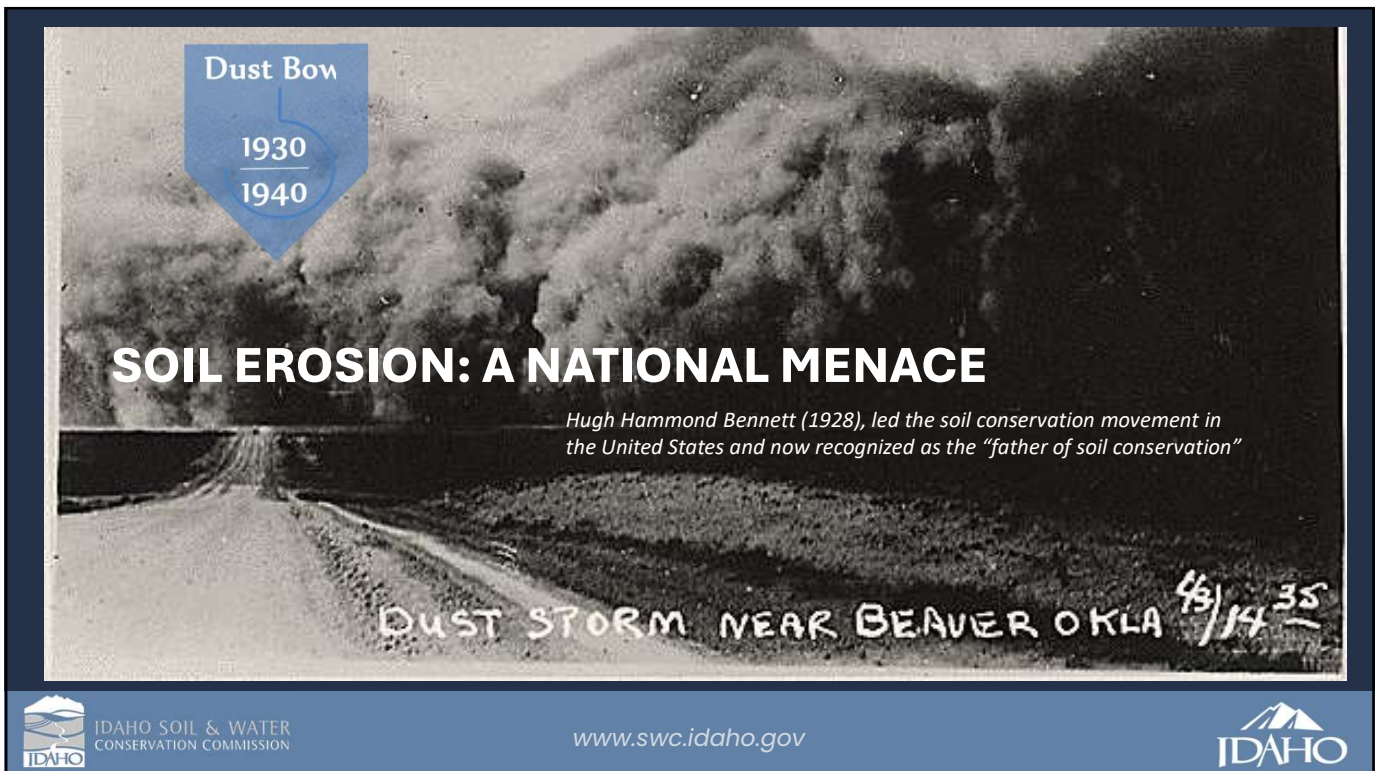
Representatives from the Idaho Soil and Water Conservation Commission, George Hitz (Operations Manager/Deputy Administrator) and Loretta Strickland (Ag Program Manager) will attend the May 21, 2026, meeting to provide presentations to the Board.

Attachment(s):

- *A. Agency Overview PowerPoint Presentation*
- *B. Water Quality Programs PowerPoint Presentation*



1



2

Dust Bowl

1930
1940

1935
Federal

A dust storm from the Midwest blew into Washington, DC in 1935, darkening the skies over the Lincoln Memorial.
Photographer unknown. USDA

IDAHO SOIL & WATER CONSERVATION COMMISSION www.swc.idaho.gov IDAHO

3

Dust Bowl

1930
1940

1935
Federal

State
1939

1205. August 1, 1931. Erosion on 40% clove in summer fallow field about 12 miles west of Pullman, Wash. Ditches are 5 to 10 inches deep and were caused by intense rain of July 30, 1931.

1934 National Reconnaissance Erosion Survey

¼ Land had Lost 75% of the topsoil

51% affected by sheet erosion

IDAHO SOIL & WATER CONSERVATION COMMISSION www.swc.idaho.gov IDAHO

4

Dust Bowl
1930
1940

Federal
1935

State
1939

Local
1940

PUT YOUR Soil Conservation DISTRICT ON THE MAP

One of the first Conservation Districts formed after the creation of the Soil Conservation Service.
Credit: USDA

IDAHO SOIL & WATER CONSERVATION COMMISSION
www.swc.idaho.gov
IDAHO

5

Dust Bowl
1930
1940

Federal
1935

State
1939

Local
1940

Today

February erosion event was one of largest in 30 years, soil scientists say
Published 2:41 pm Thursday, June 12, 2025
By Matthew Weaver

EROSION IMPACT?

- Lowers Production
- Less Sustainability
- More Input Cost
- Infrastructure Cost
- Habitat Destruction
- Health & Safety concerns

Graters of the Moon
Idaho Falls
NASA image courtesy MODIS Rapid Response Team (2010)

IDAHO SOIL & WATER CONSERVATION COMMISSION
www.swc.idaho.gov
IDAHO

6

Partnerships



www.swc.idaho.gov



7

Partnerships



Landowners & Land Managers



www.swc.idaho.gov



8

Partnerships

CONSERVATION COMMISSION

BOOTS ON THE GROUND CONSERVATION

CONSERVATION DISTRICTS

NRCS

Federal

IDAHO SOIL & WATER CONSERVATION COMMISSION

www.swc.idaho.gov

9

Partnerships

CONSERVATION COMMISSION

BOOTS ON THE GROUND CONSERVATION

CONSERVATION DISTRICTS

STATE

IDAHO SOIL & WATER CONSERVATION COMMISSION

www.swc.idaho.gov

10

Partnerships

CONSERVATION COMMISSION

NRCS

BOOTS ON THE GROUND CONSERVATION

CONSERVATION DISTRICTS

LANDOWNERS

IDAHO SOIL & WATER CONSERVATION COMMISSION

www.swc.idaho.gov

11

People

Soil & Water Conservation Commission
 Erik Olson, Chairman | Wendy Pratt, Vice Chair
 Karen Sharpnack, Secretary | Blake Hollingsworth, Treasurer
 Joan Cloonan, PhD, JD | Mitchel Silvers | Richard Savage

In-House IT Support
 Burke Barton (IDWR)

DHR Services (Boise)
 Janelle McDonald, HRO
 Jacci Ellis-Gibbons, HR Special.

Acting Administrator – Mat Weaver

South Idaho District Support and Conservation Programs
 George Hitz, Deputy Administrator

North Idaho & Engineering
 Bill Lillibridge

Fiscal (Boise)
 Sascha Marston (IDWR)

Ag. Program Mngr.
 NRC (Boise)

CREP Manager
 CREP Field Staff

NRC (Idaho Falls)
 NRC (Jerome)

NRC (Emmett)
 NRC (Division 5)

NRC (Amer. Falls)
 GW Lead/CREP

NRC (Orofino)
 NRC (Plummer)

SWC Fiscal Lead
 Admin. Asst.
 Grants/Cont. Spc.

RCRDP Loan Officer

IDAHO SOIL & WATER CONSERVATION COMMISSION

www.swc.idaho.gov

17.75 FTPs

12

Services

IDAHO SOIL & WATER CONSERVATION COMMISSION

www.swc.idaho.gov

IDAHO

This banner features a dark blue background with several icons on the left: a group of people, a clipboard with a pencil, a magnifying glass over a landscape, and a water ripple icon. The main content includes three photographs: a man in a blue shirt using a surveying instrument near a large pipe opening, a group of people working in a field near a pond, and a group of five people standing in a field. The footer contains the Idaho Soil & Water Conservation Commission logo, the website URL, and the word 'IDAHO' with a mountain icon.

13

Outreach & Education

IDAHO SOIL & WATER CONSERVATION COMMISSION

www.swc.idaho.gov

IDAHO

This banner features a dark blue background with icons on the left: a group of people, a clipboard with a pencil, a magnifying glass over a landscape, and a water ripple icon. The main content includes three overlapping images of 'Idaho's State Magazine' newsletters, a photograph of a community meeting with people gathered around a table, and a YouTube video player showing a man working with a pipe. The footer contains the Idaho Soil & Water Conservation Commission logo, the website URL, and the word 'IDAHO' with a mountain icon.

14

RCRDP **TMDL** **CREP** **WQPA**

Programs

IDAHO SOIL & WATER CONSERVATION COMMISSION www.swc.idaho.gov IDAHO

15

RCRDP
Low interest conservation loans

- 3 to 6% Interest Rates
- 7 to 15-year terms
- Up to \$600,000

IDAHO SOIL & WATER CONSERVATION COMMISSION www.swc.idaho.gov IDAHO

16



TMDL

Total Maximum Daily Load



- Clean Water Act
- Watershed Planning to restore water quality & beneficial uses




IDAHO SOIL & WATER
CONSERVATION COMMISSION

www.swc.idaho.gov




17




CREP

FFY 2026: 9,642 acres (123 contracts)
 FFY 2027*: (2) Enrollment periods added 6,697 acres (41 contracts) resulting in a total of **164 Contracts and 16,339 acres, beginning Oct. 1**
 (* as of 5/13/2026, 3,704 acres are pending FSA approval)




- Since the beginning of the program (2006) -
 622,585 ac-ft of groundwater saved (~300,000 Olympic swimming pools)
 \$34.8M in federal rental payments | State match \$959,138 (Since 2022)



IDAHO SOIL & WATER
CONSERVATION COMMISSION

www.swc.idaho.gov



18



WQPA

Water Quality Program for Agriculture

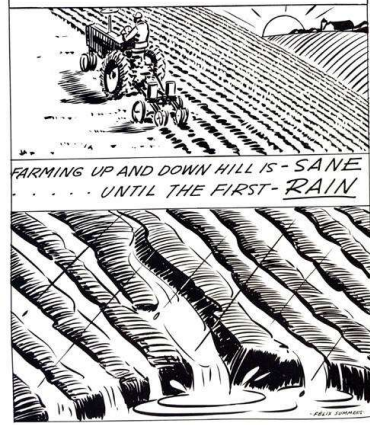


www.swc.idaho.gov



19

SOIL CONSERVATION



Questions?



Let's get together or we'll all kick the bucket!
AW-191

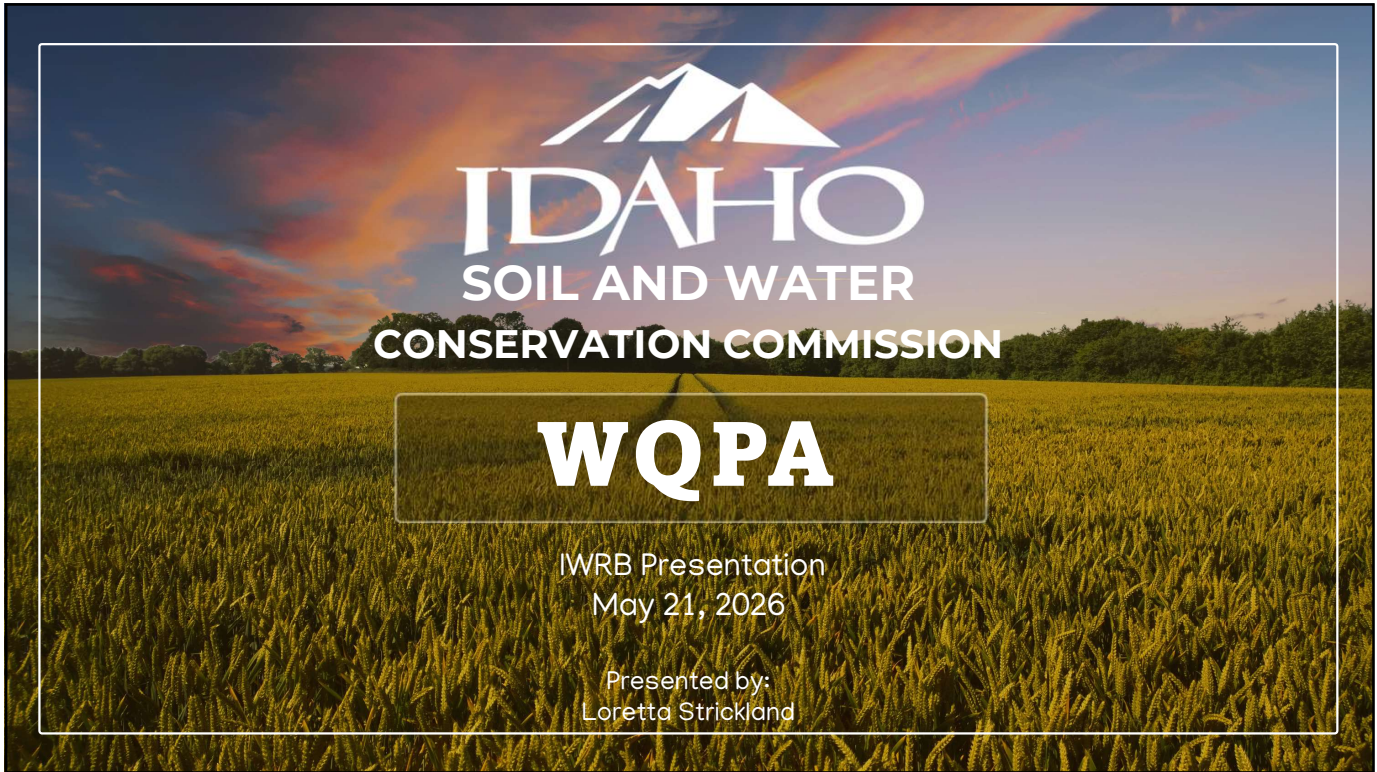
USDA artist Felix Summers (1955-1967)



www.swc.idaho.gov



20



1

The slide features a dark blue background on the left with a list of bullet points, and a photograph of a water filtration facility on the right. The photograph shows several large blue cylindrical filters connected by white pipes, with a dirt road and fields in the background under a blue sky with clouds.

WATER QUALITY PROGRAM FOR AGRICULTURE

- Established in FY2000
- Conserve and enhance Idaho's water resources
- Primarily implemented through the 50 SWCDs
- Annual appropriation of ~ \$1 million
- Unfunded from FY2012-2022
- Revitalized during FY2022 legislative session:
 - FY23 - \$5 million
 - FY24 - \$5 million
 - FY25 - \$1 million
 - FY26 - \$1 million

2

Program Requirements

- WQPA cost-share is limited to \$75,000 per proposal
- Must have 35% matching funds, can be matched by other state and federal programs
- Eligible participants:
 - landowners/operators with an agricultural or grazing interest
 - irrigations districts and canal companies
- 10% administrative costs to SWCD sponsors



3

Project Evaluation

In the 4 years - 274 Grant Proposals were submitted requesting \$26.5 million in WQPA funds

Key Evaluation Areas:

- Project sponsorship and capacity
- Project effectiveness and public benefit
- Funding request and partners



4

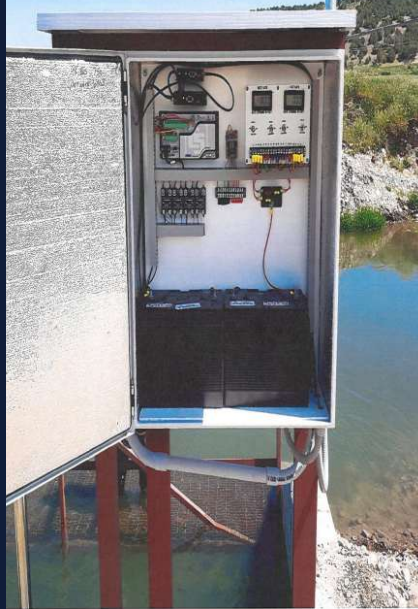
Project Implementation

- 134 projects funded, 121 completed to date
- Managed in cooperation with 47 of the 50 Conservation Districts
- Project partners include Idaho DEQ, USDA NRCS, IWRB, irrigation and drainage districts, landowners, and others
- \$32 million in conservation accomplished



5

Sunnydell Irrigation
Automated Headgate

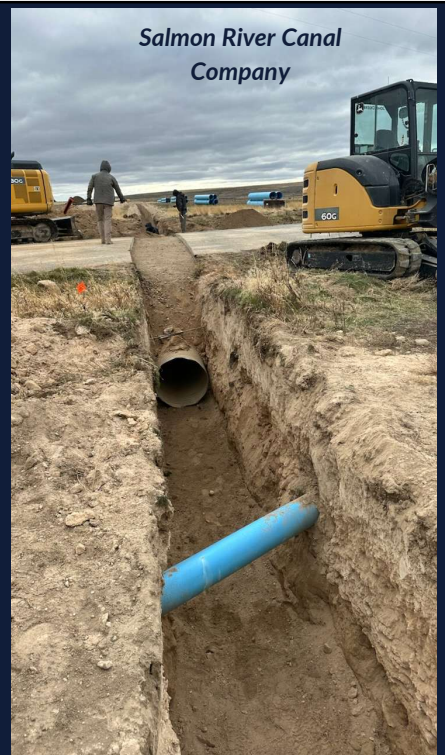


IRRIGATION INFRASTRUCTURE IMPROVEMENTS

\$3.83 million

- Updated and automated headgates
- Canal/lateral/ditch piping and lining
- Dam improvements

Salmon River Canal
Company



6



ON-FIELD IRRIGATION IMPROVEMENTS

\$4.2 million

- Irrigation System Improvements
 - Pivots
 - LESA Retrofits
 - Drip Irrigation
- Delivery Ditch Piping
- Irrigation Water Management
 - Soil Moisture Sensors

7



LIVESTOCK BMPs

\$757,428

- Virtual fence
- Off-site watering
- Riparian Fencing
- Heavy use feed pads



8

STREAMBANK, RIPARIAN, AND EROSION BMPs

\$1.1 million

- Streambank improvements
- Culvert replacements

Before



Before



During Implementation



One year later



After




9

SOIL HEALTH BMPS


\$351,721


- Nutrient Management
- No-Till Drill

Roots with no bio-stimulant treatment



Roots with bio-stimulant treatment





10

SOIL CONSERVATION DISTRICTS

working to build generations of conservationists

\$973,029

Up to 10% of WQPA cost-share funding is available for administration

IDAHO ASSOCIATION OF SOIL CONSERVATION DISTRICTS

FIRST PRESIDENT and SECRETARY

CLAY SUTTON **FRANK GOODWIN**

The Idaho Association of Soil Conservation Districts was organized in 1944 by a group of soil conservation district supervisors who were in bringing about an exchange of information encouraging uniform policies, coordinating all available sources on local and national levels, developing farmer participation and conservation, and encouraging the closest cooperation possible between soil conservation districts. Midvale, was chosen as the first with Frank Goodwin of Swain County as the first secretary.

11

IDAHO SOIL AND WATER CONSERVATION COMMISSION

Questions??

12

MEMO



To: Idaho Water Resource Board
From: Heidi Smith, Hydrologist
Date: May 15, 2026
Subject: Big Wood River Water Right Accounting Program Update

INFORMATIONAL ITEM

Heidi Smith, Hydrologist with the Idaho Department of Water Resources will provide a presentation update related to the Big Wood River Water Right Accounting Project.

Attachment(s):

- *PowerPoint Presentation*

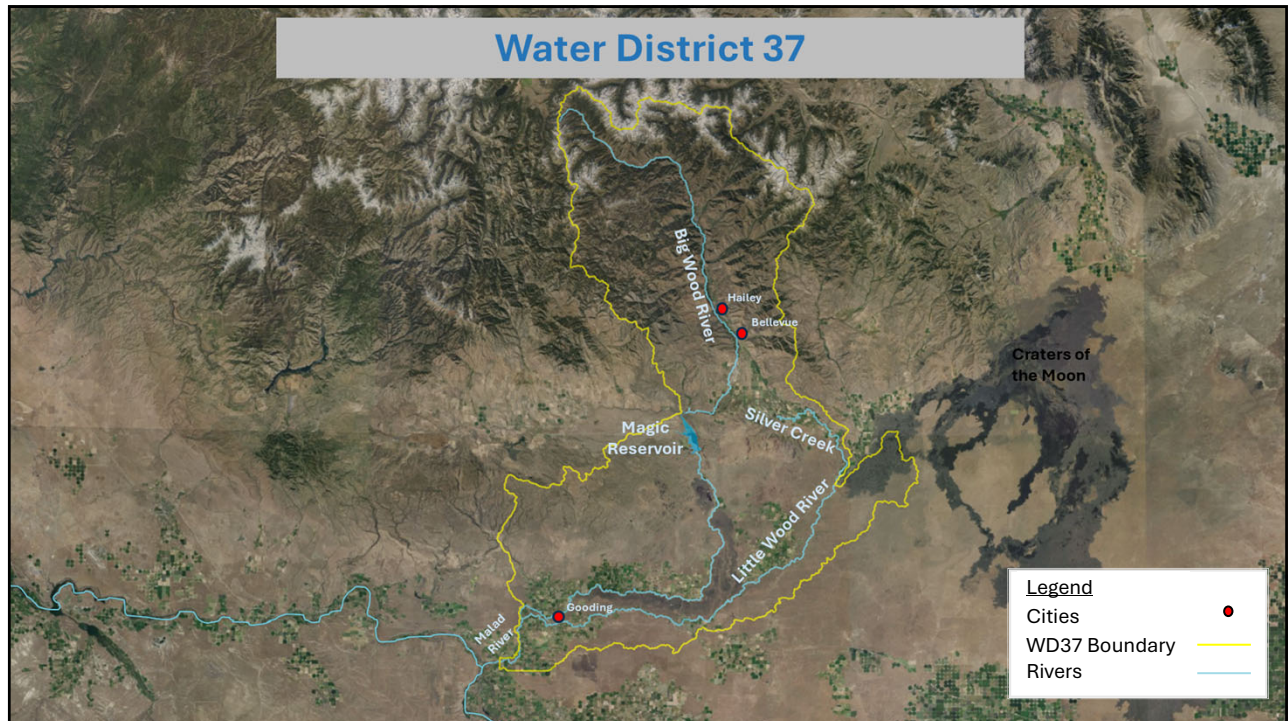


Big Wood River Water Right Accounting Project Update


Presented by: Heidi E. J. Smith, Ph.D.
May 21, 2026



1



2

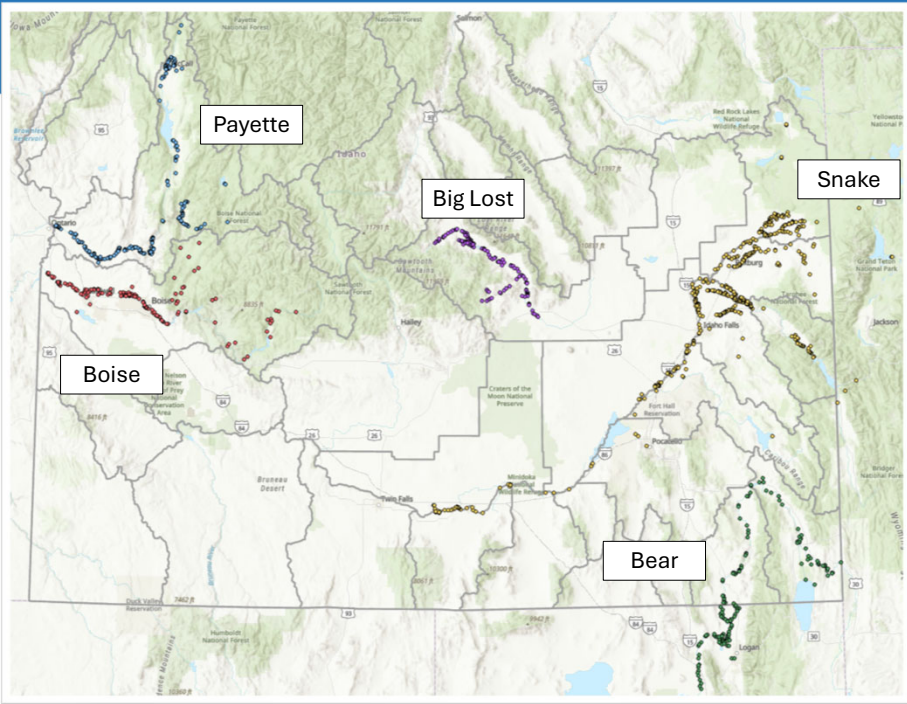


IDAHO DEPARTMENT OF WATER RESOURCES


Water Right Accounting - Idaho

Snake River	1977
Bear River	1984
Boise River	1986
Payette River	1992
Big Lost River	1993

- Use the same fundamental methods to distribute natural flow (Excel, then C#).
- Customized where necessary for unique water administration on each river.




3



IDAHO DEPARTMENT OF WATER RESOURCES

Big Wood Accounting Program Summary



Why?

Three-year extension of the Big Wood River Ground Water Management Area Plan directed the Department to develop a prototype of the Water District 37 accounting program.

What is water right accounting?

A computer program that helps watermasters administer water rights, by:

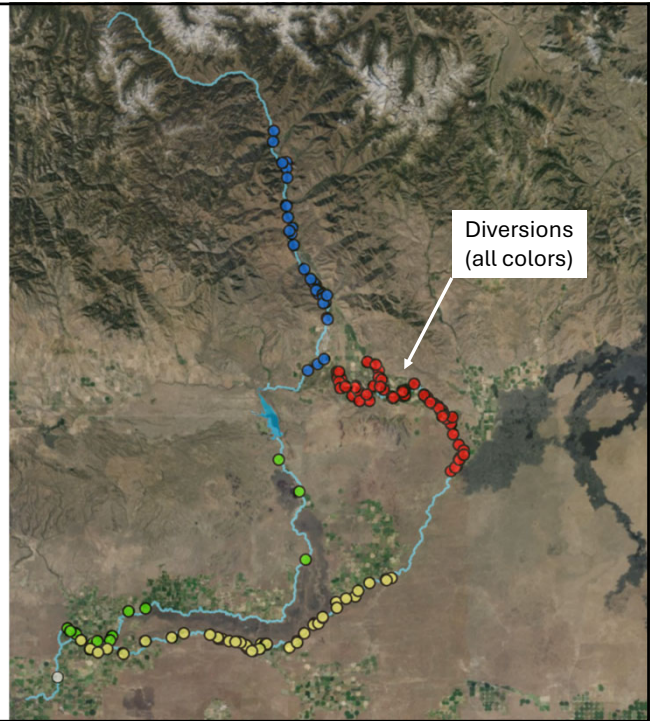
- Calculating daily natural flow in each reach.
- Allocating natural flow to water rights based on prior appropriation, focusing on irrigation and reservoir rights (excluding domestic, groundwater, and non-consumptive rights).
- Identifying water diverted as natural flow or storage flow.

4

1. Compiled Surface Water Rights

In ArcGIS, surface water right data were compiled and related to diversions in 5 groups:

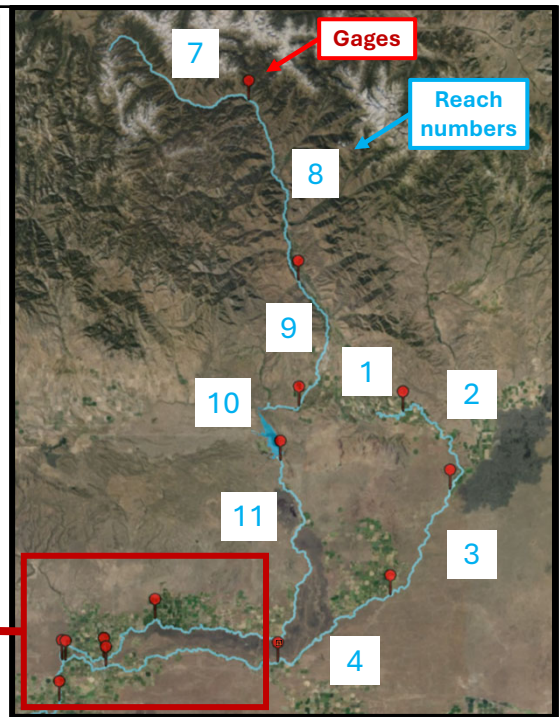
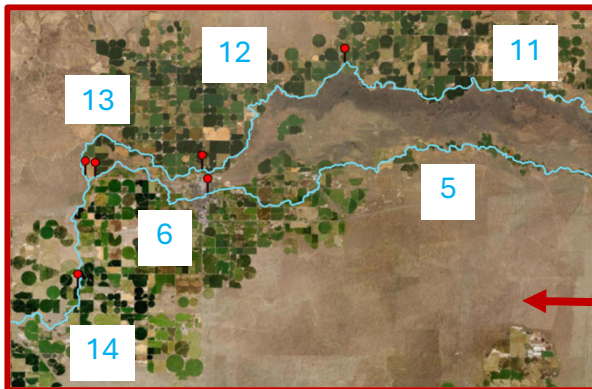
- Silver Creek
- Little Wood River
- Upper Big Wood River and Magic Reservoir
- Lower Big Wood River
- Malad River



5

2. Defined Reaches

1	Silver Creek at Sportsman access NR Picabo ID
2	Silver Creek nr Ragsdale
3	Little Wood near Richfield ID (Station 10)
4	Little Wood near Shoshone (Station 54)
5	Little Wood at Station 17 (Pivotrac)
6	Little Wood Upstream of Malad (Calculated)
7	Big Wood River Near Ketchum ID
8	Big Wood River at Hailey ID
9	Big Wood River at Stanton Crossing Nr Bellevue ID
10	Big Wood River BI Magic Dam Near Richfield
11	Big Wood Upstream of Thorne Creek (Calculated)
12	Big Wood at Station 9 (Pivotrac)
13	Big Wood Upstream of Malad (Calculated)
14	Malad River Near Gooding Idaho



6

3. Compiled Input Data

- Diversion flows from DWR central
- Streamflow from gages
- Magic Reservoir daily volume

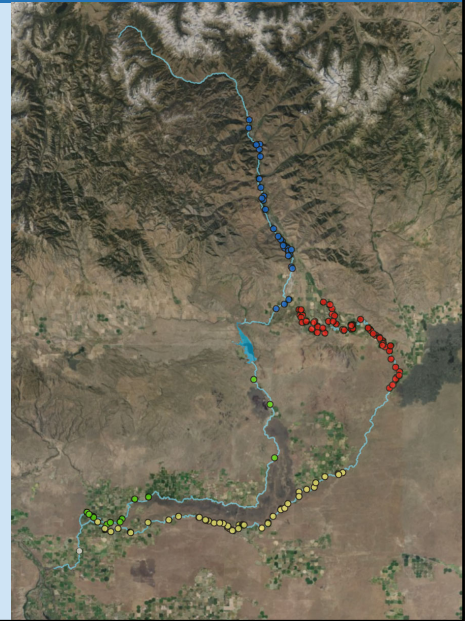
7

8



Big Wood Water Right Accounting Timeline

- ✓ Building Prototype (Excel)----- Completed Spring 2026
- **Prototype Testing**----- **Irrigation Season 2026**
- **Prototype Review**----- **Fall 2026**
- **Incorporate Enhancements** **Winter 2026/2027**
- Utilization of Program----- Irrigation Season 2027
- Final Program (C#)----- Dependent on OITS



9

(208) 287-4800

Heidi Smith

heidi.smith@idwr.idaho.gov

Kara Ferguson

kara.ferguson@idwr.idaho.gov

Questions?



Silver Creek, October 2024

10

MEMO



To: Idaho Water Resource Board (IWRB)
From: Neeley Miller, Senior Planner
Date: May 13, 2026
Subject: South Fork Snake River Comprehensive Basin Plan – Dredging Issue/New EA

REQUESTED ACTION: Consider Resolution to Acknowledge Updated Environmental Assessment

The South Fork Snake River Basin Comprehensive Basin Plan (“Plan”) was adopted by the IWRB in 1996 and approved by the legislature in 1997. The plan designates McCoy Creek from its headwaters to the backwater of Palisades Reservoir as a Recreational River to protect the public interest, current resource use, and the multiple-use character of the basin.

The plan prohibits dredging or placer mining activities on recreational rivers in the basin with the following exception:

- Stream channel alterations for recreational dredge mining may continue on McCoy Creek from the headwaters to Fish Creek confluence, and on the following perennial tributaries: City Creek, Camp Creek, Miners Delight Creek and Iowa Creek. This activity is allowed as currently regulated by the Caribou National Forest through a Special Use Permit issued according to the guidelines established in the "Environmental Assessment for Small Placer Mining Operations in the Caribou Basin Area" (Record of Decision issued December 12, 1994), and with a Stream Channel Alteration Permit from the Idaho Department of Water Resources.

A new Environmental Assessment was issued on October 15, 2021, and the Caribou National Forest recognizes the Environmental Assessment for Caribou Basin Small-Scale Placer Mining, Record of Decision issued October 15, 2021 (2021 EA) through its Special Use Permit process. The 2021 EA allows up to 15 in-stream small-scale placer operations per year for suction dredging (previous EA only allowed up to 5 in-stream operations per year).

On May 8, 2026, the IWRB’s Planning Committee recommended the IWRB recognize the updated Environmental Assessment, including future environmental analysis.

Attachment(s):

- *Resolution to Acknowledge Updated Environmental Assessment*

BEFORE THE IDAHO WATER RESOURCE BOARD

DRAFT

IN THE MATTER OF THE SOUTH FORK
SNAKE RIVER COMPREHENSIVE BASIN PLAN

RESOLUTION TO ACKNOWLEDGE
UPDATED ENVIRONMENTAL ASSESSMENT

1 WHEREAS, the Idaho Water Resource Board (IWRB) adopted the South Fork Snake River
2 Comprehensive Basin Plan (Plan) in 1996. In the plan the IWRB designates river and stream
3 reaches as natural or recreational in order to protect the public interest, current resource use,
4 and multiple-use character of the basin; and
5

6 WHEREAS, in the Plan the IWRB designates McCoy Creek and perennial tributaries as
7 recreational rivers. The Plan allows for recreational dredge mining on McCoy Creek from the
8 headwater to Fish Creek confluence and on the following perennial tributaries: City Creek, Camp
9 Creek, Miners Delight Creek and Iowa Creek; and
10

11 WHEREAS, the Plan states that recreational dredge mining on McCoy Creek has been
12 regulated by the Caribou National Forest through a Special Use Permit issued according to the
13 guidelines established in the Environmental Assessment for Small Placer Mining Operations in
14 the Caribou Basin Area, Record of Decision issued December 12, 1994 (1994 EA), and with a
15 Stream Channel Alteration Permit from the Idaho Department of Water Resources; and
16

17 WHEREAS, a new Environmental Assessment was issued on October 15, 2021, and the
18 Caribou National Forest recognizes the Environmental Assessment for Caribou Basin Small-Scale
19 Placer Mining, Record of Decision issued October 15, 2021 (2021 EA) through its Special Use
20 Permit process; and
21

22 WHEREAS, the 2021 EA allows up to 15 in-stream small-scale placer operations per year
23 may be allowed for suction dredging; and
24

25 WHEREAS, on May 8, 2026, the IWRB’s Planning Committee recommended the IWRB
26 recognize the updated Environmental Assessment and update the website; and
27

28 NOW THEREFORE BE IT RESOLVED that the Board hereby acknowledges that the 1994 EA
29 was updated through the 2021 EA.
30

31 BE IT FURTHER RESOLVED that the 2021 Environmental Assessment may be modified
32 through new and additional environmental analysis as to the number of dredge operations or the
33 season of operation at some point in the future.
34

35 BE IT FURTHER RESOLVED that the Board therefore hereby exercises its discretion to
36 acknowledge that the Plan shall be interpreted to be consistent in recognizing the conditions of

37 the Environmental Assessment in effect as of the date of proposed dredging activities regulating
38 small placer mining operation in the Caribou Basin.

DATED this 21st day of May 2026.

JEFF RAYBOULD, Chairman
Idaho Water Resource Board

ATTEST _____
DEAN STEVENSON, Secretary

MEMO



To: Idaho Water Resource Board (IWRB)
From: Justin Ferguson, Project Manager
Date: May 11, 2026
Subject: Dalton Water Association – New Water Project Loan Application

REQUESTED ACTION: Consider a Loan Request of \$797,000.00

INTRODUCTION

The Dalton Water Association, Inc. (DWA) is requesting a new loan in the amount of \$797,000 from the IWRB to upsize its existing transmission main to protect the existing drinking public and domestic water system. The current transmission main is comprised of asbestos-cement pipe and is nearing the end of its service life, potentially putting users on the system at risk should an issue occur.

BACKGROUND

The Dalton Water Association, Inc. is the governing entity for domestic water distribution in the areas in and around the City of Dalton Gardens. Their distribution system currently includes 957 year-round water users with an additional 83 commercial water users.

PRIOR LOANS

DWA has held several loans with the IWRB in the past, including a loan in 1976 and another in 1979. As those projects were completed, the IWRB entered into subsequent loan agreements with DWA in 1994, 1998, 2008, and, most recently, a loan in 2018. To date, all of these obligations have been paid in full.

PROPOSED PROJECT

The Project will replace DWA's existing transmission main, comprised of asbestos-concrete, with an updated and upsized PVC pipe system. The line begins at Mt. Carroll Street and continues to the tank reservoir site. Work on the initial design is underway through JUB Engineers, with 95% design cost data provided in the application package.

BENEFITS

The transmission line replacement would provide DWA several benefits for both their service area and the surrounding water users. Because the pipe is nearing the useable service life, replacing the asbestos-concrete with PVC would prevent any water users from the potential impacts of asbestos exposure. Further, because this transmission line is one of the major ways DWA routes water to its users, a failure could result in a loss of water for both domestic and commercial users.

FINANCIAL ANALYSIS

The total Project costs were estimated at \$686,000, adding a contingency of \$111,000 the total requested was \$797,000. Currently, DWA assesses their water users per hookup at \$81.12 per quarter, with additional assessments at \$1.04 per 1,000 gallons over 10K gallons per month.

Dalton Water Association also has an additional source of income to repay the loan, as noted in the application, there is a 201 Government Way Upsize Project Special Assessment in place. The Association has also already secured reserve funding with a 6-month running average balance of \$750,000. Based on DWA's loan payment history with the IWRB, and the financial information provided in the application, there are no concerns at this time as to DWA's ability to repay the loan. The estimated annual payment, based on a 15-year term and an estimated 3 equal disbursements, was approximately \$80,000 at a 5.39% interest rate.

The funds will be allocated from the Revolving Development Account with an estimated balance of \$2,971,000 (*As of February 2026, rounded*)

WATER RIGHTS

Water Right	Source	Priority Date	Rate	Beneficial Use
95-7008	Groundwater	11/22/1967	2.38	Domestic
95-7360	Groundwater	9/13/1973	2.32	Domestic

SECURITY

As security for the loan, the Dalton Water Association has offered its existing well-site parcel, including the existing pumphouse infrastructure, along with an additional parcel for future water project usage. The estimated value for the property, as provided in the application, was sufficient to cover the amount requested by DWA.

CONCLUSION AND RECOMMENDATION

The requested funds will be used to upsize and update Dalton Water Association's existing transmission main, eliminating the risk of asbestos contamination and providing its water users with reliable infrastructure. The Association has held several loans in the past with a perfect repayment record, has already secured a savings account well beyond the estimated annual payment, and has established a special assessment to ensure the loan is paid in full.

The applicant meets the qualification criteria, and the proposed project is consistent with the Board's goals established in the Idaho State Water Plan. Staff recommends the approval of the loan request for the total amount of \$797,000.00.

Attachment(s):

- *Draft Resolution*

BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF THE DALTON WATER
ASSOCIATION LOAN REQUEST

RESOLUTION TO AUTHORIZE LOAN FUNDING
FOR COSTS RELATED TO TRANSMISSION LINE
REPAIRS

1 WHEREAS, Dalton Water Association (Association) submitted a loan application to the Idaho
2 Water Resource Board (IWRB) in the amount of \$797,000 to cover costs associated with the update and
3 upsizing of one of their transmission lines; and
4

5 WHEREAS, the Association was established to govern the distribution of Domestic water within
6 and around the Dalton Gardens area, with over 1,000 residential and commercial water users; and
7

8 WHEREAS, the existing transmission line was installed in the 1960s and has reached the
9 scheduled useful service life; and
10

11 WHEREAS, the transmission line could pose severe health hazards to the Association’s patrons
12 should there be a failure of this critical piece of infrastructure; and
13

14 WHEREAS, the proposal is requesting funds to remove the existing asbestos-concrete pipe and
15 replace the transmission line with a larger pipe made of PVC, improving both safety and reliability for
16 the Association’s users; and
17

18 WHEREAS, alternative options were explored but did not provide the Association a long-term
19 solution to deliver domestic water and address potential future growth; and
20

21 WHEREAS, the Association has held several loans with the IWRB, ranging from 1976 through
22 2018, that have all been paid in full; and
23

24 WHEREAS, the Association has already established a reserve account with a 6-month average
25 well over the estimated annual payment and has established a special assessment for its users for the
26 costs of the project; and
27

28 WHEREAS, the Association is a qualified applicant, and the proposed Project is eligible for a loan
29 from the Board’s Revolving Development Account; and
30

31 WHEREAS, the proposed Project is in the public interest and is in compliance with the State
32 Water Plan.
33

34 NOW THEREFORE BE IT RESOLVED that the IWRB provides authority to the Chairman of the
35 Idaho Water Resource Board, or his designee, to enter into contracts, to effectuate the loan, with the
36 Association on behalf of the IWRB.
37

38 NOW THEREFORE BE IT FURTHER RESOLVED that the IWRB approves a loan not to exceed
39 \$797,000 from the Revolving Development Account at 5.39 % interest with a 15-year repayment term.
40

41 NOW THEREFORE BE IT FURTHER RESOLVED that this resolution and the approval of the loan are
42 subject to the following conditions:
43

- 44 1) The Company shall comply with all applicable rules and regulations that apply to the
45 proposed Project.
- 46 2) Prior to the disbursement of any funds, the Company shall comply with all statutory
47 requirements for incurring debt.
- 48 3) Prior to the disbursement of any funds, the Company will provide acceptable security for the
49 loan to the IWRB.
50

DATED this 21st day of May, 2026.

JEFF RAYBOULD, Chairman
Idaho Water Resource Board

ATTEST _____
DEAN STEVENSON, Secretary

MEMO



To: Idaho Water Resource Board (IWRB)
From: Justin Ferguson, Project Manager
Date: May 21, 2026
Subject: ESPA SWC Efficiencies Program – Minidoka Irrigation District – F-Waste Rehabilitation Project

REQUESTED ACTION: Consider a Funding Request for Minidoka Irrigation District for \$3,210,000

INTRODUCTION

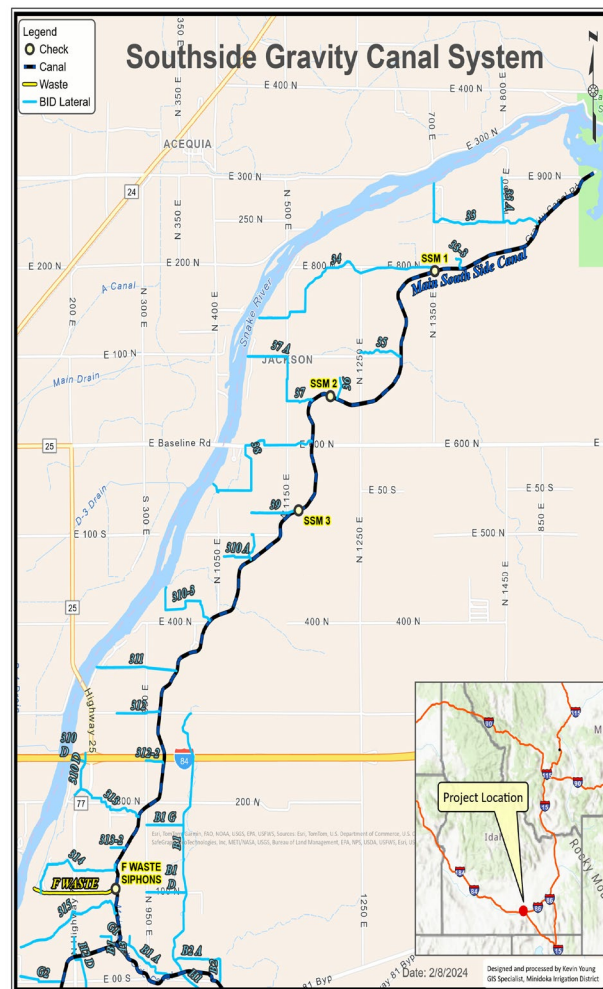
The Minidoka Irrigation District (MID) has applied for ESPA SWC Efficiencies Program funding to repair the existing F-Waste siphon structure. This serves as an emergency siphon for both the MID and the Burley Irrigation District (BID) and, according to a recent survey conducted by Civil Science of Twin Falls, is severely structurally degraded. This poses significant risks to agricultural productivity in the area if the structure fails.

PROPOSED PROJECT

Built in the 1900s, the structure ensures safe, reliable operations during emergency discharge events for both the Minidoka and Burley irrigation districts. Core samples taken by Civil Science in 2021 indicated severe structural degradation and a significant reduction in compressive strength. The location for this structure is noted on the figure as F-Waste Siphons (yellow).

PROJECT IMPLEMENTATION SCHEDULE & COST ESTIMATE

The MID proposes that the project could be completed in stages, with the new structure built upstream of the existing, followed by the removal of the existing structure. With potential weather, funding, and scheduling, it may be possible for both phases to run concurrently. Project costs are currently estimated at \$3,210,000.



EFFICIENCY RESULTS LIKELY TO BE ACHIEVED & 2024 SWC AGREEMENT IMPACTS The project would allow MID to improve flow consistency and reduce maintenance costs for its patrons. The reconstruction would also restore full hydraulic capacity, prevent leakage, and ensure safe discharge operations for both BID and MID patrons.

CONCLUSION

As a Surface Water Coalition member, the Minidoka Irrigation District is working to improve system efficiency to meet the 2024 Surface Water Coalition Stipulated Mitigation Plan. This project, requesting \$3,210,000, would help MID improve water management coordination and ensure safe, reliable operations during emergencies.

Attachment(s):

- *Draft Resolution*
- *Minidoka Surface Water Efficiencies Proposal – F-Waste Rehabilitation Project*

DRAFT

BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF THE MINIDOKA IRRIGATION
DISTRICT SURFACE WATER COALITION
OPERATIONAL EFFICIENCY PROGRAM FUNDING
REQUEST

RESOLUTION TO AUTHORIZE
FUNDING FOR COSTS RELATED TO
THE F-WASTE REHABILITATION
PROJECT

1 WHEREAS, Idaho Code § 42-1760 authorizes the Idaho Water Resource Board (IWRB) to
2 expend, loan, or grant money from the Water Management Account for water projects that
3 conserve or increase water supply, improve drought resiliency, address water sustainability, or
4 support flood management, including the identification, study, and construction of managed
5 aquifer recharge sites above Milner dam; and
6

7 WHEREAS, the IWRB passed Resolution No. 23-2025 creating the Surface Water Coalition
8 Operational Efficiency Program (Program) to fund improvements in water delivery system
9 operations, with a goal of enhancing the efficient use of surface water supplies within the Snake
10 River Plain Aquifer Area of Common Groundwater Supply, in support of the 2024 Stipulated
11 Mitigation Plan entered into by the surface and ground water users on the Eastern Snake Plain;
12 and
13

14 WHEREAS, the Minidoka Irrigation District (MID) submitted a proposal to repair the
15 existing F-Waste structure, used by both Minidoka and Burley Irrigation Districts; and to regulate
16 canal operations and safely convey excess flows within the system back to the Snake River; and
17

18 NOW THEREFORE BE IT RESOLVED that the IWRB approves the Surface Water Coalition
19 Operational Efficiencies Program funding request from the Minidoka Irrigation District, in an
20 amount up to \$3,210,000, for the F-Waste Rehabilitation Project, from the Water Management
21 Account
22

23 BE IT FURTHER RESOLVED that the IWRB authorizes its Chairman or designee, to execute
24 the necessary agreements or contracts with MID for the purpose of this resolution.

DATED this 21st day of May 2026.

JEFF RAYBOULD, Chairman
Idaho Water Resource Board

ATTEST _____
DEAN STEVENSON, Secretary



MINIDOKA IRRIGATION DISTRICT
98 WEST 50 SOUTH
RUPERT, ID 83350
(208) 436-3188
www.minidokairrigationdistrict.org
"M.I.D. IS AN EQUAL OPPORTUNITY PROVIDER AND EMPLOYER"

1 May 2026

Idaho Department of Water Resources
Attn: Surface Water Coalition Operational Efficiencies Program
PO Box 83720
Boise, Idaho 83720

Idaho Water Resource Board Funding Consideration Committee,

Enclosed is Minidoka Irrigation District's (MID) funding request for consideration under the Idaho Water Resource Board Surface Water Coalition Operational Efficiencies Program.

The **South Side Gravity Canal F Waste Rehabilitation Project** represents a critical infrastructure investment focused on the replacement of a key structure within the South Side Gravity Canal system. The F Waste structure is essential for regulating canal operations and safely conveying excess flows within the system. Due to its age and current condition, the structure is no longer capable of reliably performing its intended function without increasing operational risk.

The total estimated project cost is **\$3,210,000**, and MID respectfully requests **100% funding** under the SWC Operational Efficiencies Program to complete the project under a "not-to-exceed" contract.

Thank you for your time and consideration. MID looks forward to working with the Idaho Water Resource Board to complete this important infrastructure project.

Sincerely,

Dan Davidson
General Manager
Minidoka Irrigation District

Table of Contents

Project Sponsor	3
Project Description	3
Proposed Project Narrative	4
Project Team	5
Map	5
Cost Estimate and Budget	6
Budget Summary	8
Additional Project Funding Sources	8
Implementation Schedule	8
Attachment 1	10
Civil Science F Waste Engineering Report	
Attachment 2	25
Project Map	
Attachment 3	27
USBR Supplemental Contract Transferring the South Side Canal to Burley Irrigation District (1950) with Minidoka Irrigation District Amendment (1983)	

Project Sponsor

Minidoka Irrigation District (MID) is an irrigation district and political subdivision of the State of Idaho located in Minidoka and Cassia Counties. The District operates as part of the U.S. Bureau of Reclamation's Minidoka Project, one of the earliest federal reclamation efforts established following the Reclamation Act of 1902.

MID currently provides irrigation service to approximately 77,000 acres and more than 3,000 water users. The District operates and maintains over 500 miles of canals, laterals, and drains. Water supplies are delivered from federal storage reservoirs including Minidoka, American Falls, Palisades, and Jackson Lake.

MID works in coordination with Burley Irrigation District (BID) in the operation and maintenance of shared infrastructure within the South Side Gravity Canal system. Responsibilities for these shared facilities are defined through longstanding agreements between the two districts, including the Memorandum of Agreement included as Attachment 3.

Project Description

The proposed project focuses on the reconstruction of the F Waste structure located within the South Side Gravity Canal system in Cassia County, Idaho, near Declo.

The F Waste structure serves as a critical operational and safety component of the system by regulating canal flows and providing a controlled means of discharging excess water. The structure is essential to maintaining stable canal conditions and supporting downstream water delivery operations for both MID and BID.

The existing structure has exceeded its useful life and exhibits significant deterioration. The proposed project will replace the structure with a new facility designed to meet modern engineering standards, restoring full functionality and ensuring long-term operational reliability.

Proposed Project Narrative

The South Side Gravity Canal is a key component of the regional irrigation system serving both MID and BID. The F Waste structure, located near the terminus of the canal, plays a vital role in maintaining proper flow conditions and ensuring safe system operation.

The structure is over one hundred years old and has experienced significant degradation due to age, environmental exposure, and long-term hydraulic loading. Engineering evaluation of the structure has identified widespread internal cracking, material deterioration, and reduced structural strength.

Concrete core testing indicates compressive strengths in the range of approximately 900 to 1,000 psi, significantly below typical structural design standards . These findings, combined with visible cracking and water infiltration, indicate that the structure is no longer capable of reliably performing its intended function over the long term.

Failure of the F Waste structure would have immediate and significant impacts on system operations. The South Side Gravity Canal supports irrigation deliveries to an estimated 35,000 to 40,000 acres of agricultural land. Loss of the structure would disrupt water delivery and could result in substantial economic impacts to the region during the irrigation season.

The proposed project will replace the existing structure with a new reinforced concrete facility designed to replicate the functional characteristics of the original structure while incorporating modern materials and construction practices. This will restore full hydraulic capacity, eliminate leakage associated with structural deterioration, and ensure reliable operation under a range of flow conditions.

The project supports water supply stability, public safety, and long-term sustainability of irrigation infrastructure within the region.

MID will serve as the contracting entity for the project. BID will act as a primary construction partner and sub-awardee and will perform the majority of the construction work due to its operational responsibility for the facility and its experience with similar infrastructure.

The roles and responsibilities of MID and BID are consistent with existing agreements governing shared infrastructure within the South Side system, as documented in the MID-BID Memorandum of Agreement (Attachment 3)

Project Team

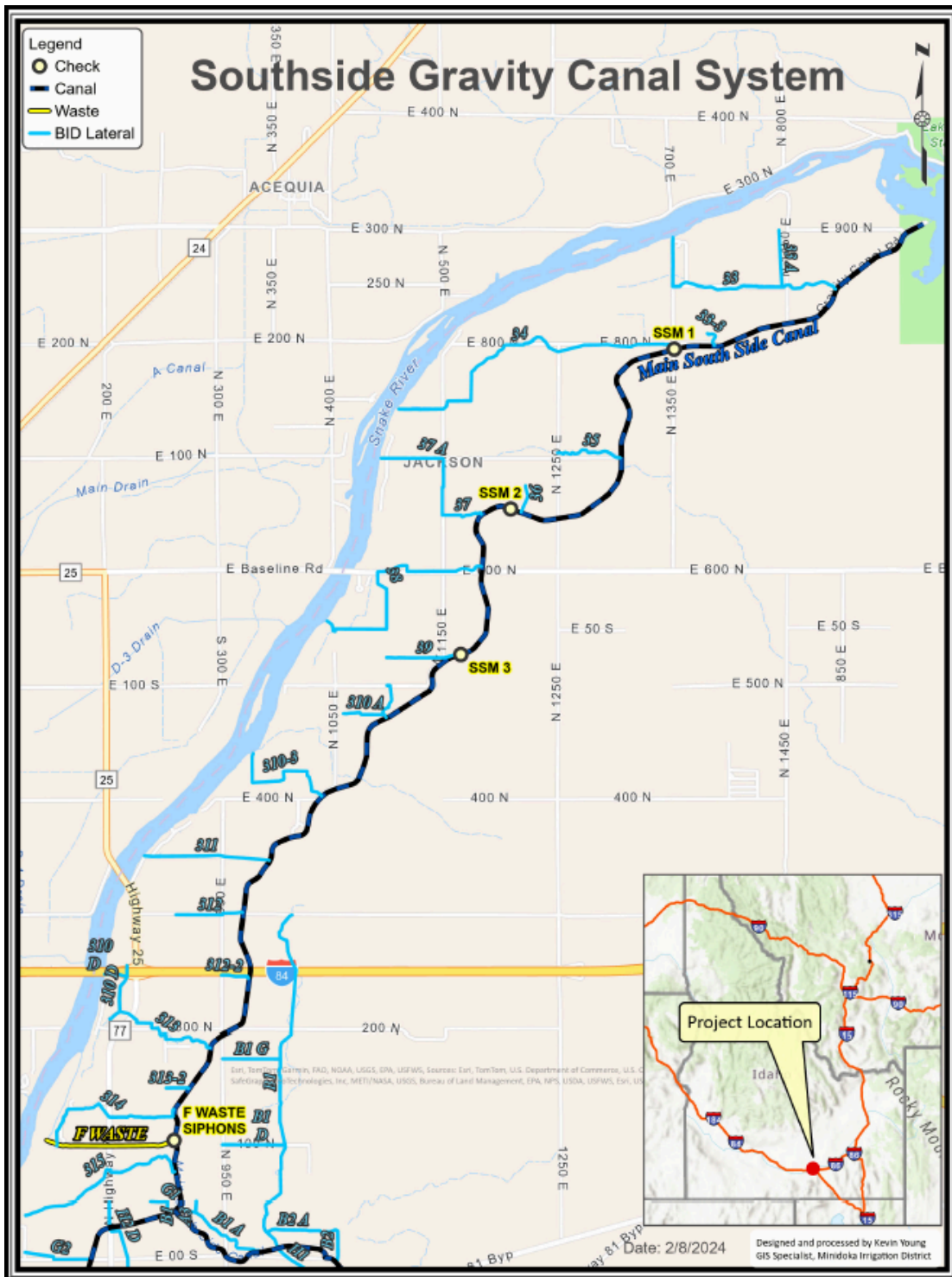
Minidoka Irrigation District (MID) will serve as the project sponsor and contracting entity, providing project oversight, coordination, and administration.

Burley Irrigation District (BID) will serve as the primary construction partner and sub-awardee and will perform the majority of construction activities. BID has extensive experience in the operation, maintenance, and construction of large-scale irrigation infrastructure, including prior work on the South Side Gravity Canal system.

Engineering evaluation and design support for the project has been provided by qualified engineering firms, including structural analysis and recommendations documented in the F Waste Engineering Report (Attachment 3) .

Map

The map provided in this section is also included as a full sheet representation as **Attachment 2.**



Cost Estimate and Budget

The South Side Gravity Canal F Waste Rehabilitation Project represents a major infrastructure replacement effort designed to restore system reliability and ensure continued operation of critical irrigation facilities.

The total estimated project cost is **\$3,210,000**, and MID is requesting **100% funding** through the Idaho Water Resource Board SWC Operational Efficiencies Program.

Rehabilitation or partial repair of the existing structure was evaluated but determined to be infeasible due to the extent of internal deterioration identified through engineering analysis. Full replacement represents the most cost-effective and reliable long-term solution.

Category	Description	Estimated Cost
Planning and Preliminary Engineering	Site surveys, data collection, feasibility evaluations, coordination with stakeholders, and preliminary design development.	\$120,000.00
Final Design and Engineering	Development of final design drawings, hydraulic modeling, structural analysis, and engineering specifications for the F Waste structure replacement.	\$ 650,000.00
Construction and Installation	Excavation, structure demolition, concrete work, installation of the new reinforced concrete structure, and associated materials and labor.	\$2,248,000.00
Administrative and Legal	Project management, contract administration, coordination with IWRB staff, procurement oversight, and potential legal services.	\$72,000.00
Construction Inspection and Quality Control	Field inspection, testing, commissioning, and verification of structural performance.	\$120,000.00

Budget Summary

The majority of project costs are associated with construction and installation, reflecting the scale and complexity of replacing a major structural component within an active canal system.

All cost estimates are based on recent similar projects and current construction conditions. MID will provide project oversight and coordination to ensure that all work is completed in accordance with applicable standards and requirements.

Additional Project Funding Sources

This funding request represents the full amount required to complete the project. Previous funding efforts related to this structure will be incorporated into this project, and all work will be completed under a single contract.

Implementation Schedule

The South Side Gravity Canal F Waste Rehabilitation Project is planned as a three-year, phased construction effort. Construction activities at the F Waste will primarily be confined to times when the irrigation water is out of the system, typically October through March to prevent disruption to irrigation operations.

Year 1: Design and Project Initiation

During the first year of the project, MID will focus on final design and engineering activities necessary to advance the project to construction. This phase will include completion of engineering plans and specifications, coordination with regulatory agencies, and acquisition of any required permits. MID will also complete procurement activities, including contractor selection and contract execution, to ensure the project is positioned to move efficiently into construction.

Years 2–3: Construction and Project Closeout

During Years 2 and 3, BID will focus on full construction of the F Waste Structure in coordination with engineering partners, including Civil Science and Shannon & Wilson, and in collaboration with the MID. Construction activities will include demolition of the Minidoka Irrigation District F Waste Rehabilitation Proposal

existing structure as needed, installation of new structural components, concrete work, and integration with the existing canal system.

Project oversight and coordination will be maintained throughout construction to ensure compliance with design specifications and project objectives. These evaluations will also help identify any necessary adjustments prior to final commissioning.

Upon completion of construction, the F Waste Structure will undergo final testing and commissioning to verify structural integrity and operational performance.

Final project activities will include site restoration and completion of all required reporting. MID will submit final documentation and financial reports in accordance with Idaho Water Resource Board requirements.

Attachment 1

Civil Science F Waste Engineering Report

F-WASTE DRAFT SUMMARY

1/11/2022

Burley Irrigation District

Rebar location and concrete coring were completed in December 2021. 9 locations were selected for test cores and Atlas located rebar for those 9 locations. Of those 9 locations 6 cores were taken. The cores were drilled by Strata. Strata used a bolt down core drill with a 4" diameter core bit. Cores were removed from 3 concrete bank and apron locations and 3 structural locations within the diversion. All cores from the structure had thorough internal cracking. Strata stored the cores in a water bath and then pressed the cores to determine compressive strength of the concrete. Each of the cores from the structure that were tested had compressive strengths in the 900psi to 1000 psi range. This is far below the assumed minimum design strength of 3,000 psi. Photos of some of the core locations are shown below as well as located on a google earth image. Figure 1. Shows core locating for cores 3 in the apron, 4 where the technician is located, and 5 at the far opening.



Figure 1

Figure 2 shows the location where core 6 was taken as indicated by the visible red rectangle. The technician is marking rebar in the side of the structure, but no cores were taken from the location he is marking in Figure 2.



Figure 2

After 3 cores had been taken with similar core conditions no further cores were extracted. It was apparent that the entire structure was suffering from the same problem. It is highly unlikely that the concrete used in the structure had entrained air since it wasn't invented until after the likely construction date of the project. The valve deck is visibly cracked and broken in various places. Figure 3 shows the technician from Atlas locating rebar in the valve deck.

Technical data from Atlas and Strata are attached at the end of this document for review. It is the preliminary recommendation that a replacement for the structure be planned in the near future. The cracking and testing photos indicate that water has likely penetrated all rebar locations. It is highly likely that the rebar is beginning to rust and this will cause continued fracture and expansion of the concrete worsening the existing condition.

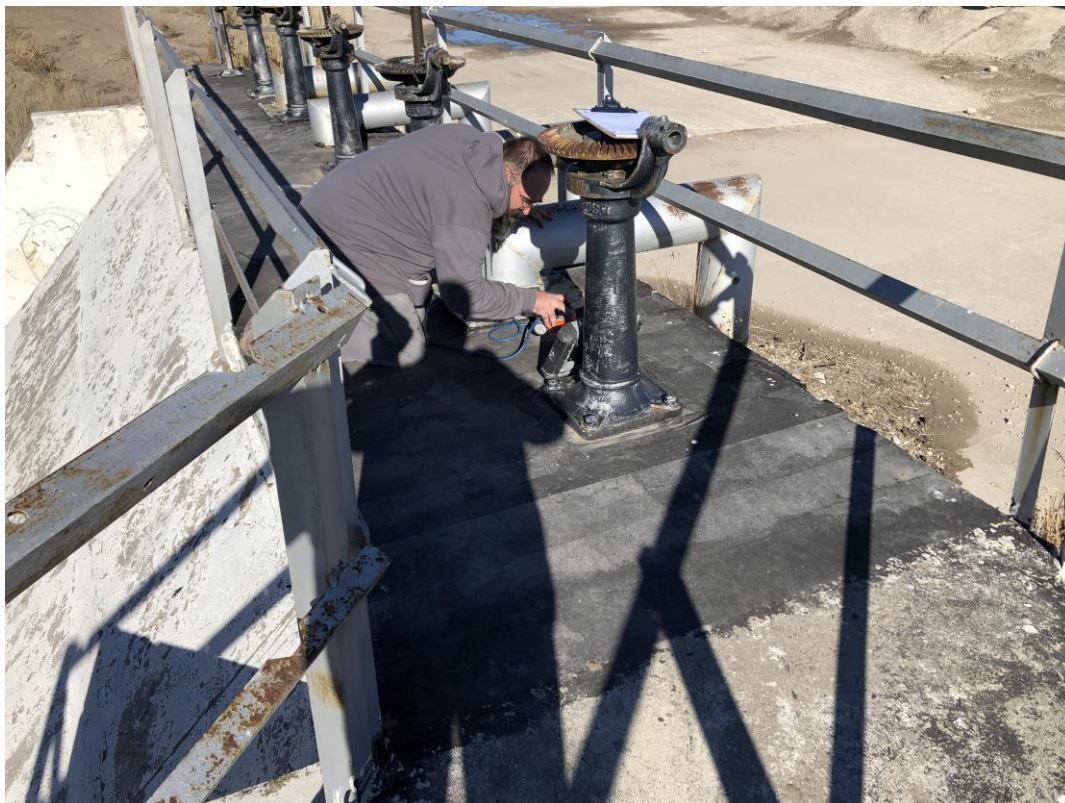
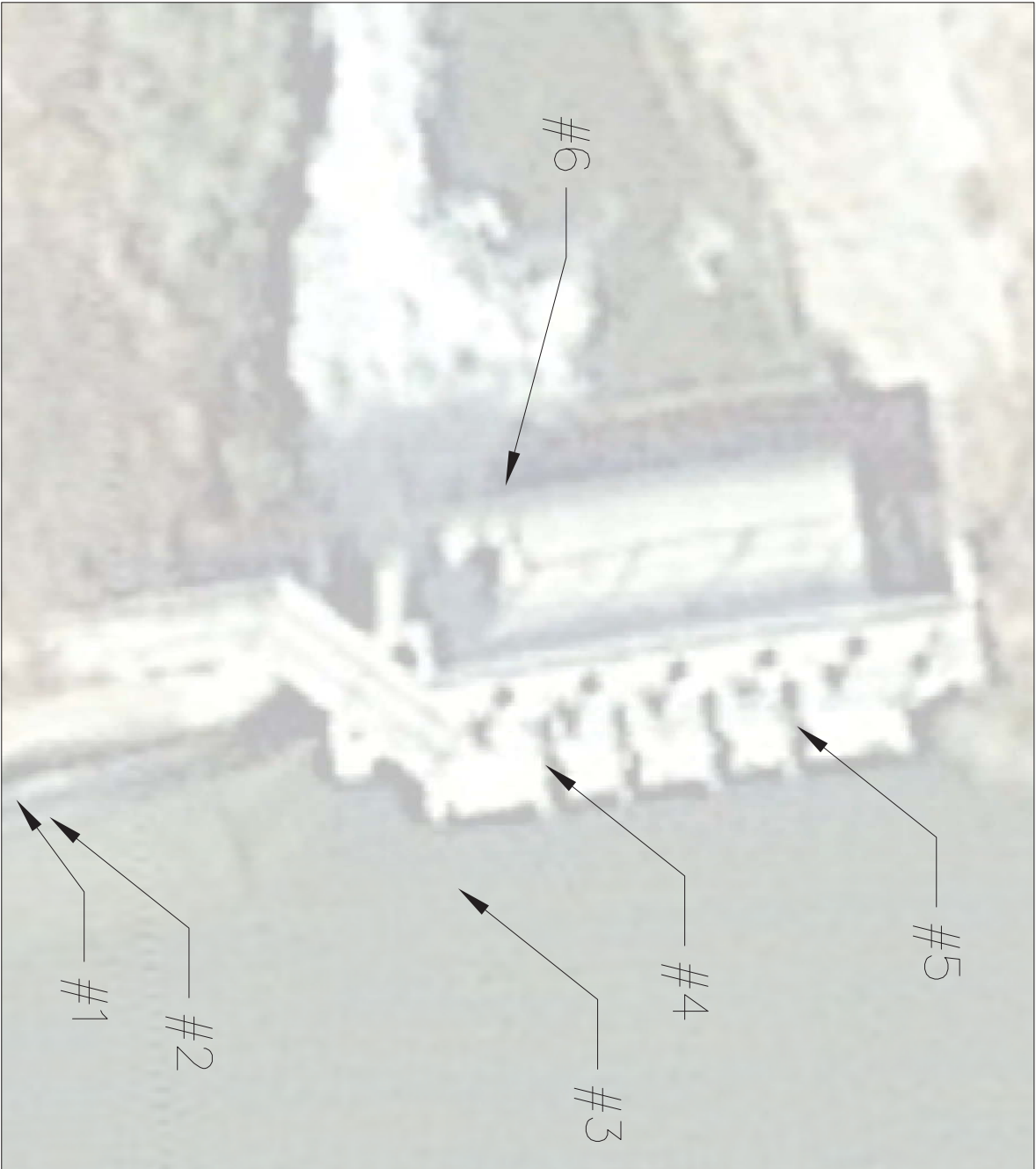


Figure 3



F-WASTE CORE LOCATIONS



F-WASTE CORE LOCATIONS
BURLEY IRRIGATION DISTRICT

REUSE OF DRAWINGS
THIS DOCUMENT AND THE IDEAS HEREIN ARE THE PROPERTY OF CIVIL SCIENCE, INC. AND IS NOT TO BE REPRODUCED, MODIFIED OR USED IN WHOLE OR IN PART, FOR ANY OTHER PROJECT OR EXTENSION OF THIS PROJECT EXCEPT BY WRITTEN AUTHORIZATION OF CIVIL SCIENCE, INC.

REVISION			
NO.	DESCRIPTION	BY	DATE

376 FALLS AVENUE
TWIN FALLS, ID 83301
208.737.0007

PROJECT: F-21004-10
DATE: JAN. 10, 2022
DESIGN BY: SGA
CHECKED BY: SGA
1 OF 1
EX-1



COMPRESSIVE STRENGTH OF DRILLED CONCRETE CORES

REPORT TO: Civil Science
376 Falls Ave
Twin Falls, Idaho 83301

DATE: 12/15/2021
CLIENT NO: CIVSCI
PROJECT NO: TF21175A

PROJECT: Burley Irrigation F Waste

Sample Identification

On 12/08/2021 Strata personnel obtained six concrete core samples, cored by STRATA from the above referenced project at locations determined by Civil Science. At your request, we performed compressive strength tests on 12/15/2021 in general accordance with ASTM C-42 on five of the six cores obtained. The test results are summarized as follows:

Test Results:

Location	Lab No.	Age, Days	Dia. in.	Capping Length, in.		Area, in ²	Load, lbs	Comp. Strength psi	L:D Correction Factor
				Before	After				
1		7	3.97	4.01	4.01	12.38	88,000	6,180	0.87
3		7	3.97	3.97	3.97	12.38	83,240	5,850	0.87
4		7	3.97	6.25	6.25	12.38	16,140	1,160	0.89
5		7	3.97	8.00	8.00	12.38	12,170	880	0.89
6		7	3.97	5.00	5.00	12.38	12,730	920	0.89

* Note: ASTM C 42 Note 3 - The compressive strengths of nominal 2-in. diameter cores are known to be somewhat lower and more variable than those of nominal 4-in. diameter cores. In addition, smaller diameter cores appear to be more sensitive to the effect of the length-diameter ratio.

Reviewed By: 

As mutual protection to our clients, the public, and ourselves, all reports are submitted as the confidential property of our clients and authorization for publication of statements, conclusions, or extracts from or regarding our reports are reserved pending our written approval. This document contains results from samples tested or observations performed by STRATA, Inc. This report shall not be reproduced, except in full without the prior written approval of STRATA, Inc. Samples will be disposed of after testing is completed unless prior arrangements are agreed to in writing.



Burley Irrigation F Waste Concrete Cores

Initial Length	Initial Weight	7 Days in Cure Room	PSI
#1- 4 ¼"	2069.9	2074.7	6,180



Initial Length	Initial Weight	7 Days in Cure Room	PSI
#3- 4"	1993.4	1998.4	5,850



Initial Length	Initial Weight	7 Days in Cure Room	PSI
#4- 6 ¼"	2857.6	2875.8	1,160



Initial Length	Initial Weight	7 Days in Cure Room	PSI
#5- 10 3/4"	4636.8	4658.9	880



Initial Length	Initial Weight	7 Days in Cure Room	PSI
#6- 5 ¼"	2298.6	2309.8	920



Moisture throughout Core #5 After being Cut



Stephen Anderson
Civil Science, Inc.
376 Falls Avenue, Suite 100
Twin Falls, ID 83301

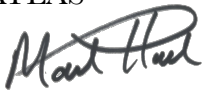
Project: Limited Ground Penetrating Radar Survey
Burley Irrigation District
Location: F Waste, Declo ID
Inspection Date (s): December 3rd, 2021
Project Manager: Chris Elzea
Atlas File #: T213157c

ATLAS has completed the limited Ground Penetrating Radar (GPR) survey of 8 core locations for core sampling. Found double and single mats of rebar at various locaitons. Avoid all rebar given by 1.5" minimum. Attached are photos of the findings.

ATLAS used a GSSI StructureScan Optical GPR device equipped with a 2 GHz antenna and TerraSIRch SIR-4000 digital control unit, which is capable of locating and imaging rebar and other targets in concrete slabs, decks, walls and masonry. The dielectric constant for this concrete was measured to be roughly 6.25 (dielectric is unit-less). Sampling rate was 16 bits/sample, 256 samples/scan, and 90 scans/foot. Some limitations of the technology exist depending upon the situation. Though not a foolproof system, the technology provides information on the location and depth of objects accurate to within 1/4 of the radar wavelength, which equates to a spatial resolution of roughly 1/4-inch for a 2 GHz system. As with any Non-Destructive Evaluation (NDE) technique, interpretation of data is key to achieving accurate results. As with any Non-Destructive Evaluation (NDE) technique, interpretation of data is key to achieving accurate results. Because of inherent limitations with GPR locating, ATLAS cannot warranty our findings and is providing this service for information purposes only.

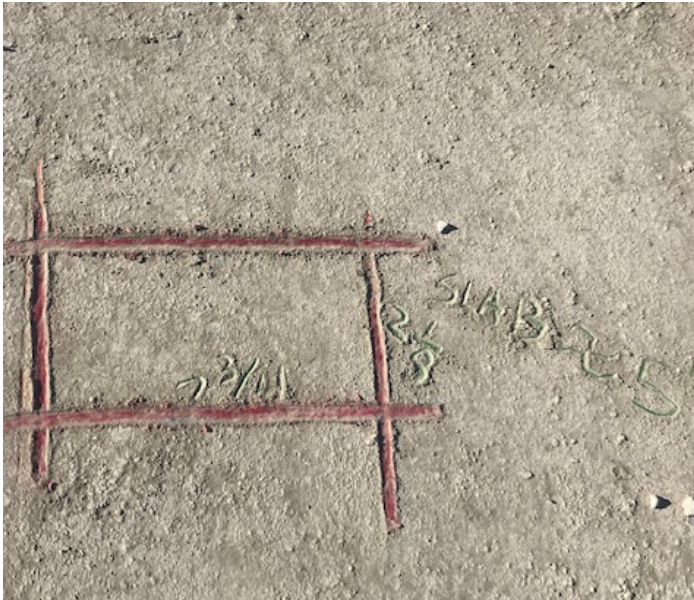
ATLAS appreciates this opportunity to be of service and looks forward to a continuing relationship as your concrete and NDE expert. If you have questions concerning this report, please contact us at (208) 376-4748.

Respectfully submitted,
ATLAS



Conducted by: Matt Hall
NDE Specialist
Attachments: *Photographs*

Core Locations



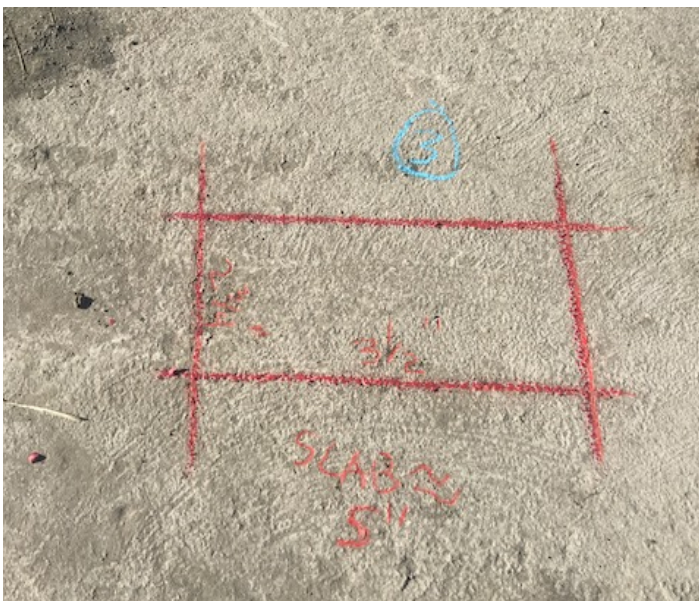
Location 1:

Slab appears to be ~5 inches thick. Single mat of rebar appears to be ~#5 bar.



Location 2:

Slab appears to be ~6 inches thick. Single mat of rebar appears to be ~#5 bar.



Location 3:

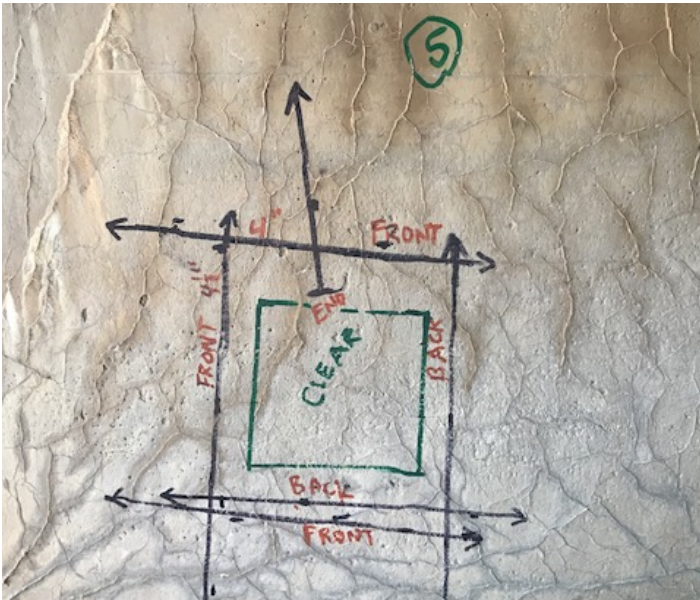
Slab appears to be ~5 inches thick. Single mat of rebar appears to be ~#5 bar.



Location 4:

Wall has a double mat of rebar that appears to be ~#4 bar.

Core Locations



Location 5:

Wall has a double mat of rebar that appears to be ~#4 bar.



Location 6:

Wall has vertical rebar at ~ 5 inches on center. Cannot "see" below this mat of rebar.



Location 7:

Wall has a double mat of rebar that appears to be ~#4 bar.



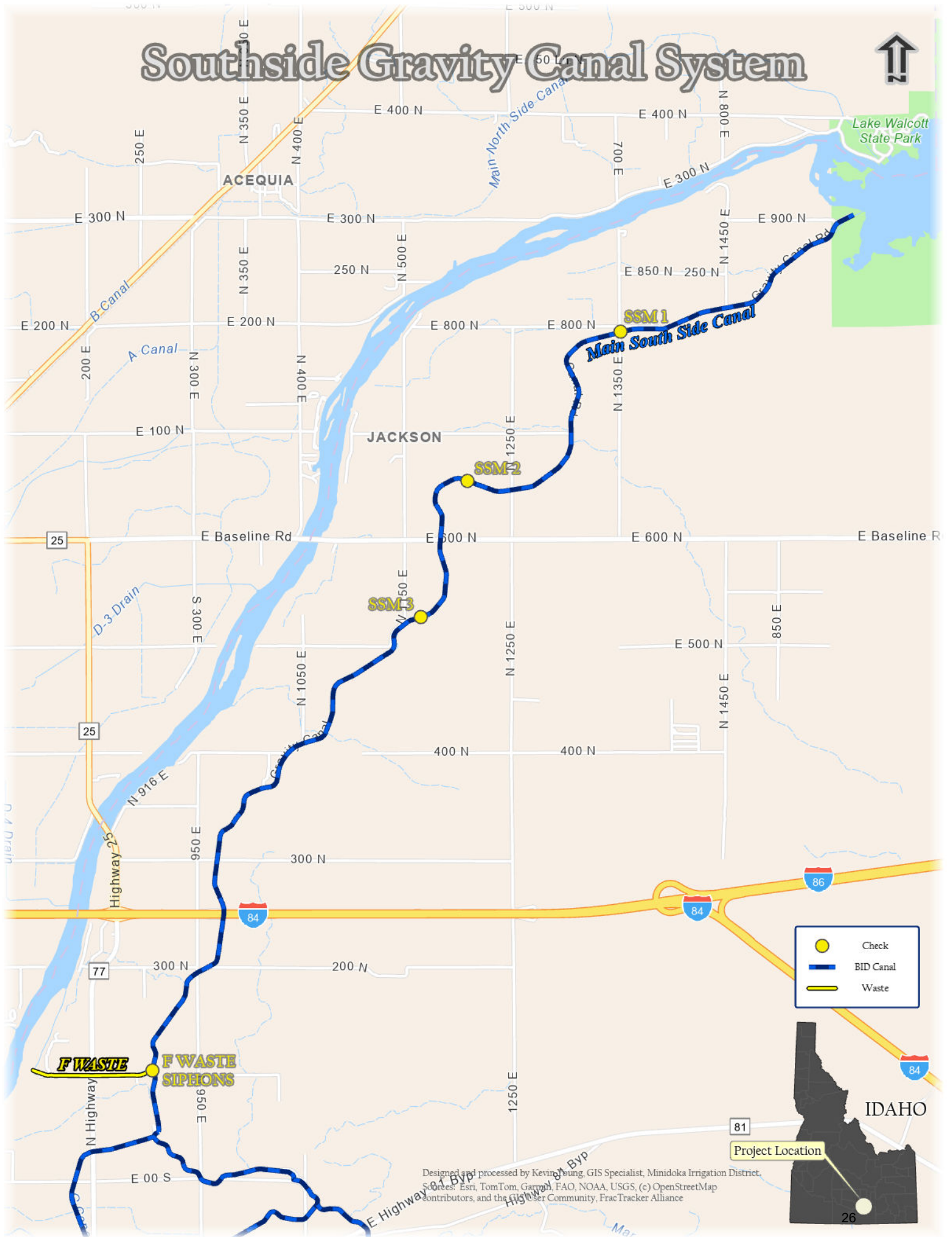
Location 8:

Wall has vertical rebar at ~ 5 inches on center. Cannot "see" below this mat of rebar.

Attachment 2

Project Map

Southside Gravity Canal System



	Check
	BID Canal
	Waste



Designed and processed by Kevin Chung, GIS Specialist, Minidoka Irrigation District.
 Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, FracTracker Alliance

Attachment 3

USBR Supplemental Contract Transferring the South Side Canal
to Burley Irrigation District (1950) with Minidoka Irrigation
District Amendment (1983)

Contract I74r-1197

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION

Minidoka Project, Idaho

SUPPLEMENTAL CONTRACT TRANSFERRING THE MAIN SOUTH
SIDE CANAL TO THE BURLEY IRRIGATION DISTRICT
FOR OPERATION AND MAINTENANCE

Index

<u>Article Number</u>	<u>Title</u>	<u>Page Number</u>
1	Preamble	1
2-3	Explanatory Recitals	1-2
4	Additional Works and Equipment Transferred . . .	2-3
5	Operation and Maintenance of Transferred Works .	3-4
6	Delivery of Water for Lands in Minidoka Irriga- tion District	4-5
7	Minidoka Irrigation District to Pay Share of Operation and Maintenance Cost	5-6
8	Previous Contracts to Remain Effective	6-7
9	Title to Transferred Works in United States . .	7
10	Officials Not to Benefit	7

2

Contract 174r-1497

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION

Minidoka Project, Idaho

SUPPLEMENTAL CONTRACT TRANSFERRING THE MAIN SOUTH
SIDE CANAL TO THE BURLEY IRRIGATION DISTRICT
FOR OPERATION AND MAINTENANCE

1 THIS AGREEMENT, made this 12th day of December, 1950,
2 under the provisions of the Act of June 17, 1902 (32 Stat. 388)
3 and acts amendatory thereof and supplementary thereto, together
4 hereinafter called the Federal Reclamation Laws, by and among
5 THE UNITED STATES OF AMERICA (hereinafter called the United
6 States) acting through the Secretary of the Interior, the BURLEY
7 IRRIGATION DISTRICT, and the MINIDOKA IRRIGATION DISTRICT (herein-
8 after called the Districts) each an irrigation district organized
9 and existing under and by virtue of the laws of the State of Idaho,

10 WITNESSETH, That:

EXPLANATORY RECITALS

11
12 2. WHEREAS, under the provisions of existing contracts be-
13 tween the parties hereto, the United States has turned over to
14 the Districts for operation and maintenance certain portions of
15 the Minidoka Federal Reclamation Project and has retained other
16 project facilities as reserved works for operation and maintenance
17 by the United States, these contracts include the contract dated
18 March 15, 1926 (Symbol and No. 11r-392) between the United States
19 and the Burley Irrigation District and the contract dated

3

1 December 2, 1916 (Symbol and No. Ilr-396), as supplemented by
2 the contract of February 11, 1927 (Symbol and No. Ilr-115),
3 between the United States of America and the Minidoka Irrigation
4 District; and

5 3. WHEREAS, it is the desire of the United States and the
6 Districts that the portion of the Main South Side Canal now being
7 operated by the United States be transferred to the Burley Irriga-
8 tion District for operation and maintenance,

9 NOW, THEREFORE, in consideration of the mutual and dependent
10 stipulations and covenants herein contained, it is mutually agreed
11 by and among the parties hereto as follows:

12 ADDITIONAL WORKS AND EQUIPMENT TRANSFERRED

13 4. (a) Effective January 1, 1951, the United States shall
14 transfer to the Burley Irrigation District the care, operation
15 and maintenance of the first 13.3 miles of the Main South Side
16 Canal from its headworks located in Section 1, Township 9 South,
17 Range 25 East, B. M., to Pumping Station Lift No. 1, located in
18 Section 23, Township 10 South, Range 24 East, B. M., including
19 all structures and measuring devices on the said canal constructed
20 for the diversion of waters therefrom and also including the
21 ditchrider's house and grounds, known as Cottage No. 20, located
22 at Pumping Station Lift No. 1. The works described in this sub-
23 article are in addition to those works transferred by the contract

24

1 of March 15, 1926, between the United States and the Burley
2 Irrigation District, and are designated "transferred works"
3 as defined in that contract, subject to all the provisions of
4 that contract. The headworks and the main gaging station of
5 the Main South Side Canal shall be continued to be operated and
6 maintained by the United States as reserved works.

7 (b) Also effective January 1, 1951, the United States
8 shall transfer to the Burley Irrigation District the following
9 described equipment:

- 10 1 Osgood Commander dragline excavator, gasoline driven,
3/4 cubic yard capacity, 35-foot boom with 10-foot
extension, Page class "C" bucket.
- 11 1 International Harvester 1/2-ton pickup truck, 1947
model, Serial No. 56102, Engine No. GRD214-142332.
- 12 1 International 2-ton dump truck, 1947 model, Serial
31842, Engine No. BLD-250-39031.
- 13 3 heavy mooring chains.

14 Upon the transfer, the boards of directors of the Districts
15 shall agree upon a fair valuation of the equipment and the
16 Burley Irrigation District shall credit the Minidoka Irrigation
17 District with 13.3 per cent of said valuation on future charges
18 due under the provisions of article 7.

19 OPERATION AND MAINTENANCE OF TRANSFERRED WORKS

20 5. The Burley Irrigation District hereby accepts, as of
21 January 1, 1951, the care, operation and maintenance of the

5

1 transferred works, and will care for, operate, maintain and
2 deliver water therefrom in full compliance with the Federal
3 Reclamation Laws, the regulations of the Secretary now in force
4 and hereafter made, the terms of this contract, and other con-
5 tracts between the United States and the District. The Burley
6 Irrigation District shall care for, operate and maintain the
7 Main South Side Canal in such manner that said works shall re-
8 main in as good and efficient condition and of not less capacity
9 for the diversion and carriage of irrigation water as now exists,
10 and will use all proper methods to secure the economical and
11 beneficial use of irrigation water.

12 DELIVERY OF WATER FOR LANDS IN
MINIDOKA IRRIGATION DISTRICT

13 6. In recognition of the interests of the Minidoka Irriga-
14 tion District by reason of delivery of water to gravity lands
15 served from the portion of the Main South Side Canal transferred
16 by this contract, the Minidoka Irrigation District shall have
17 the right to consult with the Burley Irrigation District from
18 time to time as to the operation and maintenance of the said
19 transferred canal by the Burley Irrigation District, and the
20 Burley Irrigation District shall operate and maintain the Main
21 South Side Canal in full recognition of the rights of the Minidoka
22 Irrigation District as now established and recognized in the

4

1 existing contracts between the Minidoka Irrigation District and
2 the United States. Whenever in the operation of the canal its
3 capacity becomes impaired by reason of mossing conditions to the
4 extent that 185 c.f.s. of water cannot be delivered to the gravity
5 lands of the Minidoka Irrigation District without reducing the
6 delivery of water from the canal to the Burley Irrigation District's
7 Pumping Station Lift No. 1 below 1037 c.f.s., the irrigation mana-
8 gers of the Districts shall confer to work out satisfactory
9 arrangements for correcting the conditions impairing the capacity
10 of the canal and, if necessary, temporarily reducing the water
11 deliveries, with the understanding that such reductions will be
12 prorated on the basis of 185 c.f.s. to the Minidoka Irrigation
13 District and 1037 c.f.s. to the Burley Irrigation District.
14 When the capacity of the canal will furnish 185 c.f.s. to the
15 Minidoka Irrigation District and still deliver more than the
16 requirements of the Burley Irrigation District, then upon request
17 of the Manager of the Minidoka Irrigation District, delivery to
18 said District may be increased within the safe operating capacity
19 of the canal.

20 MINIDOKA IRRIGATION DISTRICT TO PAY SHARE
OF OPERATION AND MAINTENANCE COST

21 7. The Minidoka Irrigation District shall pay to the Burley
22 Irrigation District 13.3 per cent of the annual cost of operating
23 and maintaining the transferred works described in article 4 hereof.

1 Each year the Burley Irrigation District shall give notice to
2 the Minidoka Irrigation District on or before December 1 of the
3 estimated cost of operating and maintaining the transferred
4 works described in article 4 hereof for the succeeding calendar
5 year and the Minidoka Irrigation District's share of that cost.
6 The Minidoka Irrigation District shall pay its share of said
7 estimated cost to the Burley Irrigation District on April 1 for
8 the year for which said payment is applicable. On or before
9 January 30, 1952, and on January 30 of each year thereafter,
10 the Burley Irrigation District shall furnish the Minidoka Irriga-
11 tion District an itemized statement of the actual cost of operat-
12 ing and maintaining the transferred works for the preceding year.
13 Any surplus remaining over and above the amount advanced by the
14 Minidoka Irrigation District as its share of the costs for that
15 year shall be credited on the payment to be made the succeeding
16 April 1. Should the Minidoka Irrigation District's share of the
17 actual cost as shown by the itemized statement be more than the
18 amount advanced by the Minidoka Irrigation District for that year,
19 the Minidoka Irrigation District shall promptly pay to the Burley
20 Irrigation District the amount of the deficiency.

21 PREVIOUS CONTRACTS TO REMAIN EFFECTIVE

22 8. This contract is supplementary to the contracts of
23 March 15, 1926 and December 2, 1916, as supplemented by the con-
24 tract of February 11, 1927, and these contracts, as well as all

1 other existing agreements among the parties hereto, are to
2 remain in full force and effect as to all their terms, except
3 that effective upon the transfer provided in article 4, the works
4 therein described shall become transferred works under the provi-
5 sions of the contracts of March 15, 1926 and December 2, 1916, as
6 supplemented by the contract of February 11, 1927, and be removed
7 from the provisions of those contracts relating to reserved works.

8 TITLE TO TRANSFERRED WORKS IN UNITED STATES

9 9. Title to works heretofore or herein transferred to the
10 Burley Irrigation District shall remain in the United States until
11 otherwise provided by Congress.

12 OFFICIALS NOT TO BENEFIT

13 10. No Member of or Delegate to Congress or Resident Commis-
14 sioner shall be admitted to any share or part of this contract or
15 to any benefit that may arise herefrom, but this restriction shall
16 not be construed to extend to this contract if made with a corpora-
17 tion or company for its general benefit.

18 IN WITNESS WHEREOF, the parties hereto have executed this
19 contract the day and year first above written.

20

THE UNITED STATES OF AMERICA

By /s/ F. M. Clinton
Acting Regional Director, Region 1
Bureau of Reclamation

7

7

1
2
3
4
5
6
7
8
9
10

BURLEY IRRIGATION DISTRICT

By /s/ J. W. Bodily
President

(SEAL)

Attest:

/s/ Frank O. Redfield
Secretary

MINIDOKA IRRIGATION DISTRICT

By /s/ Roy Marquess
President

(SEAL)

Attest:

/s/ G. E. Nickerson
Secretary

10

AMENDMENT TO SUPPLEMENTAL CONTRACT TRANSFERRING
THE MAIN SOUTH SIDE CANAL TO THE BURLEY IRRIGATION
DISTRICT FOR OPERATION AND MAINTENANCE

THIS AMENDMENT, made and entered into this 20th day of May , 1983, by and between Burley Irrigation District and Minidoka Irrigation District, hereinafter called the Districts, and the United States of America, hereinafter called the United States, acting through the Secretary of Interior or his authorized representatives, with each District organized and existing under and by virtue of the law of the State of Idaho.

WITNESSETH, that

WHEREAS, the responsibility for the operation and maintenance of the Main South Side Canal, hereinafter called the Main Canal, of the Minidoka Project is defined in the United States Department of Interior, Bureau of Reclamation, Contract No. I74r-1497 dated December 12, 1950, and;

WHEREAS, the parties hereto desire to share operation and maintenance of the Main Canal and to further define the obligations of the respective parties set forth in said contract and to amend portions hereof;

NOW, THEREFORE, it is hereby agreed as follows:

1. Article 3 of said contract is deleted in its entirety and the following substituted therefore:

3. WHEREAS, it is the desire of the United States and the Districts that the portion of the Main Canal originally operated and maintained by the United States be transferred to the Districts for operation and maintenance,

2. Article 4 of said contract is deleted in its entirety and the following substituted therefore:

4. As of the date of signing of this amendment, the care, operation, and maintenance of the first 13.3 miles of the Main Canal and appurtenances as described under Contract No. 174r-1497, shall be assumed by the Districts with responsibilities of each District as set forth. The works described in this article are in addition to those works transferred by the contract of March 15, 1926, between the United States and the Burley Irrigation District, and are designated "transferred works" as defined in that contract, subject to all the provisions of the contract. The headworks and the main gaging station of the Main South Side Canal shall be continued to be operated and maintained by the United States as reserved works.

3. Article 5 of said contract is deleted in its entirety and the following substituted therefore:

5. The Districts hereby accept as of date first above written the care, operation, and maintenance of the transferred works and will care for, operate, maintain, and deliver water therefrom in full compliance with the Federal Reclamation Laws, the regulations of the Secretary now in force, and hereafter made, the terms of this contract, and other contracts between the United States and the Districts. The Districts shall care for, operate, and maintain the Main Canal in such a manner that said works shall remain in a good and efficient condition and of not less capacity for the diversion and carriage of irrigation water as now exists, and will use all proper methods to secure the economical and beneficial use of irrigation water.

The Districts agree as follows in the operation and maintenance of the Main Canal:

(a) Turn on/off time - Water can be turned on anytime after April 1 and turned off no later than November 1 of each year. The exact date of turn-on and turn-off shall be agreed on by the Managers of each District.

(b) Staff gages - Staff gages shall be installed and maintained by the Burley Irrigation District at the headings, or in the immediate location of the headings, of Laterals 33, 38, and 39. The purpose of the staff gages is to be able to maintain a proper water level in the Main Canal during periods of minimum flow. Managers shall agree as to the proper operating level at each staff gage during these periods of minimum flow.

(c) Operation and Maintenance

(1) Burley Irrigation District shall maintain the Main Canal prism including banks and access roads, all turnouts and measuring devices serving Burley Irrigation District lands, and the F wasteway structure and channel to the Snake River. Burley Irrigation District shall operate the Main Canal including checks, all turnouts serving Burley Irrigation District lands, and the F wasteway structure. Water levels in front of checks shall be maintained at the agreed on staff gage readings as discussed in paragraph (b) above.

(2) Minidoka Irrigation District shall maintain all turnouts and measuring devices serving Minidoka Irrigation District lands including the checks used to maintain proper water levels in the Main Canal. Minidoka Irrigation District shall operate all turnouts serving Minidoka Irrigation District lands.

(3) The Districts shall inspect the Main Canal after the water is turned out each year to discuss the maintenance work to be done. All work shall be completed by both Districts prior to April 1 of the following year.

(4) Any new construction, additions, alterations, or rehabilitation relative to the Main Canal and F wasteway structure shall be agreed upon by the Districts prior to beginning construction. If agreement cannot be reached then the procedure as outlined under Article 6A below shall be followed.

(5) Maintenance by the Districts shall be done in accordance with the state-of-the-art standards so that the integrity of the Main Canal and appurtenant structures shall be maintained. Measuring devices taking water from the Main Canal shall be maintained so that a reliable quantity of water delivered can be obtained. Records of water usage shall be submitted by the Districts to the Bureau of Reclamation in Burley including the water pumped by the First Lifting Pumping Plant and all turnouts upstream from the First Lift Pumping Plant. These water use records shall be available at the request of either party.

(6) Costs of any major rehabilitation or construction work beyond routine operation and maintenance at the F wasteway structure will be prorated to each District according to the assessed acres served from the Main Canal by each District

(d) Water Orders - Burley Irrigation District shall make all routine water orders for operation of the headworks of the Main Canal to Bureau of Reclamation operating personnel at Minidoka Dam. The Minidoka Irrigation District Manager shall have the authority to make downward flow adjustment requests to Minidoka Dam operating personnel in cases

of emergency and shall notify Burley Irrigation District officials of action taken as soon as possible after the emergency.

(e) Selection of Main Canal Watermaster - It is agreed that the Districts will consult and agree on the selection of a watermaster for the Main Canal. If agreement cannot be reached then the procedure as outlined under Article 6A below shall be followed.

(f) Liability Insurance - The Burley Irrigation District shall maintain liability insurance against canal breaks on the Main Canal. Minidoka Irrigation District shall maintain liability insurance for its work while operating, maintaining, constructing, rehabilitating, altering or adding to the Main Canal or appurtenant structures as required by terms of this agreement. Any work done by the Minidoka Irrigation District which disturbs either bank of the Main Canal must be accepted by the Burley Irrigation District so that Burley Irrigation District can validate the work for insurance purposes. Minidoka Irrigation District shall give written notification to the Burley Irrigation District upon completion of any work that disturbs either bank, and Burley Irrigation District shall have fifteen days to object to the work performed by Minidoka Irrigation District. Should Burley Irrigation District fail to object within fifteen days, the work shall be deemed accepted by Burley Irrigation District. Should Minidoka Irrigation District fail to notify Burley Irrigation District of the completion of work, the work shall be deemed accepted by the Burley Irrigation District if it does not object to the work within fifteen days after the inspection described in Paragraph 5(c) (3), or, in any event, on April 1, following the completion of the work. It is agreed that both districts shall maintain their own liability insurance, and Burley Irrigation District

will become liable insofar as the Main Canal is concerned after accepting any work done which disturbs either bank of the Main Canal by Minidoka Irrigation District. Any disagreement or acceptance of work shall be arbitrated in accordance with Article 6A.

4. Article 6 of said contract is deleted in its entirety and the following substituted therefore:

6. In recognition of the interests of the Districts by reason of delivery of water to lands served from the portion of the Main Canal previously transferred by Contract No. I74r-1497, the Districts shall have the right to consult with each other periodically as to the operation and maintenance of the Main Canal and the said Canal shall be operated and maintained in full recognition of the rights of each District as now established and recognized in the existing contracts between the Burley Irrigation District and the United States and the Minidoka Irrigation District and the United States. The Minidoka Irrigation District's share in the Main Canal is designated as 200 cubic feet per second, and the Burley Irrigation District's share is 1150 cubic feet per second. If for any reason the Main Canal's total capacity is reduced below 1350 cubic per second, then the amount of reduction for each District shall be prorated on the basis of the above figures. When the capacity of the Main Canal will furnish 200 cubic feet per second to the Minidoka Irrigation District and still deliver the requirements of the Burley Irrigation District, then upon request of the Minidoka Irrigation District Manager, delivery to the Minidoka Irrigation District may be increased within the safe operating capacity of the Main Canal.

5. The following Article 6A is inserted into said contract between Articles 6 and 7 as follows:

RESOLVING DISAGREEMENT

6A. If for any reason the Districts or their managers cannot agree on any item called for in this contract, the problem will be submitted to the Project Superintendent of the Minidoka Project in Burley, Idaho, for resolution. If either District does not agree with the decision of the Project Superintendent, that party shall give written notice to the opposing party within fifteen days of the decision of the Project Superintendent of notice of an intention to submit the matter to arbitration. Each party shall then appoint one arbiter, and the two arbiters shall then appoint a third arbiter. The arbiters shall hold an arbitration hearing within thirty days after their appointments, at which time each party shall present its case, evidence, and witnesses, if any, in the presence of the other party and shall render their award, including a provision for payment of costs and expenses of arbitration to be paid by one or both parties, as the arbiters deem just. The award of the majority of the arbiters shall be binding upon the parties hereto, and judgment may be entered in any court having jurisdiction of the controversy according to the terms of the arbiters' decision.

6. Article 7 of said contract is deleted in its entirety and the following substituted therefore:

7. The Minidoka Irrigation District shall pay to the Burley Irrigation District the following charges for its share of the cost of operating and maintaining the Main Canal.

a. Four and fifty hundredths (4.50) percent of the total yearly operation and maintenance assessment less 5.00 percent made by the Minidoka Irrigation District to the lands within the Minidoka Irrigation District served by the Main Canal. Special assessment revenues or subsidies made by Minidoka Irrigation District are to be

excluded from the total figure. The formula for figuring this charge is as follows:

$$\text{Charge} = (\text{TA}) \times 0.95 \times .0450$$

TA = Total yearly operation and maintenance assessment not including special assessments or subsidies made by Minidoka Irrigation District for lands served by Minidoka Irrigation District from the Main Canal

0.95 = 5 percent discount given by Minidoka Irrigation District for early payment

.0450 = 4.50 percent agreed on percentage

(b) Payment of the charges described under (a) above will be made to the Burley Irrigation District by April 1 of each year and will be accompanied by the assessment record of the lands served by the Main Canal lying within the Minidoka Irrigation District.

7. Except as herein amended, Contract No. 174r-1497 dated December 12, 1950, remains in full force and effect.

Burley Irrigation District

Minidoka Irrigation District

By *Phil Hanks*
President

By *Daniel L. Stapelman*
Chairman

Approved
United States of America

By *L.W. Lloyd*
Regional Director
Bureau of Reclamation
Pacific Northwest Region

MEMO



To: Idaho Water Resource Board (IWRB/Board)
From: Wesley Hipke, Water Projects Section Manager
Date: May 12, 2026
Subject: Regional Water Sustainability Priority List Criteria

REQUESTED ACTION: Consider Adopting Updated Regional Water Sustainability Priority List Criteria

Background

The IWRB maintains the Regional Water Sustainability Priority List to identify major projects that can improve long-term water sustainability across Idaho. The List highlights regional, basin-wide, or statewide efforts, such as aquifer recharge, infrastructure modernization, and large-scale water studies, that help address declining water supplies, aging systems, and future water demands. While inclusion on the list does not guarantee funding, it signals that a project is an important regional priority and may receive IWRB support through coordination, letters of support, and assistance in seeking state or federal funding.

The IWRB first adopted the Regional Water Sustainability Priority List in July 2021 to guide spending for large regional projects using American Rescue Plan Act funds, state general funds, and other sources. In January 2022, the Board adopted initial criteria requiring that listed projects “help achieve water supply sustainability on a regional, basin-wide, or statewide basis.” Additional criteria, including the submittal process, evaluation considerations, and procedures for adding or removing projects, were formally adopted in October 2022.

As the interest in adding projects to the list has grown, the need to clarify and update the criteria has become evident. The intent of the attached draft criteria is to provide guidance reflecting the updates and providing clearer expectations for project sponsors seeking inclusion the Regional Water Sustainability Priority List.

Attachment(s):

- *Draft Resolution with Updated Regional Water Sustainability Priority List Criteria*

DRAFT

BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF THE REGIONAL
WATER SUSTAINABILITY PRIORITY LIST

RESOLUTION TO ADOPT UPDATED
CRITERIA

1 WHEREAS, in July 2021 the IWRB adopted an initial Regional Water Sustainability (RWS)
2 Priority List to help guide the Idaho Water Resource Board's (IWRB's) spending for large, regional
3 water sustainability projects from state general funds, American Rescue Plan Act (ARPA) funds,
4 or other applicable sources; and
5

6 WHEREAS, on January 21, 2022, the IWRB adopted Resolution No. 02-2022 establishing
7 qualifying criteria requiring that a project "help achieve water supply sustainability on a regional,
8 basin-wide, or statewide basis" to be included on the RWS Priority List; and
9

10 WHEREAS, on October 26, 2022, the IWRB adopted Resolution No. 39-2022 establishing
11 additional criteria related to eligible entities, eligible geographic areas, and application
12 requirements for projects seeking inclusion on the RWS Priority List, and the IWRB subsequently
13 updated the criteria through Resolution No. 17-2025 on May 23, 2025; and
14

15 WHEREAS, on May 8, 2026, the IWRB Finance Committee recommended newly updated
16 criteria for inclusion of projects on the RWS Priority List for consideration by the full Board.
17

18 NOW, THEREFORE BE IT RESOLVED that the IWRB adopts the attached criteria for
19 inclusion on the Regional Water Sustainability Priority List.

DATED this 21st day of May 2026.

JEFF RAYBOULD, Chairman
Idaho Water Resource Board

ATTEST _____
DEAN STEVENSON, Secretary



IWRB Regional Water Sustainability Priority List Criteria

The Idaho Water Resource Board (IWRB) maintains the [Regional Water Sustainability Priority List](#) (RWS Priority List) to identify and promote projects that have the potential to improve long-term water sustainability across Idaho. As stated in the [Idaho State Water Plan](#), sustainability requires the active stewardship of Idaho's water resources to satisfy current uses while ensuring water availability for future generations. Surface and groundwater systems are not limitless, and many regions of the state are experiencing increased pressure due to declining water levels, growing demand, aging infrastructure, and changing hydrologic conditions.

To support effective statewide water management, the IWRB uses the RWS Priority List as a planning tool to highlight regional scale (basin-wide, multi-entity, and statewide) projects—both studies and capital improvements—that address significant water resource challenges. These projects may contribute to stabilizing aquifer levels, modernizing critical infrastructure, improving drought resilience, resolving anticipated water supply conflicts, and protecting existing water rights and beneficial uses identified in Idaho Code. The IWRB may group related efforts into a single program or establish programs to support coordinated regional implementation.

The RWS Priority List also supports implementation of the Idaho State Water Plan, including the prioritization of IWRB funding programs, development of cooperative regional solutions, and early engagement with federal, state, tribal, and local partners. Inclusion on the RWS Priority List does not constitute a funding commitment, but elevates a project for consideration, supports coordination, and enables the Board to advocate for funding and technical resources (federal and state).

This document outlines the requirements and considerations for project sponsors seeking inclusion on the RWS Priority List. Inclusion on the RWS List is not a funding commitment, but rather a recognition that the project has the potential to help achieve water sustainability or address a regional water related issue.

I. Regional Water Sustainability Priority List Eligibility Criteria:

Projects added to the RWS Priority List provide regional scale benefits and meaningfully contribute to long-term water sustainability in Idaho. These projects generally fall into the following categories:

May 2026

- **Aquifer Stabilization**
Projects that help reverse declining groundwater trends, improve aquifer storage, and strengthen long-term water reliability.
- **Regional Water Supply and Water Management**
Projects that support long-term water planning or management through analysis, improved regional data collection, modeling, forecasting, or basin-wide evaluations that improve understanding of water availability, trends, infrastructure needs, hydrologic interactions, or future demands.
- **Infrastructure Modernization and Rehabilitation**
Upgrades or replacement of aging storage, diversion, and delivery systems that impact multiple users, or address infrastructure at risk of failure with regional consequences.
- **Surface Water Storage and Operational Improvements**
Projects that enhance reservoir capacity, optimize operations, improve system connectivity, or enable more effective management of surface and groundwater resources. This includes the development of new surface water storage, protection of existing storage assets, and enhancement of statewide storage capacity, consistent with legislative direction in House Joint Memorial No. 14 (2026), the Idaho State Water Plan, and IWRB strategic priorities for long-term water supply reliability and resilience.
- **Multi-Benefit and Integrated Water Management Projects**
Projects affecting a regional area involving multiple partners or districts that improve drought resilience, protect existing water rights, support hydropower, improve water quality, or provide other regional water management benefits.

Eligible Entities:

Entities eligible to submit a request include:

- Irrigation Districts, Irrigation Boards of Control, Canal Companies, and Water Districts
- Drainage Districts, Flood Control Districts, Groundwater Districts, and Soil & Water Conservation Districts
- Municipal Irrigation Districts (Title 50, Chapter 18, Idaho Code)
- Regional Water Supply Organizations
- State agencies, tribes, and municipalities.

Eligible Geographic Area:

Statewide.

Eligible Projects / Programs:

Projects or programs must provide regional scale water sustainability benefits.

To qualify, a project must meet all of the following:

- Address a significant regional water sustainability issue, such as declining groundwater

May 2026

levels, surface-groundwater interaction challenges, enhancement of water supply, drought resilience, aging or inadequate delivery or storage systems, infrastructure deficiencies that pose demonstrable safety risk, or anticipated water supply conflicts.

- The primary purpose of the project must provide benefits that extend beyond a single entity and improve water management at the basin or regional level.
- Align with the sustainability goals outlined in the Idaho State Water Plan, including active stewardship, protection of existing water rights, and support for future water needs.

Ineligible Projects:

Municipal drinking water or wastewater system improvements, and projects whose primary purpose is to serve or benefit only a single entity, do **not** qualify for inclusion on the List.

II. Required Proposals Materials

Sponsors requesting inclusion on the RWS Priority List must submit a written request containing the following:

1. Cover Letter

- Project name, sponsor, and geographic area
- Brief project summary
- Sponsor contact information

2. Project Background

- Description of existing infrastructure or system
- Identify regional water supply issues, deficiencies, risks, or declining trends
- Objectives and anticipated benefits

3. Sponsor Description

- Organization type, governance structure, and operational background
- Service area and population served (if applicable)
- Revenue sources and financial capacity to complete the project
- Overview of current operations relevant to the project

4. Project Description

- Narrative project / program overview
- Map showing project location and regional context
- Conceptual design or plan, if available
- Known permitting requirements

May 2026

- Environmental considerations

5. Additional Information (If Available)

- Preliminary cost estimates and budget
- Potential funding sources
- Proposed project schedule

6. Required Demonstrations (Critical for Evaluation)

Proposals **must clearly address** the following:

- **Define the regional issue**
Identify the basin-wide or regional water sustainability challenge being addressed, including whether it represents a long-standing or emerging issue.
- **Explain how the project addresses the regional issue**
Describe the mechanism (e.g., managed recharge, infrastructure or operational improvements, construction of new infrastructure, etc.)
- **Demonstrate regional support**
Provide evidence such as letters, MOUs, partnerships, or stakeholder endorsements.
- **Identify and quantify impact(s) to the regional issue**
Include metrics such as water savings, recharge volumes, impact to groundwater levels, heightened reliability, improved safety, economic, or environmental conditions, or other measurable outcomes.
- **Identify and quantify all potential impacts (positive and negative)**
Impacts to groundwater and surface water, hydrologic impacts locally and regionally, alignment with regional settlement agreements, operational changes, construction disturbance, and/or long-term benefit.

III. IWRB Considerations

The IWRB takes into account a wide range of factors when considering potential projects for the RWS Priority List. Projects that are not chosen to be on the RWS Priority list may be eligible for other IWRB programs. The IWRB is guided by direction from the Governor and Idaho Legislature through funding allocations and related directives, including:

- Projects that support and forward the [Idaho State Water Plan](#).
- Senate Concurrent Resolution No. 137 (2016) – directs the IWRB address statewide aquifer stabilization and sustainability projects and studies in key basins within the state.
- House Concurrent Resolution No. 7 (2023) – directs the IWRB to establish a long-term plan that identifies future projects intended to protect, improve, and secure the state's

May 2026

water resources for the benefit of the citizens of the state and for future generations.

- Senate Concurrent Resolution No. 110 (2025) – recognizes the need to continue activities by water users and the IWRB to improve Snake River reach gains between Blackfoot and the Minidoka Dam to support the 2024 Stipulated Mitigation Plan.
- House Joint Memorial No. 14 (2026) - supports the development of new reservoirs through research on the feasibility, planning, and design for the raising of current dams and the development of new dams to create 750,000 acre-feet of new water storage.

Additional prioritization factors that may affect prioritizations of projects include:

- Ability to resolve long-standing or emerging water supply challenges
- Magnitude and regional scale of benefits
- Contribution to aquifer stabilization or groundwater recovery
- Protection of existing water rights and consideration of benefits to hydropower, fish and wildlife, recreation, and water quality
- Anticipation of future water demands, including municipal, agricultural, or industrial development
- Modernization or improvement of aging water infrastructure
- Development of new surface water storage, protection of existing storage assets, and enhancement of statewide surface water storage capacity

IV. IWRB Support – what type of support can the IWRB provide?

Funding Support

- Eligibility for IWRB funding programs for planning, design, or implementation phases
- Cost-share participation determined on a case-by-case basis, considering project scope, regional benefit, and sponsor capacity
- Potential for phased funding (e.g., feasibility, design, construction)
- Inclusion on the RWS Priority List may improve competitiveness for state and federal funding opportunities

Advocacy and Funding Coordination

- Advocacy for state and federal funding, including coordination with agencies such as the Bureau of Reclamation and U.S. Army Corps of Engineers
- Support for legislative awareness and potential appropriations aligned with statewide water priorities
- Inclusion in broader state water resource initiatives or funding strategies

Technical Assistance

May 2026

- Support for hydrologic analysis, modeling, and data evaluation
- Assistance with feasibility studies and alternatives analysis
- Coordination and integration with statewide data and monitoring efforts
- Facilitation of interagency technical collaboration

Project Development and Coordination

- Assistance refining project scope, phasing, and alternatives
- Support in identifying and coordinating regional partners
- Convening stakeholders to advance multi-entity or basin-wide solutions

V. Additions to the RWS Priority List:

The IWRB may add projects to the RWS Priority List at its discretion. Project sponsors may submit a request at any time.

IWRB staff will work with the Project Sponsor to ensure the application is complete and the project meets the eligibility criteria. A complete application will be presented to the IWRB for consideration.

Submittal Instructions

Requests must be submitted electronically to:

IWRB-Info@idwr.idaho.gov

MEMO



To: Idaho Water Resource Board (IWRB/Board)

From: Mary Condon, Project Manager Supervisor

Date: May 13, 2026

Subject: Regional Water Sustainability Project Priority List – Winchester Dam Repair

REQUESTED ACTION: Consider Resolution to add Winchester Dam Repair to the Regional Water Sustainability Program Priority List and \$1,000,000 in Funding

Background: The Idaho Department of Fish and Game (IDFG) is requesting support and financial assistance from the IWRB to rehabilitate Winchester Dam in the amount of \$1M for the estimated \$3.6M project.

IDFG Deputy Director Amber Worthington provided an overview of the Winchester Dam repair project and funding request addition to the Regional Water Sustainability Program (RWSP) Priority List with a PowerPoint presentation during the Finance Committee Meeting on May 8, 2026. The formal application and cover letter from IDFG are included in your materials. Additionally, the Resolution and Terms to add the Winchester Dam repair project and \$1,000,000 in funding are also attached for consideration for adoption by the Board.

Proposal: The proposed project would repair the existing Winchester Dam and upgrade the spillway. Per the proposal provided in the application materials, the original breakaway walls on the spillway were designed to capture spring run-off, thereby increasing the lake capacity by 3 feet. A dam inspection determined that the breakaway walls could cause significant flooding and overtop downstream roads if they broke away as they were designed to do. In 2024, the breakaway walls were removed, requiring a reduction in the lake capacity by 3 feet. The repair and upgrade to the spillway will require completing the engineering design.

Benefits: Repairing Winchester Dam would provide the IDFG and Parks & Recreation, and their patrons a more reliable and safer structure for years to come. Lowering of the lake levels caused some docks to no longer be near the water, and upgrading the spillway to the higher 3 feet will restore lake levels.

Financial Analysis: Total project costs are estimated at \$3,600,000. The IDFG is requesting just under 1/3 of the project costs from the Board, not to exceed \$1,000,000. The IDFG will apply for a grant from the Idaho Department of Parks and Recreation (IDPR) in the amount of \$1,000,000 for the second 1/3. IDFG will also obtain spending authority for the remaining project costs of \$1,000,000 to \$1,600,000.

The total funding is outlined below:

Funding Sources:	Amount
IDFG - License Fees	\$1,600,000
IDPR - Land and Water Conservation Fund Grant	\$1,000,000
IWRB – Regional Water Sustainability Program	\$1,000,000
Total Estimated Funding	\$3,600,000

The total cost share request from the IWRB is \$1,000,000.

Recommendation: The funds requested will be used to rehabilitate Winchester Dam. The improvements will provide a safer, more reliable structure for the IDFG, IDPR, and their patrons for years to come.

The applicant meets the Regional Water Sustainability Program qualification criteria, and the proposed project is consistent with the goals established by the Board in the Idaho State Water Plan. Staff recommend approval of the funding request from the Water Management Account for the total amount of \$1,000,000 through the Regional Water Sustainability Program.

Attachment(s):

- *IDFG Funding Request Letter*
- *IDFG Funding Request Application*
- *Draft IWRB Resolution and Terms to add Winchester Dam to the Regional Water Sustainability Program Priority List and Funding*



IDAHO DEPARTMENT OF FISH AND GAME

600 S Walnut / P.O. Box 25
Boise, Idaho 83707

Brad Little / Governor
Jim Fredericks / Director

April 28, 2026

Mary Condon
Idaho Department of Water Resources
P.O. Box 83720
Boise, ID 83720
IWRB-Info@idwr.idaho.gov

Re: Request for inclusion on IWRB's Regional Water Sustainability Priority List for repairs to Winchester Lake Dam.

Dear Mary:

On behalf of the Department, I am submitting a letter of request and applicable materials to be considered for inclusion on the Idaho Water Resources Board Regional Water Sustainability Priority List.

Please find responses below to requirements of the application process.

Description of Proposed Project:

The project will rehabilitate Winchester Lake Dam by adding capacity to the spillway. Additionally, the upstream surface will be outfitted with a geomembrane liner system to deter seepage through the dam surface.

The work will reduce the amount of water at the toe of the dam entering Lapwai Creek and create the necessary capacity to ensure the dam can safely convey a 500-year flood condition.

Name of Eligible Entity and Project Partners with Contacts:

Idaho Department of Fish and Game
600 S. Walnut St., Boise, ID 83712

The Department will be working with Idaho Department of Parks and Recreation (IDPR – Kathy Muir) to apply for the Land and Water Conservation Fund (LWCF) grant, administered through IDPR.

Total Project Costs:

Engineering estimate on 12/8/2025 provided a range between \$2,800,000 and \$3,600,000 (median \$3,116,700), not including construction oversight.

Request of IWRB: \$1,000,000

Keeping Idaho's Wildlife Heritage

LWCF (IDPR): \$1,000,000

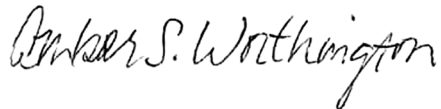
IDFG will fund remaining amount through dedicated and/or federal funds.

IDFG will request spending authority in the next budget cycle (FY 2028) to cover the amount of spending authority anticipated for the project.

Estimated Project Start and End Dates

Design work, including drilling exploration, spillway design, and slurry wall design was completed in 2025. Construction is anticipated to begin July 1, 2027 and is projected to be completed by June 30, 2028. It is possible the project may be completed sooner than the June 30, 2028 completion date, depending on supply chain and sourcing of materials.

Regards,



Amber S. Worthington

Idaho Department of Fish and Game
Deputy Director

Encl: Grant Funding Request

Grant Funding Request – May 2026

IWRB Regional Water Sustainability Projects Priority List

Winchester Lake Dam Rehabilitation
Winchester, Idaho

Submitted by:

Idaho Department of Fish and Game
600 S. Walnut St., Boise, ID 83712

Project Background¹

Winchester Dam was built in the early 1900s when the Craig Mountain Lumber Company constructed the dam at the headwaters of Lapwai Creek for a mill pond. Ownership of the dam and surrounding properties changed hands multiple times prior to the Idaho Department of Fish and Game (IDFG) finally acquiring the dam and properties from Potlatch, Inc. in 1966. The dam is 40 ft high and located on the northern portion of Lapwai Lake (Winchester Lake) and situated within Winchester State Park, outside of Winchester, Idaho.

The dam composition changed over the years, beginning as a timber crib dam with clay-silt-sand-basalt fragment mixtures - reported to have initially leaked so much that material was added on the upstream slope to control the leakage. Additional material was periodically added to the embankment for a number of years to reduce leakage until the present crest width of approximately 140 feet was achieved.

At some point prior to IDFG's acquisition, a core wall was added as well as a 36-inch low level outlet conduit at the foundation. The outlet was determined to be leaking soon after construction and was subsequently plugged. Despite the measures taken, the dam continued to leak at the downstream toe. According to a 1948 Idaho Department of Water Resources report, the concrete core wall was damaged when part of the original timber spillway failed, leading to erosion on the downstream embankment. The loss of support caused the wall to bulge downstream and crack horizontally. Repairs were reportedly made and embankment material was replaced with nearby hillside material.

Upon acquisition in 1966, IDFG began design and construction work on a concrete spillway and cutoff wall. The IDFG engineer at the time recommended removal and replacement of the spillway, installation of a steel siphon for treatment and maintenance and plugging of the old outlet works to minimize existing leaks in the structure.

In March and July 1980, remedial grouting to reduce observed leakage of the downstream toe was done but was supposedly unsuccessful in stopping or reducing leaks. In 1984, IDFG performed extensive stabilization work. Some additional work has been completed over the years.

A semi-quantitative risk analysis was performed by McMillen Jacobs in 2022 as part of an effect analysis for Idaho Department of Water Resources (IDWR). IDWR previously rated Winchester Dam as high-hazard signifying that "...if failure were to occur, the resulting consequences likely would be a direct loss of human life and extensive property damage. For this reason all high-hazard dams must be properly designed, and at all times responsibly maintained and safely operated." Through the analysis, it was assessed that overall risk of dam failure was above "tolerable risk thresholds" showing "active leakage at and around the downstream end of the spillway and the presence of sink holes at the upstream end of the spillway."

¹ Project background information compiled from McMillen Jacobs *Winchester Dam Assessment Phase I Report* (January 8, 2024) IDWR, and IDFG archives.

Based off past inspection reports, IDFG decided to begin the design process to rehabilitate the dam in 2023. The site was visited in July 2023 by a project team consisting of IDFG engineers and other staff, IDWR's dam safety program manager, and McMillen staff to conduct a site visit and research for an alternatives analysis. McMillen drafted the Winchester Dam Assessment, Phase 1 Report which provided alternatives for dam rehabilitation and a high level of cost estimates.

In 2024, Idaho Department of Administration's Risk Management Program was seeking to reinsure the Winchester Lake Dam as part of routine process and asked IDFG for the latest inspection report. The most current inspection report from IDWR showed a poor rating for the spillway and that it required remediation to move from a poor to sufficient rating. The insurance company determined it would not insure the dam until the rating changed to sufficient and that IDFG could not impound water to full level due to potential flood concerns. As a mitigation strategy, IDFG removed fuse plugs which were increasing the water holding capacity and was able to lower the water 40 inches, thereby satisfying the insurance company.

Lowering the water 40 inches is not a long-term solution for that reservoir as it affects recreation at Winchester Lake State Park, fishing opportunities due to algal blooms, and most importantly the local community that relies upon tourism to the region.

In 2024, IDFG selected the alternative to rebuild the spillway and install a geomembrane liner to mitigate seepage. To fund the design work and drilling exploration IDFG was awarded ARPA money through the Outdoor Recreation Fund Advisory Committee for design work in December 2024. IDFG selected McMillen for design work which was delivered with the engineering estimate in December of 2025.

Design work was issued to IDWR for review and was approved February 23, 2026.

Project Sponsor(s)

Type of Organization – Idaho state department

Official Name:

Idaho Department of Fish and Game

600 S. Walnut St.

P.O. Box 25

Boise, ID 83707

In 1899, Idaho created the position of state game warden to protect the state's wildlife resources, which eventually evolved into the modern Idaho Department of Fish and Game (IDFG). And, in 1938 through a voter initiative, Idaho Fish and Game Commission (Commission) was established.

IDFG is primarily funded by fish and game license sales and also through federal excise taxes from the Pittman-Robertson Act and Dingell-Johnson Act. IDFG receives zero General Fund dollars from taxpayers.

IDFG consists of seven regions, each supervised by a regional supervisor, and a headquarters based in Boise, Idaho. The Commission, which is appointed by the Governor and confirmed by the Legislature, oversees the agency through the Director who is currently appointed by the Commission. On July 1, 2026, the Director will also be appointed by the Governor and confirmed by the Legislature with continued oversight from the Commission. The headquarters is the Director's base and consists of two deputy directors who oversee the regions and bureaus – Fisheries, Wildlife, Enforcement, Administration, Communication, and Technical Services – and the director also manages the Engineering Bureau Chief and the Legislative and Community Engagement Coordinator.

IDFG's work is guided by its mission, principles of ethical hunting and fair chase, and the public trust doctrine – which ensures fish and wildlife remain a shared, publicly managed resource available to all.

Project Description

The rehabilitation work will include adding capacity to the spillway by creating an ogee crested weir spanning the entire length of the spillway and raising the spillway chute walls to contain the required flows. In addition, the upstream surface will be outfitted with a geomembrane liner system to deter seepage through the dam surface and reduce the amount of water at the toe of the dam entering Lapwai Creek.

Work will include components of demolition, concrete formation, anchor installation, temporary berm structure, earthwork, dewatering, and erosion and sedimentation controls.

Map showing location of the project in Winchester, ID:

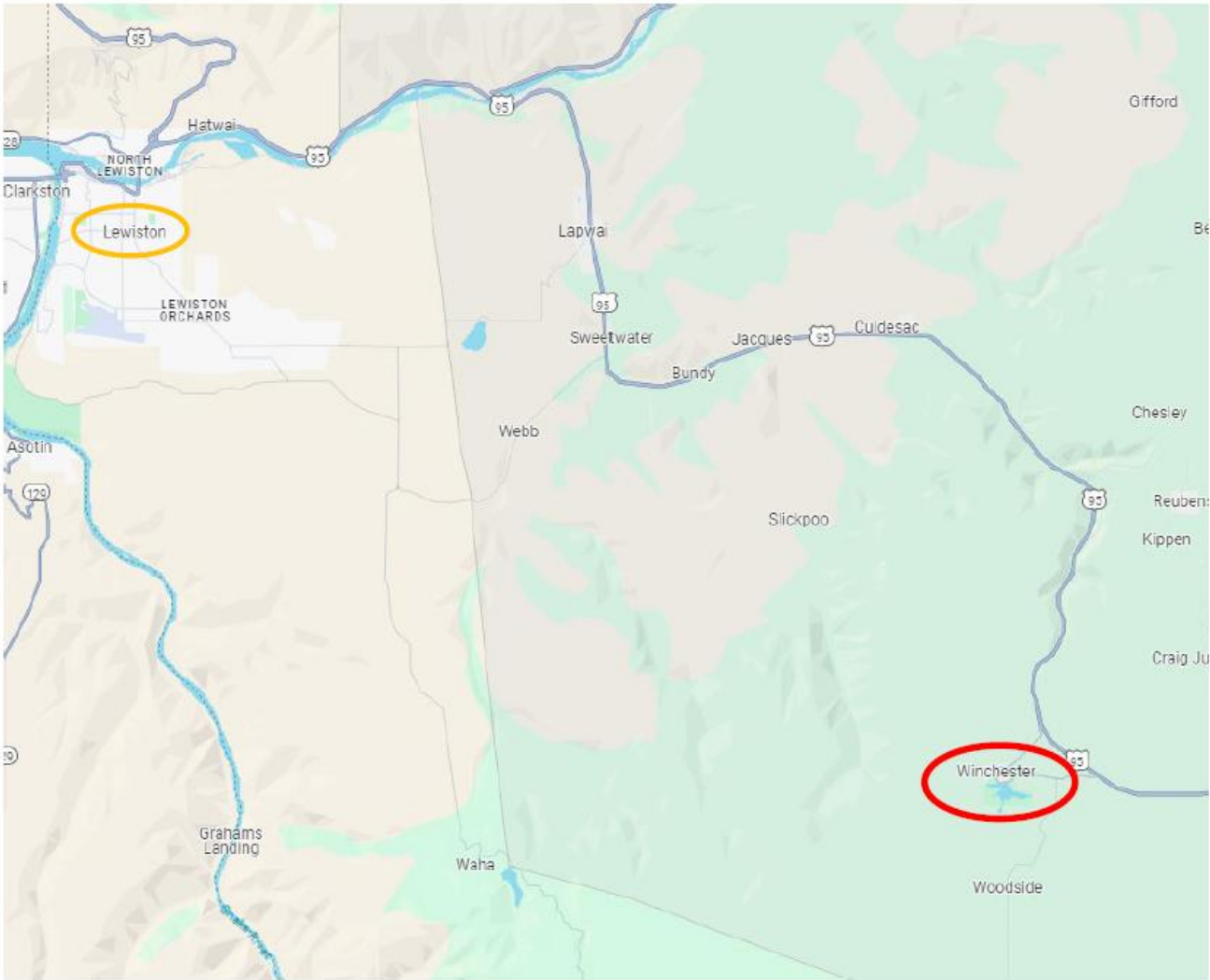


Fig. 2: Winchester Dam is approximately 34 miles southeast of Lewiston.

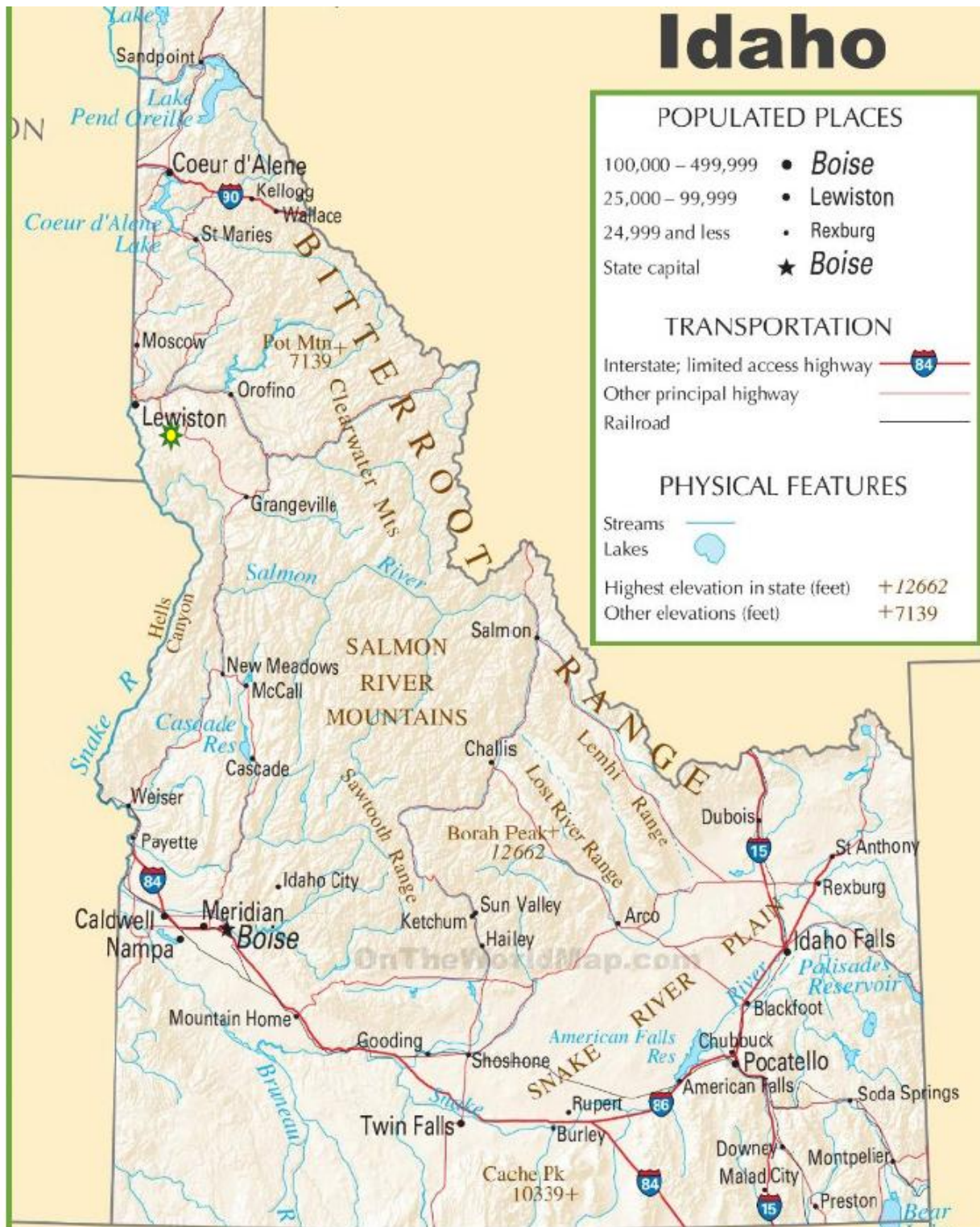
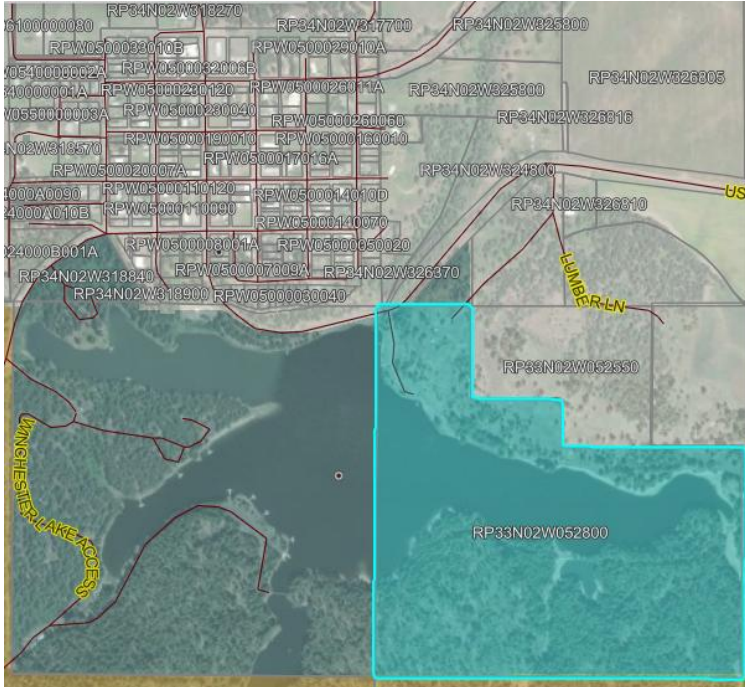


Fig. 1: ★ Indicates approximate location of Winchester State Park (Winchester Dam)

Plan and design carried out by McMillen Jacobs firm and is found in **Appendix A**.

Land entitlements at location: Dam and surrounding property owned by Idaho Department of Fish and Game. Record snapshots from Lewis County Assessor



1 of 2

RP33N02W052800 : IDAHO STATE OF DEPT OF FISH & GAME

Zoom to

The parcel number is RP33N02W052800

Owner Name: IDAHO STATE OF DEPT OF FISH & GAME

Address: 5 33 2W 120.39 Ac S 5 A In Lot 5, S 5 A In Lot 6 S 10 A In Lot 7, All Lot 8 S1/2nw1/4

Acres: 122.60

Taxing Districts:

Tax Code Area: 0520000

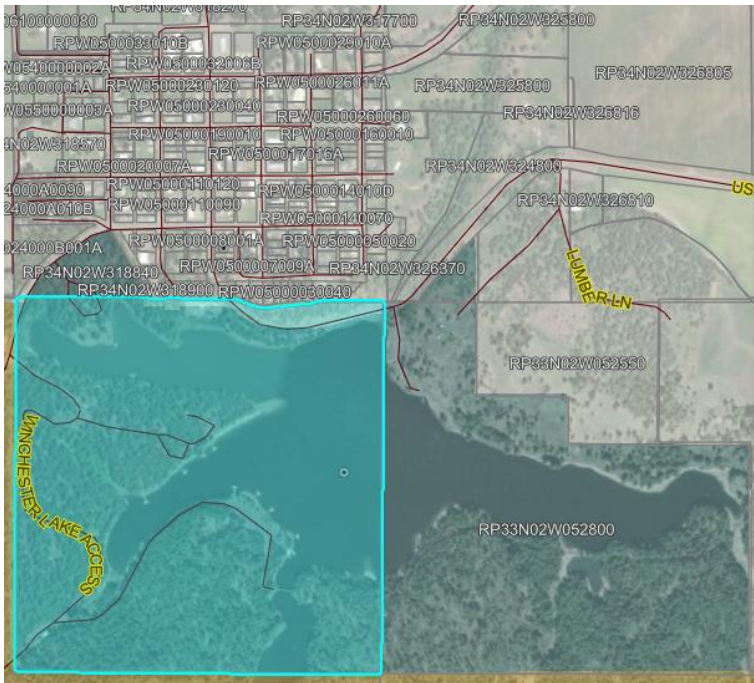
City:

Fire: WINCHESTER FIRE PROTECTION DISTRICT

Highway: EVERGREEN HIGHWAY

Library: PRAIRIE RIVER LIBRARY

School: HIGHLAND SCHOOL #305



1 of 2

RP33N02W060100 : IDAHO STATE OF DEPT OF FISH & GAME

Zoom to

The parcel number is RP33N02W060100

Owner Name: IDAHO STATE OF DEPT OF FISH & GAME

Address: 6 33 2W Ne1/4 S Of Im-na-ha Dr & Vacated Portion Of Im-na-ha Dr Adj To Blk 4 Of Winch (Less 25'X110' In N Lot 3)(2 A Rd)

Acres: 161.90

Taxing Districts:

Tax Code Area: 0520000

City:

Fire: WINCHESTER FIRE PROTECTION DISTRICT

Highway: EVERGREEN HIGHWAY

Library: PRAIRIE RIVER LIBRARY

Cost Estimate and Budget

\$2,800,000.00 - \$3,600,000.00 – does not include construction oversight (engineering estimate in Appendix B)

Project Funding Sources (if awarded)

Idaho Water Resource Board Grant - \$1,000,000.00

Land and Water Conservation Fund (IDPR) - \$1,000,000.00

Idaho Department of Fish and Game License Funds - \$1,000,000.00 - \$1,600,000.00

Spending authority will be required for IDFG to expend all monies.

Implementation Schedule

Exact schedule won't be established until the work is bid out and a contractor is selected. This is an idea of scope for activities:

- Out for Bid and Contractor selection – 3 months
- Notice to Proceed – 1 month
- Carpi Liner – 6 months
 - Procurement
 - Carpi requires 6 weeks to submit engineering drawings for approval
 - Carpi Fabrication 12-16 weeks
 - Float – 2 weeks
 - Total – 6 months
 - Site Prep – Can be completed during liner fabrication window
 - Concrete Demo – Can be completed during liner fabrication
 - Spillway Work – Upstream spillway concrete construction must be complete prior to liner installation (includes ogee weir, but not spillway chute walls)
 - Liner Installation – 4 weeks
- Finish Work – 1 month
- Project Total – 13 months
 - 4 months of pre-construction activities (contractor selection)
 - 9 months of construction activities

The project can either commence once the IDFG budget is set in March of 2027 or will commence upon receiving the spending authority officially on July 1, 2027.

Inclusions

Public Interest and Economic Impact

Winchester Lake is an important waterbody for fish and wildlife in the area. It hosts waterfowl, deer, elk, and moose as well as a good fishery for rainbow trout, bluegill, tiger muskie, perch and bass. The lake is at the center of Winchester Lake State Park and covers 100 acres with depth up to 35 feet. It is an ideal place to recreate for the wildlife, solitude, and water recreation.

The drawdown of Winchester Lake Dam has significantly impacted both the Winchester community and the revenue of Winchester Lake State Park. The lake serves as a central hub for recreation and plays a crucial role in supporting the local economy. Many businesses depend on tourism tied directly to the lake and park, and reports indicate that declining revenue has led to staff reductions and some closures. Additionally, the park has experienced a drop in reservations, largely due to the loss of water-based activities caused by lower lake levels.

In **Exhibit A**, you will find a letter of support from the community.

The dam's stability is extremely important, not only for impoundment of water for recreation and community benefit but especially for protecting the downstream communities of Culdesac and Lapwai, and the drivers on Highway 95. **Appendix C** includes analyses on potential failure modes of certain parts of the dam to downstream communities and roadways. The report also provides history on each of those parts from construction and various rehabilitation.

Other Relevant Documentation

Exhibit B – IDWR Design Approval Letter

Appendix A



IDAHO DEPARTMENT WATER RESOURCES
DAM SAFETY PROGRAM
Reviewed [Signature]
Approved [Signature]
Date of Approval 1.28.26

IDAHO DEPARTMENT OF FISH AND GAME
WINCHESTER DAM REHABILITATION

VOLUME 2 - CONSTRUCTION DRAWINGS
DECEMBER, 2025

ISSUED FOR CONSTRUCTION

IDAHO DEPARTMENT OF FISH AND GAME

WINCHESTER DAM REHABILITATION

ISSUED FOR CONSTRUCTION

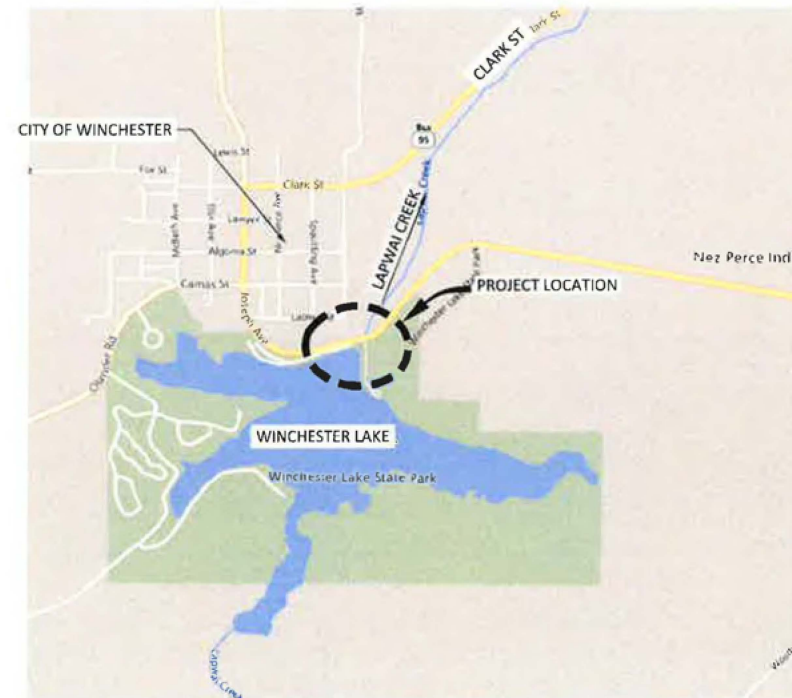
IDAHO DEPARTMENT WATER RESOURCES
DAM SAFETY PROGRAM

Reviewed: *[Signature]*
Approved: *[Signature]*

Date of Approval: 12 28 26



LOCATION MAP
NTS



LOCATION MAP
NTS



PROJECT MAP
NTS

REV	DATE	BY	DESCRIPTION
0	12/19/25	MM	ISSUED FOR CONSTRUCTION



WARNING
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE



IDAHO DEPARTMENT OF FISH AND GAME
WINCHESTER DAM REHABILITATION

LOCATION MAP, VICINITY MAP,
AND PROJECT MAP

DESIGNED M. MERKLEIN
DRAWN C. GERBER
CHECKED R. SCOTT
PROJECT DATE 12/19/25

DRAWING
G001

DRAWING NO.	TITLE
	COVER SHEET
G001	LOCATION MAP, VICINITY MAP, AND PROJECT MAP
G002	DRAWING INDEX
G003	STANDARD ABBREVIATIONS
G004	STANDARD SYMBOLS
G005	EXISTING OVERALL SITE PLAN AND PROJECT CONTROL
G006	GENERAL SITE PLAN, CONTRACTOR STAGING, AND GENERAL ARRANGEMENT
G007	HYDRAULIC PROFILE AND DESIGN CRITERIA
EC001	EROSION AND SEDIMENT CONTROL STANDARD DETAILS 1
EC002	EROSION AND SEDIMENT CONTROL STANDARD DETAILS 2
EC101	EROSION AND SEDIMENT CONTROL PLAN
D101	DEMOLITION PLAN
D102	DEMOLITION SECTIONS AND DETAILS 1
D103	DEMOLITION SECTIONS AND DETAILS 2
GC001	GENERAL CIVIL NOTES
GC002	CIVIL STANDARD DETAILS
GC003	INSTRUMENTATION DETAILS
C100	OVERALL SITE KEY PLAN
C101	COFFERDAM/DEWATERING PLAN
C102	COFFERDAM/DEWATERING SECTIONS AND DETAILS
C103	EXCAVATION PLAN
C104	EXCAVATION SECTIONS
C105	FINAL GRADING PLAN
C106	FINAL GRADING SECTIONS
C107	SIPHON EXTENSION PLAN AND PROFILE
C201	LINER SYSTEM AND INSTRUMENTATION PLAN
C202	LINER SYSTEM SECTIONS AND DETAILS 1
C203	LINER SYSTEM SECTIONS AND DETAILS 2
C300	OUTFALL PIPE REROUTING PLAN AND PROFILE
GS001	GENERAL STRUCTURAL NOTES
GS002	STANDARD STRUCTURAL DETAILS 1
GS003	STANDARD STRUCTURAL DETAILS 2
S101	STRUCTURAL OVERALL SITE PLAN
S102	SPILLWAY STRUCTURAL PLAN AND PROFILES
S103	SPILLWAY STRUCTURAL SECTIONS
S104	SPILLWAY STRUCTURAL DETAILS 1
S105	SPILLWAY STRUCTURAL DETAILS 2

**IDAHO DEPARTMENT WATER RESOURCES
DAM SAFETY PROGRAM**

Reviewed [Signature]
 Approved [Signature]
 Date of Approval 12 28 26

REV	DATE	BY	DESCRIPTION
0	12/19/25	MM	ISSUED FOR CONSTRUCTION



WARNING
 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE



IDAHO DEPARTMENT OF FISH AND GAME
WINCHESTER DAM REHABILITATION

DRAWING INDEX

DESIGNED M. MERKLEIN
 DRAWN C. GERBER
 CHECKED R. SCOTT
 PROJECT DATE 12/19/25

DRAWING
G002

A/C	AIR CONDITIONING	CL	CENTERLINE, CLASS, CLOSE	EXT	EXTERIOR, EXTERNAL, EXTENSION	I	INSTRUMENTATION (DWG DISCIPLINE)	N	NORTH, NEUTRAL	RESIL	RESILIENT	ULT	ULTIMATE
A/E	ARCHITECT/ENGINEER	CLR	CLEAR	F TO F	FACE TO FACE	ID	INSIDE DIAMETER, INTERIOR DIMENSION	NA	NOT APPLICABLE	RET	RETAINING, RETURN	UNFN	UNFINISHED
A	ARCHITECTURAL (DWG DISCIPLINE), AMP	CMH	COMMUNICATION MANHOLE	FAB	FABRICATE	IE	INVERT ELEVATION	NAT	NATURAL	REV	REVISION, REVERSE	UNO	UNLESS NOTED OTHERWISE
AB	ANCHOR BOLT	CMU	CONCRETE MASONRY UNIT	FBO	FURNISHED BY OWNER	IF	INSIDE FACE	NC	NORMALLY CLOSED	RFL	REFLECTED, REFLECTOR	UTIL	UTILITY
ABC	AGGREGATE BASE COURSE	CO	CLEAN OUT, CONCRETE OPENING	FC	FLUSHING CONNECTION	IH	INTAKE HOOD	NEG	NEGATIVE	RGS	RIGID GALVANIZED STEEL	V	VENT, VELOCITY, VOLT
ABAN	ABANDON	COL	COLUMN	FCA	FLANGED COUPLING ADAPTER	IMP	IMPACT	NG	NEAR FACE, NON-FUSED	RH	RELIEF HOOD, RIGHT HAND, RELATIVE	VA	VOLT AMPERE
AC	ALTERNATING CURRENT	COM	COMMON	FCV	FIXED CONE VALVE	IN	INCH	NF	NATURAL GAS	RL	REQUIRED LAP	VAC	VACUUM
ACST	ACOUSTIC	COMB	COMBINATION	FD	FLOOR DRAIN	INC	INCLUDE, INCANDESCENT	NIC	NOT IN CONTRACT	RND	ROUND	VAR	VARNISH, VARIABLE, VOLT AMPERES REACTIVE
AD	ADDENDUM, AREA DRAIN	COMM	COMMUNICATION	FDC	FLEXIBLE DUCT CONNECTION	INF	INFLUENT	NO	NORMALLY OPEN, NUMBER	RNG	RENEWABLE NATURAL GAS	VB	VAPOR BARRIER, VINYL BASE, VALVE BOX
ADDL	ADDITIONAL	COMP	COMPOSITION, COMPRESSIBLE, COMPOSITE	FDR	FEEDER	INSTR	INSTRUMENTATION	NOM	NOMINAL	RO	ROUGH OPENING	VC	VERTICAL CURVE
ADH	ADHESIVE	CONC	CONCENTRIC, CONCRETE	FE	FLANGED END	INSUL	INSULATION	NPS	NOMINAL PIPE SIZE	ROW	RIGHT-OF-WAY	VCT	VINYL COMPOSITION TILE, VERTICAL CENTERLINE
ADJ	ADJUSTABLE, ADJACENT	CONN	CONNECTION	FEC	FIRE EXTINGUISHER CABINET	INT	INTERIOR, INTERSECTION	NPT	NATIONAL PIPE THREAD	RPM	REVOLUTIONS PER MINUTE	VEL	VELOCITY
AF	AMP FRAME, AMP FUSE	CONST	CONSTRUCTION	FEXT	FIRE EXTINGUISHER	INTR	INTERMEDIATE, INTERIOR	NS	NEAR SIDE	RR	RAILROAD	VENT	VENTILATION
AFF	ABOVE FINISH FLOOR	CONT	CONTINUOUS, CONTINUED	FF	FAR FACE, FACTORY FINISH, FLAT FACE	INV	INVERT	NTS	NOT TO SCALE	RT	RIGHT	VERT	VERTICAL
AFG	ABOVE FINISH GRADE	COORD	COORDINATE	FG	FINISHED GRADE	IPS	IRON PIPE SIZE	NWL	NORMAL WATER LEVEL	S	SOUTH, SINK, STRUCTURAL (DWG DISCIPLINE)	V5	VERSES, VAPOR SEAL
AGGR	AGGREGATE	CORR	CORROSIVE, CORRUGATED	FIG	FIGURE	IPT	INTERNAL PIPE THREAD	OA	OUT-TO-OUT	SA	SUPPLY AIR	VL	VOLUME
AIC	AMPS INTERRUPTING CAPACITY	CP	CHECKER PLATE, CONTROL POINT	FH	FIRE HYDRANT	IRR	IRRIGATION	OC	ON CENTER	SAN	SANITARY	VPC	VERTICAL POINT OF CURVATURE
ALIG	ALIGNMENT	CPLG	COUPLING	FIN	FINISH	ISO	ISOMETRIC	OC	ON CENTER	SC	SOLID CORE	VPI	VERTICAL POINT OF INTERSECTION
ALUM	ALUMINUM	CSK	COUNTERSINK	FL	FLOW, FLOW LINE	JB	JUNCTION BOX	OD	OUTSIDE DIAMETER	SCH	SCHEDULE	VPT	VERTICAL POINT OF TANGENCY
ALT	ALTERNATE, ALTITUDE	CTR	CENTER	FLEX	FLEXIBLE	JCT	JUNCTION	OH	OVERHEAD	SCHM	SCHEMATIC	VTR	VENT THROUGH ROOF
AMB	AMBIENT	CTRL	CONTROL	FLG	FLANGE	JF	JOINT FILLER	OPNG	OPENING	SCRN	SCREEN	VWC	VINYL WALL COVERING
ANC	ANCHOR	CU	COPPER, CUBIC	FLOR	FLUORESCENT	JT	JOINT	OPP	OPPOSITE	SE	STEEL/ALUMINUM EDGE	W/	WITH
AP	ACCESS PANEL	CW	CLOCKWISE	FLR	FLOOR	K	KIP	OPT	OPTIONAL	SEC	SECONDARY, SECONDS	W/O	WITHOUT
APRX	APPROXIMATE	CY	CUBIC YARD	FLS	FLASHING, FLUSH	KB	KNEE BRACE	ORD	OVERFLOW ROOF DRAIN	SECT	SECTION	W	WATT, WEST, WIDE, WINDOW, WIRE, WIDE FLANGE BEAM
APVD	APPROVED ARCHITECTURAL			FND	FOUNDATION	KCMIL	THOUSAND CIRCULAR MILS	ORIG	ORIGINAL	SEP	SEPARATE	WC	WATER CLOSET, WATER COLUMN
ASSY	ASSEMBLY			FNC	FENCE	KD	KNOCK DOWN	OVFL	OVERFLOW	SF	SQUARE FOOT	WD	WIDTH
AT	AMP TRIP	d	PENNY (NAIL MEASURE)	FO	FINISHED OPENING	KO	KNOCK OUT	OVHG	OVERHANG	SH	SHOWER	WF	WIDE FLANGE, WASH FOUNTAIN
ATM	ATMOSPHERE	D	DEEP, DIFFUSER	FOB	FLAT ON BOTTOM	KS	KIPS PER SQUARE INCH	OZ	OUNCE	SHT	SHEET	WG	WIRE GLASS, WATER GAGE
AUTO	AUTOMATIC	DB	DUCT BANK, DECIBEL, DRY BULB	FOC	FACE OF CONCRETE, FACE OF CURB, FIBER OPTIC CABLE	L	ANGLE, LENGTH, LAVATORY	P	PAINT, PROCESS (DWG DISCIPLINE)	SHTG	SHEATHING	WH	WALL HYDRANT, WEEP HOLE
AUX	AUXILIARY	DBA	DEFORMED BAR ANCHOR	FOF	FACE OF FINISH	LAM	LAMINATE	PAR	PARALLEL, PARAPET	SIM	SIMILAR	WL	WATER LEVEL
AVE	AVENUE	DBL	DOUBLE	FOM	FACE OF MASONRY	LATL	LATERAL	PB	PANIC BAR, PULL BOX	SL	SLOPE	WLD	WELDED
AVG	AVERAGE	DC	DIRECT CURRENT	FOS	FACE OF STUDS	LB	LAV BOLT, POUND	PBD	PARTICLE BOARD	SLTD	SLOTTED	WM	WIRE MESH
AWG	AMERICAN WIRE GAGE	DEG	DEGREE	FOT	FLAT ON TOP	LCS	LEVEL CONTROL STRUCTURE	PC	POINT OF CURVE, PIECE, PRECAST	SLV	SLEEVE	WP	WEATHERPROOF, WORKING POINT
		DEG C	DEGREE CENTIGRADE	FPT	FEMALE PIPE THREAD	LDR	LEADER	PCC	POINT OF COMPOUND CURVATURE	SMLS	SEAMLESS	WTHP	WEATHERPROOF
B/B	BACK TO BACK	DEG F	DEGREE FAHRENHEIT	FR	FRAME	LF	FLOOR FOOT	PCF	POUNDS PER CUBIC FOOT	SOG	SLAB ON GRADE	WS	WATERSTOP, WATER SURFACE
BAL	BALANCE	DEMO	DEMOLITION	FRP	FIBERGLASS REINFORCED PLASTIC	LG	LONG	PCT	PERCENT	SP	SOUNDPROOF, STANDPIPE	WSEL	WATER SURFACE ELEVATION
BBD	BULLETIN BOARD	DET	DETAIL	FS	FLOOR SINK, FAR SIDE	LH	LEFT HAND	PE	PLAIN END	SPC	SPACING	WT	WEIGHT, WATER TIGHT
BC	BASE CABINET, BOTTOM CHORD, BOLT CENTER, BOLT CIRCLE	DI	DROP INLET, DUCTILE IRON	FT	FEET, FOOT	LH	LEFT HAND	PED	PEDESTAL	SPY	SUPPLY	WWF	WELDED WIRE FABRIC
BD	BOARD	DIA	DIAMETER	FTG	FOOTING, FITTING FUR FURRED, FURRING	LIN	LINEAR	PEN	PENETRATION	SPT	SET POINT		
BE	BOTH ENDS, BELL END	DIAG	DIAGONAL, DIAGRAM	FURN	FURNITURE, FURNISH	LIQ	LIQUID	PERF	PERFORATED	SQ	SQUARE		
BF	BOTH FACES, BOTTOM FACE, BLIND FLANGE, BOARD FEET	DIFF	DIFFERENTIAL, DIFFERENCE	FUT	FUTURE	LL	LIVE LOAD	PERM	PERMANENT	SR	SHORT RADIUS		
BFV	BUTTERFLY VALVE	DIM	DIMENSION	FV	FACE VELOCITY	LLH	LONG LEG HORIZONTAL	PERP	PERPENDICULAR	SS	SERVICE SINK		
BITUM	BITUMINOUS	DISCH	DISCHARGE	FW	FIELD WELD, FIRE WALL	LLV	LONG LEG VERTICAL	PF	POWER FACTOR	SST	STAINLESS STEEL		
BKG	BACKING	DIST	DISTANCE, DISTRIBUTION	FWD	FORWARD	LMLU	LIQUID MARKER LECTURE UNIT	PH	PHASE	ST	STREET		
BL	BASE LINE	DIV	DIVISION	FXR	FURNISHED WITH EQUIPMENT	LNG	LONGITUDINAL	PI	POINT OF INTERSECTION	STA	STATION		
BLDG	BUILDING	DL	DEAD LOAD			LOC	LOCATION	PKG	PACKAGE	STD	STANDARD		
BLK	BLOCK	DN	DOWN			LP	LOW POINT	PL	PLATE, PROPERTY LINE	STIF	STIFFENER		
BLKG	BLOCKING	DP	DEPTH	G	GRILLE, GROUND, GENERAL (DWG DISCIPLINE)	LPS	LOW PRESSURE SODIUM	PLBG	PLUMBING	STIR	STIRRUP		
BM	BENCHMARK, BEAM	DS	DOWNSTREAM	GA	GAGE (METAL THICKNESS)	LR	LONG RADIUS	PLF	POUNDS PER LINEAR FOOT	STL	STEEL		
BOC	BACK OF CURB	DT	DOUBLE TEE, DRIP TRAP ASSEMBLY	GAL	GALLON	LT	LEFT	PNEU	PNEUMATIC	STOR	STORAGE		
BOD	BOTTOM OF DUCT	DUP	DUPLICATE	GALV	GALVANIZED	LTG	LIMITED LIGHTING	POL	POLISH	STR	STRUCTURAL STRAIGHT		
BOG	BOTTOM OF GRILLE	DWG	DRAWING	GB	GRADE BREAK	LTD	LIMITED LIGHTING	POS	POSITIVE, POSITION	SUB	SUBSTITUTE		
BOL	BOTTOM OF LOUVER	DWL	DOWEL	GD	GUARD	LTG	LIGHTING	PP	POLYPROPYLENE, POWER POLE	SUC	SUCTION		
BOL	BOTTOM OF LOUVER	E	EAST, ELECTRICAL (DWG DISCIPLINE)	GEN	GENERAL	LTL	LINTEL	PRC	POINT OF REVERSE CURVATURE	SUSP	SUSPENDED		
BOP	BOTTOM OF PIPE	EACI	EARTH CIRCUIT INTERRUPTER	GFCI	GROUND FAULT CIRCUIT INTERRUPTER	LTNG	LIGHTNING	PREF	PREFINISHED	SWPPP	STORMWATER POLLUTION PREVENTION PLAN		
BOR	BOTTOM OF REGISTER	EA	EACH, EXHAUST AIR	GL	GLASS	LV	LOW VOLTAGE	PREFAB	PREFABRICATED	SY	SQUARE YARD		
BOT	BOTTOM	EC	ELECTRICAL CONTRACTOR	GP	GUY POLE	LVR	LOUVER	PRELIM	PRELIMINARY	SYM	SYMBOL		
BOU	BOTTOM OF UNIT	ECC	ECCENTRIC	GR	GRADE	LW	LIGHTWEIGHT	PREP	PREPARE	SYMM	SYMMETRICAL		
BP	BASE PLATE	EDB	ELECTRICAL DUCT BANK	GRND	GROUND	LWC	LIGHTWEIGHT CONCRETE	PRES	PRESSURE	SYN	SYNTHETIC		
BRG	BEARING	EE	EACH END	GRNG	GRATING	LWL	LOW WATER LEVEL	PROP	PROPERTY	SYS	SYSTEM		
BRGP	BEARING PLATE	EF	EACH FACE	GRNG	GRATING	M	MECHANICAL (DWG DISCIPLINE)	PROT	PROTECTION				
BRKT	BRACKET	EG	EXISTING GRADE	GRNG	GRATING	MA	MIXED AIR	PSF	POUNDS PER SQUARE FOOT				
BS	BOTH SIDES	EGL	ENERGY GRADE LINE	GT	GREASE TRAP	MAINT	MAINTENANCE	PSI	POUNDS PER SQUARE INCH				
BTU	BRITISH THERMAL UNIT	EFF	EFFLUENT, EFFICIENCY	GWB	GYPSPUM WALLBOARD	MAN	MANUAL	PSIA	POUNDS PER SQUARE INCH ABSOLUTE				
BTW	BETWEEN	EHH	ELECTRICAL HANDHOLE	GYP	GYPSPUM HARDBOARD	MAOP	MAXIMUM ALLOWABLE OPERATING PRESSURE	PSIG	POUNDS PER SQUARE INCH GAGE				
BTWLD	BUTT WELD	EHS	EXTERIOR INSULATION & FINISH SYSTEM	H	HIGH	MATL	MATERIAL	PT	POINT, POINT OF TANGENCY				
BV	BALL VALVE	EIFS	EXTENSION JOINT	HB	HOSE BIB	MAX	MAXIMUM	PTN	PARTITION				
BW	BOTH WAYS	EJ	ELBOW, ELEVATION	HBD	HARDBOARD	MB	MACHINE BOLT	PVC	POLYVINYL CHLORIDE				
BYP	BYPASS	EL	ELECTRICAL	HC	HANDICAPPED, HOLLOW CORE, HORIZONTAL CURVE	MBR	MEMBER	PVMT	PAVEMENT				
C TO C	CENTER TO CENTER	ELEC	ELECTRICAL	HCH	HORIZONTAL CENTERLINE	MCJ	MASONRY CONTROL JOINT	PWD	PLYWOOD				
C&G	CURB & GUTTER	EMBD	EMBEDDED	HDR	HEADER	MCH	MECHANICAL	PZ	PIEZOMETER				
C	CHANNEL SHAPE, CENTIGRADE, CONDUIT, CIVIL (DRAWING DISCIPLINE)	EMERG	EMERGENCY	HDR	HEADER	MED	MEDIUM	Q	RATE OF FLOW				
CAB	CABINET	EMH	ELECTRICAL MANHOLE	HOW	HARDWARE	MFR	MANUFACTURER	QTR	QUARTER				
CAP	CAPACITY	ENCL	ENCLOSURE	HEX	HEXAGONAL	MH	MANHOLE, METAL HALIDE	QTY	QUANTITY				
CAT	CATALOG	ENGR	ENGINEER	HH	HANDHOLE	MIN	MINIMUM	QUAL	QUALITY				
CAV	CAVITY	ENTR	ENTRANCE	HM	HOLLOW METAL	MIR	MIRROR	R&R	REMOVE AND REPLACE				
CB	CATCH BASIN	EOP	EDGE OF PAVEMENT	HORIZ	HORIZONTAL	MISC	MISCELLANEOUS	R&S	REMOVE AND SALVAGE				
CCB	CONCRETE BLOCK	EQ	EQUAL	HP	HIGH POINT, HORSEPOWER	MJ	MECHANICAL JOINT	R	RADIUS, REGISTER, RISER				
CCW	COUNTER CLOCKWISE	EQU	EQUAL EQUIPMENT	HPC	HORIZONTAL POINT OF CURVATURE	MED	MEDIUM	RA	RETURN AIR				
CF	CUBIC FEET (FOOT)	EQUIV	EQUIVALENT	HPS	HIGH PRESSURE SODIUM	MFR	MANUFACTURER	RB	RESILIENT BASE, ROCK BERM				
CHFR	CHAMFER	ES	EACH SIDE, EQUAL SPACE, EMERGENCY SHOWER	HPT	HORIZONTAL POINT OF TANGENCY	MOD	MODULAR, MODIFY	RCPT	RECEPTACLE				
CHD	CHORD	ESC	EROSION AND SEDIMENT CONTROL	HR	HOUR	MON	MONUMENT	RD	ROOF DRAIN				
CHH	COMMUNICATION HANDHOLE	ESEW	EMERGENCY SHOWER AND EYE WASH	HS	HEADED STUD, HIGH STRENGTH	MPT	MALE PIPE THREAD	REC	RECESS				
CI	CURB INLET	EST	ESTIMATE	HSS	HOLLOW STRUCTURAL SHAPE	MSL	MEAN SEA LEVEL	RECT	RECTANGULAR				
CIP	CAST-IN-PLACE	EW	EACH WAY, EMERGENCY EYE/FACE WASH	HT	HEIGHT	MT	MOUNT	RED	REDUCER				
CIPB	CONCRETE INTERLOCKING PAVER	EW	ELECTRIC WATER COOLER	HVAC	HEATING, VENTILATION & AIR CONDITIONING	MU	MASONRY UNIT	REF	REFERENCE				
		EWC	ELECTRIC WATER COOLER	HWD	HARDWOOD	MULL	MULLION	REINF	REINFORCING				
		EWF	EACH WAY, EACH FACE	HWL	HIGH WATER LEVEL	MV	MEDIUM VOLTAGE	REQD	REQUIRED				
		EWTB	EACH WAY, TOP AND BOTTOM	HYD	HYDRAULIC HZ HERTZ, CYCLES PER SECOND	MW	MONITORING WELL						
		EXC	EXCAVATION										
		EXH	EXHAUST										
		EXIST	EXISTING										
		EXP	EXPANSION, EXPOSED										

**IDAHO DEPARTMENT OF FISH AND GAME
DAM SAFETY PROGRAM**

Reviewed: *[Signature]*

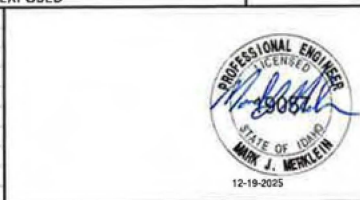
Approved: *[Signature]*

Date of Approval: 1.28.26

AGENCY AND PROJECT ABBREVIATIONS:
 IDFG IDAHO DEPARTMENT OF FISH AND GAME
 IDWR IDAHO DEPARTMENT OF WATER RESOURCES

- GENERAL NOTES:**
- THESE ABBREVIATIONS APPLY TO THE ENTIRE SET OF CONTRACT DRAWINGS.
 - LISTING OF ABBREVIATIONS DOES NOT IMPLY ALL ABBREVIATIONS ARE USED IN THE CONTRACT DRAWINGS.
 - ABBREVIATIONS SHOWN ON THIS SHEET INCLUDE VARIATIONS OF THE WORD. FOR EXAMPLE, "MOD" MAY MEAN MODIFY OR MODIFICATION; "INC" MAY MEAN INCLUDED OR INCLUDING; "REINF" MAY MEAN EITHER REINFORCE OR REINFORCING.
 - SCREENING OR SHADING OF WORK IS USED TO INDICATE EXISTING COMPONENTS OR TO DE-EMPHASIZE PROPOSED IMPROVEMENTS TO HIGHLIGHT SELECTED TRADE WORK. REFER TO CONTEXT OF EACH SHEET FOR USAGE.
 - SEE SHEET PF001 FOR PROJECT SPECIFIC EQUIPMENT SYMBOLS, EQUIPMENT ABBREVIATIONS AND PIPING SYSTEM ABBREVIATIONS.

0	12/19/25	MM	ISSUED FOR CONSTRUCTION
REV	DATE	BY	DESCRIPTION



WARNING

0 1/2 1

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE



IDAHO DEPARTMENT OF FISH AND GAME
WINCHESTER DAM REHABILITATION

STANDARD ABBREVIATIONS

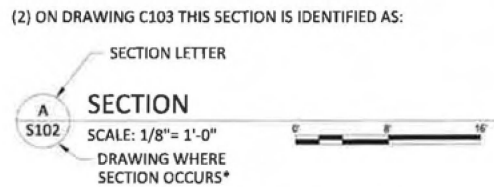
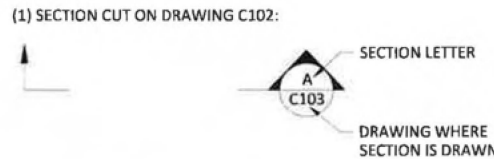
DESIGNED	M. MERKLEIN	G003
DRAWN	C. GERBER	
CHECKED	R. SCOTT	
PROJECT DATE	12/19/25	

C:\Users\ChloeGerber\Documents\McMillen Inc\25-005 - Winchester Dam Rehab\Project Files\Drawings\25-005 - Winchester Dam Rehab\DWG\003 - Standard Abbreviations.dwg

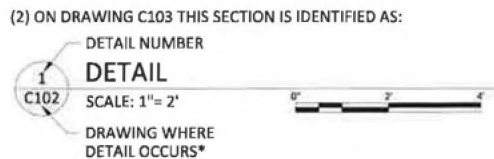
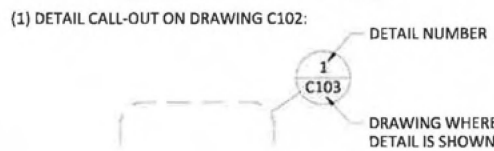
SHEET SYMBOLS



SECTION IDENTIFICATION

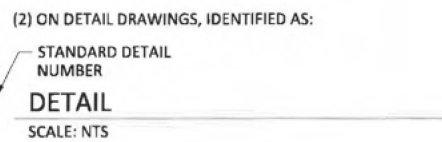
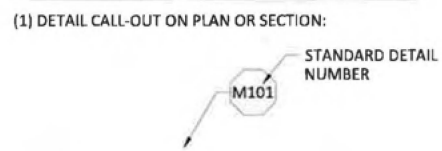


DETAIL IDENTIFICATION



*NOTE: IF PLAN AND SECTION (OR DETAIL CALL-OUT AND DETAIL) ARE SHOWN ON SAME DRAWING. DRAWING NUMBER IS REPLACED BY A LINE.

STANDARD DETAIL IDENTIFICATION



ELEVATION/IMAGE IDENTIFICATION



SITE PLAN LINE TYPES

455	MAJOR CONTOUR
456	MINOR CONTOUR
455	EXIST MAJOR CONTOUR
456	EXIST MINOR CONTOUR
---	EDGE OF WATERLINE
TOE	TOE OF SLOPE
TOB	TOP OF BANK
SS	SANITARY SEWER
SD	STORM DRAIN
EP	EDGE OF PAVEMENT
EG	EDGE OF GRAVEL
W	WATTLE
SF	SILT FENCE
CF	CONSTRUCTION FENCE
GAS	GAS LINE
TC	TURBIDITY CURTAIN
IRR	IRRIGATION LINE
WTR	WATER LINE
TEL	TELEPHONE LINE
COM	COMMUNICATION LINE
DHP	OVERHEAD ELECTRICAL/POWER
EUG	UNDERGROUND ELECTRICAL
UFO	UNDERGROUND FIBER
P/L	PROPERTY LINE
X	FENCE LINE
---	DITCH/FLOW LINE
TOE	EXIST TOE OF SLOPE
TOB	EXIST TOP OF BANK
SS	EXIST SANITARY SEWER
SD	EXIST STORM DRAIN
EP	EXIST EDGE OF PAVEMENT
EG	EXIST EDGE OF GRAVEL
GAS	EXIST GAS LINE
IRR	EXIST IRRIGATION LINE
WTR	EXIST WATER LINE
TEL	EXIST TELEPHONE LINE
COM	EXIST COMMUNICATION LINE
DHP	EXIST OVERHEAD ELECTRICAL/POWER
EUG	EXIST UNDERGROUND ELECTRICAL
P/L	EXIST PROPERTY LINE
X	EXIST FENCE LINE
---	EXIST DITCH/FLOW LINE
---	LIMITS OF DISTURBANCE

SITE PLAN SYMBOLS

	ARROW INDICATES DIRECTION OF PLAN NORTH
	CONIFER TREE: FIR, SPRUCE, LARCH OR PINE, 8" DIAMETER OR LARGER.
	DECIDUOUS TREE: COTTONWOOD, HAWTHORN, ASPEN, 8" DIAMETER OR LARGER.
	MANHOLE
	STORM DRAIN MANHOLE
	FIRE/YARD HYDRANT
	SURVEY CONTROL POINT, AS NOTED.
	POLE ANCHOR
	POWER POLE
	LIGHT POLE
	SIGN
	SURVEY HUB
	SECTION CORNER
	BENCH MARK
	STATE PLANE COORDINATE MARKER
	EXISTING SECTION CORNER MONUMENT FOUND AS DESCRIBED
	EXISTING CONTROL POINT MONUMENT, BORING LOCATION
	TEST PIT LOCATION
	2025 GEOTECHNICAL BOREHOLE BY SLATE
	TELEPHONE PED

SHEET NOTE SYMBOLS

	CONTROL POINT LABEL, AS NOTED.
	SHEET KEY NOTE LABEL, AS NOTED.
	EQUIPMENT LABEL, AS NOTED.
	PIPE CALLOUT LABEL, AS NOTED.

MISCELLANEOUS SYMBOLS

	CHANGE OF PIPE MTL
	END OF PIPE
	DIAMETER
	PLUS/MINUS

HATCH SYMBOLS

	ROCK/GRAVEL, TYPE AS NOTED (PLAN/SECTION)
	EXIST ROCK/GRAVEL, TYPE AS NOTED (PLAN/SECTION)
	BED ROCK
	NEW SOIL/FINISH GRADE (SECTION)
	EXISTING GRADE (SECTION)
	CONCRETE EXISTING (SECTION/PLAN)
	CONCRETE 1ST STAGE (SECTION/PLAN)
	CONCRETE 2ND STAGE (SECTION/PLAN)
	SAND, GROUT (PLAN/SECTION)
	IRON, BRICK, STONE MASONRY (PLAN/SECTION)
	STEEL (SECTION)
	BRONZE, BRASS, COPPER (SECTION)
	PLASTIC, RUBBER (SECTION)
	LEAD, ZINC, MAGNESIUM (SECTION)
	ALUMINUM (SECTION)
	GRATING (PLAN)
	EXIST GRATING (PLAN)
	RIP RAP (PLAN/SECTION)
	EXIST RIP RAP (PLAN/SECTION)
	ASPHALT SURFACE (PLAN/SECTION)
	EXIST ASPHALT SURFACE (PLAN/SECTION)
	GRASS/VEGETATION (PLAN)
	EXISTING TO BE REMOVED OR DEMOLISHED
	CLEARING AND GRUBBING

GENERAL NOTES:

1. ALL SYMBOLS ARE NOT NECESSARILY USED. THIS IS A STANDARD DRAWING SHOWING COMMON SYMBOLS ON THIS PROJECT.
2. SCREENING OR SHADING OF WORK IS USED TO INDICATE EXISTING COMPONENTS OR TO DE-EMPHASIZE PROPOSED IMPROVEMENTS TO HIGHLIGHT SELECTED TRADE WORK. REFER TO CONTEXT OF EACH DRAWING FOR USAGE.

**IDAHO DEPARTMENT WATER RESOURCES
DAM SAFETY PROGRAM**

Reviewed
Approved 1.28.26
Date of Approval _____

0	12/19/25	MM	ISSUED FOR CONSTRUCTION
REV	DATE	BY	DESCRIPTION



WARNING
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

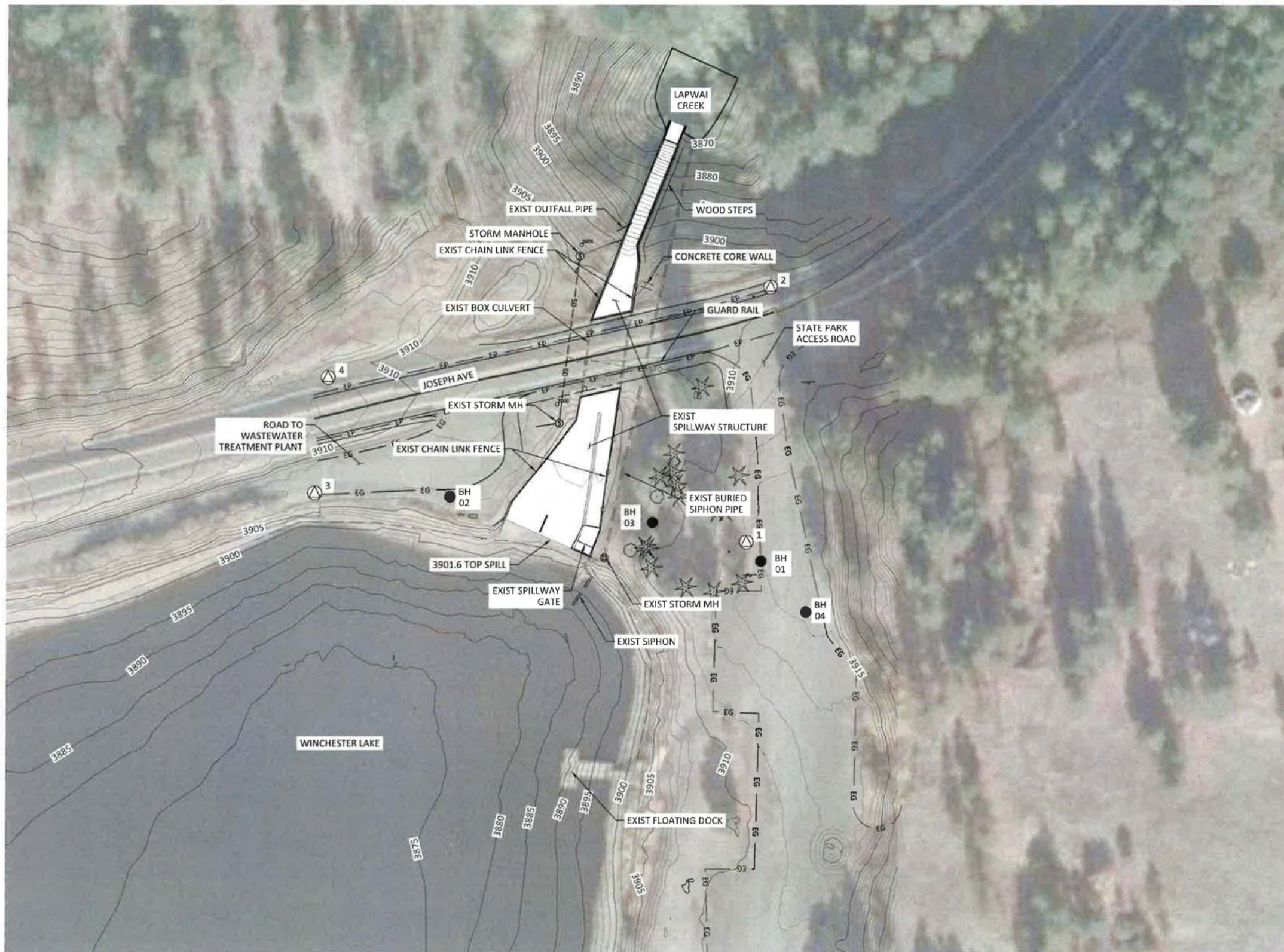


IDAHO DEPARTMENT OF FISH AND GAME
WINCHESTER DAM REHABILITATION

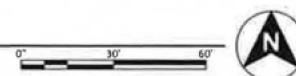
STANDARD SYMBOLS

DESIGNED M. MERKLEIN
DRAWN C. GERBER
CHECKED R. SCOTT
PROJECT DATE 12/19/25

DRAWING
G004



EXISTING OVERALL SITE PLAN AND SURVEY CONTROL
SCALE: 1" = 30'



SHEET NOTES:

SITE ADDRESS

GENERAL AREA OF:
NORTH SPILLWAY/DAM
WINCHESTER LAKE
618 JOSEPH AVE
WINCHESTER IDAHO 83555

BASIS OF BEARINGS

BEARINGS ARE BASED ON IDAHO STATE PLANE WEST ZONE 1103,
NAD83(2011) EPOCH 2010 USING GEOID18.

VERTICAL CONTROL

NGVD29 DATUM AS OBTAINED FROM TRIMBLE RTX SYSTEM AND
CONFIRMED AT NSG DATA STATION K24 (R20253).
THE CONVERSION AT THIS STATION WAS CALCULATED USING THE ONLINE
NGS DATA CONVERSION TOOL (HTTPS://WWW.NGS.NOAA.GOV/NCAT)
AND FOUND TO BE -3.63 FEET: K24 ELEVATION NAVD88=3972.10.
K24 ELEVATION CONVERTED TO NGVD29=3968.47, HELD FOR THIS SURVEY.

SURVEY CONTROL				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	1667364.19	2404808.34	3913.13	TDH 60D WSHR R
2	1667502.84	2404821.13	3908.65	TDH 60D WSHR
3	1667390.92	2404573.61	3907.72	TDH 60D WSHR
4	1667453.74	2404580.68	3911.32	TDH 60D WSHR CP3 RTX ADJ FINAL 29

IDAHO DEPARTMENT WATER RESOURCES
DAM SAFETY PROGRAM

Reviewed *[Signature]*

Approved *[Signature]*

1 28 26

Date of Approval _____

REV	DATE	BY	DESCRIPTION
0	12/19/25	MM	ISSUED FOR CONSTRUCTION



WARNING
IF THIS BAR DOES NOT
MEASURE 1" THEN
DRAWING IS NOT TO SCALE



IDAHO DEPARTMENT OF FISH AND GAME
WINCHESTER DAM REHABILITATION

EXISTING OVERALL SITE PLAN
AND PROJECT CONTROL

DESIGNED P. GALASKA
DRAWN C. GERBER
CHECKED S. KLAWITTER
PROJECT DATE 12/19/25

DRAWING
G005



GENERAL SITE PLAN, CONTRACTOR STAGING AND GENERAL ARRANGEMENT

SCALE: 1" = 50'



SHEET NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR INSPECTING AND MAINTAINING ALL EROSION AND SEDIMENT CONTROL MEASURES THROUGH THE DURATION OF THE PROJECT AND ACCORDING TO THE CONTRACT SPECIFICATIONS.
2. CONTRACTOR SHALL REGRADE AND VEGETATE DISTURBED SLOPES NEAR EXISTING CONDITION AS APPROVED BY THE OWNER'S REPRESENTATIVE. ALL FINISHED CONSTRUCTED SLOPES SHALL HAVE BIODEGRADABLE FIBER WATTLES INSTALLED AT THE TOE OF THE FINISHED SLOPE.
3. CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL FACILITIES, FENCING, AND STAGING AREA MATERIALS WHEN CONSTRUCTION IS COMPLETE. NO CONSTRUCTION DEBRIS, DEMOLITION MATERIALS, OR EXCESS EQUIPMENT SHALL BE LEFT ON SITE.
4. GENERAL CONTRACTOR STAGING AREA SHOWN. CONTRACTOR TO COORDINATE WITH OWNER FOR EXACT EXTENTS AND FENCING LOCATION.

IDAHO DEPARTMENT WATER RESOURCES
DAM SAFETY PROGRAM

Reviewed *[Signature]*

Approved *[Signature]*

1 28 26

Date of Approval

REV	DATE	BY	DESCRIPTION
0	12/19/25	MM	ISSUED FOR CONSTRUCTION



WARNING
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE



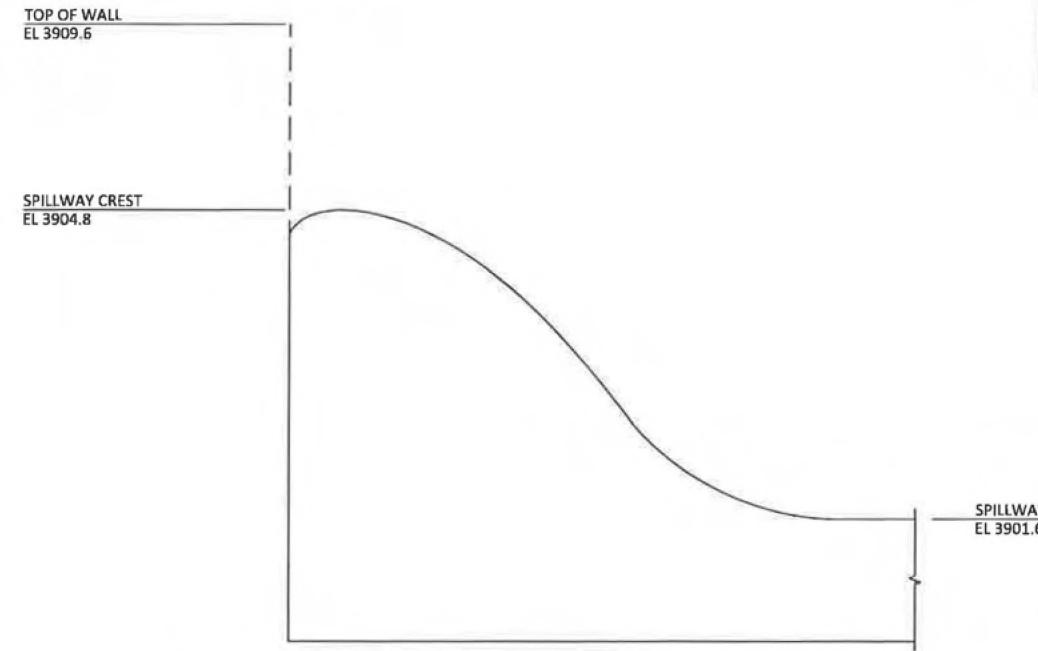
IDAHO DEPARTMENT OF FISH AND GAME
WINCHESTER DAM REHABILITATION

GENERAL SITE PLAN, CONTRACTOR STAGING,
AND GENERAL ARRANGEMENT

DESIGNED P. GALASKA
DRAWN C. GERBER
CHECKED S. KLAWITTER
PROJECT DATE 12/19/25

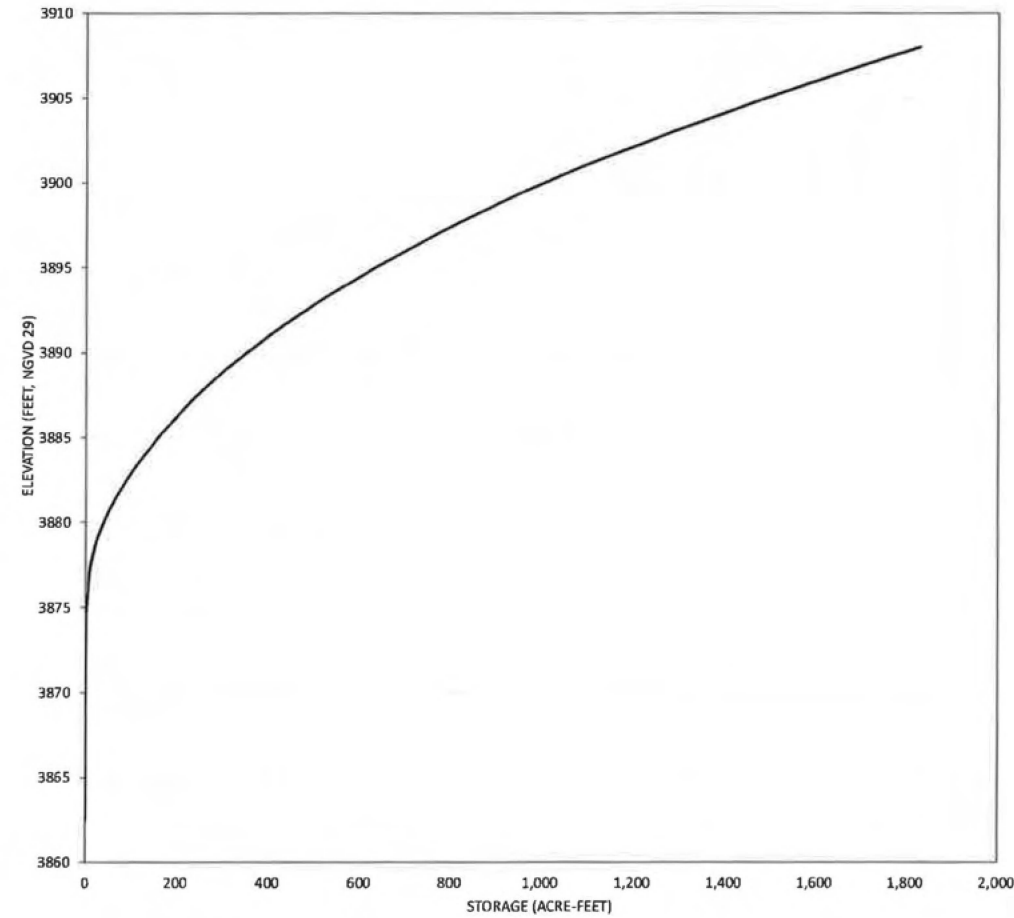
DRAWING
G006

CRITERIA	UNIT	VALUE
DAM HEIGHT	FT	40
MAX OPERATING POOL EL	FT	3904.8
MAX INFLOW DESIGN FLOOD EL	FT	3906.9
MAX INFLOW DESIGN FLOOD OUTFLOW	CFS	603.0



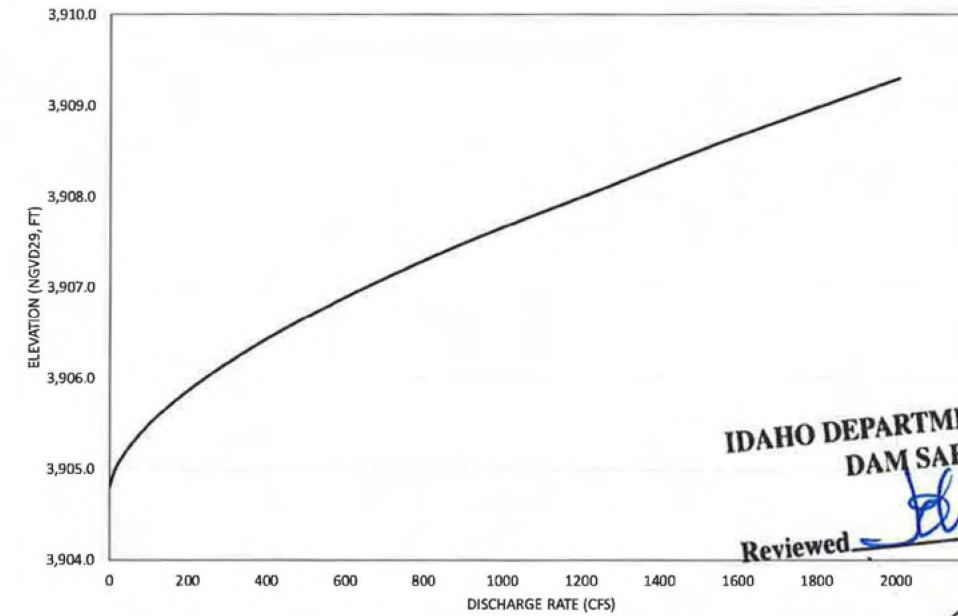
OPERATING SECTION

SCALE: NTS



WINCHESTER LAKE STAGE STORAGE CURVE

SCALE: NTS



SPILLWAY RATING CURVE

SCALE: NTS

IDAHO DEPARTMENT WATER RESOURCES
DAM SAFETY PROGRAM

Reviewed *[Signature]*

Approved *[Signature]*

128 26

Date of Approval

REV	DATE	BY	DESCRIPTION
0	12/19/25	MM	ISSUED FOR CONSTRUCTION



WARNING
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

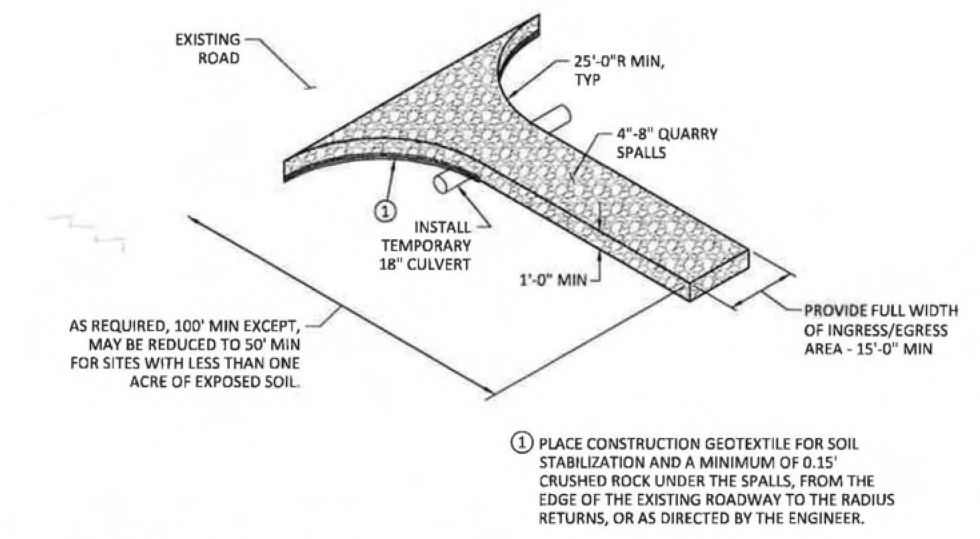
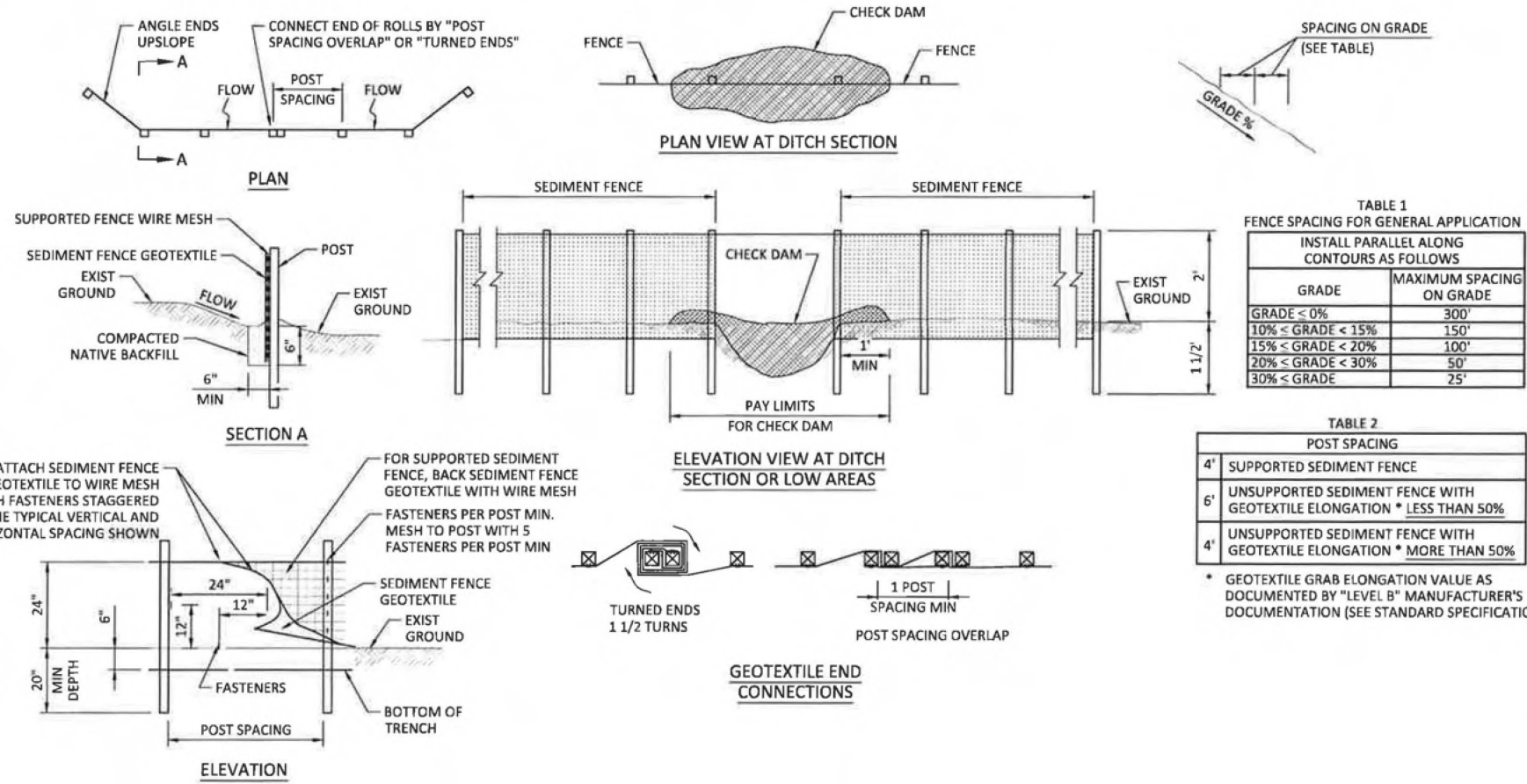


IDAHO DEPARTMENT OF FISH AND GAME
WINCHESTER DAM REHABILITATION

HYDRAULIC PROFILE
AND DESIGN CRITERIA

DESIGNED P. GALASKA
DRAWN C. GERBER
CHECKED S. KLAWITTER
PROJECT DATE 12/19/25

DRAWING
G007



EC101 SILT FENCE DETAIL
 SCALE: NTS

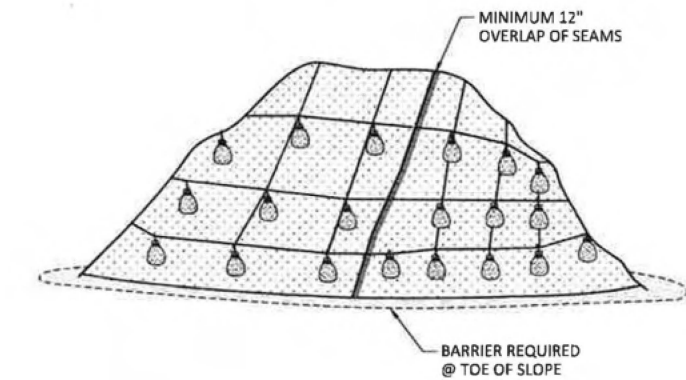
**IDAHO DEPARTMENT WATER RESOURCES
 DAM SAFETY PROGRAM**

Reviewed: *[Signature]*

Approved: *[Signature]*

Date of Approval: **1 28 26**

EC103 TEMPORARY ENTRANCE
 SCALE: NTS



- NOTES:**
1. MINIMUM 12" OVERLAP OF ALL SEAMS REQUIRED.
 2. BARRIER REQUIRED @ TOE OF STOCK PILE.
 3. COVERING MAINTAINED TIGHTLY IN PLACE BY USING SANDBAGS OR TIRES ON ROPES WITH A MAXIMUM 10' GRID SPACING IN ALL DIRECTIONS.

REV	DATE	BY	DESCRIPTION
0	12/19/25	MM	ISSUED FOR CONSTRUCTION



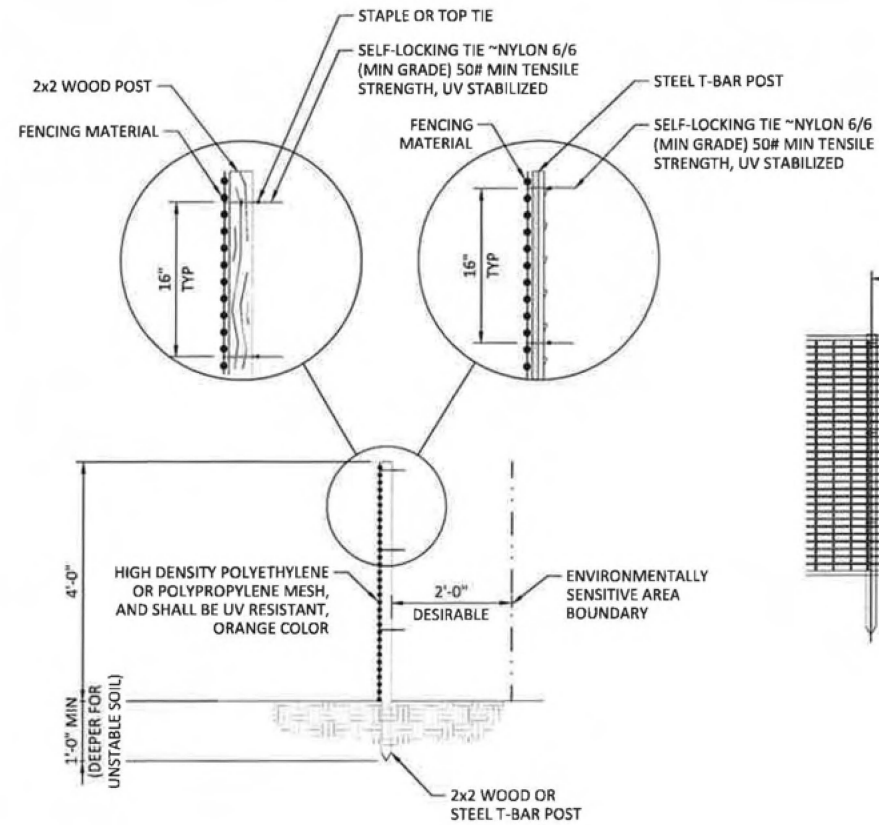
WARNING
 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE



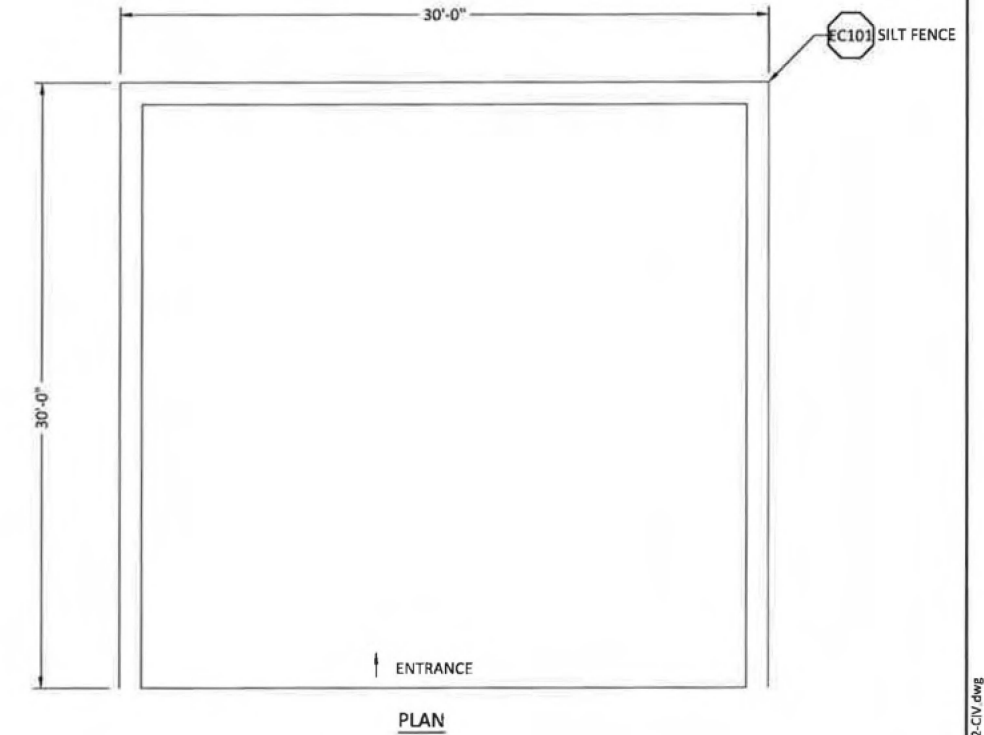
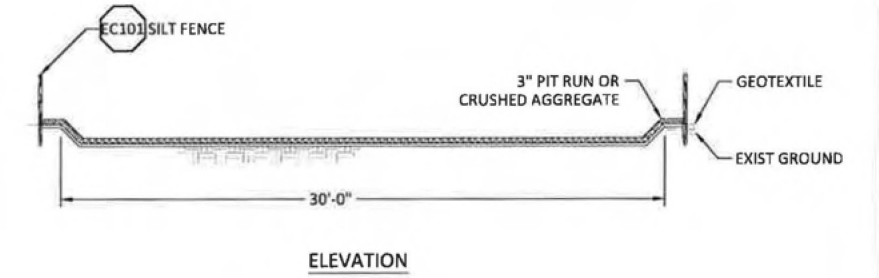
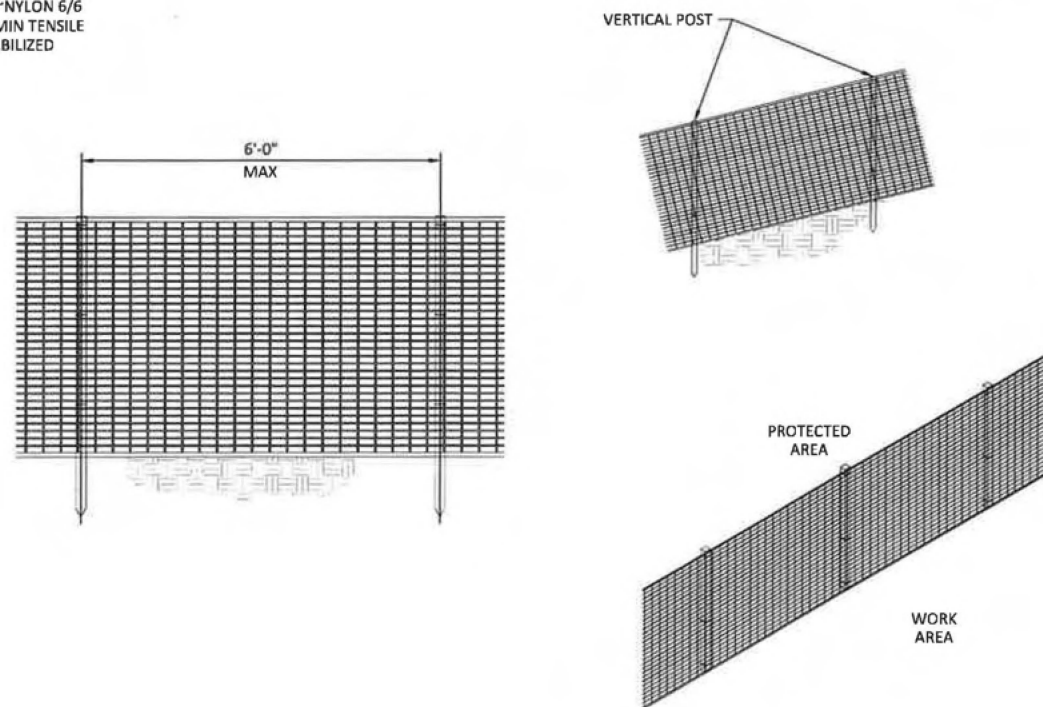
IDAHO DEPARTMENT OF FISH AND GAME
 WINCHESTER DAM REHABILITATION
 EROSION AND SEDIMENT CONTROL
 STANDARD DETAILS 1

DESIGNED P. GALASKA
 DRAWN C. GERBER
 CHECKED S. KLAWITTER
 PROJECT DATE 12/19/25

DRAWING
EC001



NOTE:
1. POST SHALL HAVE SUFFICIENT STRENGTH AND DURABILITY TO SUPPORT THE FENCE THROUGH THE LIFE OF THE PROJECT.



EC109 CONSTRUCTION LIMITS FENCE DETAIL
SCALE: NTS

EC110 CONCRETE WASHOUT DETAIL
SCALE: NTS

IDAHO DEPARTMENT WATER RESOURCES
DAM SAFETY PROGRAM
Reviewed: *[Signature]*
Approved: *[Signature]*
Date of Approval: 12 28 26

REV	DATE	BY	DESCRIPTION
0	12/19/25	MM	ISSUED FOR CONSTRUCTION



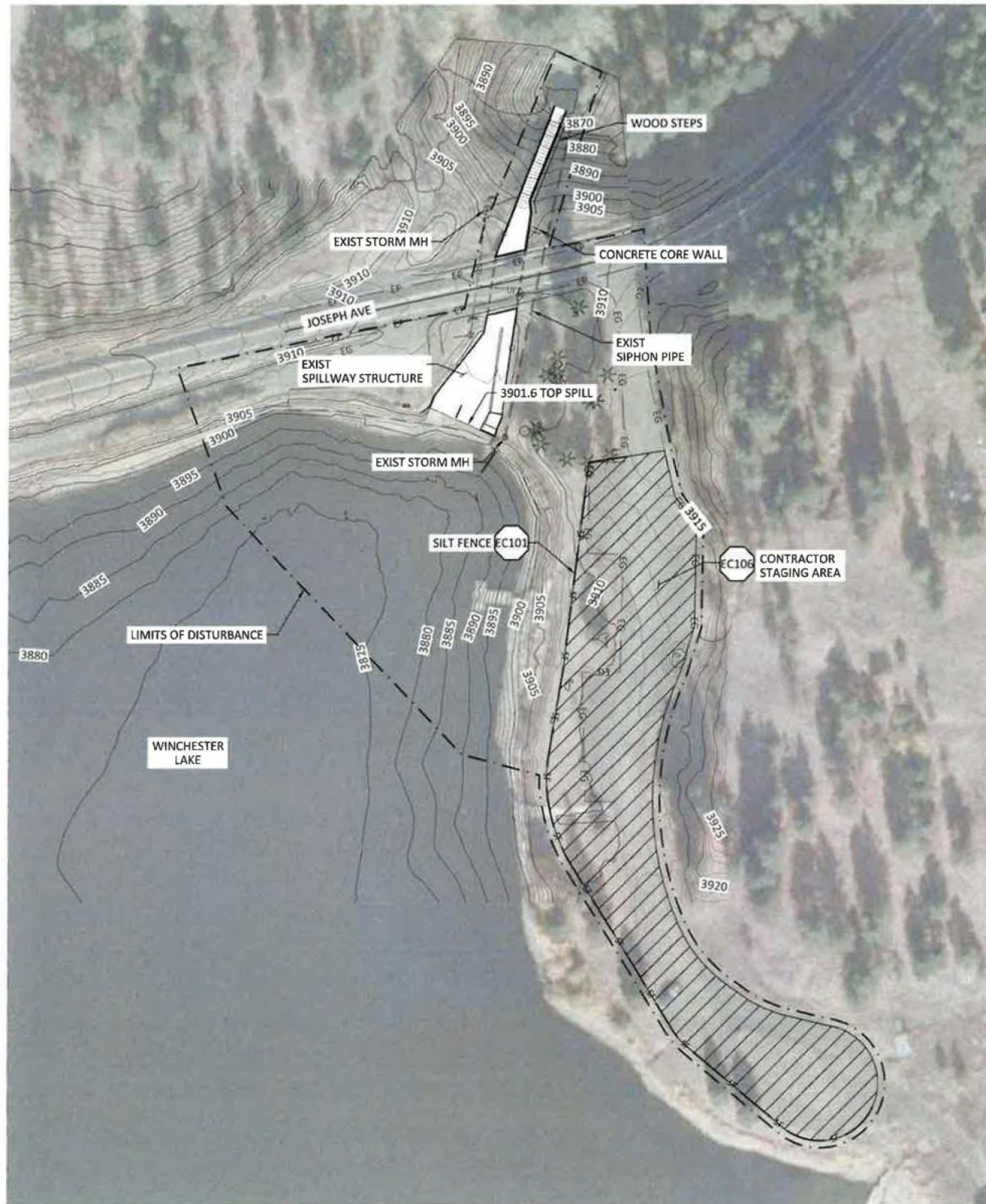
WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE



IDAHO DEPARTMENT OF FISH AND GAME
WINCHESTER DAM REHABILITATION
EROSION AND SEDIMENT CONTROL
STANDARD DETAILS 2

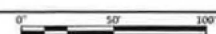
DESIGNED P. GALASKA
DRAWN C. GERBER
CHECKED S. KLAWITTER
PROJECT DATE 12/19/25

DRAWING
EC002



EROSION AND SEDIMENT CONTROL PLAN

SCALE: 1" = 50'



EROSION CONTROL NOTES:

1. CONTRACTOR SHALL SUBMIT AN EROSION AND SEDIMENT CONTROL PLAN FOR WORK DURING CONSTRUCTION THAT MEETS ALL FEDERAL, STATE AND LOCAL REQUIREMENTS, SIGNED AND STAMPED BY A REGISTERED CIVIL ENGINEER IN THE STATE OF IDAHO PRIOR TO THE START OF CONSTRUCTION.
2. THE GENERAL EROSION AND SEDIMENT CONTROL PLAN ON THIS DRAWING IS PROVIDED TO AID THE CONTRACTOR IN DEVELOPING EROSION AND SEDIMENT CONTROL PLAN ACCORDING TO THE CONTRACTOR SCHEDULE AND PHASING OF THE PROJECT.
3. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE PRIOR TO INITIATING CONSTRUCTION ACTIVITIES.
4. NO GRADING OR CONSTRUCTION ACTIVITIES SHALL OCCUR OUTSIDE THE PROPOSED IMPROVEMENTS SHOWN IN THE PLANS FOR THE PROJECT.
5. MINIMIZE DISTURBANCE TO EXIST VEGETATION; UTILIZE NATURAL BUFFER STRIPS.
6. ALL SLOPES SHALL BE PROTECTED FROM EROSION DURING ROUGH GRADING OPERATIONS AND THEREAFTER, UNTIL INSTALLATION OF FINAL GROUND COVER. CONTRACTOR SHALL INSTALL SILT FENCE AS INDICATED AND IN ANY ADDITIONAL LOCATIONS WHERE MATERIAL COULD LEAVE THE CONSTRUCTION SITE, AT CONTRACTOR'S EXPENSE.
7. ALL RUNOFF FROM SITE CONSTRUCTION ACTIVITIES AND FROM RAINFALL EVENTS SHALL BE RETAINED ON SITE AND FILTERED PRIOR TO DISCHARGE.
9. CONTRACTOR SHALL TAKE APPROPRIATE MEASURES TO PREVENT TRACKING OF MUD AND DIRT ONTO ROADS. ROAD SWEEPING IS REQUIRED. ACCUMULATION OF CONSTRUCTION WASTE AND LITTER ON SITE.
10. STOCKPILED EXCAVATION MATERIAL SHALL BE PROTECTED FROM WATER AND WIND EROSION BY COVERING AS APPROPRIATE.
11. CONTRACTOR SHALL PROVIDE DUST ABATEMENT OVER ALL DISTURBED AREAS BY WATER SUPPLY.
12. CONTRACTOR SHALL HAVE ONSITE AT ALL TIMES SPILL PREVENTION AND CONTROL MEASURES.
13. THE CONTRACTOR SHALL PROVIDE ANY ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES (HYDROSEEDING, MULCHING OF STRAW, SAND BAGS, DIVERSION DITCHES, ETC) DICTATED BY FIELD CONDITIONS TO PREVENT THE INTRODUCTION OF DIRT, MUD, OR DEBRIS TO EXIST PUBLIC OR PRIVATE ROADWAYS OR ONTO ADJACENT PROPERTIES DURING ANY PHASE OF CONSTRUCTION OPERATIONS. SPECIAL ATTENTION SHALL BE GIVEN TO ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES NOTED ABOVE.
14. IF ONE OR MORE ACRES OF GROUND IS TO BE DISTURBED, A PERMIT MUST BE OBTAINED FROM THE STATE WATER RESOURCES CONTROL BOARD PRIOR TO CONSTRUCTION.
15. PRIOR TO ANY DEMOLITION OR GRADING, A CONSTRUCTION FENCE SHALL BE ESTABLISHED AROUND THE PERIMETER TO PREVENT UNAUTHORIZED VEHICULAR ENTRY.
16. ALL EROSION CONTROL MEASURES SHALL CONFORM TO THE LOCAL JURISDICTION STANDARDS AND THE EROSION CONTROL PLANS SHOWN ON THE CONSTRUCTION DRAWINGS.
17. INTERIM EROSION CONTROL MEASURES MAY BE NEEDED AND SHALL BE INSTALLED DURING CONSTRUCTION TO ENSURE ADEQUATE EROSION CONTROL FACILITIES ARE IN PLACE AT ALL TIMES.
18. ALL MULCH MAY BE STRAW OR RICES. ALL MULCH SHOULD BE USED WITH A TRACKIFIER.
19. ALL SANDBAGS MAY BE GRAVEL OR SAND FILLED BAGS UNLESS SPECIFIED DIFFERENT.
20. ALL SLOPES WITH DISTURBED SOILS GREATER THAN 10% THAT ARE FREE OF VEGETATION SHALL HAVE EARTH GUARD APPLIED OR MULCH SPREAD AND TACKED DOWN PRIOR TO A 50% CHANGE OF RAIN.
21. DUST CONTROL MEASURES IN THE FORM OF WATER APPLICATION TO ALL EXPOSED SOIL SURFACES TO PREVENT THE TRANSPORT OF SOIL FROM EXPOSED SURFACES ON CONSTRUCTION SITES IN THE FORM OF AIRBORNE PARTICULATES. WATERING OF EXPOSED SOIL SURFACES SHALL OCCUR AT LEAST TWICE DAILY, PREFERABLY IN THE LATE MORNING AND AFTER WORK IS DONE FOR THE DAY. ALL CLEARING, GRADING, EARTH MOVING OR EXCAVATION ACTIVITIES SHALL CEASE WHEN WINDS EXCEED 15 MPH AVERAGED OVER 1 HOUR.
22. TO MINIMIZE THE TRACKING OF MUD AND DIRT AND TO STABILIZE THE POINT OF INGRESS/EGRESS BY CONSTRUCTION VEHICLES, THE CONTRACTOR SHOULD PLACE 4" TO 6" ANGULAR ROCK WITH A MINIMUM DEPTH OF 18" IN CONJUNCTION WITH AN UNDERLAY OF FILTER FABRIC. ANY SOIL MATERIAL CARRIED ONTO STREET SURFACES BY CONSTRUCTION EQUIPMENT SHALL BE REMOVED ON A DAILY BASIS. (BROOM CLEAN, DO NOT USE WATER TO WASH THE STREET). IF EQUIPMENT TRAFFIC IS MINIMAL, STABILIZED ENTRANCE MAY NOT BE NEEDED. ANY SEDIMENT TRACKED OFF PROPERTY AND ONTO PAVED ROADWAYS SHALL BE SWEEP CLEAN IMMEDIATELY AFTER EACH VEHICLE LEAVES THE SITE.
23. ALL ROADS SHALL BE PAVED AS SOON AS FEASIBLE OR WATERED PERIODICALLY OR CHEMICALLY STABILIZED.
24. HAUL TRUCKS SHALL BE COVERED WITH TARPULINS OR OTHER EFFECTIVE COVERS AT ALL TIMES.
25. IF THE CONSTRUCTION SITE IS TO REMAIN INACTIVE LONGER THAN 3 MONTHS THEN THE SITE SHALL BE STABILIZED BY APPLYING "EARTH GUARD" OR SEEDED AND WATERED UNTIL GRASS COVER IS GROWN. OTHER METHODS MAY BE ACCEPTABLE IF APPROVED BY ENGINEER.
26. INSPECT SEDIMENT CONTROL DEVICES BEFORE EACH STORM TO VERIFY THEY ARE IN PROPER ORDER. INSPECT BMP'S AFTER EACH STORM, REMOVING COLLECTED SEDIMENT AND REPAIRING DEFICIENCIES. IF BMP'S ARE DAMAGED IN A STORM, REPAIRS SHOULD BE COMPLETED WITHIN 72 HOURS. CARE SHOULD BE EXERCISED TO MINIMIZE DAMAGE AND PROTECTED AREAS WHILE MAKING REPAIRS.

27. IF BMP'S HAVE FAILED, OR ARE INEFFECTIVE, NOTIFY THE ENGINEER TO MODIFY THE BMP OR SPECIFY AN ALTERNATIVE. THE MODIFICATION OR ALTERNATIVE, THE MODIFICATION OR ALTERNATIVE SHOULD BE INSTALLED WITHIN 72 HOURS OF APPROVAL.
28. DURING LONG PERIODS OF RAIN AND HIGH INTENSITY RAINFALL BMP MEASURES MAY BECOME CLOGGED. EXTREME CARE SHOULD BE TAKEN TO CLEAN BMP MEASURES TO REDUCE FUGITIVE DISCHARGE AND POTENTIAL FLOODING.
29. KEEP A LOG WITH RECORDS OF ALL INSPECTIONS AND ACTIONS TAKEN TO CORRECT OR MODIFY THE SWPP. NOTE ALL FAILURES OF TEH SWPP AND ACTIONS TAKEN TO CORRECT ANY DISCHARGES. FAILURE TO DO SO WILL PUT THE SWPP OUT OF COMPLIANCE.
30. STRAW WATTLES SHALL HAVE A MAXIMUM FUNCTIONAL LONGEVITY OF 1 YEAR AN SHALL BE REPLACED ANNUALLY IF REQUIRED BEYOND 1 YEAR.
31. APPLICANT MAY REMOVE TEMPORARY BMP'S (WATTLES AND SILT FENCING) ONCE STABILIZATION HAS BEEN ESTABLISHED.
32. HYDROSEED SHALL BE APPLIED TO ALL DISTURBED AREAS THAT ARE NOT SUBJECT TO HEAVY WEAR FROM CONSTRUCTION EQUIPMENT OR OTHER VEHICLES. IRRIGATION CAN BE PERFORMED BY HAND WATERING OR BY PIPED SPRINKLER SYSTEM. SEED AND MULCH SHALL BE KEPT MOIST AT ALL TIMES UNTIL GERMINATION HAS OCCURRED. SEED SHOULD BE IN CONFORMANCE WITH THE IDAHO TRANSPORTATION DEPARTMENT AND IDFG GUIDELINES
33. IF SEEDS FAIL TO GERMINATE, OR THEY GERMINATE AND DIE, THE AREA MUST BE RE-SEEDED, FERTILIZED, AND MULCHED WITHIN THE PLANTING SEASON. NOT LESS THAN HALF THE ORIGINAL APPLICATION RATE SHOULD BE APPLIED.
34. UPON PERMANENT STABILIZATION, AND APPROVAL OF THE ENGINEER/QSP, TEMPORARY BMP'S MAY BE REMOVED IF NO LONGER NEEDED.
35. PLACEMENT OF 2" CLEAN ROCK MAY BE USED AS AN ALTERNATE STABILIZATION BMP FOR AREAS WHERE SLOPES ARE LESS THAN 10%.

DUST SUPPRESSION PLAN

1. CONDUCT DAILY CLEANUP. THIS PRACTICE SHALL INCLUDE REMOVAL OF MUD AND DUST CARRIED ONTO STREET SURFACES BY CONSTRUCTION VEHICLES. DURING CLEARING, GRADING, EARTH-MOVING, EXCAVATION, OR TRANSPORTATION OF CUT OR FILL MATERIALS, WATER TRUCKS OR SPRINKLE SYSTEMS ARE TO BE USED TO PREVENT DUST FROM LEAVING THE SITE AND TO CREATE A CRUST AFTER EACH DAY'S ACTIVITIES CEASE.
2. COVER HAUL TRUCKS WITH TARPULINS OR OTHER EFFECTIVE COVERS AT ALL TIMES, EXCEPT WHEN LOADING OR UNLOADING MATERIALS.
3. WATER ALL EXPOSED EARTH SURFACES. THIS PRACTICE SHALL BE CONDUCTED AT A MINIMUM IN THE LATE MORNING AND AT THE END OF THE DAY. FURTHER, THE FREQUENCY OF WATERING SHALL INCREASE IF REQUIRED BY THE BUTTE COUNTY AIR POLLUTION CONTROL DISTRICT.
4. ALL CLEARING, GRADING, EARTH-MOVING, OR EXCAVATION ACTIVITIES SHALL CEASE WHEN WINDS EXCEED 15 MPH AVERAGED OVER 1 HOUR.
5. THE AREA DISTURBED BY DEMOLITION, CLEARING, GRADING, EARTH-MOVING, OR EXCAVATION OPERATIONS SHALL BE MINIMIZED AT ALL TIMES.
6. PORTIONS OF THE CONSTRUCTION SITE TO REMAIN INACTIVE LONGER THAN AN PERIOD OF 14 DAYS SHALL BE SEEDED AND WATERED UNTIL GRASS COVER IS GROWN.
7. THE APPLICANT SHALL MINIMIZE CONSTRUCTION-RELATED EXHAUST EMISSIONS BY MAINTAINING CONSTRUCTION EQUIPMENT ENGINES IN GOOD CONDITION AND IN PROPER TUNE ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND DURING SMOG SEASON (MAY THROUGH OCTOBER) BY NOT ALLOWING CONSTRUCTION EQUIPMENT TO BE LEFT IDLING FOR LONG PERIODS.
8. ALL ON-SITE VEHICLES SHOULD BE LIMITED TO A SPEED OF 15 MPH ON UNPAVED ROADS.
9. RE-VEGETATE ALL EXPOSED SURFACES. THIS SHALL BE COMPLETED AS SOON AS POSSIBLE TO REDUCED DUST EMISSIONS. THE DUST SUPPRESSION PLAN SHALL BE SUBMITTED TO THE COUNTY OF BUTTE FOR REVIEW AND APPROVAL PRIOR TO ISSUANCE OF A GRADING PERMIT.
10. SOIL STOCKPILED FOR MORE THAN TWO DAYS SHALL BE COVERED, KEPT MOIST, OR TREATED WITH SOIL BINDERS TO PREVENT DUST GENERATION.
11. ABIDE BY THE FOLLOWING ADDITIONAL MEASURES DURING ALL CONSTRUCTION ACTIVITY:
 - A. USE ALTERNATIVES TO OPEN BURNING OF VEGETATIVE MATERIAL DURING ALL CLEARING AND CONSTRUCTION.
12. OTHER MEASURES AS DETERMINED APPROPRIATE BY AQMD AND DEPARTMENT OF PUBLIC WORKS TO REDUCE DUST.
13. ONE OR MORE PUBLICLY - VISIBLE SIGNS SHALL BE POSTED AT CONSTRUCTION SITE WITH THE DEVELOPER CONTACT INFORMATION. DUST COMPLAINTS RECEIVED SHALL BE RESPONDED TO WITHIN 24 HOURS. COMPLAINTS TAKEN TO THE IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY SHALL BE RESPONDED TO WITHIN 48 HOURS. COMPLIANCE WITH IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY REGULATIONS.

IDAHO DEPARTMENT OF FISH AND GAME
DAMS SAFETY PROGRAM
 Reviewed: *[Signature]*
 Approved: *[Signature]*
 1 28 26

REV	DATE	MM	BY	DESCRIPTION
0	12/19/25	MM		ISSUED FOR CONSTRUCTION

PROFESSIONAL ENGINEER
 LICENSED
 51667147
 STATE OF IDAHO
 STEVEN M. KLAWITTER
 12/19/2025

WARNING
 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

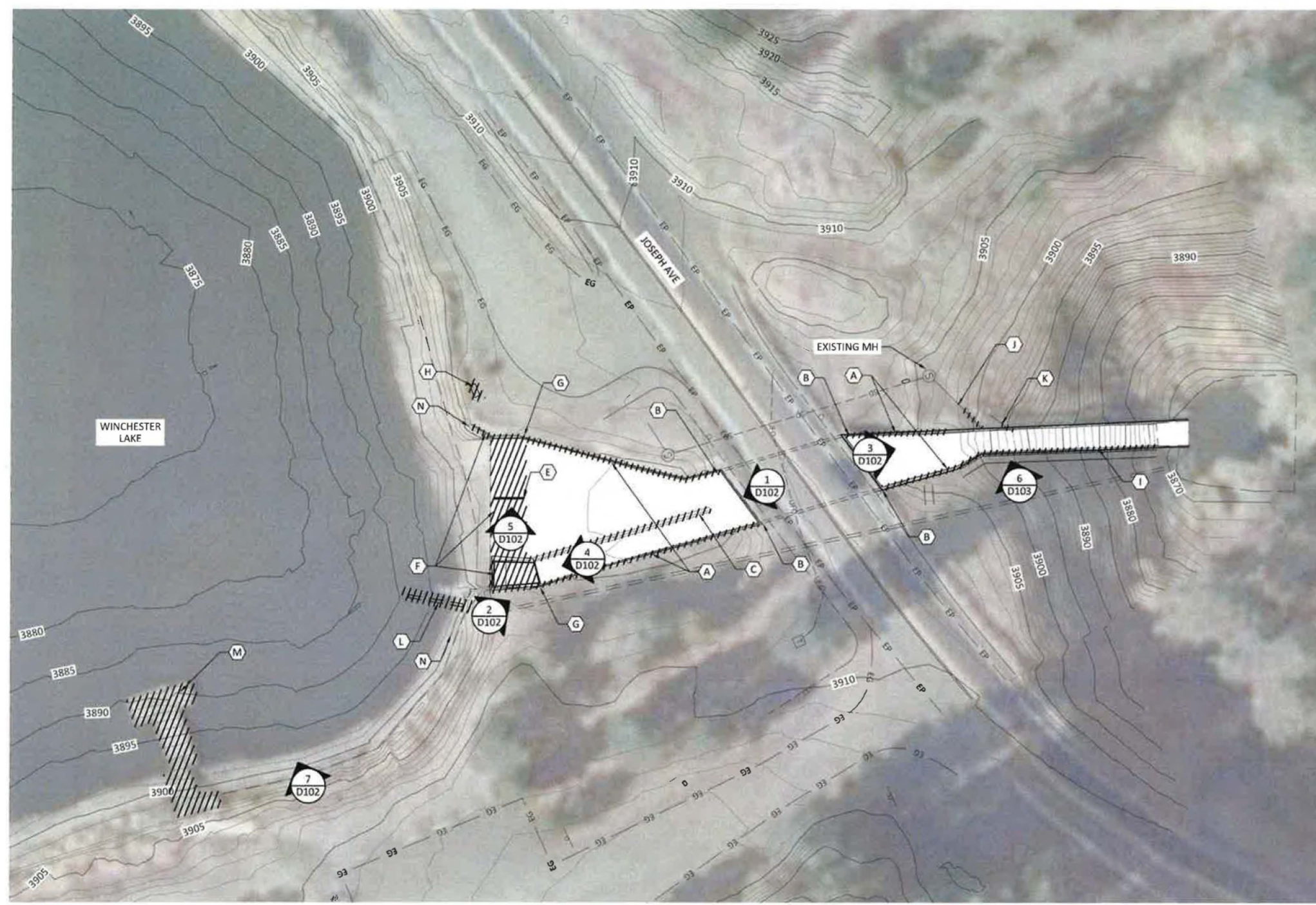
McMillen
 1471 Shoreline Dr. Ste 100 Boise, ID 83702 | (208) 342-4214 | mcmillen.com



IDAHO DEPARTMENT OF FISH AND GAME
 WINCHESTER DAM REHABILITATION
 EROSION AND SEDIMENT CONTROL PLAN

DESIGNED	DATE OF APPROVAL	DRAWING
P. GALASKA		EC101
C. GERBER		
S. KLAWITTER		
PROJECT DATE	12/19/25	

C:\Users\ChloeGerber\OneDrive\Documents\Winchester Dam Rehab\Project Files\Drawings\12-005_EC101_02-CIV.dwg



DEMOLITION PLAN
SCALE: 1" = 20'

- SHEET NOTES:**
1. ALL EXISTING STRUCTURES ARE TO REMAIN UNLESS NOTED OTHERWISE. PROTECT EXISTING STRUCTURES FROM DAMAGE.
 2. ALL CONCRETE ANCHOR BOLTS AND OTHER EMBEDDED METALS TO BE DEMOLISHED SHALL BE CUT FLUSH WITH THE SURFACE OF THE CONCRETE IN WHICH THEY ARE EMBEDDED. AVOID DAMAGE TO EXISTING CONCRETE.

- SHEET KEY NOTES:**
- A DEMOLISH EXISTING CHAIN LINK FENCE UP TO BRIDGE.
 - B MAINTAIN EXISTING CHAIN LINK FENCE ACROSS BOTH SIDES OF BRIDGE, INCLUDING CORNER FENCE POSTS.
 - C DEMOLISH EXISTING CONCRETE FLUME WALL. SAW-CUT FLUSH WITH TOP OF FLOOR SLAB AND GRIND SMOOTH. BURN BACK OR GRIND REINFORCING TO MINIMUM 1-INCH BELOW CONCRETE SURFACE AND PATCH WITH NONSHRINK GROUT.
 - D DEMOLISH EXISTING GATE, TRASH RACK, SEAL PLATES, AND ALL ASSOCIATED EQUIPMENT AND METAL WORKS. (NOT SHOWN, SEE PHOTOS ON D102).
 - E SAW-CUT FLOOR SLAB PERPENDICULAR TO SPILLWAY CENTERLINE AT STA. 0+11.43.
 - F DEMOLISH EXISTING CONCRETE SPILLWAY STRUCTURE UPSTREAM OF STA. 0+11.43, INCLUDING FLOOR SLAB, CONCRETE FOUNDATION CUTOFF, WALLS, AND PIER.
 - G SAW-CUT WALLS VERTICALLY PERPENDICULAR TO WALL AXIS AT STA. 0+11.43.
 - H NON-DESTRUCTIVELY REMOVE EXISTING SIGN PRIOR TO COMMENCING CONSTRUCTION AND PROTECT DURING CONSTRUCTION. RE-INSTALL NEAR THE ORIGINAL LOCATION AND ORIENTATION, AS APPROVED BY IDFG PRIOR TO DEMOBILIZATION. ENSURE INSTALLATION LOCATION DOES NOT INHIBIT ACCESS TO PROPOSED GATE.
 - I DEMOLISH EXISTING STEEL RAILING ALONG THE TOP OF RIGHT CHUTE WALL.
 - J EMERGENCY DRAIN LINE FOR THE CITY OF WINCHESTER WASTEWATER TREATMENT PLANT. DEMOLISH PORTION AS REQUIRED TO ALLOW FOR NEW INSTALLATION OF OUTFALL DOWNSTREAM AND OVER THE TOP OF EXTENDED SPILLWAY WALL AS SHOWN ON C300. COORDINATE ALL REQUIRED SHUTDOWNS OF OUTFALL AND POSSIBLE TEMPORARY LINE WITH IDFG AND WWTP.
 - K ACTIVE OUTFALL FOR CITY OF WINCHESTER WASTEWATER TREATMENT PLANT. DEMOLISH PORTION AS REQUIRED TO ALLOW FOR NEW INSTALLATION OF OUTFALL DOWNSTREAM AND OVER THE TOP OF EXTENDED SPILLWAY WALL AS SHOWN ON C300. COORDINATE ALL REQUIRED WORK ON THE OUTFALL AND POSSIBLE TEMPORARY LINE WITH IDFG AND WWTP.
 - L CONTRACTOR SHALL DEMOLISH EXISTING SIPHON PIPE AND SALVAGE EXISTING INTAKE TO PERMIT GRADING WORK AND INSTALLATION OF LINER SYSTEM.
 - M RELOCATE EXISTING DOCK MIN 100 FEET FROM UPSTREAM EDGE OF LINER SYSTEM.
 - N SALVAGE EXISTING DEBRIS BOOM, LAKE ANCHORS AND SHORE ANCHORS. STORE ONSITE AT LOCATION COORDINATED WITH IDFG WITHIN CONTRACTOR STAGING AREA.

IDAHO DEPARTMENT WATER RESOURCES
DAM SAFETY PROGRAM

Reviewed: *[Signature]*
Approved: *[Signature]*
1 28 26

REV	DATE	BY	DESCRIPTION
0	12/19/25	MM	ISSUED FOR CONSTRUCTION

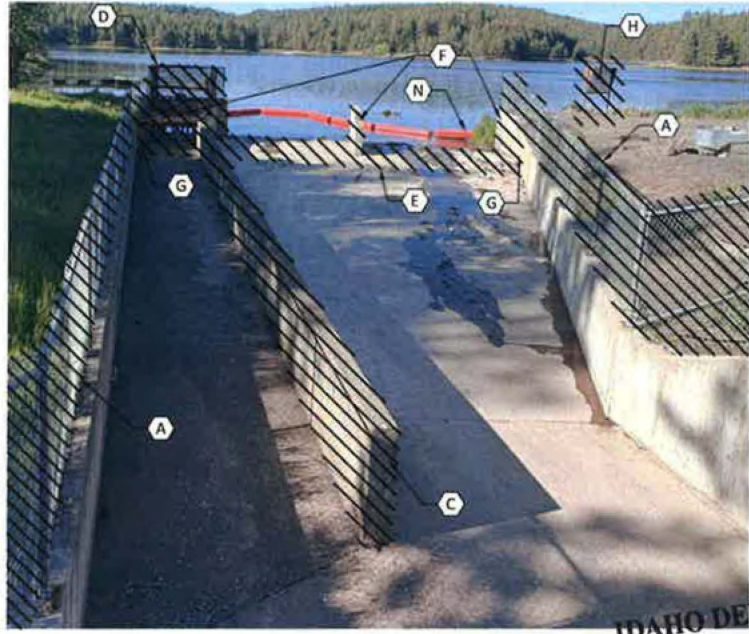


WARNING
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE



IDAHO DEPARTMENT OF FISH AND GAME WINCHESTER DAM REHABILITATION		DESIGNED <u>T. MAGILL</u> DRAWN <u>C. GERBER</u> CHECKED <u>M. MERKLEIN</u> PROJECT DATE <u>12/19/25</u>	DRAWING D101
DEMOLITION PLAN		Date of Approval: <i>[Signature]</i>	

C:\Users\ChloeGerber\OneDrive\Documents\Winchester Dam Rehab\Project Files\Drawings\25-005_D101_03-CIV.dwg



1 PHOTO 1
D101 SCALE: NTS



2 PHOTO 2
D101 SCALE: NTS

IDAHO DEPARTMENT WATER RESOURCES
DAM SAFETY PROGRAM

Reviewed *[Signature]*

Approved *[Signature]*

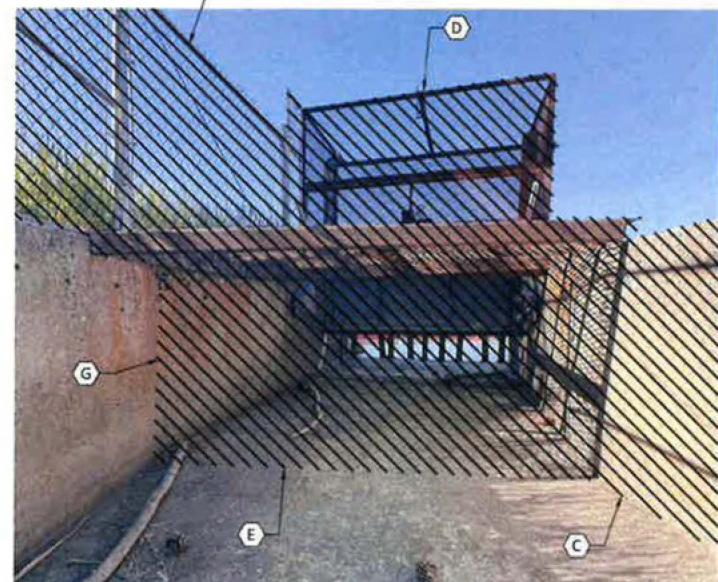
Date of Approval 1 28 26

- SHEET NOTES:**
1. ALL EXISTING STRUCTURES ARE TO REMAIN UNLESS NOTED OTHERWISE. PROTECT EXISTING STRUCTURES FROM DAMAGE. ALL CONCRETE ANCHOR BOLTS AND OTHER EMBEDDED METALS TO BE DEMOLISHED SHALL BE CUT FLUSH WITH THE SURFACE OF THE CONCRETE IN WHICH THEY ARE EMBEDDED. AVOID DAMAGE TO EXISTING CONCRETE.

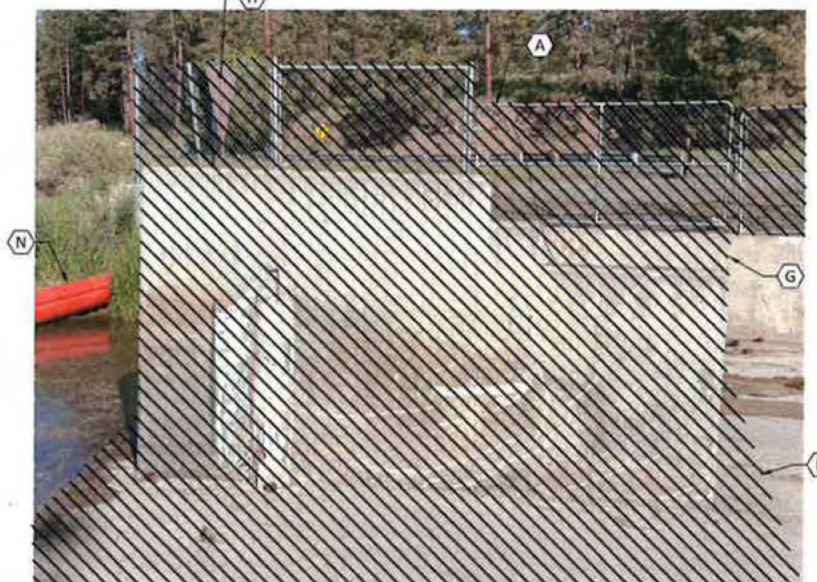
- SHEET KEY NOTES:**
- A DEMOLISH EXISTING CHAIN LINK FENCE UP TO BRIDGE.
 - B MAINTAIN EXISTING CHAIN LINK FENCE ACROSS BOTH SIDES OF BRIDGE, INCLUDING CORNER FENCE POSTS.
 - C DEMOLISH EXISTING CONCRETE FLUME WALL. SAW-CUT FLUSH WITH TOP OF FLOOR SLAB AND GRIND SMOOTH. BURN BACK OR GRIND REINFORCING TO MINIMUM 1-INCH BELOW CONCRETE SURFACE AND PATCH WITH NONSHRINK GROUT.
 - D DEMOLISH EXISTING GATE, TRASH RACK, SEAL PLATES, AND ALL ASSOCIATED EQUIPMENT AND METAL WORKS.
 - E SAW-CUT FLOOR SLAB PERPENDICULAR TO SPILLWAY CENTERLINE AT STA. 0+11.43.
 - F DEMOLISH EXISTING CONCRETE SPILLWAY STRUCTURE UPSTREAM OF STA. 0+11.43, INCLUDING FLOOR SLAB, CONCRETE FOUNDATION CUTOFF, WALLS, AND PIER.
 - G SAW-CUT WALLS VERTICALLY PERPENDICULAR TO WALL AXIS AT STA. 0+11.43.
 - H NON-DESTRUCTIVELY REMOVE EXISTING SIGN PRIOR TO COMMENCING CONSTRUCTION AND PROTECT DURING CONSTRUCTION. RE-INSTALL NEAR THE ORIGINAL LOCATION AND ORIENTATION, AS APPROVED BY IDFG, PRIOR TO DEMOBILIZATION. ENSURE INSTALLATION LOCATION DOES NOT INHIBIT ACCESS TO PROPOSED GATE.
 - I DEMOLISH EXISTING STEEL RAILING ALONG TOP OF RIGHT CHUTE WALL.
 - N SALVAGE EXISTING DEBRIS BOOM, LAKE ANCHORS AND SHORE ANCHORS. STORE ONSITE AT LOCATION COORDINATED WITH IDFG WITHIN CONTRACTOR STAGING AREA.



3 PHOTO 3
D101 SCALE: NTS



4 PHOTO 4
D101 SCALE: NTS



5 PHOTO 5
D101 SCALE: NTS

REV	DATE	MM	BY	DESCRIPTION
0	12/19/25	MM		ISSUED FOR CONSTRUCTION

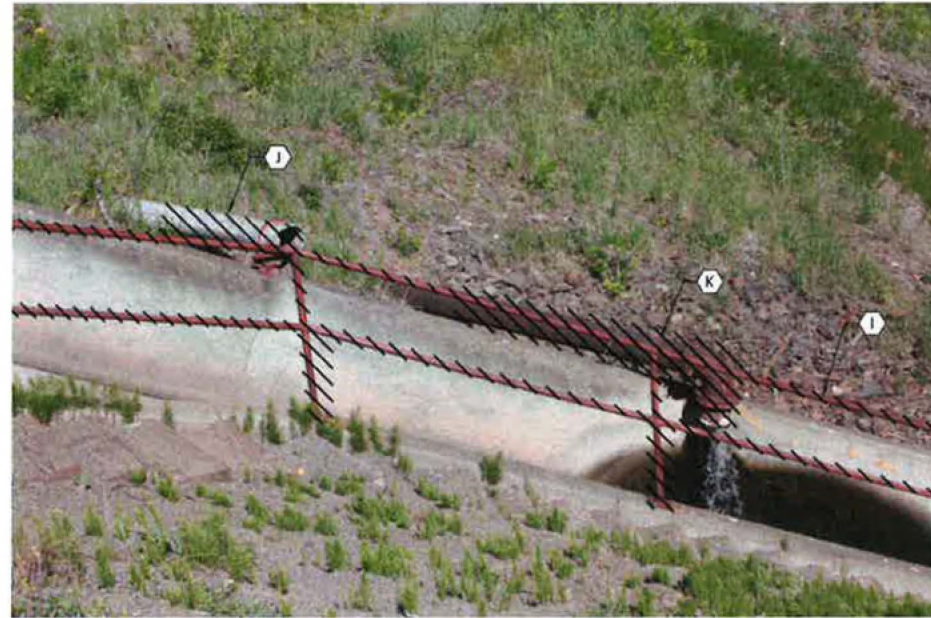


WARNING
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE



IDAHO DEPARTMENT OF FISH AND GAME WINCHESTER DAM REHABILITATION		DESIGNED <u>T. MAGILL</u>	DRAWING D102
DEMOLITION SECTIONS AND DETAILS 1		DRAWN <u>C. GERBER</u>	
		CHECKED <u>M. MERKLEIN</u>	
		PROJECT DATE <u>12/19/25</u>	

C:\Users\ChloeGerber\OneDrive\Documents\Winchester Dam Rehab\Project Files\Drawings\25-005_D102_03-CIV.dwg



6 PHOTO 6
D101 SCALE: NTS



7 PHOTO 7
D101 SCALE: NTS

SHEET NOTES:

1. ALL EXISTING STRUCTURES ARE TO REMAIN UNLESS NOTED OTHERWISE. PROTECT EXISTING STRUCTURES FROM DAMAGE.
2. ALL CONCRETE ANCHOR BOLTS AND OTHER EMBEDDED METALS TO BE DEMOLISHED SHALL BE CUT FLUSH WITH THE SURFACE OF THE CONCRETE IN WHICH THEY ARE EMBEDDED. AVOID DAMAGE TO EXISTING CONCRETE.

SHEET KEY NOTES:

- I DEMOLISH EXISTING STEEL RAILING ALONG TOP OF RIGHT CHUTE WALL.
- J DEMOLISH EXISTING EMERGENCY DRAIN LINE FOR THE CITY OF WINCHESTER WASTEWATER TREATMENT PLANT 1 FOOT PAST WHERE THE PIPE DAYLIGHTS TO ALLOW FOR NEW INSTALLATION OF OUTFALL DOWNSTREAM AND OVER THE TOP OF EXTENDED SPILLWAY WALL.
- K DEMOLISH EXISTING CITY OF WINCHESTER WASTEWATER TREATMENT PLANT OUTFALL 1 FOOT PAST WHERE THE PIPE DAYLIGHTS TO ALLOW FOR NEW EXTENSION OF OUTFALL DOWNSTREAM AND OVER THE TOP OF EXTENDED SPILLWAY WALL.
- L CONTRACTOR SHALL REMOVE EXISTING SIPHON PIPE AND INTAKE TO PERMIT GRADING WORK AND INSTALLATION OF LINER SYSTEM PRIOR TO INSTALLATION OF NEW EXTENDED SIPHON PIPE.
- M RELOCATE EXISTING DOCK MIN 100 FEET FROM EDGE OF LINER SYSTEM.
- N SALVAGE EXISTING DEBRIS BOOM, LAKE ANCHORS AND SHORE ANCHORS. STORE ONSITE AT LOCATION COORDINATED WITH IDFG WITHIN CONTRACTOR STAGING AREA.

IDAHO DEPARTMENT WATER RESOURCES
DAM SAFETY PROGRAM

Reviewed: *[Signature]*
Approved: *[Signature]*
Date of Approval: 1 28 26

REV	DATE	BY	DESCRIPTION
0	12/19/25	MM	ISSUED FOR CONSTRUCTION



WARNING
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE



IDAHO DEPARTMENT OF FISH AND GAME
WINCHESTER DAM REHABILITATION
DEMOLITION SECTIONS AND DETAILS 2

DESIGNED T. MAGILL
DRAWN C. GERBER
CHECKED M. MERKLEIN
PROJECT DATE 12/19/25

DRAWING
D103

GENERAL PROJECT NOTES:

- ELEVATIONS GIVEN ARE TO FINISH GRADE UNLESS OTHERWISE SHOWN.
- EXIST SURFACE FEATURES SHOWN ON ALL SHEETS HEREIN ARE BASED ON AERIAL AND (FIELD SURVEYS). THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF ALL EXIST SURFACE FEATURES WHETHER SHOWN OR NOT ON CIVIL SHEETS.
- SLOPE UNIFORMLY BETWEEN CONTOURS AND SPOT ELEVATIONS SHOWN.
- CONTRACTOR SHALL REPAIR ALL EXISTING SURFACE, UTILITIES, AND FOUNDATIONS IMPACTED BY CONSTRUCTION, WHICH ARE NOT INDICATED TO BE DEMOLISHED.
- CONTRACTOR SHALL KEEP ALL CONSTRUCTION WITHIN WORK BOUNDARIES DEFINED FOR THIS PROJECT AS SHOWN. THIS INCLUDES, BUT IS NOT LIMITED TO, VEHICLES AND EQUIPMENT, LIMITS OF EXCAVATION, STOCKPILED EXCAVATED MATERIAL, BACKFILL MATERIAL.
- SEE SPECIFICATION 31.00.00 FOR AGGREGATE MATERIAL TYPES.
- ALL MATERIAL FURNISHED ON, OR FOR THE PROJECT, MUST MEET THE MINIMUM REQUIREMENTS OF APPROVING AGENCIES. AT THE REQUEST OF THE APPROVING AGENCY OR THE DESIGN ENGINEER, CONTRACTORS SHALL FURNISH PROOF THAT ALL MATERIALS INSTALLED ON THIS PROJECT MEET THE SPECIFICATION REQUIREMENTS SET FORTH IN THE PROJECT SPECIFICATIONS.
- ANY DEVIATION FROM THE APPROVED PLANS AND SPECIFICATIONS MUST HAVE DESIGN ENGINEER AND OWNER APPROVAL IN WRITING.
- ALL DISTURBED SURFACES SHALL BE RETURNED TO ORIGINAL OR BETTER CONDITIONS.
- DISPOSE OF ALL NON-ORGANIC WASTES SUCH AS METAL, PIPING, ROCK RUBBLE ETC AT AN APPROVED LANDFILL OR, OTHER SUITABLE DISPOSAL SITES AT THE CONTRACTOR'S EXPENSE.
- RESTORE ALL SURVEY MONUMENTS THAT ARE DAMAGED OR DESTROYED DURING CONSTRUCTION.

GENERAL YARD PIPING AND UTILITY NOTES:

- CONTRACTOR TO VERIFY LOCATION OF EXISTING STRUCTURES, AND OVERHEAD UTILITIES PRIOR TO THE START OF CONSTRUCTION OF SUBMITTAL OF SHOP DRAWINGS.
- THE CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES TO REMAIN.
- THE CONTRACTOR SHALL CONTACT THE UTILITY AGENCIES FOR FIELD LOCATION OF UTILITIES, AT LEAST 72 HOURS PRIOR TO START OF CONSTRUCTION.
- THE CONTRACTOR SHALL PROVIDE MINIMUM OF 24" COVER ON TOP OF ALL PIPELINES UNLESS OTHERWISE INDICATED OR DIRECTED.
- ELEVATIONS SHOWN ARE TO INVERT (FLOWLINE) OF PIPES, UNLESS OTHERWISE NOTED.
- STRAIGHT SLOPES SHALL BE MAINTAINED BETWEEN INVERTS SHOWN OR SPECIFIED.
- THE CONTRACTOR SHALL ADJUST ALL VALVE BOXES, PULL BOXES, AND MANHOLES TO FINISHED GRADE UNLESS OTHERWISE SHOWN OR SPECIFIED.
- ALL PIPE TRENCHING AND BACKFILL SHALL BE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- CONTRACTOR SHALL COORDINATE WITH IDFG AND CITY OF WINCHESTER WWTP STAFF PRIOR TO DEMOLISHING AND RELOCATING EXISTING OUTFALL. CONTRACTOR SHALL INITIATE CONSULTATION WITH BOTH PARTIES A MINIMUM OF 3 WEEKS PRIOR TO COMMENCING WORK AND ENSURE THAT ALL PARTIES ARE IN AGREEMENT WITH TIMELINESS OF ALL ACTIVITIES AND TEMPORARY OUTFALL RELOCATION TO ENSURE CONSTRUCTION ACTIVITIES DO NOT IMPACT WWTP OPERATIONS.

GENERAL PVC PIPING AND JOINTS NOTES:

- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND LAYING DIAGRAMS OF ALL PIPE, JOINTS, BENDS, SPECIAL FITTINGS, AND PIPING APPURTENANCES FOR THE PROJECT.
- THE CONTRACTOR SHALL SUBMIT MANUFACTURER'S CERTIFICATE THAT PIPE CONFORMS TO THE FOLLOWING SPECIFICATIONS.
- PIPE SHALL CONFORM TO THE REQUIREMENTS OF ASTM D 3034- TYPE PSM POLY (VINYL CHLORIDE) PVC SEWER PIPE AND FITTINGS, SDR [26]. MATERIAL FOR PVC PIPE SHALL CONFORM TO THE REQUIREMENTS OF ASTM D 1784 - RIGID POLY (VINYL CHLORIDE) (PVC) COMPOUNDS AND CHLORINATED POLY (VINYL CHLORIDE) (CPVC) COMPOUNDS, FOR CELL CLASSIFICATION 12454-B OR 12454-C AS DEFINED THEREIN.
- JOINTS SHALL CONFORM TO ASTM D 3212 - JOINTS FOR DRAIN AND SEWER PLASTIC PIPE USING FLEXIBLE ELASTOMERIC SEALS. ELASTOMERIC SEALS FOR COMPRESSION TYPE JOINTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F 477 - ELASTOMERIC SEALS (GASKETS) FOR JOINING PLASTIC PIPE OR ASTM F 913 - THERMOPLASTIC ELASTOMERIC SEALS (GASKETS) FOR JOINING PLASTIC PIPE.
- ALL FITTINGS SHALL CONFORM TO ASTM D 3034. THE STIFFNESS OF THE FITTINGS SHALL NOT BE LESS THAN THE STIFFNESS OF THE ADJOINING PIPE.
- HANDLING OF THE PVC PIPE SHALL BE DONE WITH IMPLEMENTS, TOOLS AND FACILITIES AS RECOMMENDED BY THE PIPE MANUFACTURER TO ENSURE THAT THE PIPE IS NOT DAMAGED IN ANY MANNER DURING STORAGE, TRANSIT, LOADING, UNLOADING, AND INSTALLATION.
- PIPE SHALL BE INSPECTED BOTH PRIOR TO AND AFTER INSTALLATION AND ALL DEFECTIVE LENGTHS SHALL BE REJECTED AND IMMEDIATELY REMOVED FROM THE WORKING AREA.
- CUTTING AND MACHINING OF THE PIPE SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE PIPE MANUFACTURER'S STANDARD PROCEDURES.
- ALL FOREIGN MATTER OR DIRT SHALL BE REMOVED FROM THE INTERIOR OF THE PIPE BEFORE PLACING. PIPE SHALL BE KEPT CLEAN AFTER LAYING.
- EACH PIPE COMPRESSION TYPE JOINT SHALL BE JOINED WITH A LOCK-IN RUBBER RING AND A RING GROOVE THAT IS DESIGNED TO RESIST DISPLACEMENT DURING PIPE INSERTION. THE RING AND THE RING SEAT INSIDE THE BELL SHALL BE WIPED CLEAN BEFORE THE GASKET IS INSERTED, A THIN FILM OF LUBRICANT SHALL BE APPLIED TO THE EXPOSED SURFACE OF THE RING AND TO THE OUTSIDE OF THE CLEAN PIPE END. LUBRICANT OTHER THAN THAT FURNISHED WITH THE PIPE SHALL NOT BE USED. THE END OF THE PIPE SHALL BE THEN FORCED INTO THE RING TO COMPLETE THE JOINT.
- THE PIPE SHALL NOT BE DEFLECTED EITHER VERTICALLY OR HORIZONTALLY IN EXCESS OF THE PRINTED RECOMMENDATIONS OF THE MANUFACTURER OF THE COUPLING.
- FITTINGS SHALL BE CAREFULLY CONNECTED TO PIPE, AND JOINTS SHALL BE CHECKED TO INSURE A SOUND AND PROPER JOINT.

**IDAHO DEPARTMENT WATER RESOURCES
DAM SAFETY PROGRAM**

Reviewed [Signature]
 Approved [Signature]
 Date of Approval 1 28 26

REV	DATE	BY	DESCRIPTION
0	12/19/25	MM	ISSUED FOR CONSTRUCTION



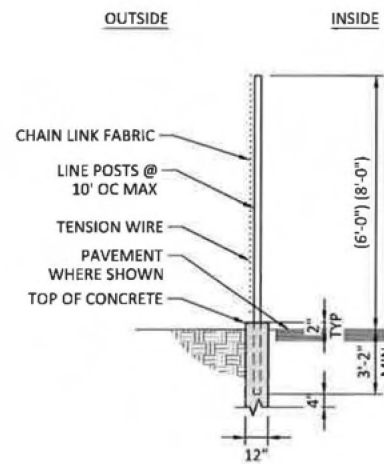
WARNING
 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE



IDAHO DEPARTMENT OF FISH AND GAME
 WINCHESTER DAM REHABILITATION
 GENERAL CIVIL NOTES

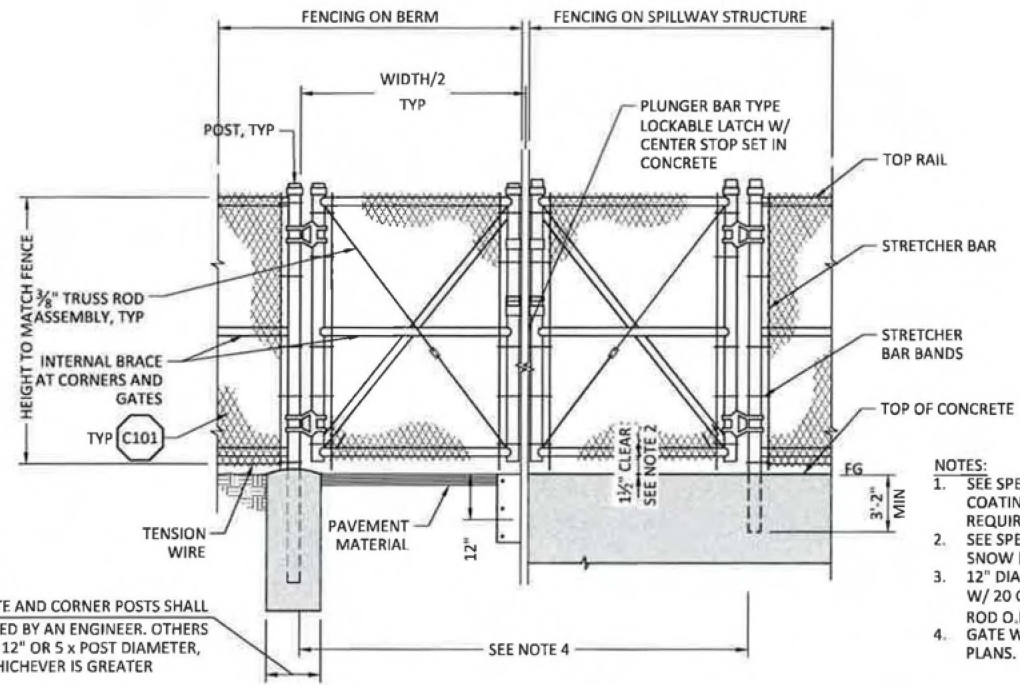
DESIGNED P. GALASKA
 DRAWN C. GERBER
 CHECKED S. KLAWITTER
 PROJECT DATE 12/19/25

DRAWING
GC001



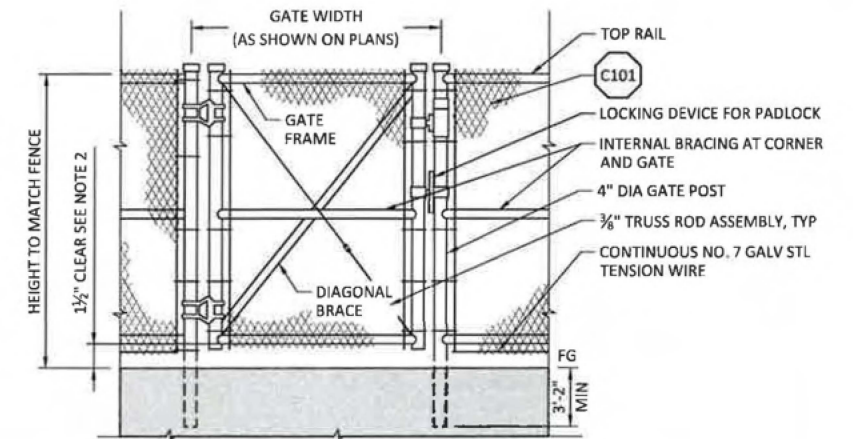
- NOTES:
- SEE SPECIFICATIONS FOR FENCE MATERIAL, COATINGS, AND INSTALLATION REQUIREMENTS.
 - EXTENSION ARM MAY BE TURNED IN AT OPTION OF OWNER.

C101 CHAIN LINK FENCE
SCALE: NTS



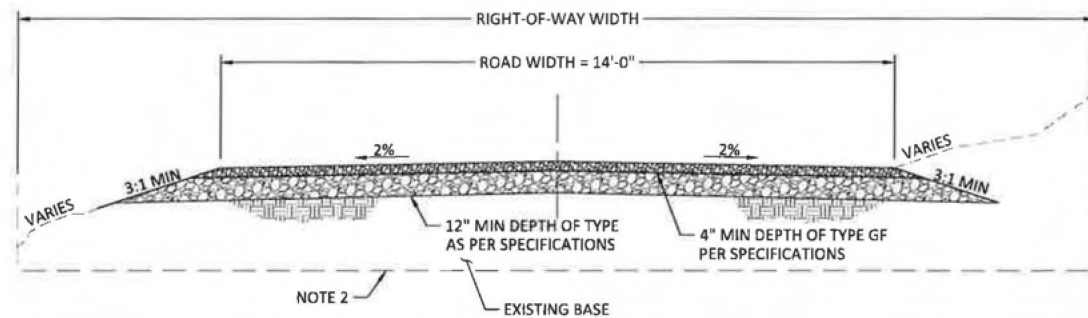
- NOTES:
- SEE SPECIFICATIONS FOR FENCE MATERIAL, COATINGS, AND INSTALLATION REQUIREMENTS.
 - SEE SPECIFICATIONS FOR CLEARANCES IN SNOW REGIONS.
 - 12" DIAMETER x 18" DEEP CONCRETE STOP W/ 20 GA STEEL PLUNGER SLEEVE, DIA = ROD O.D. + 1/2".
 - GATE WIDTH DIMENSIONS AS SHOWN ON PLANS.

C102 DOUBLE LEAF GATE
SCALE: NTS

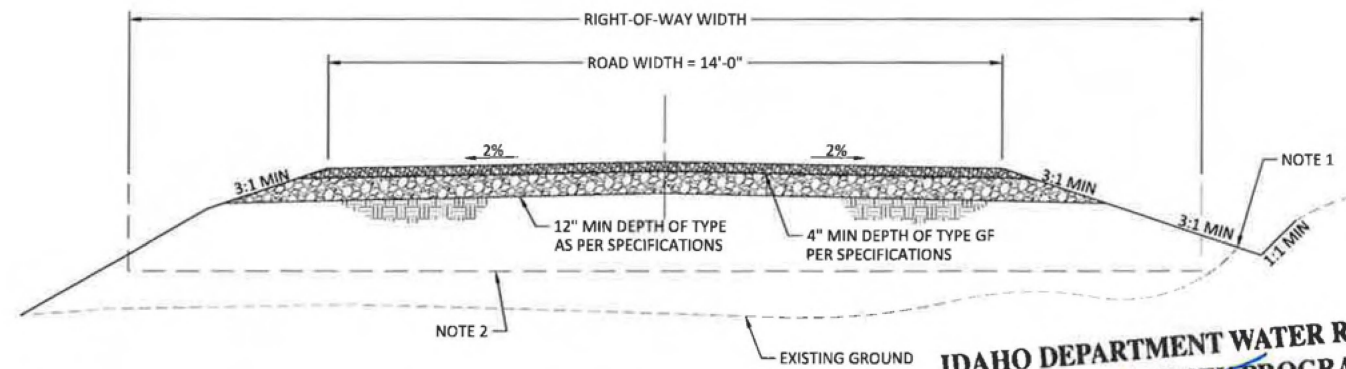


- NOTES:
- SEE SPECS FOR FENCE MATERIAL, COATINGS, AND INSTALLATION REQUIREMENTS.
 - GATE TO BE INSTALLED WITH KEEPER TO SECURE IN OPEN POSITION.
 - GATES LESS THAN 8'-0" IN WIDTH SHALL BE SINGLE LEAF.
 - SEE SPECIFICATIONS FOR CLEARANCES IN SNOW REGIONS.

C103 SINGLE LEAF PEDESTRIAN GATE
SCALE: NTS



C137 TYPICAL GRAVEL ROAD SECTION
SCALE: NTS



- NOTES:
- BORROW DITCHES SHALL HAVE A MINIMUM 3:1 SLOPE WITH 4:1 SLOPE RECOMMENDED. THE BACKSLOPE OF THE BORROW DITCH SHALL BE MINIMUM 1:1 BACKSLOPE WITH 4:1 BACKSLOPE RECOMMENDED. THE FLOW LINE OF THE DITCH SHALL BE 6" BELOW THE LOWEST AGGREGATE BASE COURSE TO ENCOURAGE DRAINAGE.
 - OVER EXCAVATE EXISTING GRADE 12" MIN. PROOF ROLL AND BACKFILL WITH TYPE SF PER SPECIFICATIONS.

ROADWAY FILL SECTION

**IDAHO DEPARTMENT WATER RESOURCES
DAM SAFETY PROGRAM**

Reviewed *[Signature]*

Approved *[Signature]*

1 28 26

Date of Approval

REV	DATE	BY	DESCRIPTION
0	12/19/25	MM	ISSUED FOR CONSTRUCTION



WARNING
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

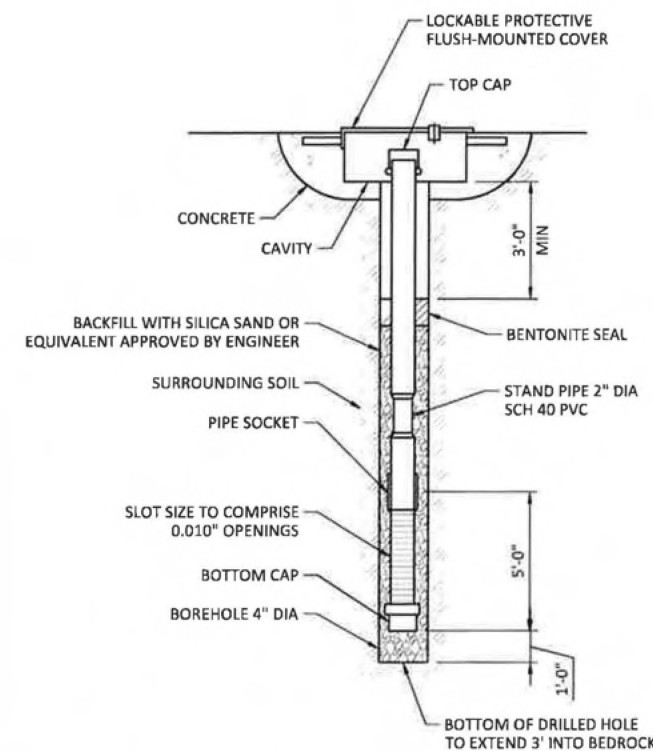


IDAHO DEPARTMENT OF FISH AND GAME
WINCHESTER DAM REHABILITATION

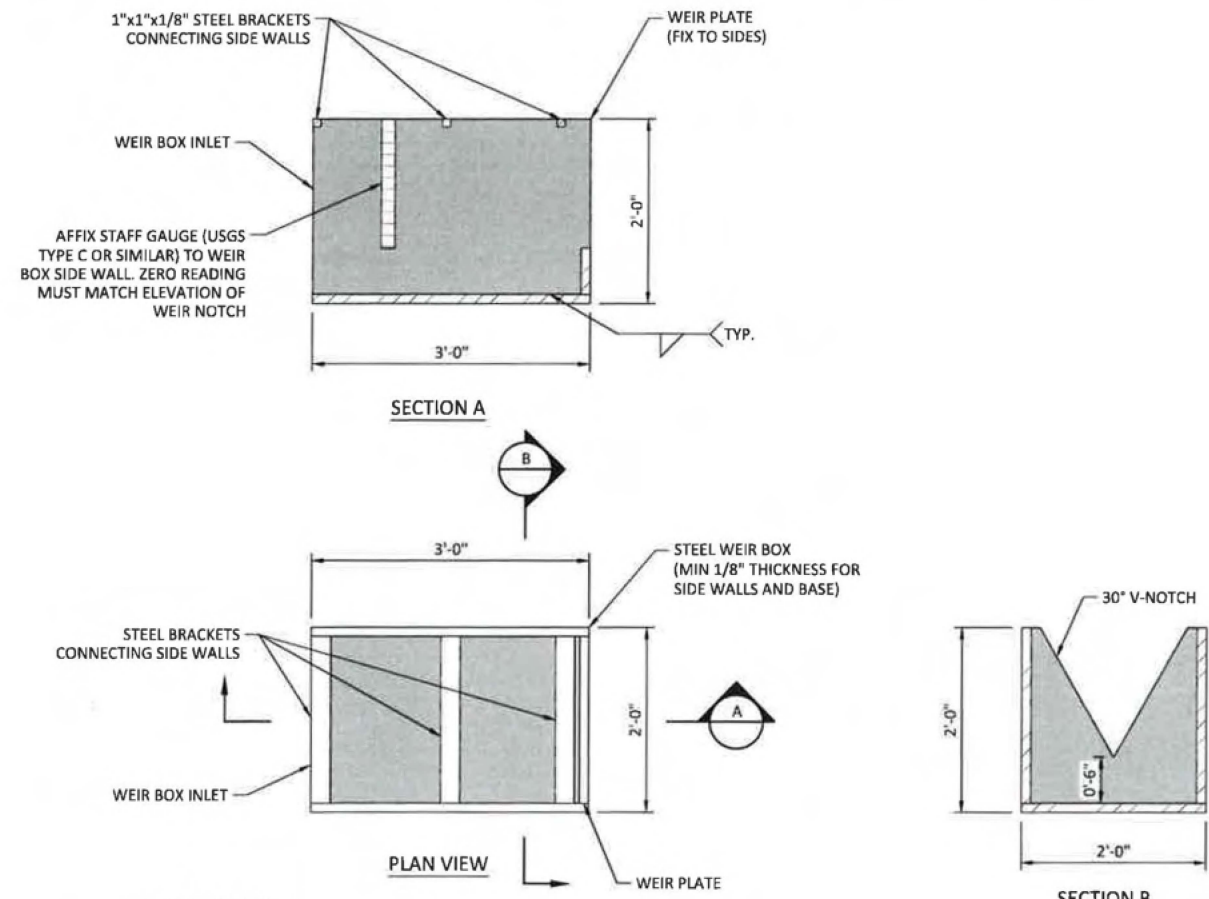
CIVIL
STANDARD DETAILS

DESIGNED P. GALASKA
DRAWN C. GERBER
CHECKED S. KLAWITTER
PROJECT DATE 12/19/25

DRAWING
GC002



1 STANDPIPE PIEZOMETER DETAIL
SCALE: NTS



2 WEIR BOX
SCALE: NTS

- SHEET NOTES:**
1. INSTALLATION OF STANDPIPE PIEZOMETERS TO BE MONITORED AND LOGGED BY A QUALIFIED GEOTECHNICAL ENGINEER LICENSED IN THE STATE OF IDAHO.
 2. WEIR BOXES TO BE INSTALLED IN LOCATIONS OF KNOWN SEEPAGE AT THE TOE OF THE DAM. LOCATIONS MUST BE CONFIRMED IN COORDINATION WITH THE ENGINEER, IDFG AND IDWR.
 3. WEIR BOXES TO BE PLACED ON A FLAT, LEVEL SURFACE. THE WEIR PLATES MUST BE PLUMB AND LEVEL.
 4. THE WEIR BOX SIDE WALLS SHALL BE BACKFILLED TO A MINIMUM OF 1.5 FEET ABOVE THE BASE OF THE BOX.

IDAHO DEPARTMENT WATER RESOURCES
DAM SAFETY PROGRAM

Reviewed: *[Signature]*

Approved: *[Signature]*

Date of Approval: 1 28 26

REV	DATE	BY	DESCRIPTION
0	12/19/25	MM	ISSUED FOR CONSTRUCTION



WARNING
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

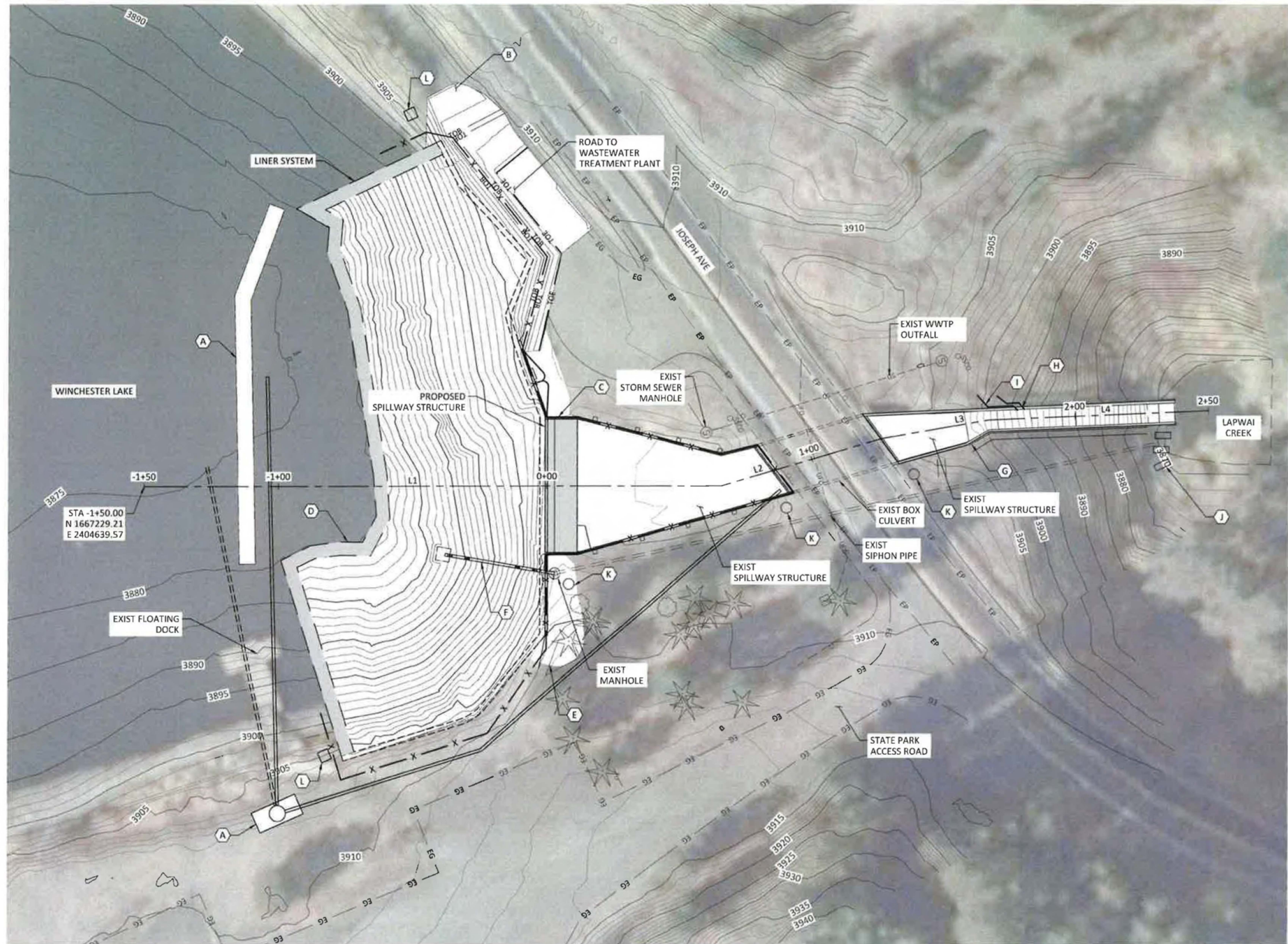


IDAHO DEPARTMENT OF FISH AND GAME
WINCHESTER DAM REHABILITATION

INSTRUMENTATION
DETAILS

DESIGNED B. WARD
DRAWN C. GERBER
CHECKED A. BONTEMPO
PROJECT DATE 12/19/25

DRAWING
GC003



- SHEET KEYNOTES:**
- A CONSTRUCT TEMPORARY COFFERDAM AND BYPASS SYSTEM, SEE SHEET C101.
 - B CONSTRUCT NEW ACCESS ROAD TO WASTEWATER TREATMENT PLANT, SEE SHEET C105.
 - C CONSTRUCT NEW SPILLWAY CONTROL STRUCTURE AND APPROACH WALLS, SEE SHEET S103.
 - D INSTALL NEW LINER SYSTEM, SEE SHEET C201.
 - E REGRADE BACKFILL AFTER SPILLWAY MODIFICATIONS TO PROVIDE RUNOFF BACK INTO WINCHESTER LAKE OR THE SPILLWAY, SEE SHEET C105.
 - F INSTALL NEW SIPHON PIPE AND RELOCATE EXISTING INTAKE STRUCTURE. SEE SHEET C107.
 - G NEW WALL EXTENSIONS ON EXISTING SPILLWAY WALLS, SEE SHEET S102.
 - H EXISTING WWTP OUTFALL PIPE TO BE REROUTED, SEE SHEET C300.
 - I EXISTING WWTP EMERGENCY DRAIN LINE TO BE REROUTED, SEE SHEET C300.
 - J NEW WEIR BOXES, SEE SHEET C201.
 - K THREE NEW PIEZOMETERS, SEE SHEET C201.
 - L TEN NEW ECOLOGY BLOCKS AND DEBRIS BOOM.

ALIGNMENT LINE TABLE				
LINE #	LENGTH	BEARING	START POINT	END POINT
L1	193.90	N23°55'51"E	N 1667248.56, E 2404648.16	N 1667425.80, E 2404726.81
L2	61.84	N7°27'54"E	N 1667425.80, E 2404726.81	N 1667487.12, E 2404734.85
L3	40.74	N14°04'53"E	N 1667487.12, E 2404734.85	N 1667526.63, E 2404744.76
L4	82.34	N21°35'13"E	N 1667526.63, E 2404744.76	N 1667603.19, E 2404775.05

**IDAHO DEPARTMENT WATER RESOURCES
DAM SAFETY PROGRAM**

Reviewed: *[Signature]*

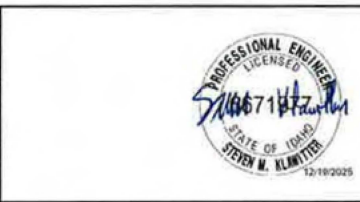
Approved: *[Signature]*

Date of Approval: **12 28 26**

OVERALL SITE KEY PLAN
SCALE: 1" = 20'



REV	DATE	BY	DESCRIPTION
0	12/19/25	MM	ISSUED FOR CONSTRUCTION



WARNING
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

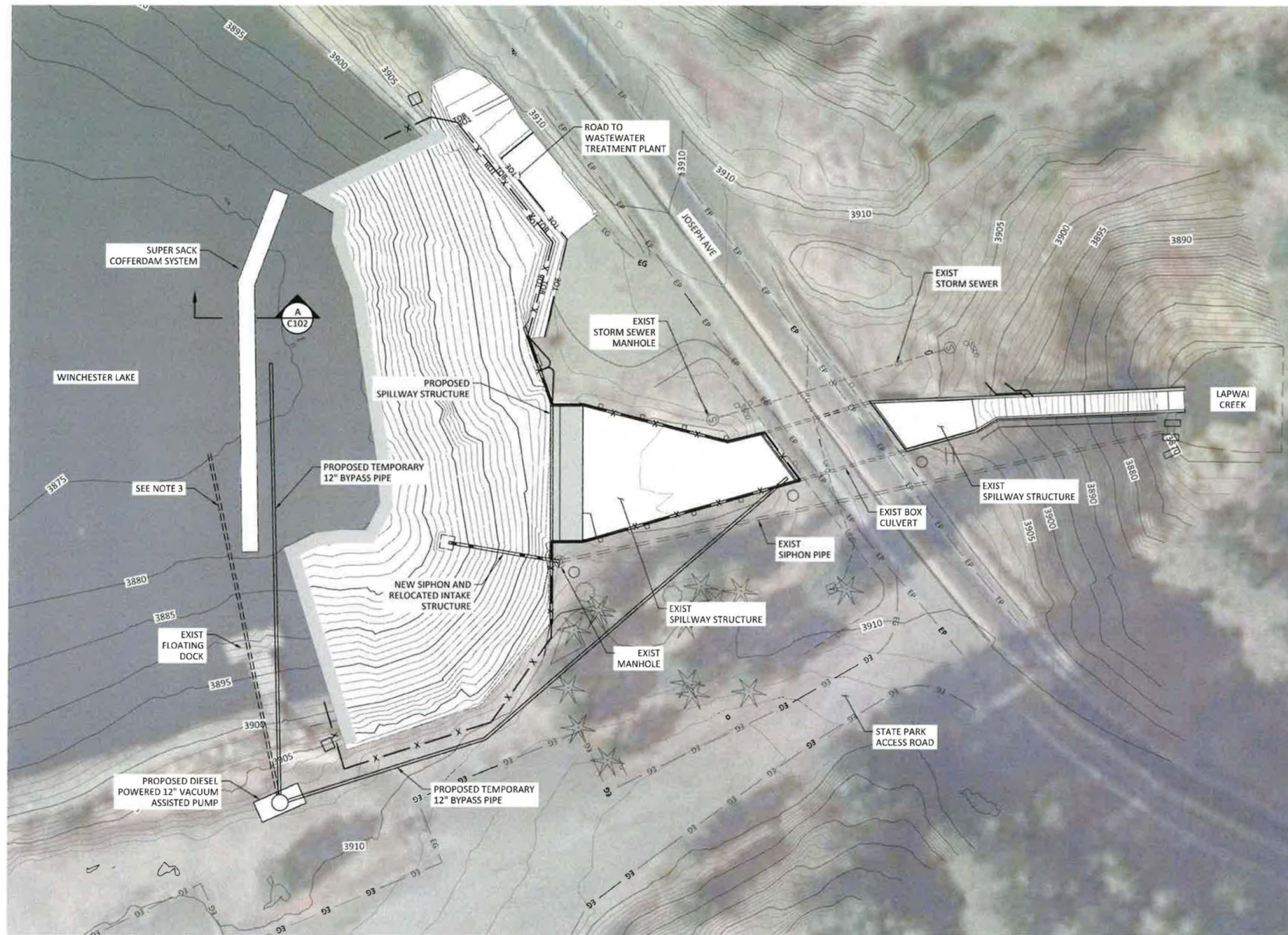


IDAHO DEPARTMENT OF FISH AND GAME
WINCHESTER DAM REHABILITATION
OVERALL SITE KEY PLAN

DESIGNED: P. GALASKA
DRAWN: C. GERBER
CHECKED: S. KLAWITTER
PROJECT DATE: 12/19/25

DRAWING
C100

C:\Users\ChloeGerber\OneDrive\Documents\Winchester Dam Rehab\Project Files\Drawings\125-005_C100_05-CIV.dwg



SHEET NOTES:

1. IDFG TO INITIALLY DEWATER WINCHESTER LAKE TO THE LOWEST EXTENT POSSIBLE WITH THE EXISTING SIPHON, APPROXIMATELY ELEVATION 3892.0
2. CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING THE LAKE BELOW THE ELEVATION ACHIEVED BY USE OF THE SIPHON.
3. DRAWINGS ASSUME THAT A PUMPING SYSTEM AND SUPERSACK COFFERDAM (SEE C102) WILL BE UTILIZED TO LOWER THE LAKE LEVEL AND MAINTAIN A DRY WORK ENVIRONMENT FOR THE DURATION OF THE IN WATER WORK. THE PUMPING SYSTEM WILL BE OPERATED IN THE FOLLOWING PHASES:
 PHASE 1 IDFG TO LOWER RESERVOIR WITH EXISTING SIPHON SYSTEM.
 PHASE 2 CONTRACTOR TO DEWATER RESERVOIR TO CONTRACTOR'S REQUIRED ELEVATION TO ALLOW INSTALLATION OF CONTRACTOR DESIGNED COFFERDAM.
 PHASE 3 INSTALL COFFERDAM.
 PHASE 4 DEWATER WORK AREA DOWNSTREAM OF COFFERDAM.
 PHASE 5 MOVE DEWATERING SYSTEM UPSTREAM OF COFFERDAM TO MAINTAIN RESERVOIR ELEVATION TO THE MAXIMUM DESIGN LEVEL OR BELOW, OF THE COFFERDAM SYSTEM.

**IDAHO DEPARTMENT WATER RESOURCES
DAM SAFETY PROGRAM**

Reviewed *[Signature]*

Approved *[Signature]*

Date of Approval 1 28 26

COFFERDAM DEWATERING PLAN
SCALE: 1" = 20'



REV	DATE	BY	DESCRIPTION
0	12/19/25	MM	ISSUED FOR CONSTRUCTION

PROFESSIONAL ENGINEER
LICENSED
[Signature]
STATE OF IDAHO
STEVEN W. KLAWITTER
12/19/2025

WARNING
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

McMillen
1471 Stoneham Dr. Ste 100 Boise, ID 83725 | (208) 377-4274 | mcmillen.com



IDAHO DEPARTMENT OF FISH AND GAME
WINCHESTER DAM REHABILITATION
COFFERDAM/DEWATERING PLAN

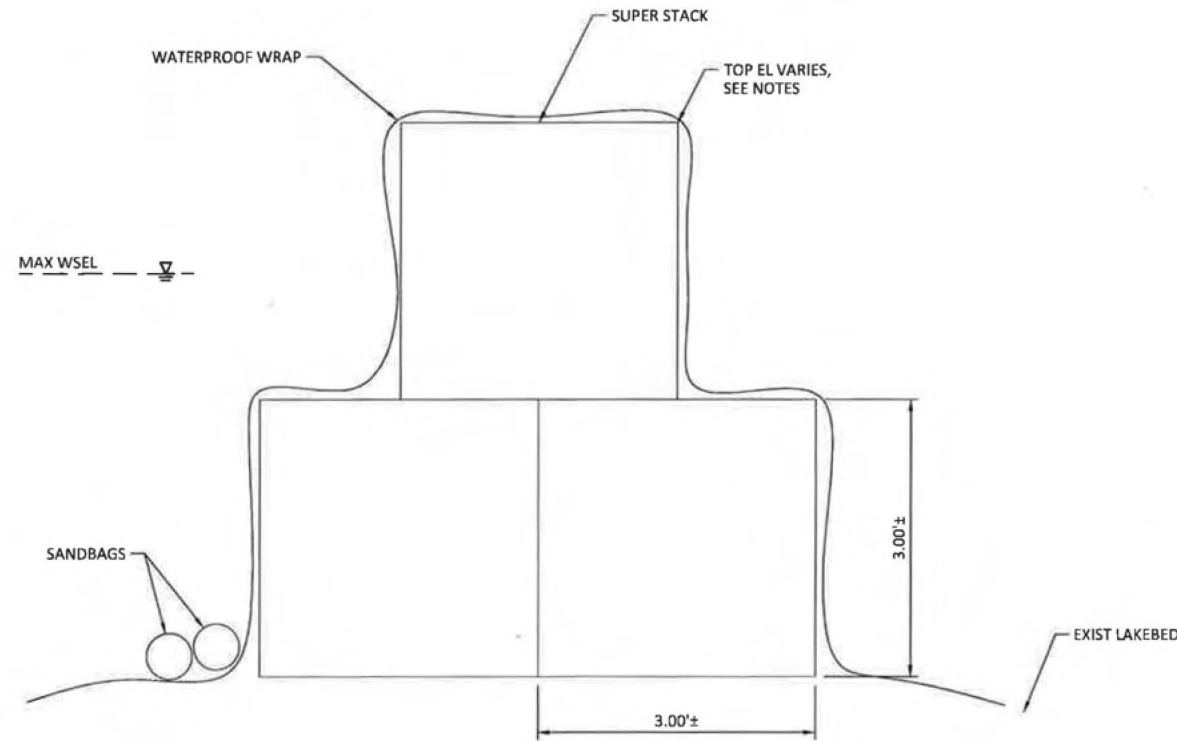
DESIGNED P. GALASKA
DRAWN C. GERBER
CHECKED S. KLAWITTER
PROJECT DATE 12/19/25

DRAWING
C101

C:\Users\ChloeGerber\DC\Projects\Winchester Dam Rehab\Project Files\Drawings\25-005 - Winchester Dam Rehab\Project Files\Drawings\25-005_C101_05-CIV.dwg

SHEET NOTES:

1. TEMPORARY BERM STRUCTURE TO FOLLOW SPECIFICATION 13 40 00. DESIGN, PROCUREMENT, INSTALLATION, MAINTENANCE, AND REMOVAL SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR, AND SHALL MEET ONE OF THE FOLLOWING APPROVED METHODS; AT THE CONTRACTOR'S OPTION:
 1. CONVENTIONAL BERM
 2. FLEXIBLE INTERMEDIATE BULK CONTAINERS (FBIC; E.G. SUPER SACKS)
 3. PORTADAM
 THE TEMPORARY BERM STRUCTURE SHALL BE DESIGNED BY A QUALIFIED, LICENSED ENGINEER IN THE STATE OF IDAHO.
2. COFFERDAM HEIGHT WILL VARY BASED ON CONTRACTOR'S DEWATERING PLAN AND MAINTAINED WATER LEVEL DURING CONSTRUCTION.



A COFFERDAM - SECTION
C101 SCALE: 1"= 1'-0"



IDAHO DEPARTMENT WATER RESOURCES
DAM SAFETY PROGRAM

Reviewed [Signature]

Approved [Signature]

Date of Approval 1 28 26

REV	DATE	BY	DESCRIPTION
0	12/19/25	MM	ISSUED FOR CONSTRUCTION



WARNING
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

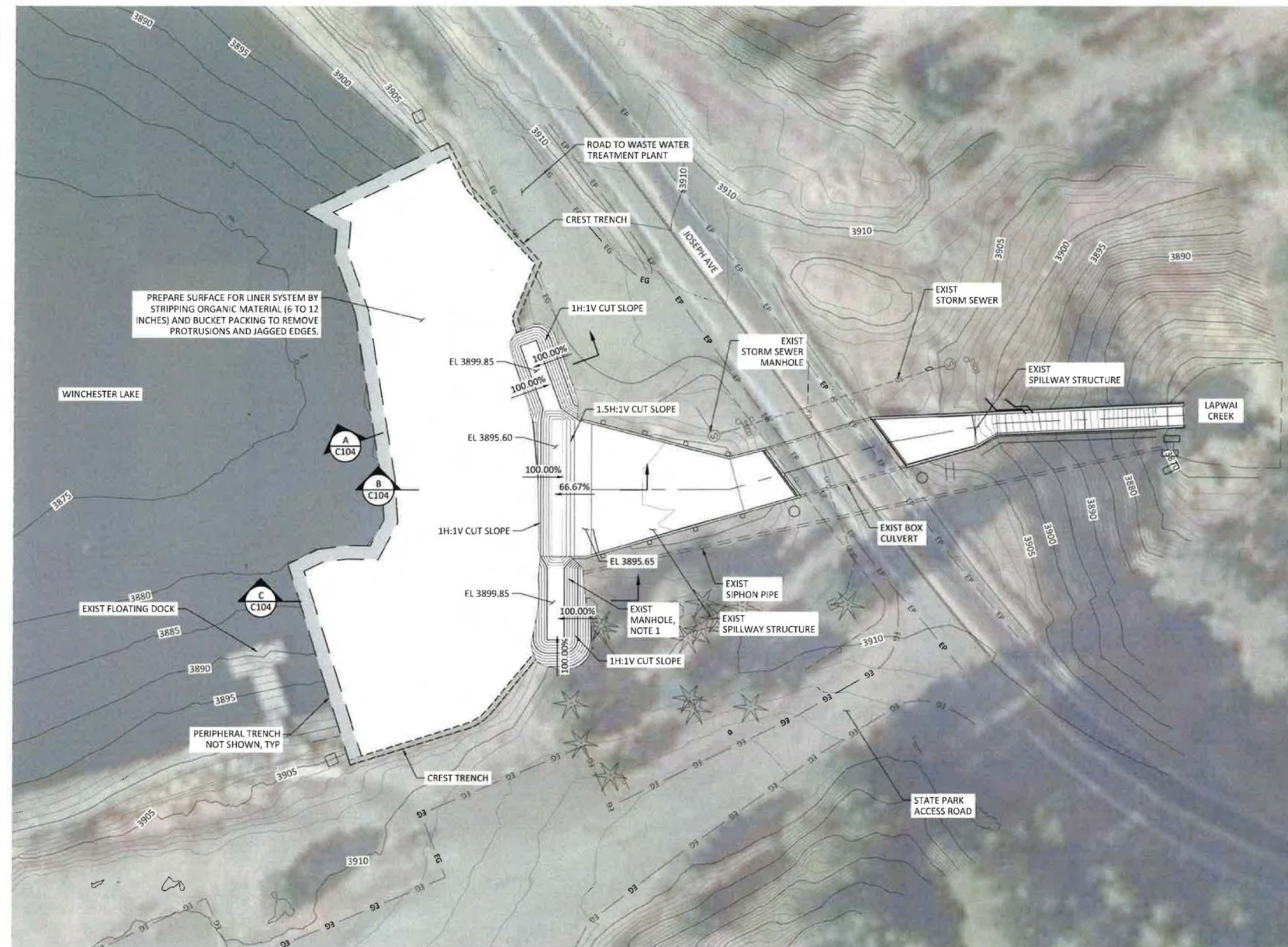


IDAHO DEPARTMENT OF FISH AND GAME
WINCHESTER DAM REHABILITATION

COFFERDAM/DEWATERING
SECTIONS AND DETAILS

DESIGNED P. GALASKA
DRAWN C. GERBER
CHECKED S. KLAWITTER
PROJECT DATE 12/19/25

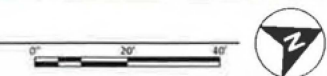
DRAWING
C102



SHEET NOTES:

1. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DISTURBANCES OR DAMAGE TO THE EXISTING MANHOLE AND SIPHON LOCATED ADJACENT TO THE PROPOSED EXCAVATION NEAR THE RIGHT SPILLWAY APPROACH WALL. CONTRACTOR SHALL EXCAVATE EQUALLY AROUND THE MANHOLE. PROTECTIVE MEASURES SHALL BE IMPLEMENTED AS REQUIRED, INCLUDING HAND EXCAVATION OR USE OF VACUUM EXCAVATION WITHIN PROXIMITY TO THE MANHOLE, AS DETERMINED BY THE ENGINEER. ANY DAMAGE TO THE MANHOLE OR ITS CONNECTIONS RESULTING FROM CONSTRUCTION ACTIVITIES SHALL BE PROMPTLY REPORTED AND REPAIRED AT THE CONTRACTOR'S EXPENSE.
2. CONTRACTOR MUST REMOVE EXISTING UPSTREAM SIPHON PIPE TO FACILITATE WORK ACTIVITIES RELATED TO THE SPILLWAY AND LINER SYSTEM INSTALLATION.

EXCAVATION PLAN
SCALE: 1" = 20'



**IDAHO DEPARTMENT WATER RESOURCES
DAM SAFETY PROGRAM**

Reviewed *[Signature]*

Approved *[Signature]*

Date of Approval **1 28 26**

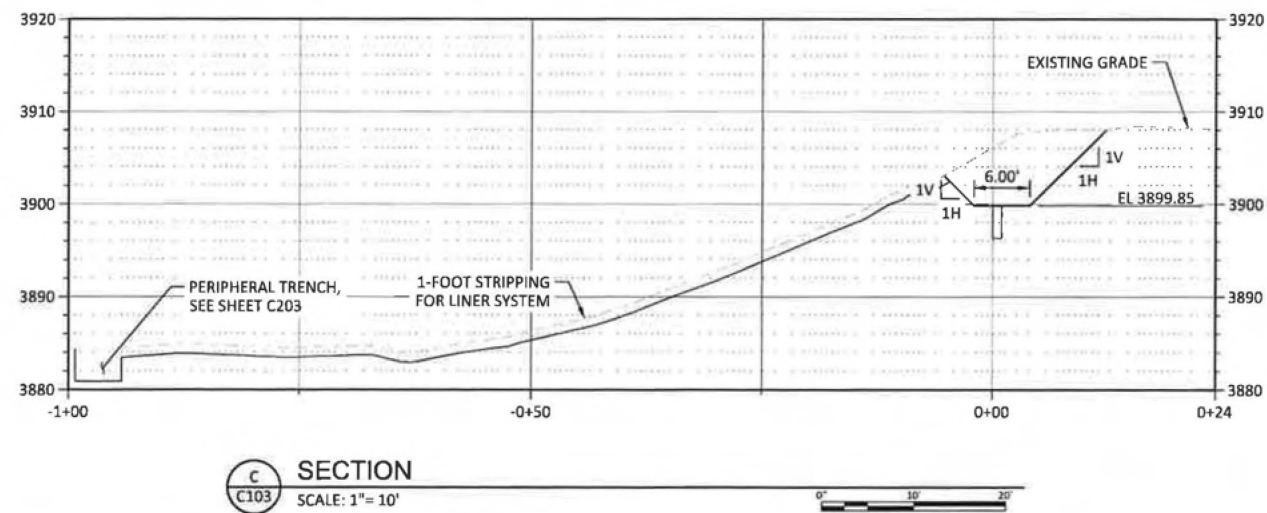
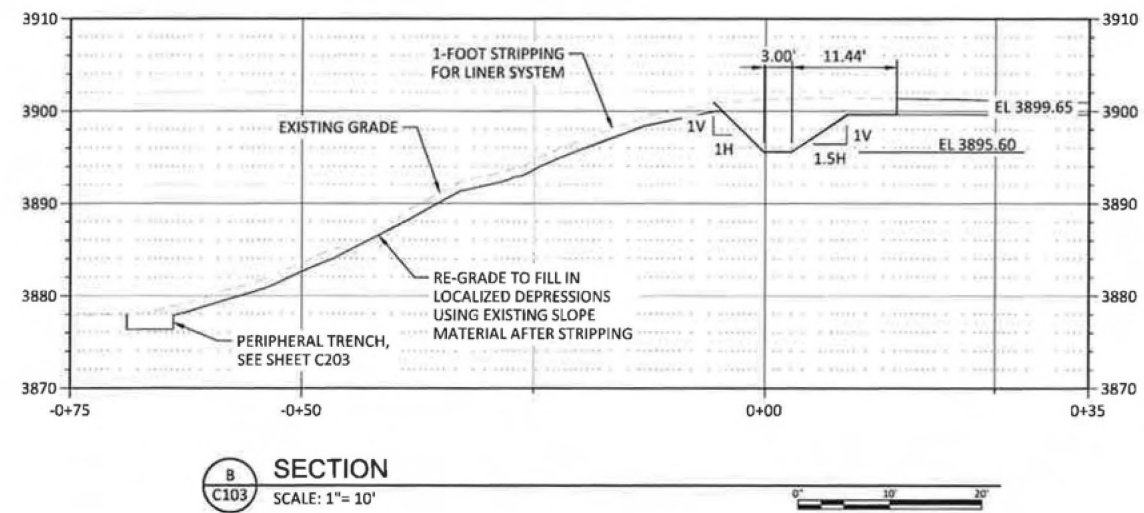
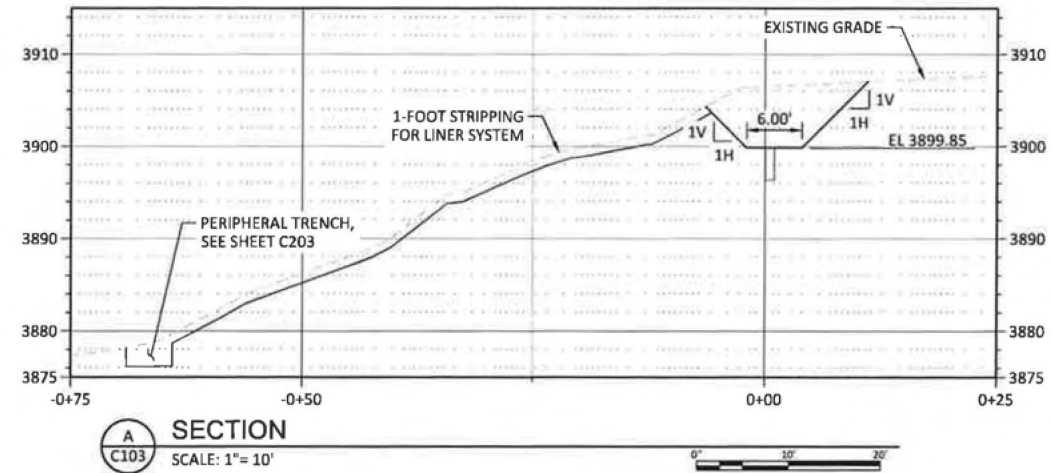
REV	DATE	BY	DESCRIPTION
0	12/19/25	MM	ISSUED FOR CONSTRUCTION

WARNING
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

IDAHO DEPARTMENT OF FISH AND GAME
WINCHESTER DAM REHABILITATION
EXCAVATION PLAN

DESIGNED P. GALASKA
DRAWN C. GERBER
CHECKED S. KLAWITTER
PROJECT DATE 12/19/25

DRAWING
C103



IDAHO DEPARTMENT WATER RESOURCES
DAM SAFETY PROGRAM

Reviewed [Signature]

Approved [Signature]

Date of Approval 1 28 26

REV	DATE	BY	DESCRIPTION
0	12/19/25	MM	ISSUED FOR CONSTRUCTION



WARNING
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

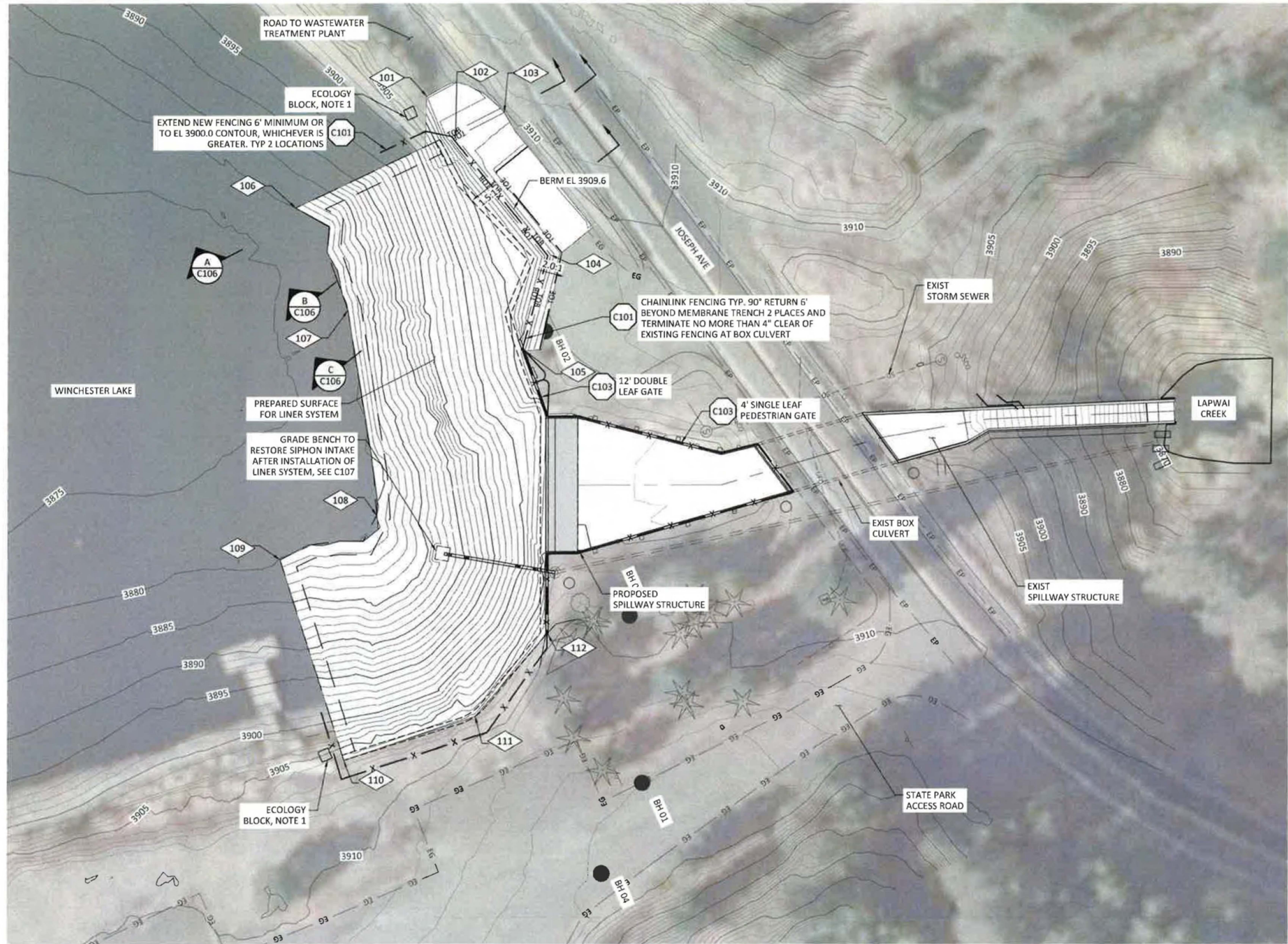


IDAHO DEPARTMENT OF FISH AND GAME
WINCHESTER DAM REHABILITATION

EXCAVATION
SECTIONS

DESIGNED P. GALASKA
DRAWN C. GERBER
CHECKED S. KLAWITTER
PROJECT DATE 12/19/25

DRAWING
C104



FINAL GRADING PLAN
SCALE: 1" = 20'

SHEET NOTES:

- CONTRACTOR TO COORDINATE WITH IDFG TO INSTALL UP TO 10 NEW ECOLOGY BLOCKS OUTSIDE OF THE LINER SYSTEM EXTENTS FOR THE DEBRIS BOOM EXTENSION. IDFG RESPONSIBLE FOR DESIGN, INSTALLATION, AND IMPLEMENTATION OF THE DEBRIS BOOM.

GRADING POINTS			
POINT #	NORTHING	EASTING	ELEVATION
101	1667384.36	2404549.58	3907.94
102	1667387.98	2404568.03	3909.60
103	1667408.11	2404566.73	3909.60
104	1667402.19	2404622.42	3909.60
105	1667378.94	2404651.29	3909.60
106	1667323.02	2404567.83	3880.00
107	1667325.07	2404610.55	3880.00
108	1667303.82	2404684.86	3879.98
109	1667264.54	2404685.41	3880.20
110	1667255.58	2404763.23	3906.71
111	1667306.96	2404768.34	3907.45
112	1667344.00	2404751.45	3910.13

**IDAHO DEPARTMENT WATER RESOURCES
DAM SAFETY PROGRAM**

Reviewed: *[Signature]*
 Approved: _____
 Date of Approval: 12 28 26

REV	DATE	BY	DESCRIPTION
0	12/19/25	MM	ISSUED FOR CONSTRUCTION



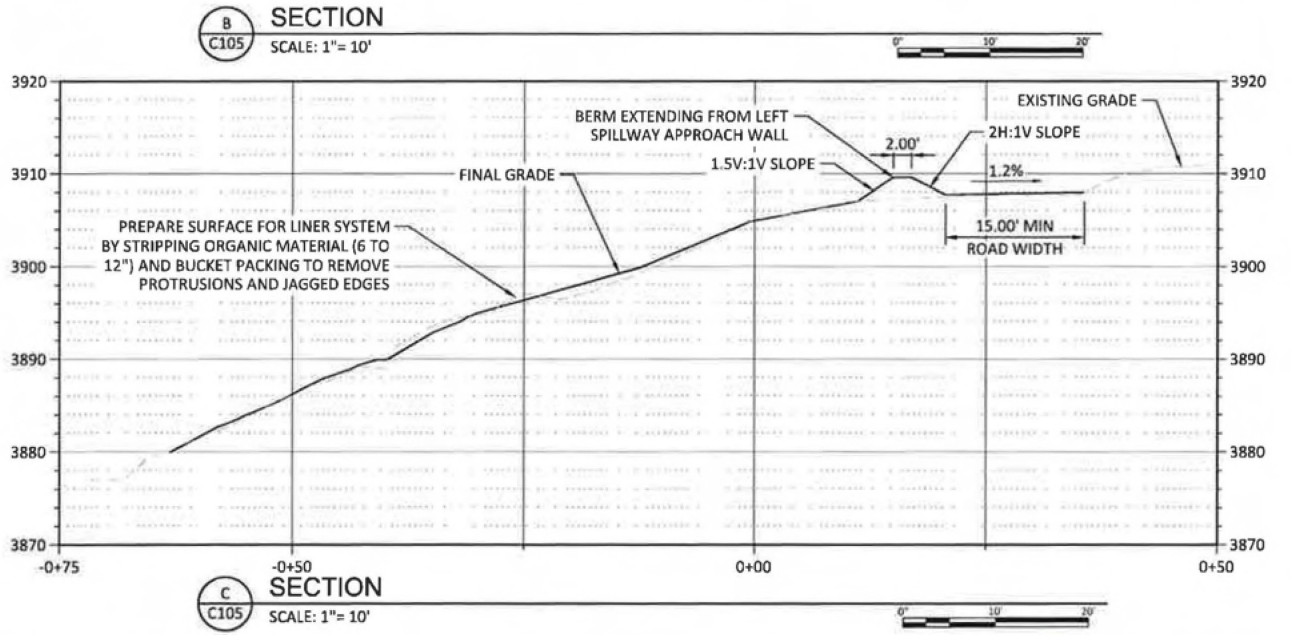
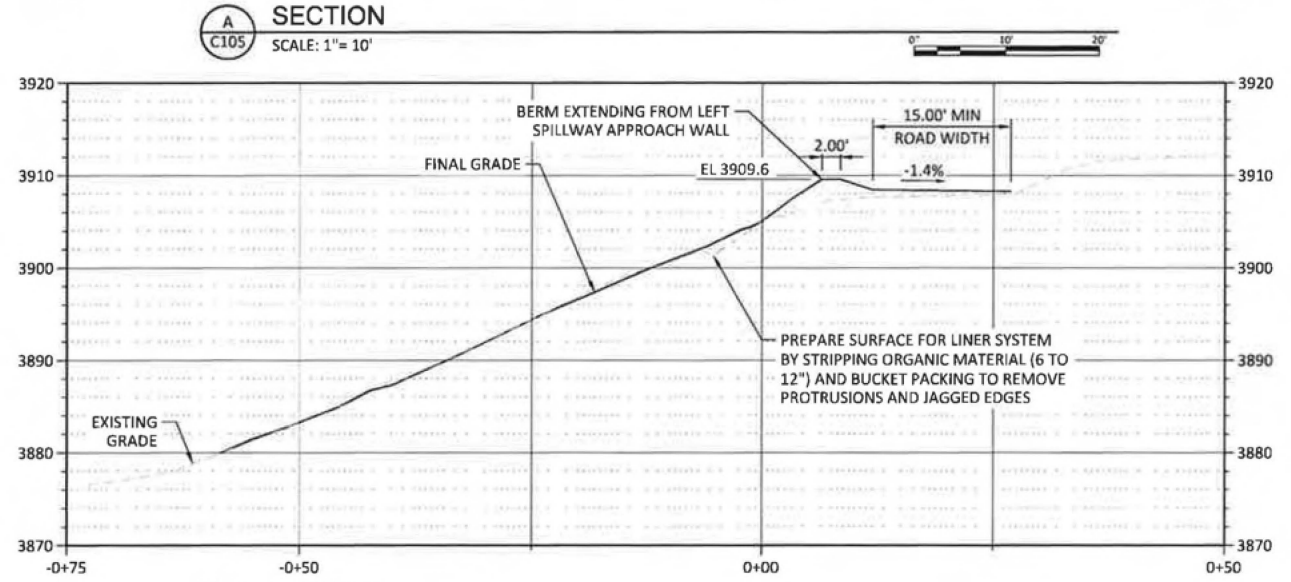
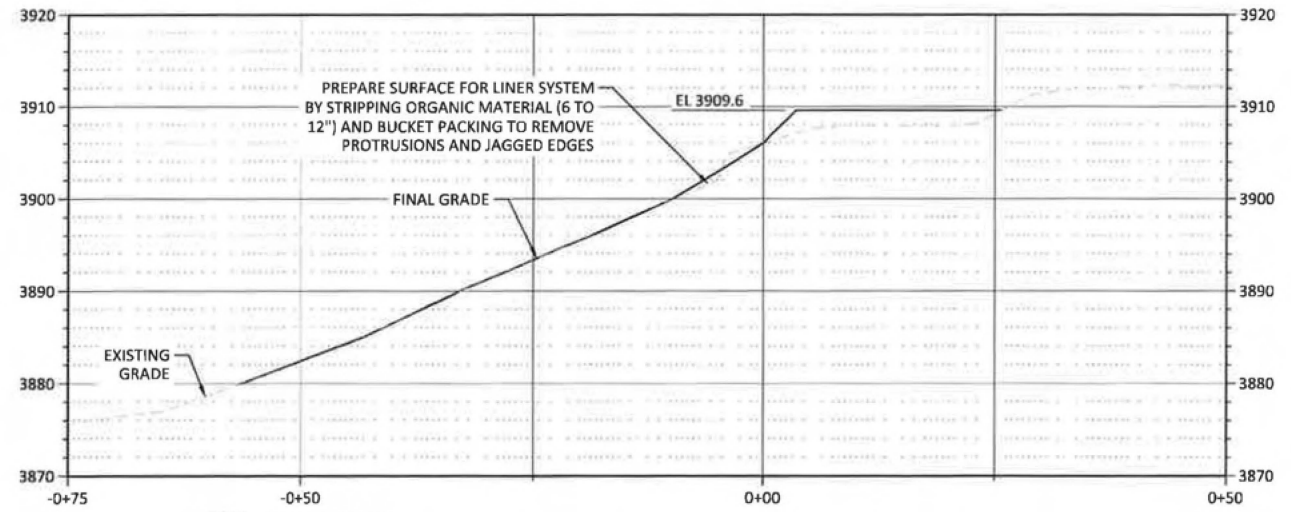
WARNING
 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE



IDAHO DEPARTMENT OF FISH AND GAME
 WINCHESTER DAM REHABILITATION
FINAL GRADING PLAN

DESIGNED: P. GALASKA
 DRAWN: C. GERBER
 CHECKED: S. KLAWITTER
 PROJECT DATE: 12/19/25

DRAWING
C105



IDAHO DEPARTMENT WATER RESOURCES
DAM SAFETY PROGRAM

Reviewed *[Signature]*

Approved *[Signature]*

Date of Approval **1 28 26**

REV	DATE	BY	DESCRIPTION
0	12/19/25	MM	ISSUED FOR CONSTRUCTION



WARNING
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE



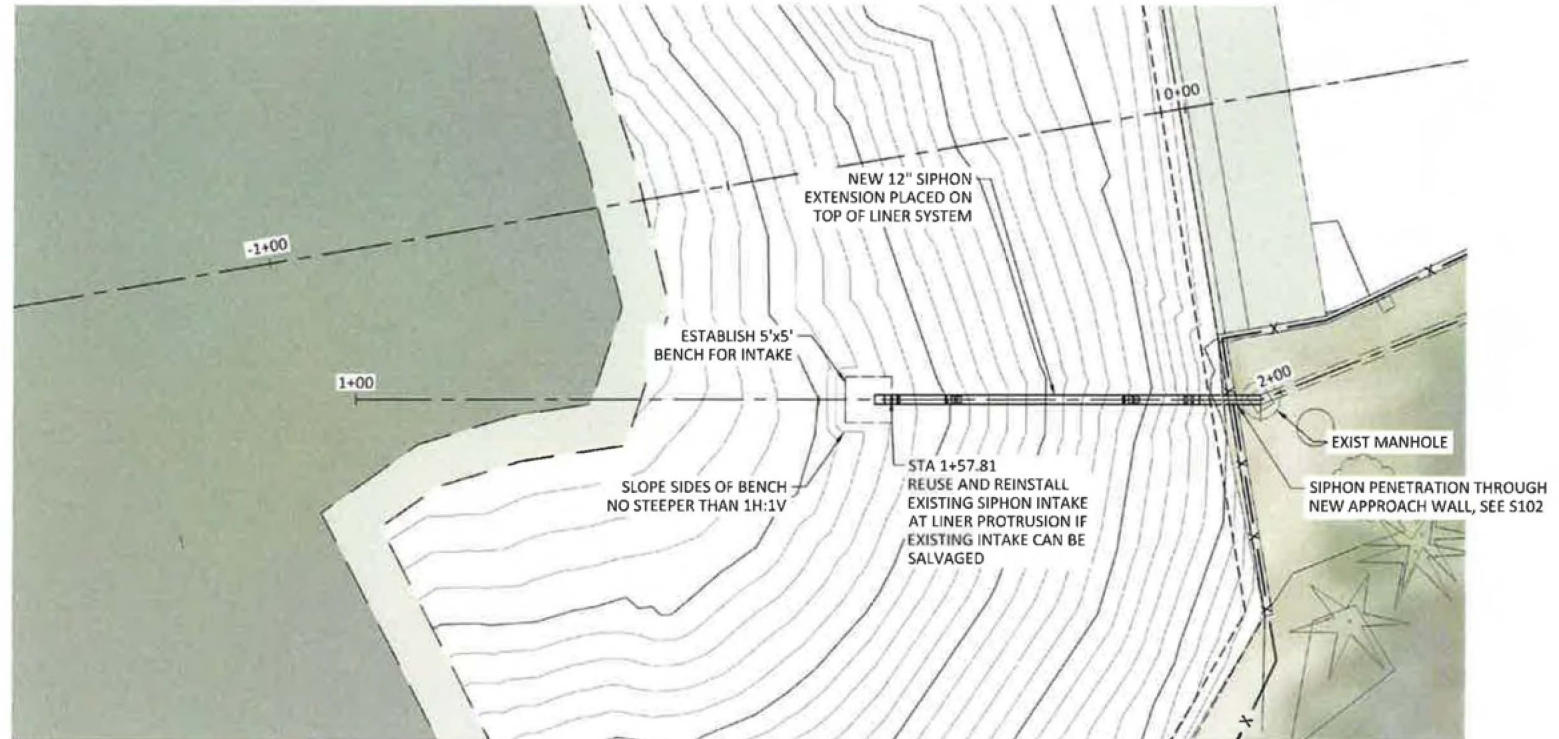
IDAHO DEPARTMENT OF FISH AND GAME
WINCHESTER DAM REHABILITATION

FINAL GRADING SECTIONS

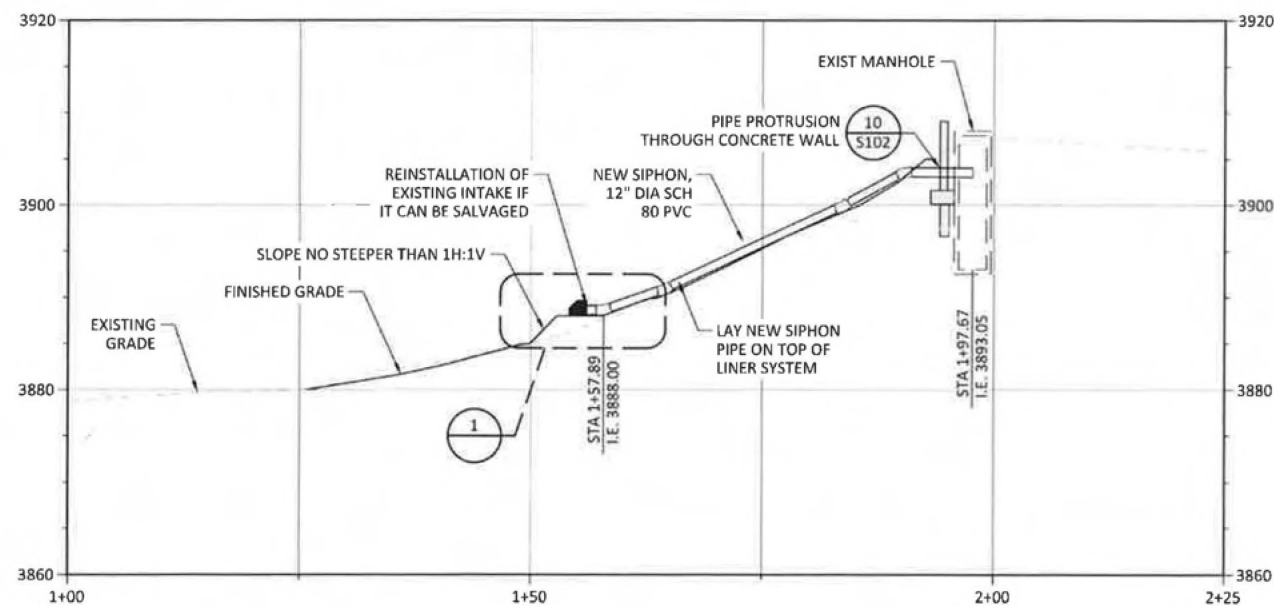
DESIGNED P. GALASKA
DRAWN C. GERBER
CHECKED S. KLAWITTER
PROJECT DATE 12/19/25

DRAWING
C106

C:\Users\ChloeGerber\Documents\Projects\Winchester Dam Rehab\Project Files\Drawings\25-005_C105_05-CIV.dwg



SIPHON PLAN
SCALE: 1" = 10'



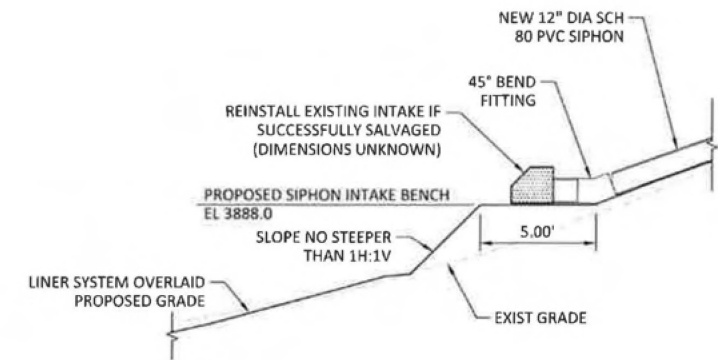
SIPHON PROFILE
SCALE: 1" = 10'

SHEET NOTES:

1. LOCATION AND ELEVATIONS OF EXISTING SIPHON ARE CONSIDERED APPROXIMATE AND BASED ON RECORD DRAWINGS AND HISTORICAL INFORMATION. CONTRACTOR TO VERIFY IN FIELD.
2. SEE TEMPORARY COFFERDAM AND DEWATERING SPECIFICATION AND PLAN SHEET C101 FOR DETAILS OR REQUIREMENTS FOR DEWATERING INFORMATION.
3. CONTRACTOR TO DEMOLISH EXISTING SIPHON PIPE AND SALVAGE EXISTING INTAKE TO PERMIT GRADING WORK AND INSTALLATION OF LINER SYSTEM PRIOR TO INSTALLATION OF NEW EXTENDED SIPHON PIPE.
4. IF THE EXISTING INTAKE CAN BE SALVAGED, CONNECT THE INTAKE TO THE PROTRUDING SIPHON SECTION.
5. CONTRACTOR TO INSTALL NEW 12" DIAMETER SCH 80 PVC SIPHON PIPE AND RE-GRADE SURFACE, CREATING 5'x5' BENCH AT EL 3888. REFERENCE GC001 FOR GENERAL NOTES ON PVC PIPING AND JOINTS.
6. AFTER LINER SYSTEM IS INSTALLED, COMPLETE PIPE PROTRUSION (SEE DETAIL ON S102) TO ALLOW SIPHON PIPE TO PASS THROUGH THE NEW CONCRETE WINGWALL.

**IDAHO DEPARTMENT WATER RESOURCES
DAM SAFETY PROGRAM**

Reviewed: *[Signature]*
Approved: *[Signature]*
Date of Approval: 1-28-26



1 INTAKE PAD GRADING DETAIL
SCALE: NTS

REV	DATE	BY	DESCRIPTION
0	12/19/25	MM	ISSUED FOR CONSTRUCTION

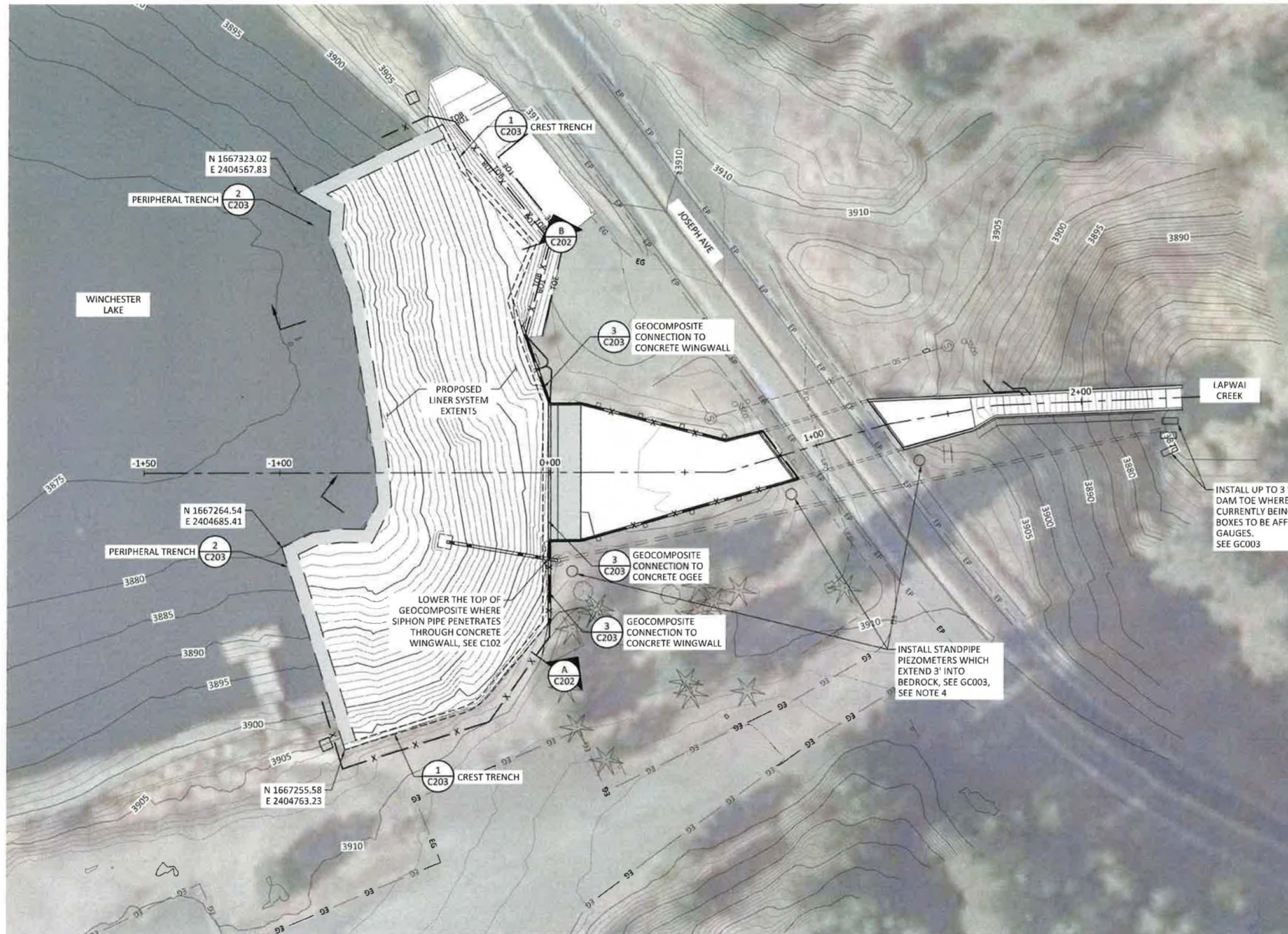


WARNING
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE



IDAHO DEPARTMENT OF FISH AND GAME WINCHESTER DAM REHABILITATION SIPHON EXTENSION PLAN AND PROFILE	DESIGNED <u>P. GALASKA</u>	DRAWING C107
	DRAWN <u>C. GERBER</u>	
CHECKED <u>S. KLAWITTER</u>		
PROJECT DATE <u>12/19/25</u>		

C:\Users\ChloeGerber\Documents\McMillen Inc\25-005 - Winchester Dam Rehab\Project Files\Drawings\25-005_C107_05-CIV.dwg



SHEET NOTES:

1. FOR EXCAVATION AND GRADING DEFINITION OF SCOPE OF WORK, SEE SHEETS C103 TO C106.
2. CONTRACTOR SHALL PROVIDE TO ENGINEER FOR APPROVAL THE SUBMITTALS LISTED IN SPECIFICATIONS 01 33 00 AND 31 05 19 FOR THE LINER SYSTEM:
3. INSTALLATION OF LINER SYSTEM SHALL NOT OCCUR WHEN AMBIENT TEMPERATURE IS BELOW 40°F WITHOUT PRIOR APPROVAL OF ENGINEER. IF THE LINER SYSTEM IS TO BE INSTALLED IN AMBIENT TEMPERATURES BELOW 40°, THE CONTRACTOR SHALL SUBMIT A COLD WEATHER WORK PLAN TO THE ENGINEER FOR APPROVAL.
4. FINAL PIEZOMETER LOCATIONS SHALL BE ADJUSTED IN THE FIELD BY THE ENGINEER AS REQUIRED TO ACCOMMODATE DRILL RIG ACCESS. UTILITY LOCATION AND CLEARANCE OF EXISTING SIPHON PIPE AND OTHER BURIED UTILITIES WILL BE REQUIRED.

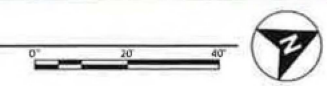
**IDAHO DEPARTMENT WATER RESOURCES
DAM SAFETY PROGRAM**

Reviewed: 

Approved: 

Date of Approval: **1 28 26**

LINER SYSTEM AND INSTRUMENTATION PLAN
SCALE: 1" = 20'



REV	DATE	BY	DESCRIPTION
0	12/19/25	MM	ISSUED FOR CONSTRUCTION

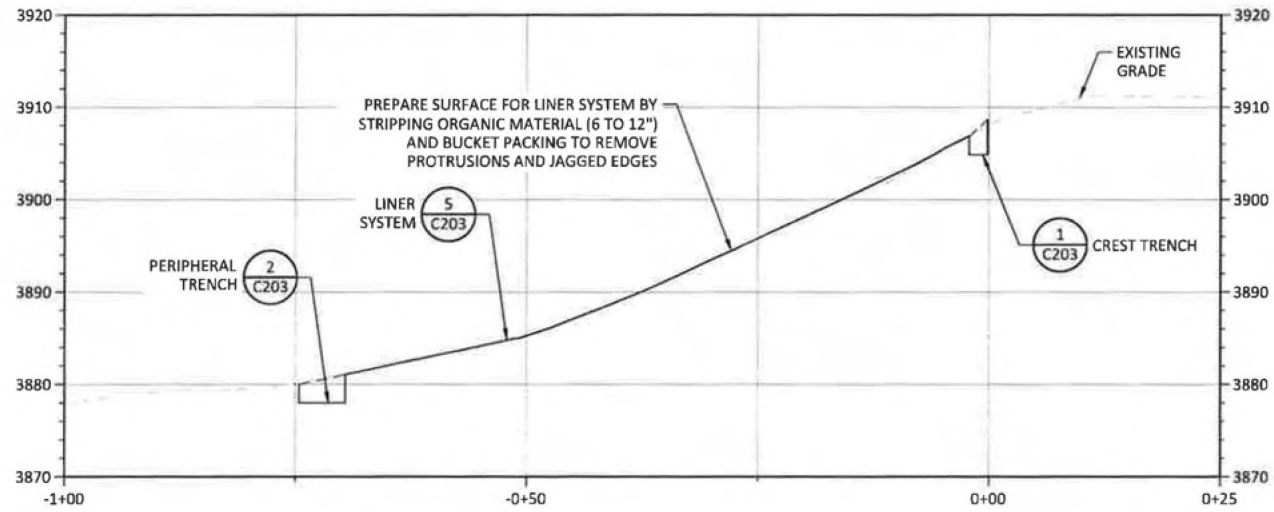


WARNING
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

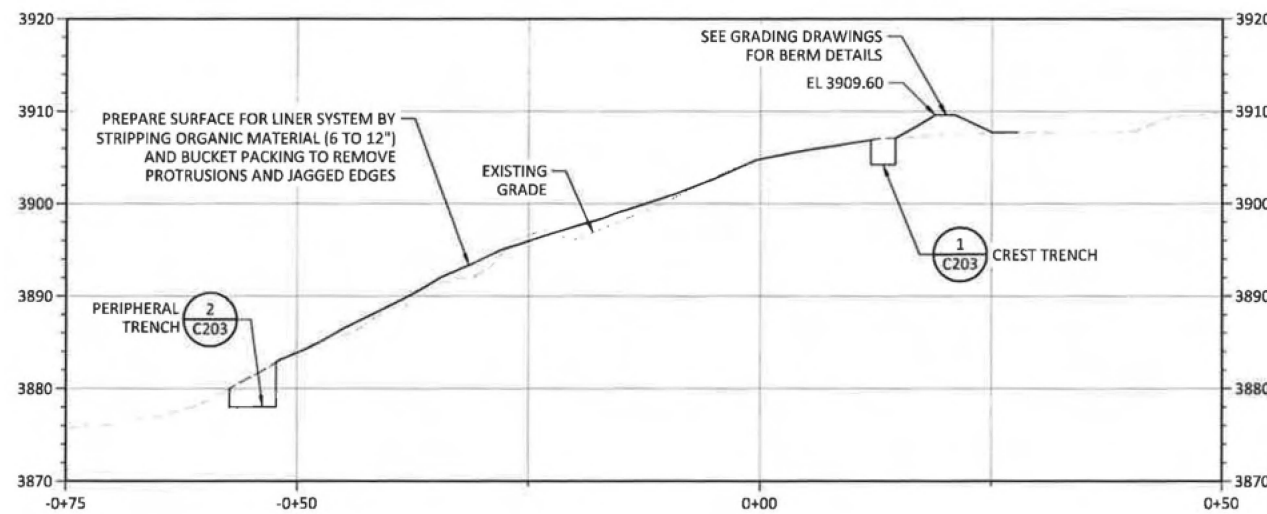


IDAHO DEPARTMENT OF FISH AND GAME WINCHESTER DAM REHABILITATION	DESIGNED <u>B. WARD</u>	DRAWING C201
LINER SYSTEM AND INSTRUMENTATION PLAN	DRAWN <u>C. GERBER</u>	
	CHECKED <u>A. BONTEMPO</u>	
	PROJECT DATE <u>12/19/25</u>	

C:\Users\ChloeGerber\OneDrive\Documents\Winchester Dam Rehab\Project Files\Drawings\35-005_C201_05-CIV.dwg



A
SECTION
C201 SCALE: 1" = 10'



B
SECTION
C201 SCALE: 1" = 10'



IDAHO DEPARTMENT WATER RESOURCES
DAM SAFETY PROGRAM

Reviewed *[Signature]*

Approved *[Signature]*

Date of Approval **1 28 26**

REV	DATE	BY	DESCRIPTION
0	12/19/25	MM	ISSUED FOR CONSTRUCTION



WARNING
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

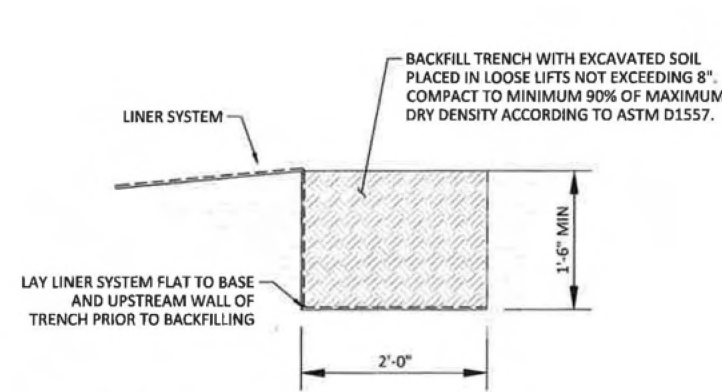


IDAHO DEPARTMENT OF FISH AND GAME
WINCHESTER DAM REHABILITATION

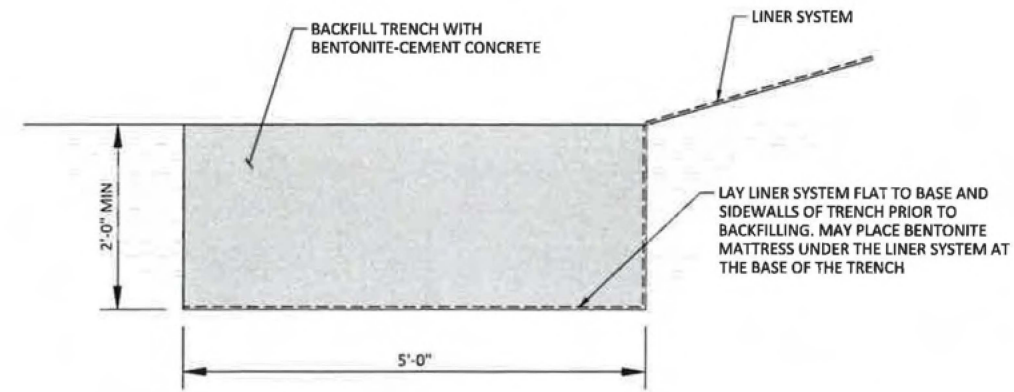
LINER SYSTEM
SECTIONS AND DETAILS 1

DESIGNED B. WARD
DRAWN C. GERBER
CHECKED A. BONTEMPO
PROJECT DATE 12/19/25

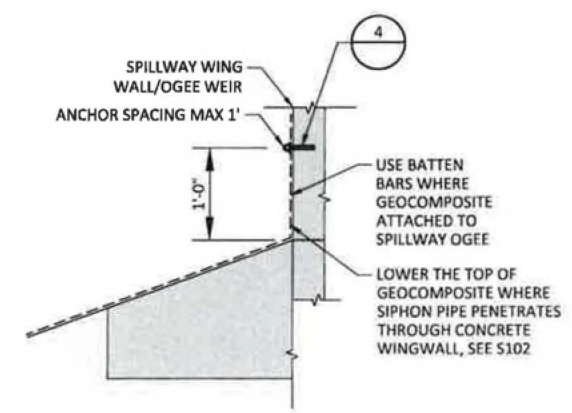
DRAWING
C202



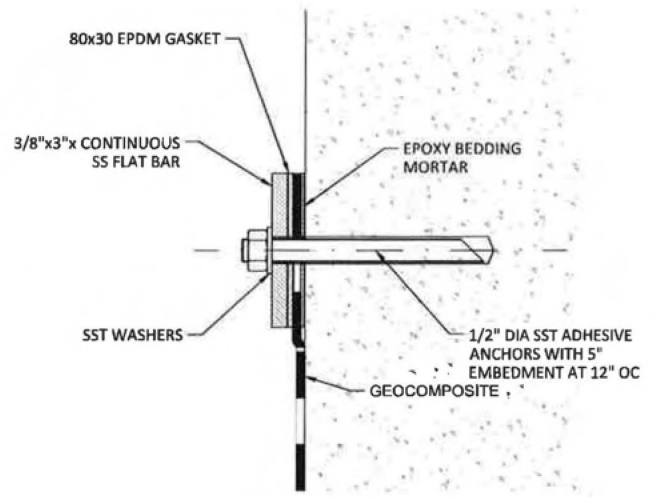
1 CREST TRENCH
SCALE: 1" = 1'-0"



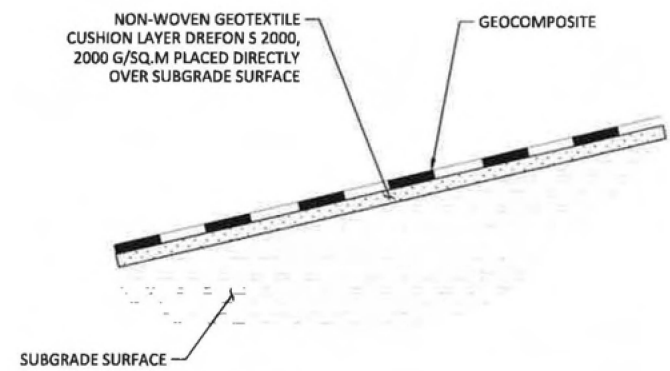
2 PERIPHERAL TRENCH
SCALE: 1" = 1'-0"



3 GEOCOSMITE CONNECTION TO CONCRETE FACES
SCALE: 1" = 1'-0"



4 ANCHOR SEAL FOR LINER CONNECTION TO CONCRETE FACING
SCALE: 1/4" = 1'-0"



5 LINER SYSTEM
NTS

NOTE:
1. LINER SYSTEM COMPRISES GEOCOSMITE PLACED OVER CUSHION LAYER. SEE SPECIFICATION 31 05 19 FOR MATERIAL DESCRIPTIONS.

IDAHO DEPARTMENT WATER RESOURCES
DAM SAFETY PROGRAM

Reviewed: *[Signature]*

Approved: *[Signature]*

Date of Approval: 1 28 26

REV	DATE	BY	DESCRIPTION
0	12/19/25	MM	ISSUED FOR CONSTRUCTION



WARNING
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE



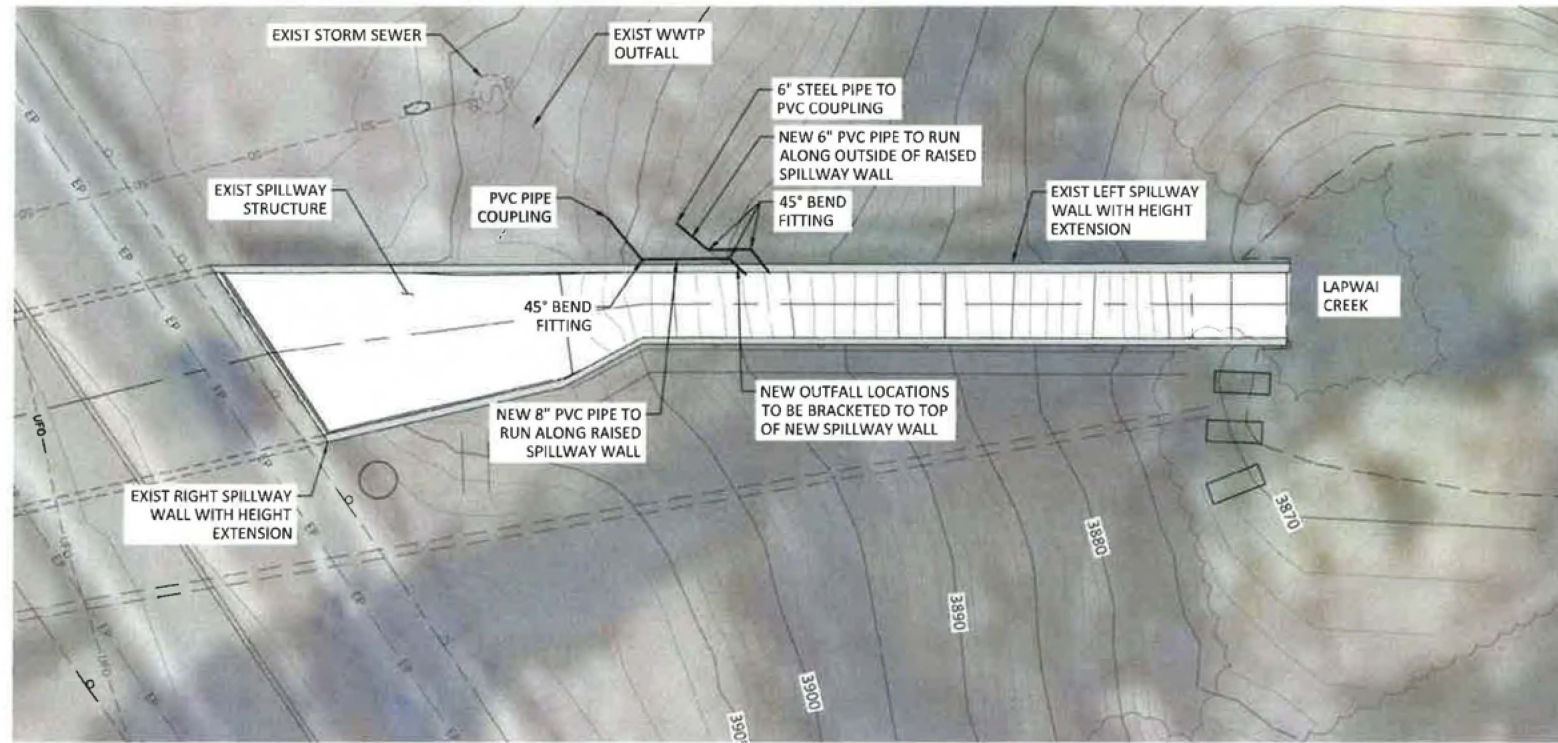
IDAHO DEPARTMENT OF FISH AND GAME
WINCHESTER DAM REHABILITATION

LINER SYSTEM
SECTIONS AND DETAILS 2

DESIGNED B. WARD
DRAWN C. GERBER
CHECKED A. BONTEMPO
PROJECT DATE 12/19/25

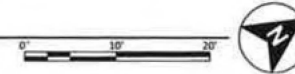
DRAWING
C203

C:\Users\ChloeGerber\OneDrive\Documents\Winchester Dam Rehab\Project Files\Drawings\C203-005_C203_05-CIV.dwg



OUTFALL PIPE REROUTING PLAN

SCALE: 1" = 10'



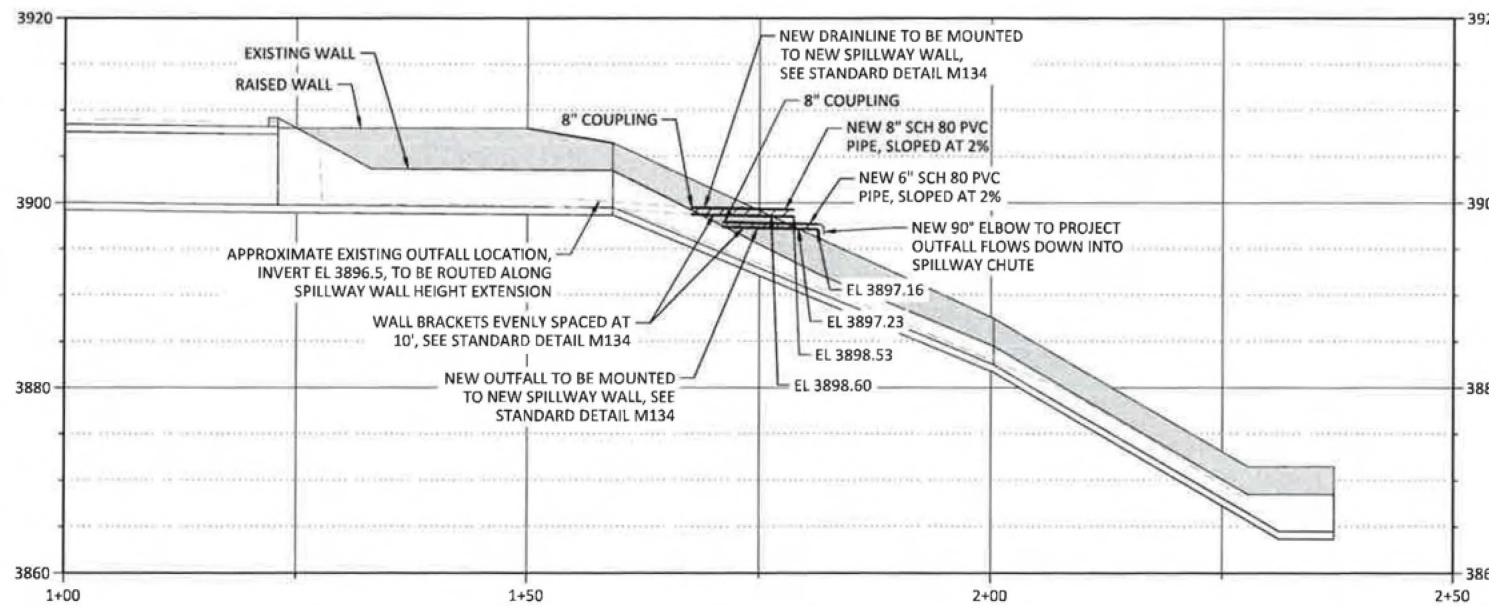
SHEET NOTES:

1. DEMOLISH PORTIONS OF WWTP OUTFALL AND DRAIN LINE BACK TO 1 FOOT OF PIPE DAYLIGHTING BEYOND EXISTING GRADE TO ALLOW FOR NEW INSTALLATION OF OUTFALLS DOWNSTREAM AND OVER THE TOP OF EXTENDED SPILLWAY WALLS AS SHOWN. CONTRACTOR TO COORDINATE ALL REQUIRED SHUTDOWNS OF OUTFALLS AND POSSIBLE TEMPORARY LINE WITH IDFG AND WWTP.
2. ALL PIPE EXTENSIONS ARE TO MATCH EXISTING PIPE DIAMETERS. PIPE EXTENSIONS ARE PROPOSED PVC.
3. PIPE EXTENSIONS ARE TO BE BRACKETED TO THE PROPOSED WALL RAISE UTILIZING PIPE HANGERS AS IDENTIFIED IN STANDARD DETAIL M134.
4. REFERENCE GC001 FOR GENERAL NOTES ON BRIDGING AND JOINTS.

IDAHO DEPARTMENT WATER RESOURCES
DAM SAFETY PROGRAM

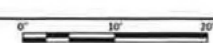
Reviewed: *[Signature]*
Approved: *[Signature]*

Date of Approval: 1 28 26

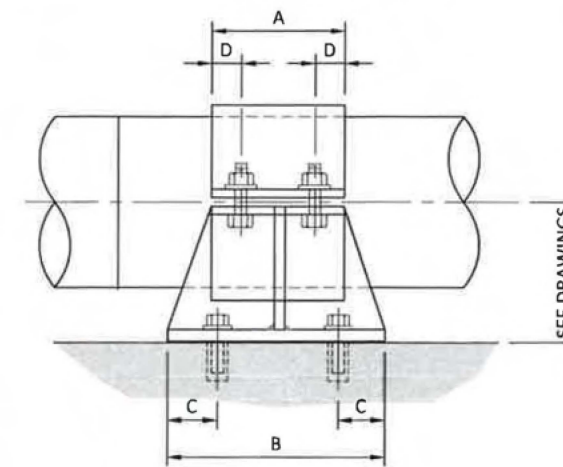


SPILLWAY WALL PROFILE

SCALE: 1" = 10'

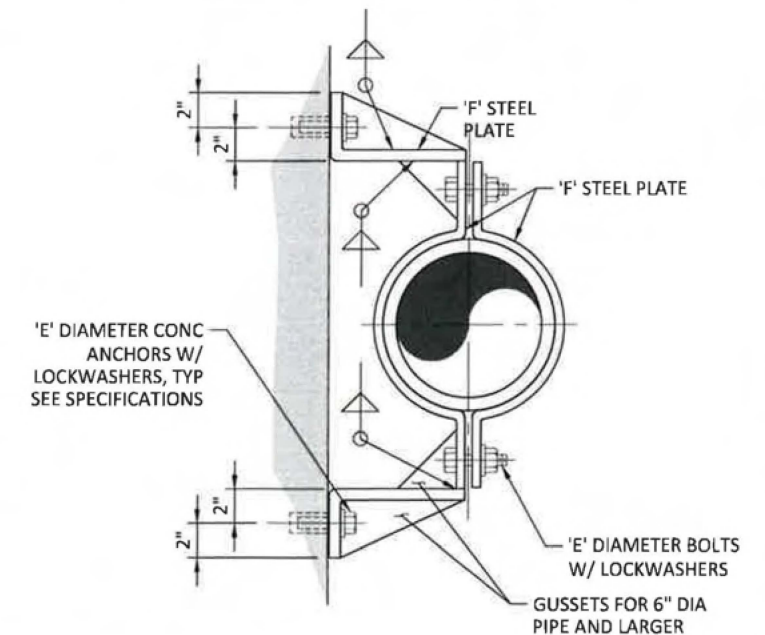


- NOTE:**
1. GALVANIZE ALL PARTS AFTER FABRICATION.
 2. ALL BOLTS, ANCHORS, NUTS AND LOCKWASHERS EXPOSED TO WATER SHALL BE TYPE 316 SST.
 3. FOR 16"-24" DIAMETER PIPES, PROVIDE THREE CONCRETE ANCHORS (SEE SPECS) AT 6" SPACING AND TWO GUSSETS AT 4" SPACING EACH SIDE OF HANGER.
 4. FOR ADDITIONAL REQUIREMENTS SEE SPECIFICATIONS SECTION 'PIPE SUPPORTS'.



M134 PIPE HANGER FOR INDIVIDUAL PIPE
SCALE: NTS

DIMENSIONS IN INCHES						
PIPE DIAMETER	"A"	"B"	"C"	"D"	"E"	"F"
3 TO 8	6	10	1 1/2"	1	5/8"	1/4"
10 TO 14	8	12	2	1 1/2"	3/4"	3/8"
16 TO 24	12	16	2	1 1/2"	3/4"	3/8"



REV	DATE	BY	DESCRIPTION
0	12/19/25	MM	ISSUED FOR CONSTRUCTION



WARNING
1/2" = 1"
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE



IDAHO DEPARTMENT OF FISH AND GAME
WINCHESTER DAM REHABILITATION

OUTFALL PIPE REROUTING
PLAN AND PROFILE

DESIGNED: P. GALASKA
DRAWN: C. GERBER
CHECKED: S. KLAWITTER
PROJECT DATE: 12/19/25

DRAWING
C300

GENERAL STRUCTURAL NOTES:

THE FOLLOWING NOTES ARE GENERAL AND APPLY TO THE ENTIRE PROJECT, UNLESS SPECIFICALLY NOTED OTHERWISE.

GENERAL:

- DO NOT SUBSTITUTE MATERIALS OR COMPONENTS WITHOUT WRITTEN APPROVAL FROM THE ENGINEER.
- DO NOT SCALE THE DRAWINGS.
- FOR ABBREVIATIONS NOT LISTED, SEE ASME Y14.38 "ABBREVIATIONS AND ACRONYMS: PUBLICATION AS DISTRIBUTED BY THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME). THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY ABBREVIATIONS UNKNOWN TO THE CONTRACTOR.
- SPECIFIC NOTES AND DETAILS SHALL TAKE PRECEDENCE OVER STANDARD DETAILS NOTES.
- STANDARD DETAILS ARE APPLICABLE WHEN REFERRED TO OR WHEN NO OTHER MORE RESTRICTIVE OR SPECIFIC DETAILS ARE SHOWN ON THE DRAWINGS.
- STANDARD AND SPECIFIC DESIGN DETAILS ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO SIMILAR SITUATIONS OCCURRING THROUGHOUT THE PROJECT, WHETHER OR NOT THEY ARE INDIVIDUALLY CALLED OUT, UNLESS NOTED OTHERWISE.
- INFORMATION (DETAILING, DIMENSIONS, CONFIGURATIONS, AND ELEVATIONS, ETC.) OF EXISTING CONSTRUCTION SHOWN REFLECTS AVAILABLE EXISTING DESIGN DOCUMENTS AND DOES NOT NECESSARILY REPRESENT THE AS-CONSTRUCTED CONDITIONS. THE CONTRACTOR SHALL FIELD VERIFY DIMENSIONS, ELEVATIONS AND DETAILING OF THE EXISTING STRUCTURES PRIOR TO UNDERTAKING ANY WORK THAT IS AFFECTED BY THE EXISTING STRUCTURE.
- CONTRACTOR'S WORK SHALL CONFORM TO THE MINIMUM STANDARDS OF THE REGULATING AGENCIES WHICH HAVE AUTHORITY OVER ANY PORTION OF THE WORK.
- SPECIFICATIONS, CODES AND STANDARDS NOTED SHALL BE OF THE LATEST APPROVED ISSUE, INCLUDING SUPPLEMENTS, UNLESS NOTED OTHERWISE.

DESIGN CRITERIA:

- APPLICABLE CODES AND STANDARDS

ORGANIZATION	CODE OR STANDARD	
ACI	ACI 301-16	SPECIFICATIONS FOR STRUCTURAL CONCRETE
ACI	ACI 318-19	BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
ACI	ACI 350-20	CODE REQUIREMENTS FOR ENVIRONMENTAL ENGINEERING CONCRETE STRUCTURES
ASCE	ASCE 7-22	MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES
USACE	EM 1110-2-2100	STABILITY ANALYSIS OF CONCRETE STRUCTURES
USACE	EM-1110-2-2104	STRENGTH DESIGN FOR REINFORCED CONCRETE HYDRAULIC STRUCTURES

- REFER TO THE DRAWINGS FOR ADDITIONAL SPECIFIC STRUCTURAL LOADINGS AND REQUIREMENTS.
- LOADS SHOWN ARE SERVICE LEVEL (UNFACTORED) UNLESS NOTED OTHERWISE.
- DEAD LOADS

REINFORCED CONCRETE	150 PCF
STEEL	490 PCF

- LIVE LOADS

CONSTRUCTION (VERTICAL SURCHARGE)	220 PSF
CONSTRUCTION (EQUIVALENT LATERAL ACTIVE PRESSURE)	110 PSF

- WIND LOAD

BASIC DESIGN WIND SPEED (V) (3-SEC GUST)	114 MPH
RISK CATEGORY	IV
WIND EXPOSURE	C

- SNOW LOAD

GROUND SNOW LOAD (P _g)	128 PSF
------------------------------------	---------

- SEISMIC LOAD

MDE PEAK GROUND ACCELERATION (PGA)	0.18 g
------------------------------------	--------

- EARTH LOADS: SEE GEOTECHNICAL DESIGN PARAMETERS

- HYDROSTATIC LOADS:

10-YR WSEL (USUAL)	3906.2 FT
100-YR WSEL (UNUSUAL)	3906.7 FT
500-YR WSEL (EXTREME)	3906.9 FT

- EXISTING SPILLWAY WALLS WITH NEW HEIGHT EXTENSION WERE NOT DESIGNED FOR ADDITIONAL BACKFILL BEYOND THE EXISTING CONDITIONS.
- IMPROVING THE SLIDING STABILITY OF THE STEEP DOWNSTREAM SECTION OF SPILLWAY AND THE EMBANKMENT SLOPE UNDER IT WERE NOT WITHIN THE SCOPE OF THIS PROJECT. IT WAS DETERMINED THAT THE NEW WALL HEIGHT EXTENSIONS WILL NOT DECREASE THE EXISTING STABILITY OF THIS SECTION.

GEOTECHNICAL DESIGN PARAMETERS:

- GEOTECHNICAL DESIGN CRITERIA IS BASED ON THE RECOMMENDATIONS AND DATA DOCUMENTED IN THE FOLLOWING GEOTECHNICAL REPORT(S):

TITLE	BY	DATE
GEOTECHNICAL DATA REPORT WINCHESTER DAM REMEDIATION PROJECT LEWIS COUNTY, IDAHO	SLATE GEOTECHNICAL CONSULTANTS, INC. OAKLAND, CA	JULY 16, 2025
LOG OF EXPLORATION HOLE	CONSULTING GEOTECHNICAL ENGINEERS- R. ERICKSON, D. OSTERMAN	JUNE 9, 1978

- THE PARAMETERS SHOWN ARE PRESUMPTIVE AND BASED ON EXPLORATIVE DRILLING AND AS-BUILT DRAWINGS.

ALLOWABLE BEARING PRESSURE	
SPILLWAY FOUNDATION	2,000 PSF
EQUIVALENT FLUID UNIT WEIGHT (MOIST) - EXISTING BACKFILL	
ACTIVE	36 PCF
AT-REST	55 PCF
PASSIVE	330 PCF
EQUIVALENT FLUID UNIT WEIGHT (MOIST) - NEW BACKFILL	
ACTIVE	40 PCF
AT-REST	60 PCF
PASSIVE	360 PCF
UNIT WEIGHT - EXISTING BACKFILL	
MOIST UNIT WEIGHT	110 PCF
SATURATED UNIT WEIGHT	115 PCF
UNIT WEIGHT - NEW BACKFILL	
MOST UNIT WEIGHT	120 PCF
SATURATED UNIT WEIGHT	135 PCF
COEFFICIENT OF FRICTION	
CONCRETE ON FOUNDATION MATERIAL	0.46

TESTING AND INSPECTIONS:

- CONTRACTOR SHALL MAKE THE WORK ACCESSIBLE FOR INSPECTION BY OWNER, ENGINEER, AND THE AUTHORITY HAVING JURISDICTION. WORK SHALL REMAIN ACCESSIBLE AND EXPOSED FOR INSPECTION UNTIL APPROVED.
- VISITS TO THE JOB SITE BY THE ENGINEER TO OBSERVE CONSTRUCTION DO NOT MEAN THAT THE ENGINEER IS GUARANTOR OF CONTRACTOR'S WORK, NOR RESPONSIBLE FOR THE COMPREHENSIVE OR SPECIAL INSPECTIONS, COORDINATION, SUPERVISION, OR SAFETY AT THE JOB SITE.

FOUNDATIONS AND EXCAVATION:

- EXCAVATIONS SHALL BE SHORED TO PREVENT SUBSIDENCE OR DAMAGE TO ADJACENT EXISTING STRUCTURES, STREETS, UTILITIES, ETC.
- FOUNDATION BEARING SURFACES SHALL BE OBSERVED BY THE ENGINEER OR QUALIFIED DESIGNEE PRIOR TO PLACEMENT OF FORMWORK OR REINFORCING STEEL.

FORMWORK, SHORING AND BRACING:

- STRUCTURES SHOWN ON THE DRAWINGS HAVE BEEN DESIGNED FOR STABILITY UNDER FINAL CONDITIONS ONLY. CONTRACTOR SHALL DETERMINE METHODS OF ERECTION, BRACING, SHORING, RIGGING, FALSEWORK, AND OTHER WORK AIDS REQUIRED TO SAFELY PERFORM THE WORK.
- DO NOT BACKFILL CANTILEVER CONCRETE WALLS UNTIL CONCRETE HAS ATTAINED 100 PERCENT OF THE DESIGN COMPRESSIVE STRENGTH.

CONCRETE:

- CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH AS INDICATED:

CONCRETE TYPE	f _c
CAST-IN-PLACE (UNLESS NOTED OTHERWISE)	4,500 PSI

- CONCRETE WORK SHALL CONFORM TO THE LATEST EDITION OF ACI 301 SPECIFICATIONS FOR STRUCTURAL CONCRETE AND ACI 117 SPECIFICATION FOR TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS, EXCEPT AS OTHERWISE NOTED.
- CONCRETE SHALL BE NORMAL WEIGHT UNLESS NOTED OTHERWISE.
- CONTRACTOR SHALL SUBMIT JOINT LOCATION PLAN FOR APPROVAL.
- CONSTRUCTION JOINTS INDICATED ARE SUGGESTED LOCATIONS. CONTRACTOR MAY REVISE LOCATION OF JOINTS, SUBJECT TO SPECIFIED REQUIREMENTS AND ENGINEER APPROVAL.
- ROUGHEN AND CLEAN CONSTRUCTION JOINTS PRIOR TO PLACING ADJACENT CONCRETE BY WATER BLASTING OR OTHER METHOD APPROVED BY THE ENGINEER.
- COORDINATE PLACEMENT OF OPENINGS, CURBS, DOWELS, SLEEVES, CONDUITS, BOLTS AND INSERTS PRIOR TO PLACEMENT, INCLUDING COORDINATION WITH OTHER DISCIPLINE DRAWINGS.
- PLACE NO UNCOATED ALUMINUM CONDUIT OR PRODUCTS CONTAINING ALUMINUM OR ANY OTHER MATERIAL INJURIOUS TO THE CONCRETE INTO THE CONCRETE. ALL ALUMINUM IN CONTACT WITH CONCRETE SHALL BE COATED WITH AN APPROVED METHACRYLATE OR BITUMASTIC COATING.
- CONTINUOUS WATERSTOP SHALL BE INSTALLED IN CONCRETE AND CONSTRUCTION JOINTS EXCEPT WHERE NOTED OTHERWISE.

- PRIOR TO PLACING NEW CONCRETE AGAINST EXISTING CONCRETE, ROUGHEN THE SURFACE OF THE EXISTING CONCRETE PER ACI 318 AND PROVIDE A MINIMUM OF 1/4" SURFACE AMPLITUDE ROUGHNESS.
- AVOID DAMAGE TO EXISTING REINFORCEMENT WHEN DRILLING FOR NEW REBAR DOWELS.
- ALL DAMAGE TO EXISTING CONCRETE STRUCTURES DURING DEMOLITION OR OTHER CONSTRUCTION ACTIVITIES SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST USING A METHOD APPROVED BY THE ENGINEER.

CONCRETE REINFORCING:

- MATERIALS FOR REINFORCING STEEL SHALL CONFORM TO THE FOLLOWING:

REINFORCEMENT TYPE	MATERIAL STANDARD
TYPICAL (UNLESS NOTED OTHERWISE)	ASTM A615, GRADE 60

- FABRICATION AND PLACEMENT OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH CRSI MANUAL OF STANDARD PRACTICE [MSP-1] AND ACI 301 SPECIFICATIONS FOR STRUCTURAL CONCRETE.
- CLEAR COVER FOR REINFORCEMENT BARS, UNLESS NOTED OTHERWISE, SHALL BE IN ACCORDANCE WITH THE FOLLOWING:

REINFORCEMENT USE	CLEAR COVER
UNFORMED SURFACES IN CONTACT WITH FOUNDATION	4 INCHES
FORMED AND SCREEDED SURFACES GREATER THAN OR EQUAL TO 24" THICK	4 INCHES
FORMED AND SCREEDED SURFACES GREATER THAN 12" AND LESS THAN 24" THICK	3 INCHES
ALL OTHER CONDITIONS	2 INCHES

- 90 DEGREE BENDS SHALL BE ACI 318 STANDARD HOOKS UNLESS NOTED OTHERWISE. FIELD BENDING OF REINFORCEMENT IS NOT PERMITTED WITHOUT WRITTEN APPROVAL FROM THE ENGINEER.
- REINFORCING STEEL FOR FOOTINGS AND SLABS ON GRADE SHALL BE ADEQUATELY SUPPORTED ON BAR SUPPORTS WITH SPACERS TO KEEP REINFORCING ABOVE THE PREPARED GRADE.
- LIFTING REINFORCEMENT OFF THE GRADE DURING CONCRETE PLACEMENT IS NOT PERMITTED.
- CARRIER ("BURY") BARS ARE NOT PERMITTED IN BOTTOM MATS OF REINFORCEMENT IN ELEVATED SLABS OR TOP MATS IN ELEVATED SLABS LESS THAN 12 INCHES THICK. ADDITIONAL REINFORCEMENT SHALL BE ADDED TO REPLACE ANY REINFORCEMENT USED AS CARRIER BARS.
- WELDING OF REINFORCEMENT IS NOT PERMITTED UNLESS NOTED OTHERWISE OR APPROVED BY THE ENGINEER.

STRUCTURAL STEEL AND METAL FABRICATION:

- STEEL TO BE EMBEDDED IN CONCRETE SHALL BE CLEAN AND FREE OF PAINT, OIL, OR DIRT.

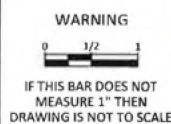
IDAHO DEPARTMENT WATER RESOURCES
DAM SAFETY PROGRAM

Reviewed *[Signature]*

Approved *[Signature]*

Date of Approval 1 28 26

REV	DATE	BY	DESCRIPTION
0	12/19/25	MM	ISSUED FOR CONSTRUCTION



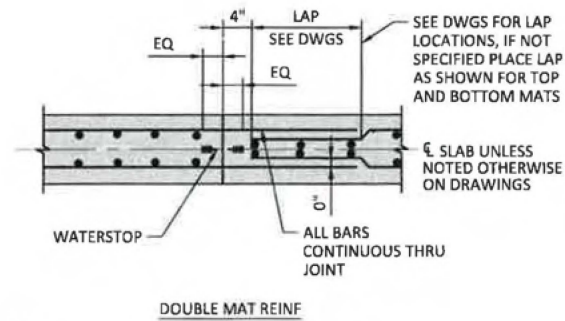
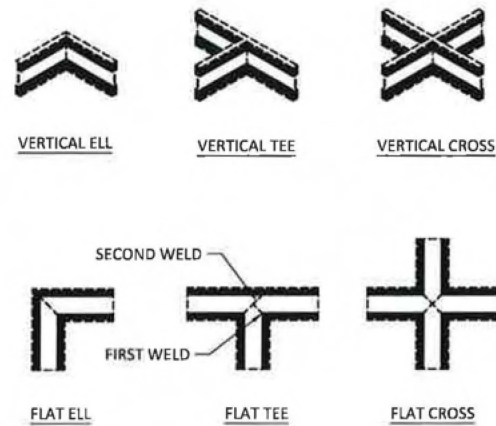
IDAHO DEPARTMENT OF FISH AND GAME
WINCHESTER DAM REHABILITATION

GENERAL STRUCTURAL NOTES

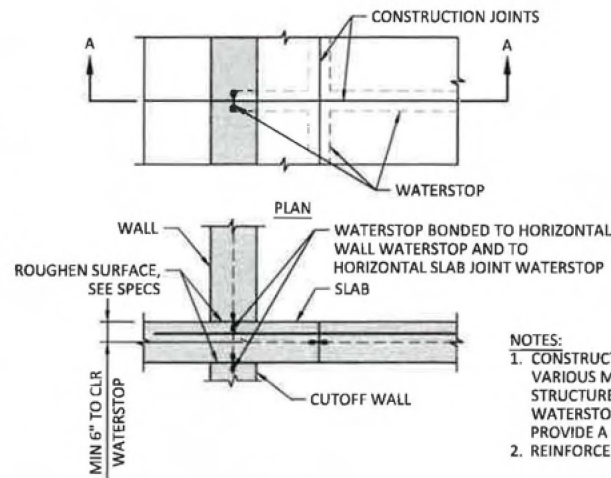
DESIGNED T. MAGILL
DRAWN C. GERBER
CHECKED M. MERKLEIN
PROJECT DATE 12/19/25

DRAWING
GS001

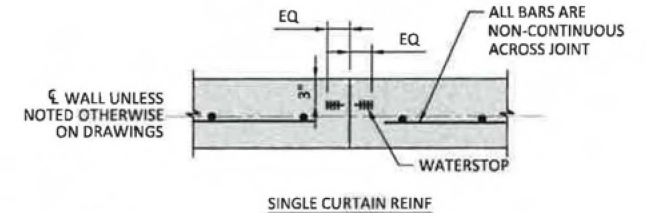
C:\Users\ChloeGerber\OneDrive\Documents\McMillen\inc\25-005 - Winchester Dam Rehab\Project Files\Drawings\25-005_GS001_04-STR.dwg



NOTES:
 1. STAGGER SPLICES UNLESS NOTED OTHERWISE.
 2. SEE DRAWINGS FOR LAYOUT, SIZE, SPACING OF REINFORCEMENT.



NOTES:
 1. CONSTRUCTION JOINTS PASSING THROUGH VARIOUS MEMBERS OF A WATER RETAINING STRUCTURE SHALL BE SEALED WITH WATERSTOPS BONDED TOGETHER, SO AS TO PROVIDE A CONTINUOUS WATERTIGHT JOINT.
 2. REINFORCEMENT REQUIRED, SEE DRAWINGS.



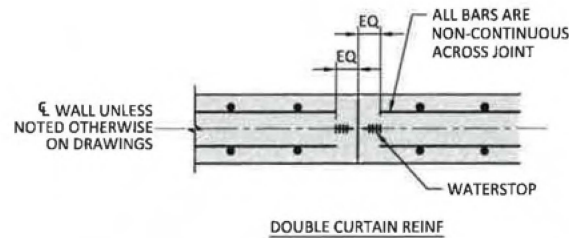
NOTES:
 1. SPACING BETWEEN JOINTS SHALL BE 20' MAXIMUM, UNLESS OTHERWISE APPROVED.
 2. PLACE WATERSTOP ON WATER SIDE OF WALL.

S108 PREFABRICATED WATERSTOP JOINTS
 SCALE: NTS

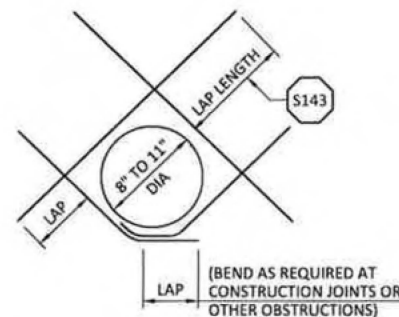
S112 CONSTRUCTION JOINT (SLAB)
 SCALE: NTS

S118 CONSTRUCTION JOINT (WALL TO SLAB)
 SCALE: NTS

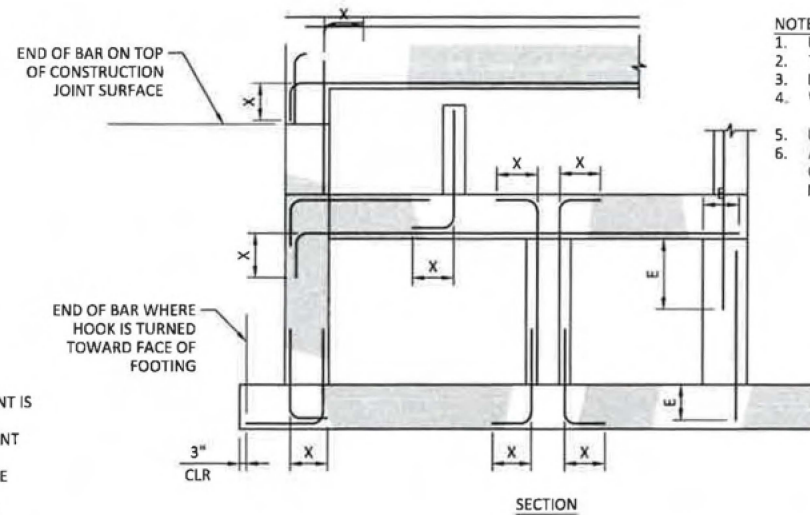
S121 CONTRACTION JOINT (WALL VERTICAL)
 SCALE: NTS



NOTES:
 1. SEE DRAWINGS FOR LAYOUT, SIZE, SPACING OF REINFORCEMENT.
 2. SPACING BETWEEN JOINTS SHALL BE 20' MAXIMUM UNLESS OTHERWISE APPROVED.



NOTES:
 1. CUT NORMAL REINFORCEMENT 2" CLEAR OF OPENING.
 2. DIAGONAL BARS TO BE PLACED;
 A. AT CENTERLINE OF WALL OR SLAB WHERE ONE LAYER OF REINFORCEMENT IS PROVIDED.
 B. AT EACH FACE OF WALL OR SLAB WHERE TWO LAYERS OF REINFORCEMENT ARE PROVIDED.
 3. UNLESS OTHERWISE NOTED, SIZE OF DIAGONAL BARS SHALL BE THE SIZE OF THE LARGEST NORMAL REINFORCING BAR CUT.
 4. THIS DETAIL TO BE USED WHEN CALLED FOR ON THE DRAWINGS OR WHEN NO OTHER DETAIL IS SPECIFIED.



NOTES:
 1. USE LAP LENGTHS AS DETERMINED FROM THESE TABLES UNLESS SHOWN OTHERWISE.
 2. THE TABLES SHOWN ARE FOR $f'c=4500psi$, $f_y=60,000psi$, 1.5" MIN CONCRETE COVER AND 3" MIN BAR SPACING.
 3. MULTIPLY THE LAP AND E SHOWN IN THESE TABLES BY 1.5 FOR EPOXY COATED REINFORCING.
 4. WHEN BARS OF DIFFERENT SIZES ARE LAP SPLICED, LAP LENGTH SHALL BE THE LARGER OF:
 EMBEDMENT LENGTH OF LARGER BAR LAP OR LENGTH OF SMALLER BAR.
 5. UNLESS NOTED OTHERWISE USE REBAR COUPLERS FOR SPLICES OF #11 AND LARGER BARS.
 6. ALL DOWEL BARS SHALL EXTEND AN EMBEDMENT LENGTH E INTO ANOTHER MEMBER OR ACROSS A CONSTRUCTION JOINT UNLESS SHOWN TO SPLICE WITH OTHER BARS OR TO EXTEND TO THE FAR FACE OF THE MEMBER AND END WITH A STANDARD HOOK.

BAR SIZE	LENGTH (*)		
	HOOK X	LAP	EMBEDMENT E
#3	6"	18" (23")	14" (18")
#4	8"	24" (31")	18" (24")
#5	10"	30" (38")	23" (30")
#6	12"	35" (46")	27" (35")
#7	14"	51" (67")	40" (51")
#8	16"	59" (76")	45" (59")
#9	19"	66" (86")	51" (66")
#10	22"	74" (96")	57" (74")
#11	24"	82" (107")	64" (82")

* USE LENGTH IN PARENTHESIS FOR WALL HORIZONTAL REBARS AND SLAB BARS WITH 12" OR MORE OF FRESH CONCRETE UNDERNEATH

S123 CONTRACTION JOINT (WALL VERTICAL)
 SCALE: NTS

S142 DIAGONAL REINF AT CIRCULAR OPENINGS
 SCALE: NTS

S143 STANDARD 90° BAR HOOKS, EMBEDMENT LENGTHS AND LAP LENGTHS
 SCALE: NTS

IDAHO DEPARTMENT WATER RESOURCES
 DAM SAFETY PROGRAM

Reviewed: *[Signature]*
 Approved: *[Signature]*
 1 28 26

REV	DATE	BY	DESCRIPTION
0	12/19/25	MM	ISSUED FOR CONSTRUCTION



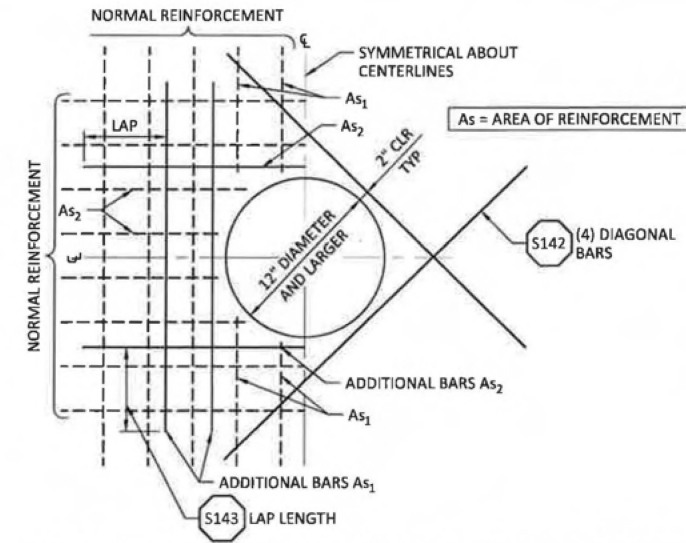
WARNING
 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE



IDAHO DEPARTMENT OF FISH AND GAME
 WINCHESTER DAM REHABILITATION
 STANDARD STRUCTURAL DETAILS 1

DESIGNED T. MAGILL
 DRAWN C. GERBER
 CHECKED M. MERKLEIN
 PROJECT DATE 12/19/25

DRAWING
 GS002



- NOTES:
- CUT NORMAL REINFORCEMENT AT OPENINGS: A_{s1} AND $A_{s2} = \frac{1}{2}$ AREA OF CUT BARS TO BE ADDED ON EACH SIDE OF OPENING.
 - ADDITIONAL BARS A_{s1} AND A_{s2} TO BE PLACED:
 - AT CENTERLINE OF WALLS OR SLABS WHERE ONE LAYER OF REINFORCEMENT IS PROVIDED.
 - AT EACH FACE OF WALLS OR SLABS WHERE TWO LAYERS OF REINFORCEMENT ARE PROVIDED.
 - INCREASE SIZE OF ADDITIONAL BARS AS NEEDED TO FIT WITHIN A DISTANCE OF 2 X WALL/SLAB THICKNESS FROM OPENING, PROVIDE 2" MIN CLEAR BETWEEN BARS.
 - THIS DETAIL TO BE USED ONLY WHEN NO OTHER DETAIL IS INDICATED ON THE DRAWINGS.
 - WHERE A SLAB OR INTERSECTING WALL CONNECTS WITHIN ONE WALL THICKNESS OF THE OPENINGS, ADDITIONAL BARS ON THAT SIDE MAY BE OMITTED.

S144 ADDITIONAL REINFORCEMENT AT CIRCULAR OPENINGS (12" DIA OR LARGER)
SCALE: NTS

IDAHO DEPARTMENT WATER RESOURCES
DAM SAFETY PROGRAM

Reviewed:

Approved:

Date of Approval: 1 28 26

REV	DATE	BY	DESCRIPTION
0	12/19/25	MM	ISSUED FOR CONSTRUCTION



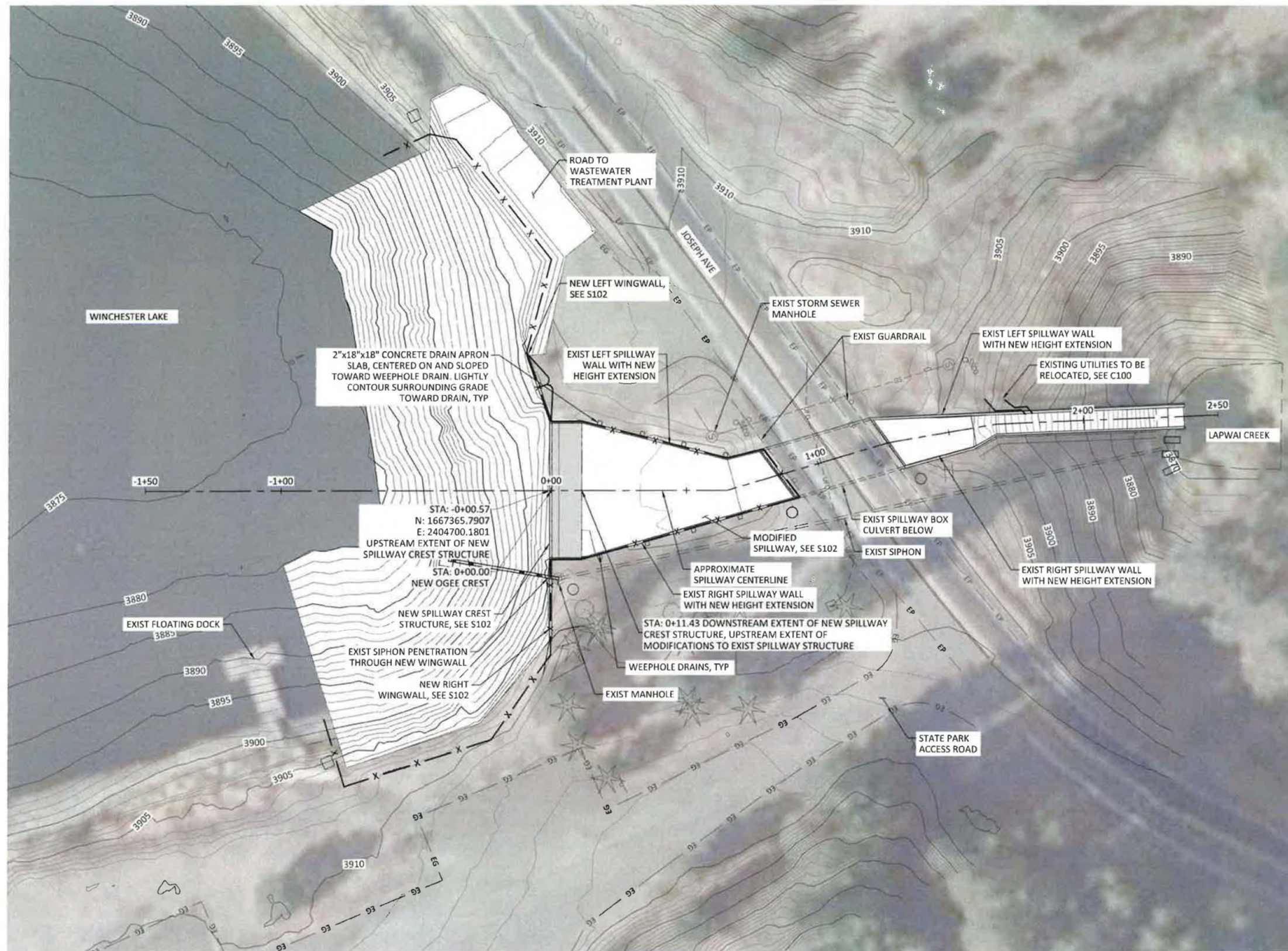
WARNING
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE



IDAHO DEPARTMENT OF FISH AND GAME
WINCHESTER DAM REHABILITATION
STANDARD STRUCTURAL DETAILS 2

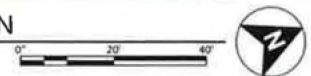
DESIGNED	T. MAGILL
DRAWN	C. GERBER
CHECKED	M. MERKLEIN
PROJECT DATE	12/19/25

DRAWING
GS003



OVERALL SITE STRUCTURAL KEY PLAN

SCALE: 1" = 20'



IDAHO DEPARTMENT WATER RESOURCES
DAM SAFETY PROGRAM

Reviewed *[Signature]*

Approved *[Signature]*

Date of Approval **1 28 26**

REV	DATE	MM	BY	DESCRIPTION
0	12/19/25	MM		ISSUED FOR CONSTRUCTION



WARNING
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE



IDAHO DEPARTMENT OF FISH AND GAME
WINCHESTER DAM REHABILITATION

STRUCTURAL
OVERALL SITE PLAN

DESIGNED T. MAGILL
DRAWN C. GERBER
CHECKED M. MERKLEIN
PROJECT DATE 12/19/25

DRAWING
S101

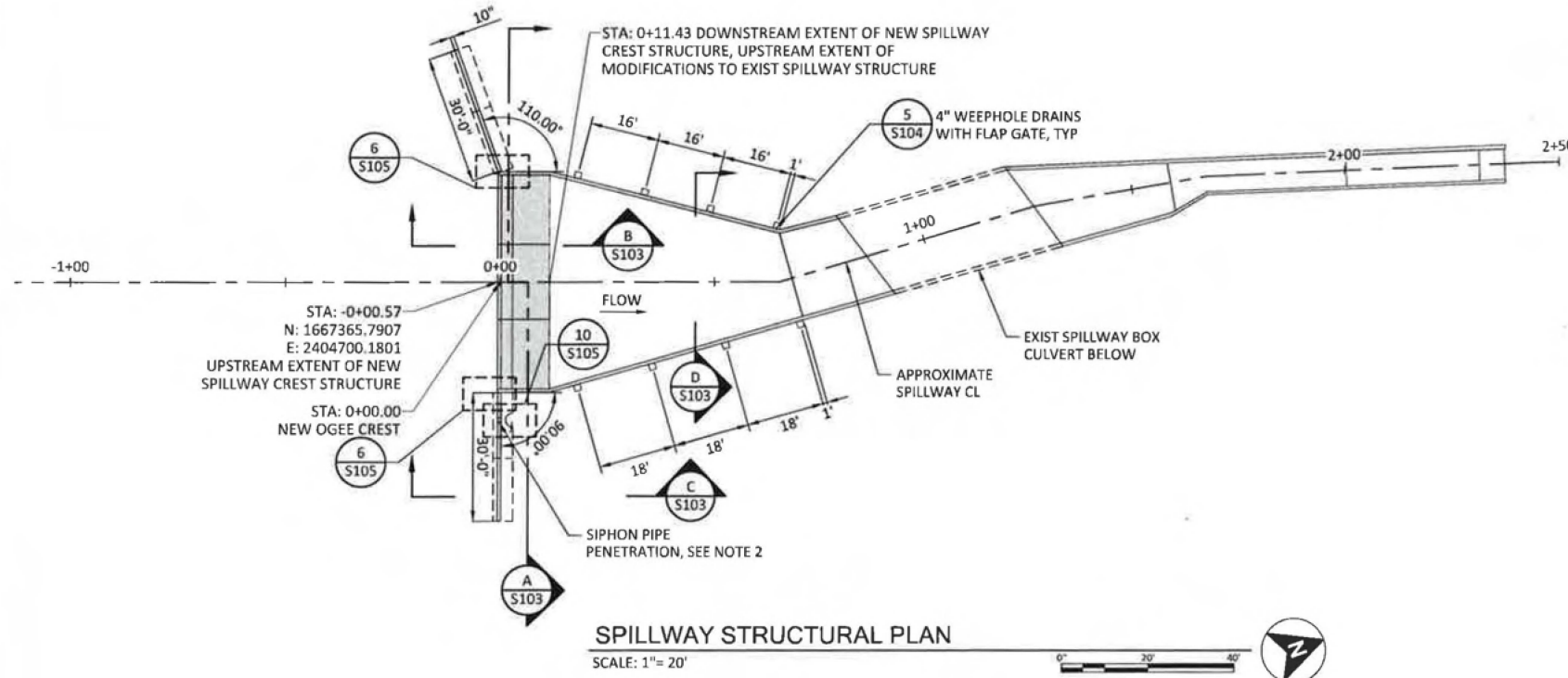
Reviewed *[Signature]*

Approved *[Signature]*

Date of Approval 1 28 26

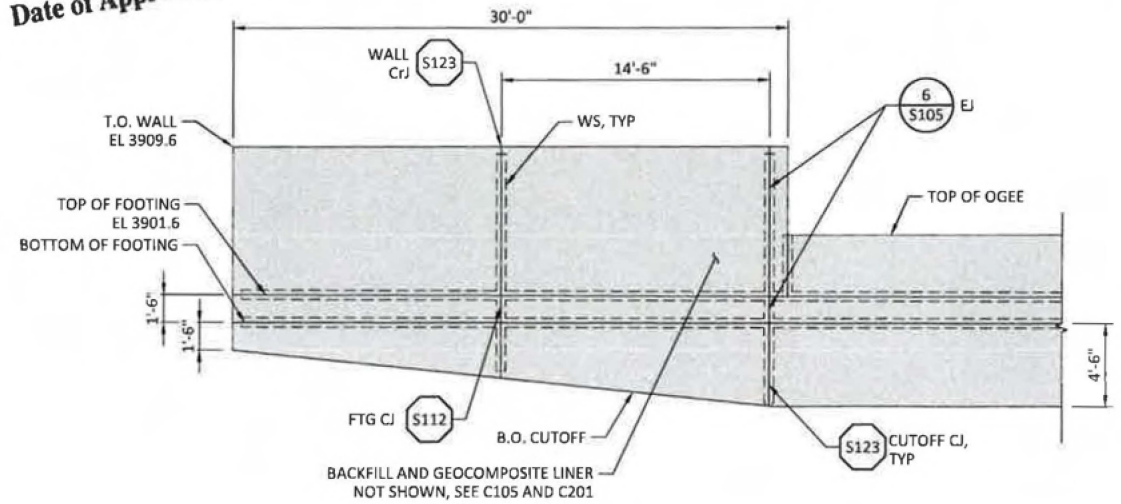
SHEET NOTES:

- DO NOT ADD BACKFILL TO MODIFIED SPILLWAY WALLS ABOVE THE TOP OF EXISTING SPILLWAY WALL.
- AT PIPE PENETRATION, PROVIDE LINK-SEAL MODEL S-316, SIZE LS-410 BY GARLOCK, OR AN APPROVED EQUAL INSTALL IN ACCORDANCE WITH MANUFACTURER'S PRINTED INSTRUCTIONS.



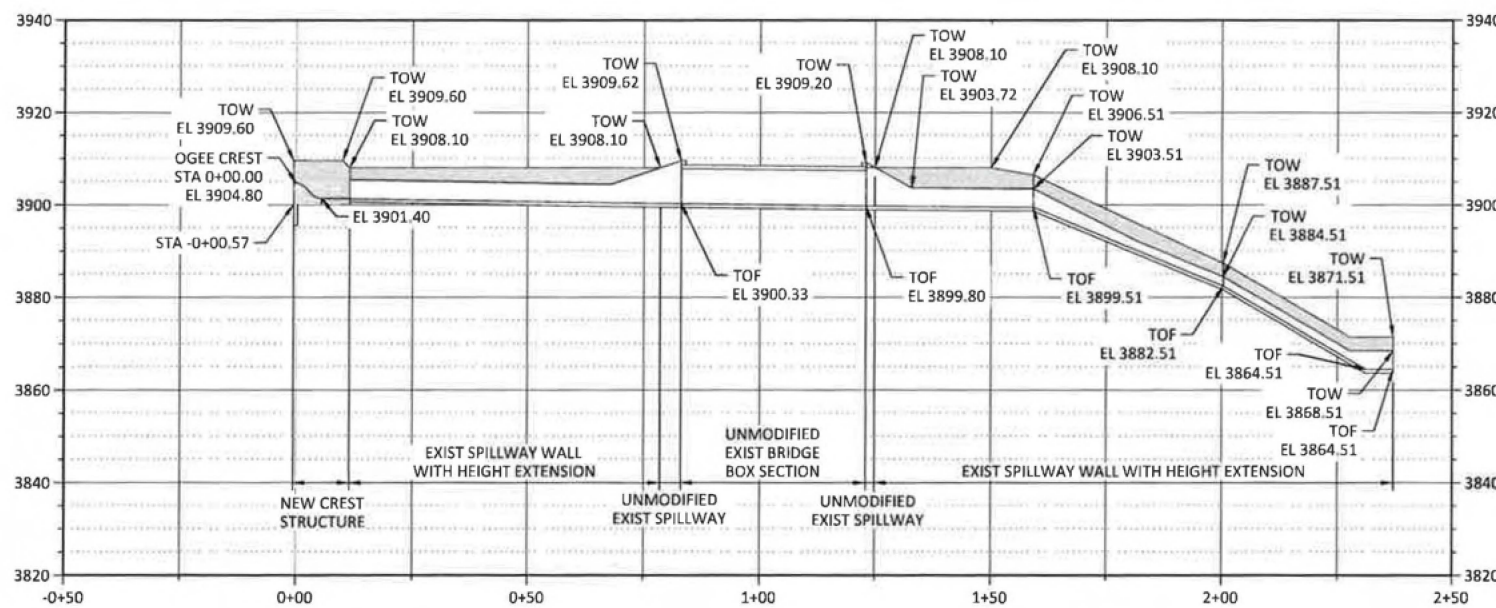
SPILLWAY STRUCTURAL PLAN

SCALE: 1" = 20'



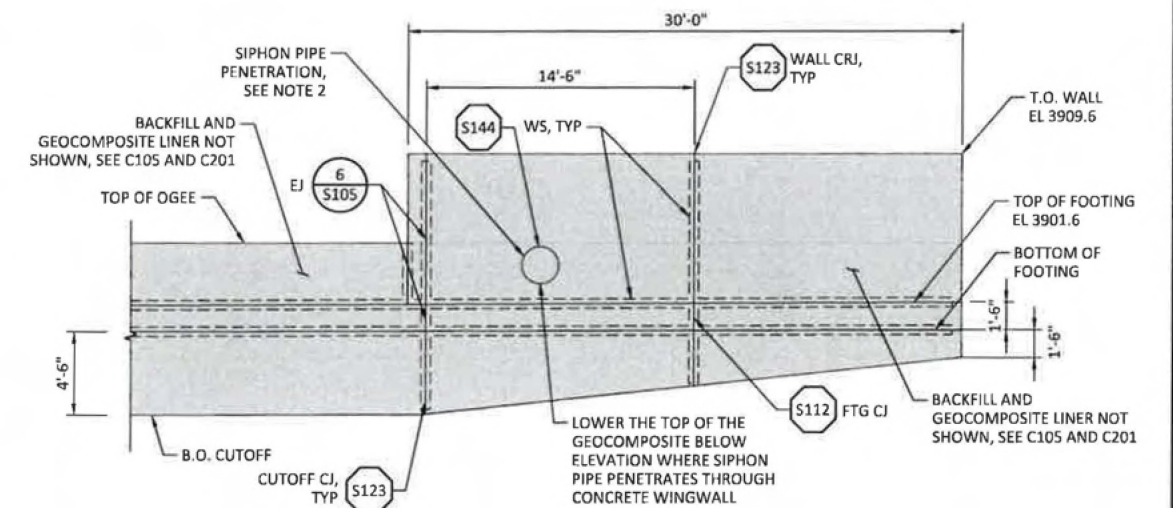
PROFILE ALONG LEFT WING WALL

SCALE: 1" = 5'



SPILLWAY STRUCTURAL PROFILE

SCALE: 1" = 20'



PROFILE ALONG RIGHT WING WALL

SCALE: 1" = 5'

REV	DATE	MM	BY	DESCRIPTION
0	12/19/25	MM		ISSUED FOR CONSTRUCTION



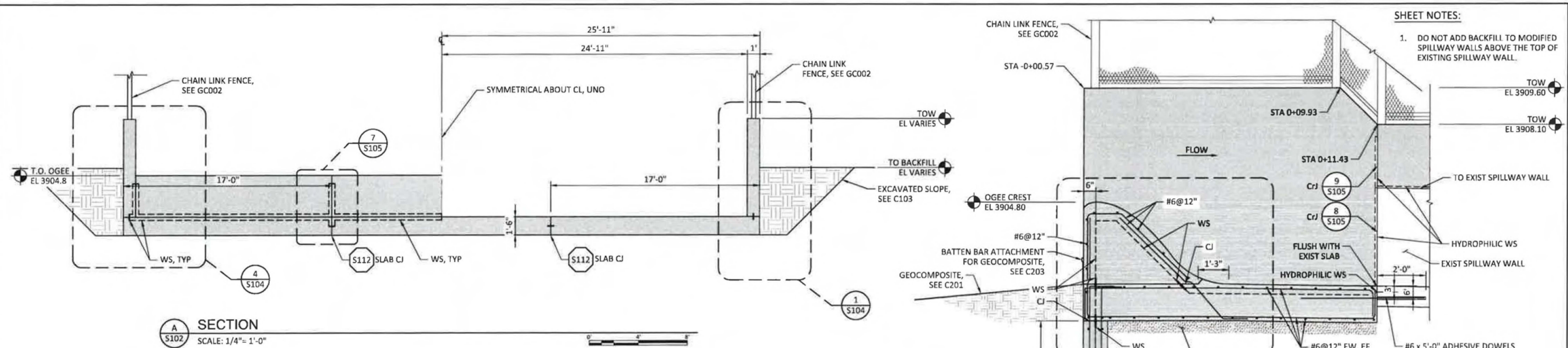
WARNING
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE



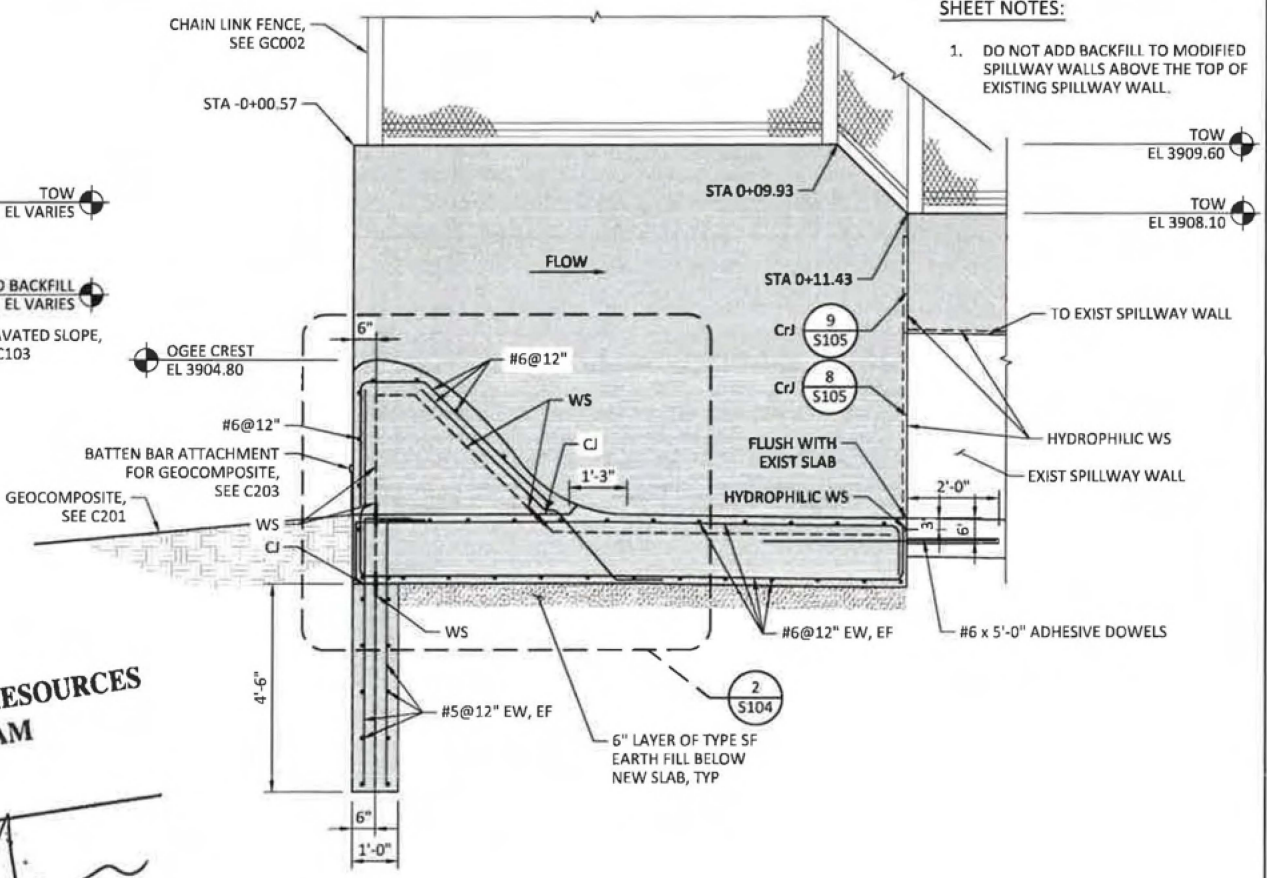
IDAHO DEPARTMENT OF FISH AND GAME
WINCHESTER DAM REHABILITATION
SPILLWAY
STRUCTURAL PLAN AND PROFILES

DESIGNED T. MAGILL
DRAWN C. GERBER
CHECKED M. MERKLEIN
PROJECT DATE 12/19/25

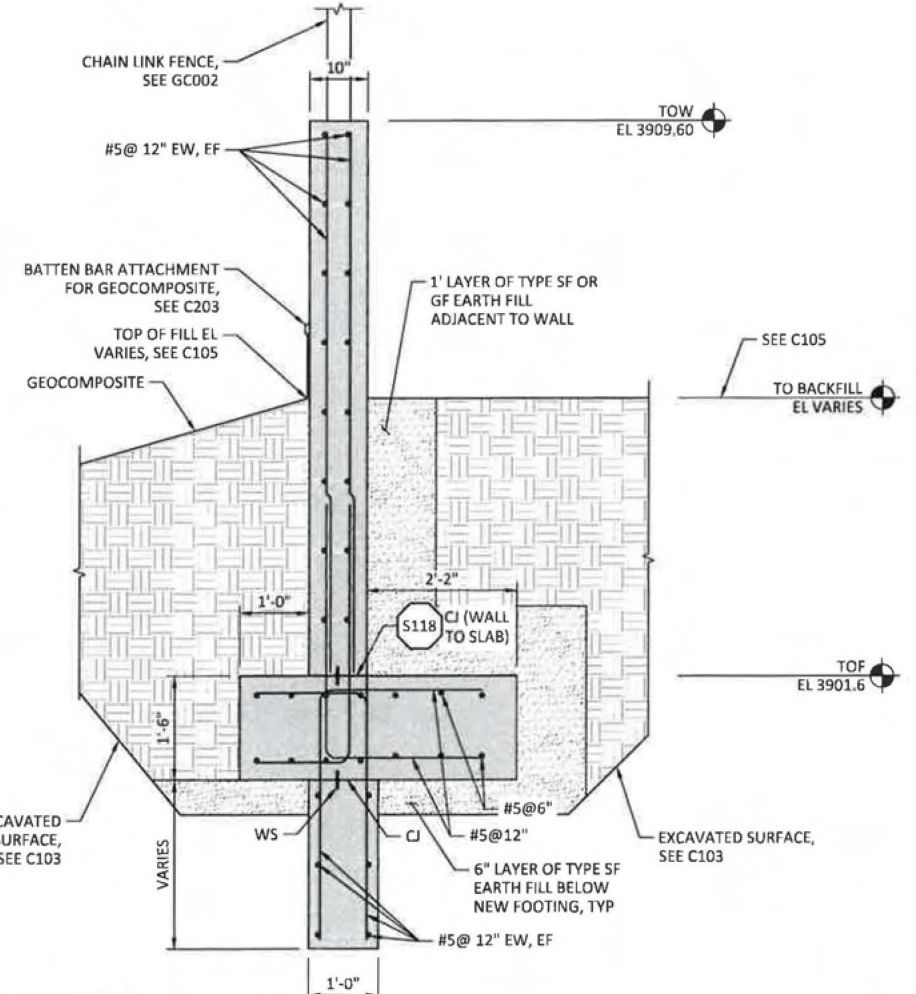
DRAWING
S102



A SECTION
S102 SCALE: 1/4" = 1'-0"



B SECTION
S102 SCALE: 1/2" = 1'-0"



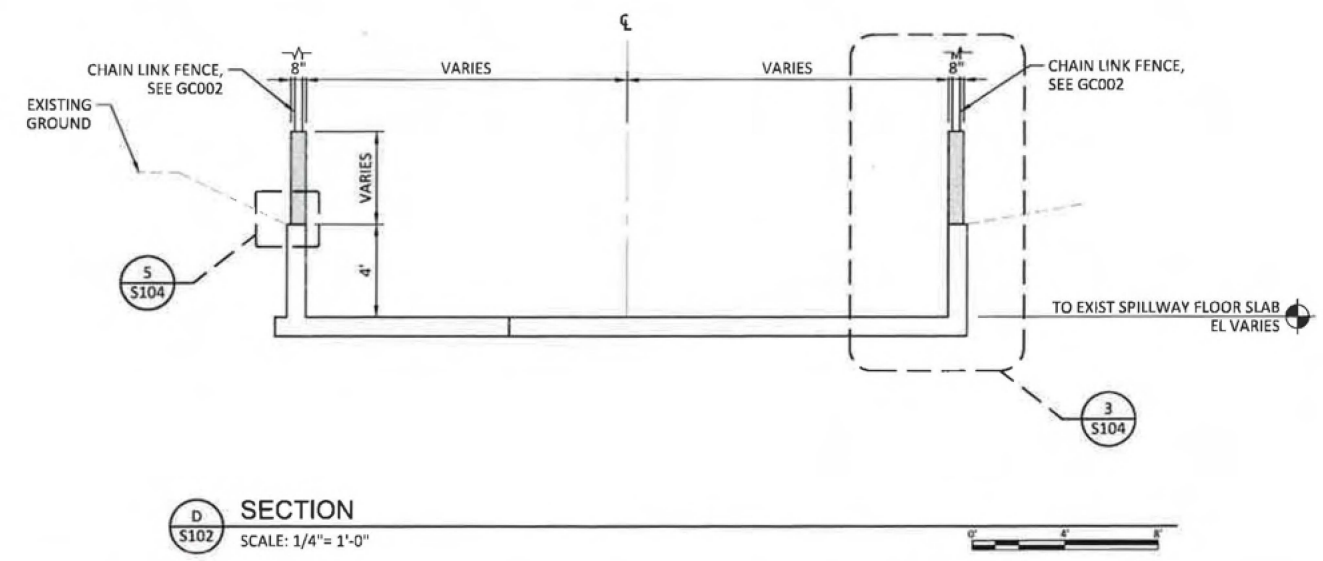
C SECTION
S102 SCALE: 3/4" = 1'-0"

**IDAHO DEPARTMENT WATER RESOURCES
DAM SAFETY PROGRAM**

Reviewed *[Signature]*

Approved *[Signature]*

Date of Approval **1 28 26**



D SECTION
S102 SCALE: 1/4" = 1'-0"

SHEET NOTES:

1. DO NOT ADD BACKFILL TO MODIFIED SPILLWAY WALLS ABOVE THE TOP OF EXISTING SPILLWAY WALL.

REV	DATE	BY	DESCRIPTION
0	12/19/25	MM	ISSUED FOR CONSTRUCTION



WARNING

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE



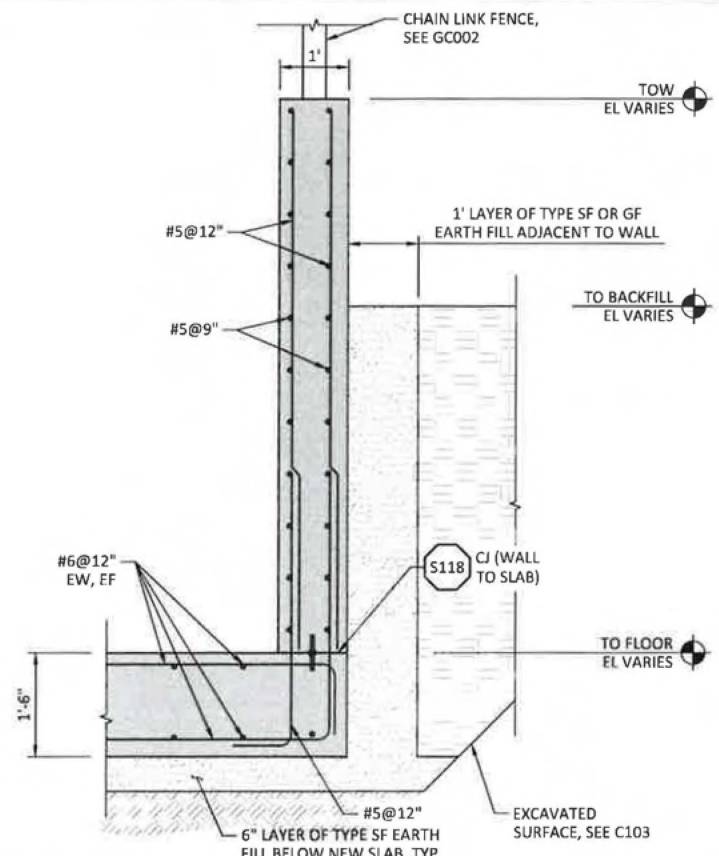
IDAHO DEPARTMENT OF FISH AND GAME
WINCHESTER DAM REHABILITATION

SPILLWAY STRUCTURAL SECTIONS

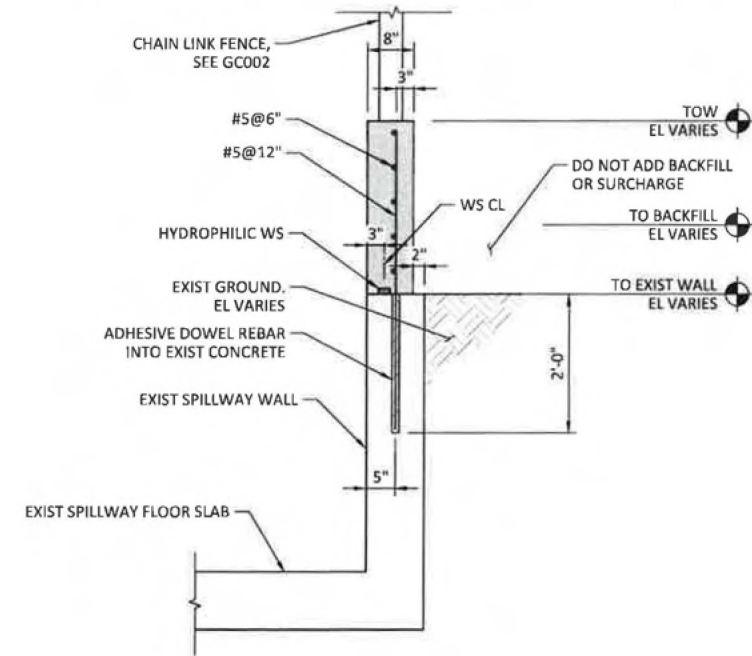
DESIGNED T. MAGILL
DRAWN C. GERBER
CHECKED M. MERKLEIN
PROJECT DATE 12/19/25

DRAWING
S103

C:\Users\ChloeGerber\OneDrive\Documents\Projects\Drawings\25-005 - Winchester Dam Rehab\Project Files\Drawings\25-005_S103_DS-STR.dwg

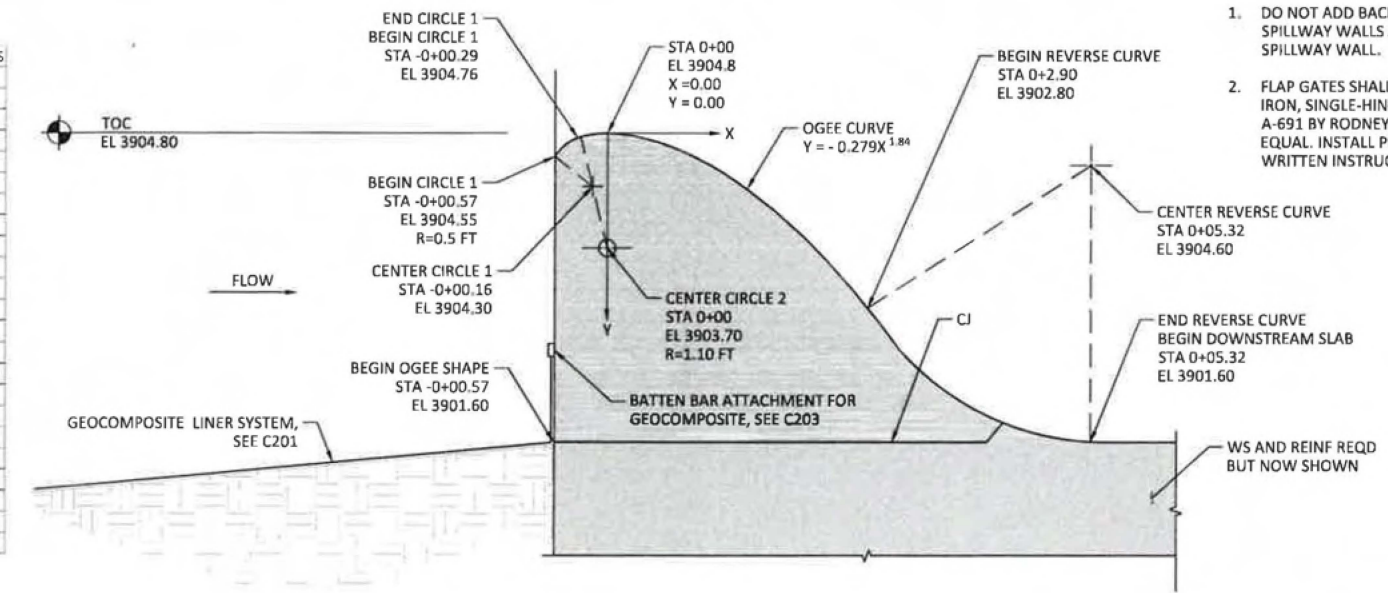


1
S103
DETAIL
SCALE: 3/4" = 1'-0"

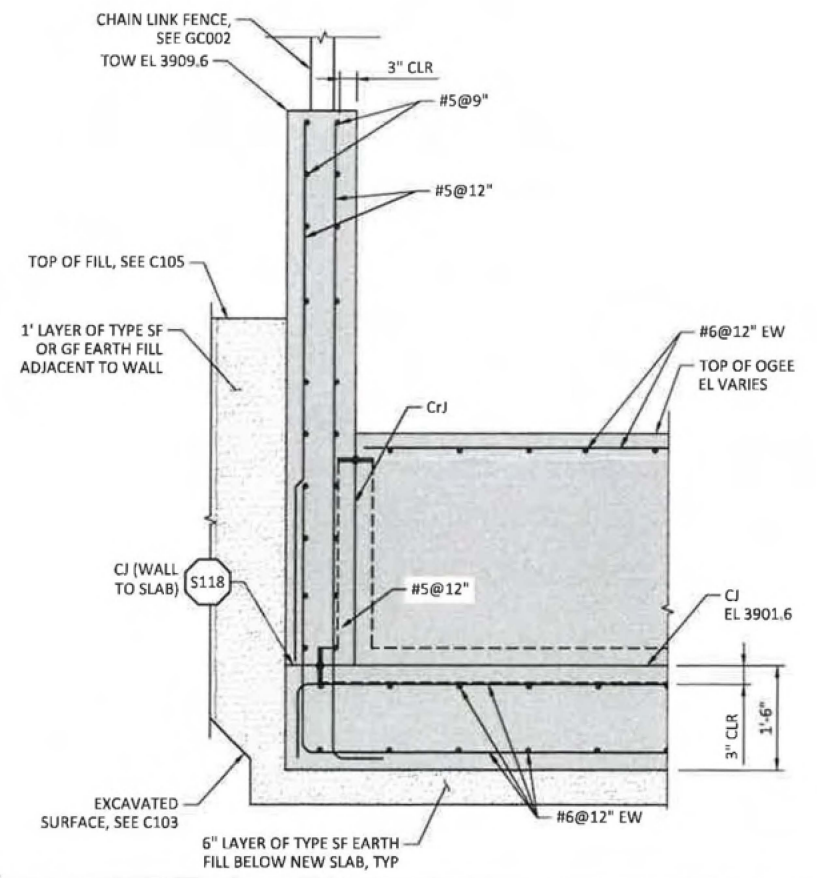


3
S103
DETAIL
SCALE: 3/4" = 1'-0"

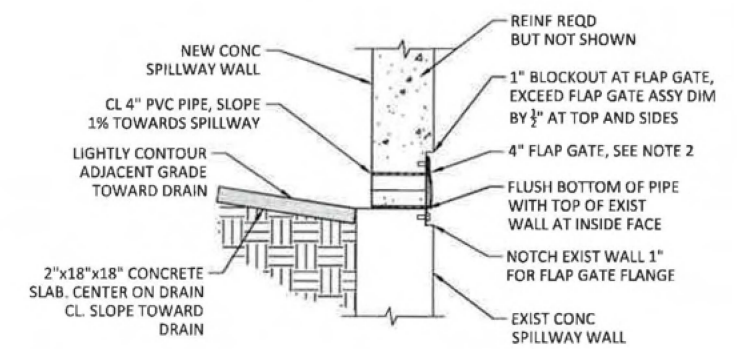
DOWNSTREAM OGEE CURVE POINTS	
X	EL
0' - 0"	3904' - 9 5/8"
0' - 1 5/8"	3904' - 9 1/2"
0' - 3 3/8"	3904' - 8 7/8"
0' - 5"	3904' - 8 7/8"
0' - 6 3/4"	3904' - 8 1/2"
0' - 8 3/8"	3904' - 7 7/8"
0' - 10 1/8"	3904' - 7 1/8"
0' - 11 3/4"	3904' - 6 3/8"
1' - 1 1/2"	3904' - 5 1/2"
1' - 3 1/8"	3904' - 4 1/2"
1' - 4 7/8"	3904' - 3 3/8"
1' - 6 1/2"	3904' - 2 1/8"
1' - 8 1/4"	3904' - 0 7/8"
1' - 9 7/8"	3903' - 11 1/2"
1' - 11 5/8"	3903' - 10"
2' - 1 1/4"	3903' - 8 3/8"
2' - 2 7/8"	3903' - 6 3/4"
2' - 4 5/8"	3903' - 5"
2' - 6 1/4"	3903' - 3 1/8"
2' - 8"	3903' - 1 1/4"
2' - 9 5/8"	3902' - 11 1/4"
2' - 11 3/8"	3902' - 9 1/8"



2
S103
DETAIL
SCALE: 1" = 1'-0"



4
S103
DETAIL
SCALE: 3/4" = 1'-0"



5
S103
DETAIL
SCALE: 1" = 1'-0"

- SHEET NOTES:
- DO NOT ADD BACKFILL TO MODIFIED SPILLWAY WALLS ABOVE THE TOP OF EXISTING SPILLWAY WALL.
 - FLAP GATES SHALL BE WALL-MOUNTED, CAST IRON, SINGLE-HINGE, DOUBLE-PIVOT, SERIES A-691 BY RODNEY HUNT, OR AN APPROVED EQUAL. INSTALL PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

IDAHO DEPARTMENT WATER RESOURCES
DAM SAFETY PROGRAM

Reviewed *[Signature]*
Approved *[Signature]*
Date of Approval 1 28 26

REV	DATE	BY	DESCRIPTION
0	12/19/25	MM	ISSUED FOR CONSTRUCTION



WARNING
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE



IDAHO DEPARTMENT OF FISH AND GAME
WINCHESTER DAM REHABILITATION

SPILLWAY STRUCTURAL
DETAILS 1

DESIGNED T. MAGILL
DRAWN C. GERBER
CHECKED M. MERKLEIN
PROJECT DATE 12/19/25

DRAWING
S104

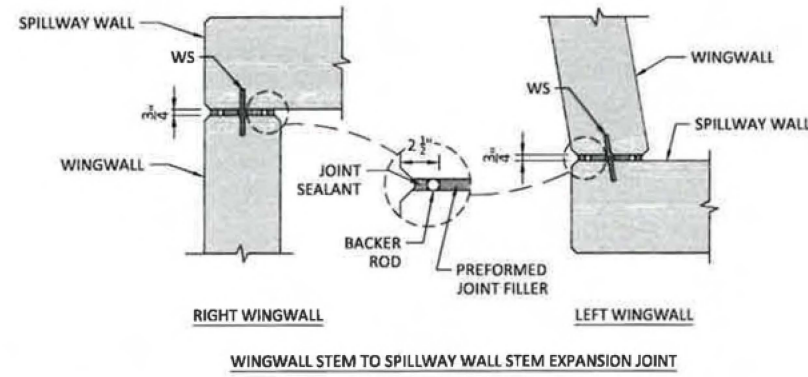
C:\Users\ChloeGerber\OneDrive\Documents\Winchester Dam Rehab\Project Files\Drawings\25-005_S104_05-STR.dwg

IDAHO DEPARTMENT WATER RESOURCES
DAM SAFETY PROGRAM

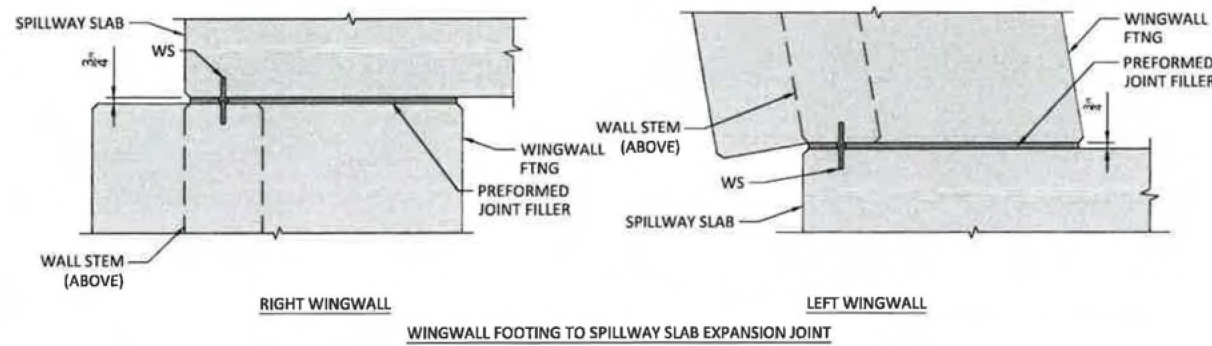
Reviewed: *[Signature]*

Approved: *[Signature]*

Date of Approval: **1 28 26**

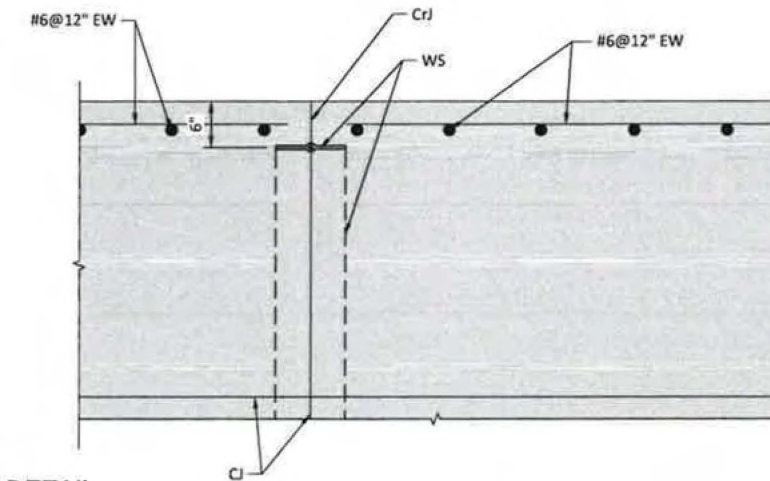


WINGWALL STEM TO SPILLWAY WALL STEM EXPANSION JOINT



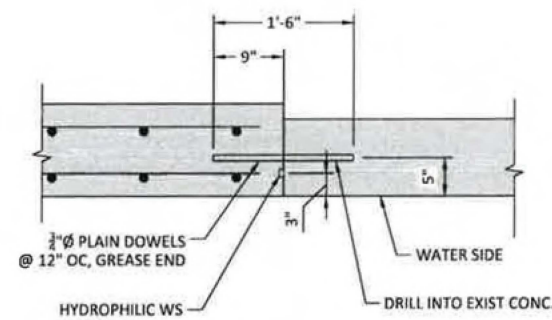
WINGWALL FOOTING TO SPILLWAY SLAB EXPANSION JOINT

DETAIL NOTES:
1. REINFORCEMENT IS NOT CONTINUOUS ACROSS JOINT.

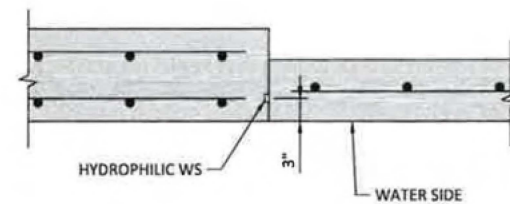


7
S103
DETAIL
SCALE: NTS

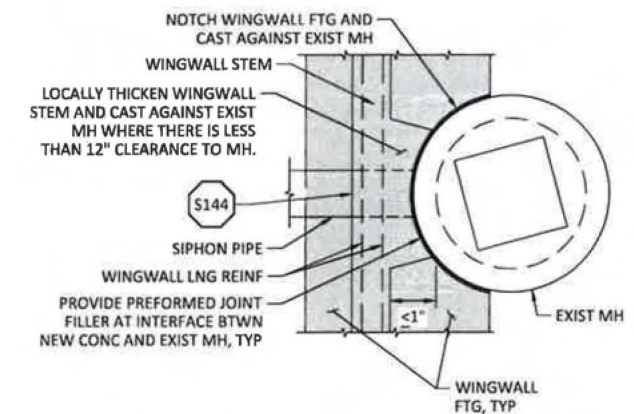
6
S102
DETAIL
SCALE: NTS



8
S103
DETAIL
SCALE: NTS



9
S103
DETAIL
SCALE: NTS



10
S102
DETAIL
SCALE: NTS

REV	DATE	BY	DESCRIPTION
0	12/19/25	MM	ISSUED FOR CONSTRUCTION



WARNING
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE



IDAHO DEPARTMENT OF FISH AND GAME
WINCHESTER DAM REHABILITATION

SPILLWAY STRUCTURAL
DETAILS 2

DESIGNED: T. MAGILL
DRAWN: C. GERBER
CHECKED: M. MERKLEIN
PROJECT DATE: 12/19/25

DRAWING
S105

Appendix B



PROJECT: Winchester Dam Rehabilitation

SHEET: 100% Design - Engineer's Estimate

DATE: 8-Dec-2025

BidItem	Bid Description	QTY	UNIT	Cost	Subtotal
1000	GENERAL CONDITIONS				\$ 400,000
1050	General Requirements	1	LS	\$300,000	
1075	Mobilization	1	LS	\$100,000	
1200	EXISTING CONDITIONS				\$ 61,000
1220	Demo	1	LS	\$51,200	
1230	Potholing	1	LS	\$9,800	
1300	CONCRETE				\$ 334,700
1320	Spillway Slab & Ogee	70	CY	\$107,100	
1330	Walls	120	CY	\$227,600	
1500	METALS				\$ 8,300
1510	Weirs	1	LS	\$8,300	
3100	EARTHWORK				\$ 1,446,800
3105	SWPPP	1	LS	\$14,100	
3110	Control of Water	1	LS	\$452,100	
3120	Structural Excavation	500	CY	\$20,700	
3125	Excavation - Liner Prep	260	CY	\$12,600	
3130	Structural Fill	225	CY	\$23,800	
3140	Common Fill	275	CY	\$7,200	
3145	Access Road - Water Treatment Plant	290	CY	\$15,300	
3150	Trenching	140	CY	\$7,800	
3160	Bentonite Fill	160	CY	\$48,200	
3170	Piezometer	3	LS	\$40,000	
3180	Geomembrane Liner ⁵	17,000	SF	\$805,000	
3200	EXTERIOR IMPROVEMENTS				\$ 145,900
3210	Fencing	520	LF	\$59,500	
3220	Site Grading	1	LS	\$17,100	
3230	Debris Boom Anchors	1	LS	\$13,600	
3240	Relocate Existing Dock	1	LS	\$20,100	
3250	Downstream Outfall Piping Extension	1	LS	\$13,100	
3260	Relocate Siphon	1	LS	\$22,500	
SUBTOTAL - DIRECT COSTS					\$ 2,396,700
	OH&P	15%			\$360,000
	Contingency	15%			\$360,000
TOTAL - MEDIAN CONSTRUCTION COST					\$ 3,116,700
CLASS 1 ESTIMATE ACCURACY RANGE:		+15%			\$ 3,600,000
		-10%			\$ 2,800,000

- 1) Class 1 estimate based on December 2025 100% design drawings.
- 2) Costs are in December 2025 dollars. No escalation is added.
- 3) The OPCC estimate includes only construction costs. (No permitting, design costs, or construction management costs are included).
- 4) Pricing assumes the project will be competitively bid with 3 to 5 contractors.
- 5) This is based on most recent CARPI estimate. McMillen is requesting verification of cost increase. Note that specifications will permit or equal systems.
- 6) Dewatering cost assumes siphon dewater the top 12ft of lake elevation.
- 7) Liner costs include \$10k in tariffs. Actual tariffs for liner may vary.

Cost Report

McMillen, LLC

6

Grant Wilson

Page 1 of 18

2025-39-3

Winchester Dam (100% EE)

12/8/2025 8:27 AM

Biditem - Parent

1200

EXISTING CONDITIONS

Takeoff Qty: 1.000 LS
Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	21,560.00	7,643.10	29,203.10	23,262.20	0.00	0.00	7,000.00	1,500.00	0.00	0.00	60,965.30
Total	21,560.00	7,643.10	29,203.10	23,262.20	0.00	0.00	7,000.00	1,500.00	0.00	0.00	60,965.30

	Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
	440.0000	0.0023	440.0000	138.5575	49.0000	66.3707	0.0000

Biditem

1220

Demo

Takeoff Qty: 1.000 LS
Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	19,800.00	6,994.68	26,794.68	22,860.20	0.00	0.00	0.00	1,500.00	0.00	0.00	51,154.88
Total	19,800.00	6,994.68	26,794.68	22,860.20	0.00	0.00	0.00	1,500.00	0.00	0.00	51,154.88

	Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
	400.0000	0.0025	400.0000	127.8872	49.5000	66.9867	0.0100

Activity: 020080 Demolition (Unreviewed) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	19,800.00	6,994.68	26,794.68	22,860.20	0.00	0.00	0.00	1,500.00	0.00	0.00	51,154.88
Total	19,800.00	6,994.68	26,794.68	22,860.20	0.00	0.00	0.00	1,500.00	0.00	0.00	51,154.88

	Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
	49,654.8800	100.0000	0.0100	496.5488	10.0000	0.1000	10.0000	5,115.4880

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	400.0000	0.0025	400.0000	66.9867	19,800.0000

Calendar: 510 50 HR WK (5 DAYS@10 HR/DAY) Hrs/Shift: 10 WC: Code not found.

Crew: EX336 (Mod) CAT 336 EXCAVATOR CREW Prod:CH 100 Eff: 100.00 Crew Hrs:100.00 Labor Pcs:4.00 Equipment Pcs:6.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
5TRUCK	Trucking - Hourly	1.00	5.00	TL	300.00	100.000	300.00	1,500.00
8AR250	Air Compressor 250 CFM	1.00	100.00	HR	42.50	106.000	45.05	4,505.00
8ARJH29	Jackhammer to 50 lbs	3.00	300.00	HR	5.10	106.000	5.41	1,621.80
8EXCAT336	CAT336 - 89,000 lbs	1.00	100.00	HR	138.90	106.000	147.23	14,723.40
8PKF350	MCM Ford F-350-Excavation	1.00	100.00	HR	20.10	100.000	20.10	2,010.00
LABRA	Laborer General	2.00	200.00	MH	40.00	110.000	60.21	12,042.08
OPEX	Operator Excavator	1.00	100.00	MH	50.00	110.000	73.26	7,326.30
OPFO	Operator Foreman	1.00	100.00	MH	50.00	110.000	74.26	7,426.30

Biditem

1230

Potholing

Takeoff Qty: 1.000 LS
Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	1,760.00	648.42	2,408.42	402.00	0.00	0.00	7,000.00	0.00	0.00	0.00	9,810.42
Total	1,760.00	648.42	2,408.42	402.00	0.00	0.00	7,000.00	0.00	0.00	0.00	9,810.42

	Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
--	----------	---------	---------	-------	---------------	----------------	---------

40.0000	0.0250	40.0000	245.2605	44.0000	60.2105	0.0500
---------	--------	---------	----------	---------	---------	--------

Activity: 020001 Locate Utilities / Pothole (Unreviewed) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	1,760.00	648.42	2,408.42	402.00	0.00	0.00	7,000.00	0.00	0.00	0.00	9,810.42
Total	1,760.00	648.42	2,408.42	402.00	0.00	0.00	7,000.00	0.00	0.00	0.00	9,810.42

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
2,810.4200	20.0000	0.0500	140.5210	2.0000	0.5000	2.0000	4,905.2100

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
40.0000	0.0250	40.0000	60.2105	1,760.0000

Calendar: 510 50 HR WK (5 DAYS@10 HR/DAY) Hrs/Shift: 10 WC: Code not found.

Crew: LAB2 2 MAN LABOR CREW Prod: CH 20 Eff: 100.00 Crew Hrs: 20.00 Labor Pcs: 2.00 Equipment Pcs: 1.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4 SUB	Pothole Subcontractor	1.00	2.00	DAYS	3,500.00	100.000	3,500.00	7,000.00
8PKF350	MCM Ford F-350-Excavation	1.00	20.00	HR	20.10	100.000	20.10	402.00
LABRA	Laborer General	2.00	40.00	MH	40.00	110.000	60.21	2,408.42

Biditem - Parent

CONCRETE

1300

Takeoff Qty: 1.000 LS

Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	111,032.19	41,184.39	152,216.58	10,788.92	60,420.00	6,837.00	104,500.00	0.00	0.00	0.00	334,762.50
Total	111,032.19	41,184.39	152,216.58	10,788.92	60,420.00	6,837.00	104,500.00	0.00	0.00	0.00	334,762.50

Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
2,370.5000	0.0004	2,370.5000	141.2202	46.8391	64.2129	0.0000

Biditem

Spillway Slab

1310

Takeoff Qty: 40.000 CY

Bid Qty: 40.000 CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	256.67	99.20	355.87	34.25	318.00	79.50	550.00	0.00	0.00	0.00	1,337.62
Total	10,266.69	3,967.94	14,234.63	1,370.02	12,720.00	3,180.00	22,000.00	0.00	0.00	0.00	53,504.65

Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
225.0000	0.1778	5.6250	237.7984	45.6297	63.2650	0.5853

Activity: 030740 Slab on Grade Form & Strip (Unreviewed) Quantity: 200.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	23.83	8.45	32.28	3.34	0.00	15.90	0.00	0.00	0.00	0.00	51.52
Total	4,766.69	1,689.46	6,456.15	668.27	0.00	3,180.00	0.00	0.00	0.00	0.00	10,304.42

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
35.6221	0.1667	6.0000	213.7328	3.3333	60.0001	0.0167	3,091.3291

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
100.0000	2.0000	0.5000	64.5615	23.8335

Calendar: 510 50 HR WK (5 DAYS@10 HR/DAY) Hrs/Shift: 10 WC: Code not found.

Crew: C4 CONCRETE FORMING CREW Prod: MU 0.5 Eff: 100.00 Crew Hrs: 33.33 Labor Pcs: 3.00 Equipment Pcs: 1.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
3 FORMWORK	Formwork	1.00	200.00	SF	15.00	106.000	15.90	3,180.00
8PKF550	MCM Ford F-550-Concrete	1.00	33.33	HR	20.05	100.000	20.05	668.27

CARPE	Carpenter	2.00	66.67	MH	45.00	110.000	66.74	4,449.34
LABRA	Laborer General	1.00	33.33	MH	40.00	110.000	60.21	2,006.81

Activity: 030745 Slab on Grade Rebar (Unreviewed) Quantity: 8800.00 Unit: LBS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	2.50	0.00	0.00	0.00	2.50
Total	0.00	0.00	0.00	0.00	0.00	0.00	22,000.00	0.00	0.00	0.00	22,000.00

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.0000	0.0000	4,000,000.0000	0.0000	0.0002	40,000,000.0000	0.0000	100,000,000.0000

Calendar: 510 50 HR WK (5 DAYS@10 HR/DAY) Hrs/Shift: 10 WC: Code not found.

Crew: C5 REBAR CREW Prod:UM 800000 Eff:100.00 Crew Hrs:0.00 Labor Pcs:5.00 Equipment Pcs:1.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4 REBAR	Rebar	1.00	8,800.00	LBS	2.50	100.000	2.50	22,000.00
8PKF550	MCM Ford F-550-Concrete	1.00	0.00	HR	20.05	100.000	0.00	0.00
CEF	Concrete Foreman	1.00	0.00	MH	40.00	110.000	0.00	0.00
IWREINF	Ironworker Reinforcing Steel	2.00	0.00	MH	45.00	110.000	0.00	0.00
LABRA	Laborer General	2.00	0.00	MH	40.00	110.000	0.00	0.00

Activity: 030750 Slab on Grade Place (Unreviewed) Quantity: 40.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	44.00	17.67	61.67	3.34	318.00	0.00	0.00	0.00	0.00	0.00	383.02
Total	1,760.00	706.95	2,466.95	133.73	12,720.00	0.00	0.00	0.00	0.00	0.00	15,320.68

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
65.0170	0.1667	6.0000	390.1000	0.6667	59.9997	0.0167	22,980.9051

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
40.0000	1.0000	1.0000	61.6738	44.0000

Calendar: 510 50 HR WK (5 DAYS@10 HR/DAY) Hrs/Shift: 10 WC: Code not found.

Crew: C2 (Mod) CONCRETE PLACING CREW Prod:MU 1 Eff:100.00 Crew Hrs:6.67 Labor Pcs:6.00 Equipment Pcs:1.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
2 READYMIX	Readymix	1.00	40.00	CY	300.00	106.000	318.00	12,720.00
8PKF550	MCM Ford F-550-Concrete	1.00	6.67	HR	20.05	100.000	20.05	133.73
CEF	Concrete Foreman	1.00	6.67	MH	40.00	110.000	63.16	421.25
CEFIN	Concrete Finisher	3.00	20.00	MH	40.00	110.000	62.16	1,243.10
LABRA	Laborer General	2.00	13.33	MH	40.00	110.000	60.21	802.60

Activity: 030755 Slab on Grade Finish (Unreviewed) Quantity: 850.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	4.40	1.85	6.25	0.67	0.00	0.00	0.00	0.00	0.00	0.00	6.92
Total	3,740.00	1,571.53	5,311.53	568.02	0.00	0.00	0.00	0.00	0.00	0.00	5,879.55

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
6.9171	0.0333	30.0002	207.5152	2.8333	300.0025	0.0033	2,075.1524

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
85.0000	10.0000	0.1000	62.4886	4.4000

Calendar: 510 50 HR WK (5 DAYS@10 HR/DAY) Hrs/Shift: 10 WC: Code not found.

Crew: C1 CONCRETE FINISHING CREW Prod:MU 0.1 Eff:100.00 Crew Hrs:28.33 Labor Pcs:3.00 Equipment Pcs:1.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
8PKF550	MCM Ford F-550-Concrete	1.00	28.33	HR	20.05	100.000	20.05	568.02
CEF	Concrete Foreman	1.00	28.33	MH	40.00	110.000	63.16	1,789.19
CEFIN	Concrete Finisher	2.00	56.67	MH	40.00	110.000	62.16	3,522.34

Biditem

Ogee

1320

Takeoff Qty: 30.000 CY
 Bid Qty: 30.000 CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	523.42	201.10	724.51	72.96	318.00	121.90	550.00	0.00	0.00	0.00	1,787.38
Total	15,702.50	6,032.92	21,735.42	2,188.86	9,540.00	3,657.00	16,500.00	0.00	0.00	0.00	53,621.28

	Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
	342.5000	0.0876	11.4167	156.5585	45.8467	63.4611	0.2748

Activity: 030740 Slab on Grade Form & Strip (Unreviewed) Quantity: 230.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	35.75	12.67	48.42	5.01	0.00	15.90	0.00	0.00	0.00	0.00	69.33
Total	8,222.50	2,914.32	11,136.82	1,152.88	0.00	3,657.00	0.00	0.00	0.00	0.00	15,946.70

	Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
	53.4335	0.2500	4.0000	213.7339	5.7500	40.0000	0.0250	2,773.3391

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	172.5000	1.3333	0.7500	64.5613	35.7500

Calendar: 510 50 HR WK (5 DAYS@10 HR/DAY) Hrs/Shift: 10 WC: Code not found.

Crew: C4 CONCRETE FORMING CREW Prod:MU 0.75 Eff: 100.00 Crew Hrs:57.50 Labor Pcs:3.00 Equipment Pcs:1.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
3 FORMWORK	Formwork	1.00	230.00	SF	15.00	106.000	15.90	3,657.00
8PKF550	MCM Ford F-550-Concrete	1.00	57.50	HR	20.05	100.000	20.05	1,152.88
CARPE	Carpenter	2.00	115.00	MH	45.00	110.000	66.74	7,674.72
LABRA	Laborer General	1.00	57.50	MH	40.00	110.000	60.21	3,462.10

Activity: 030745 Slab on Grade Rebar (Unreviewed) Quantity: 6600.00 Unit: LBS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	2.50	0.00	0.00	0.00	2.50
Total	0.00	0.00	0.00	0.00	0.00	0.00	16,500.00	0.00	0.00	0.00	16,500.00

	Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
	0.0000	0.0000	3,000,000.0000	0.0000	0.0002	30,000,000.0000	0.0000	75,000,000.0000

Calendar: 510 50 HR WK (5 DAYS@10 HR/DAY) Hrs/Shift: 10 WC: Code not found.

Crew: C5 REBAR CREW Prod:UM 600000 Eff: 100.00 Crew Hrs:0.00 Labor Pcs:5.00 Equipment Pcs:1.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4 REBAR	Rebar	1.00	6,600.00	LBS	2.50	100.000	2.50	16,500.00
8PKF550	MCM Ford F-550-Concrete	1.00	0.00	HR	20.05	100.000	0.00	0.00
CEF	Concrete Foreman	1.00	0.00	MH	40.00	110.000	0.00	0.00
IWREINF	Ironworker Reinforcing Steel	2.00	0.00	MH	45.00	110.000	0.00	0.00
LABRA	Laborer General	2.00	0.00	MH	40.00	110.000	0.00	0.00

Activity: 030750 Slab on Grade Place (Unreviewed) Quantity: 30.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	44.00	17.67	61.67	3.34	318.00	0.00	0.00	0.00	0.00	0.00	383.02
Total	1,320.00	530.21	1,850.21	100.25	9,540.00	0.00	0.00	0.00	0.00	0.00	11,490.46

	Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
	65.0153	0.1667	6.0000	390.0920	0.5000	60.0000	0.0167	22,980.9200

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	30.0000	1.0000	1.0000	61.6737	44.0000

Calendar: 510 50 HR WK (5 DAYS@10 HR/DAY) Hrs/Shift: 10 WC: Code not found.

Crew: C2 (Mod) CONCRETE PLACING CREW Prod:MU 1 Eff: 100.00 Crew Hrs:5.00 Labor Pcs:6.00 Equipment Pcs:1.00

Table with 9 columns: Resource, Description, Pcs/Wste, Quantity, Unit, Unit Cost, Tax/OT %, Actual UC, Total. Rows include 2 READYMIX, 8PKF550, CEF, CEFIN, LABRA.

Activity: 030755 Slab on Grade Finish (Unreviewed) Quantity: 700.00 Unit: SF

Summary table with 12 columns: Base Labor, Burden, Total Labor, Equipment, Perm Matls, Const Matls, Sub, Trucking, Travel, Services, Total. Rows for U. Cost and Total.

Summary table with 10 columns: Crew \$/Unit, Crew Hrs/Unit, Units/Crew Hr, \$/Crew Hour, Shifts, Units/Shift, Shifts/Unit, \$/Shift. Row for 13.8345, 0.0667, 15.0000, 207.5167, 4.6667, 149.9999, 0.0067, 2,075.1671.

Summary table with 5 columns: Manhours, Unit/MH, MH/Unit, Total Labor/MH, Base Labor/Unit. Row for 140.0000, 5.0000, 0.2000, 62.4885, 8.8000.

Calendar: 510 50 HR WK (5 DAYS@10 HR/DAY) Hrs/Shift: 10 WC: Code not found.

Crew: C1 CONCRETE FINISHING CREW Prod:MU 0.2 Eff: 100.00 Crew Hrs:46.67 Labor Pcs:3.00 Equipment Pcs:1.00

Table with 9 columns: Resource, Description, Pcs/Wste, Quantity, Unit, Unit Cost, Tax/OT %, Actual UC, Total. Rows include 8PKF550, CEF, CEFIN.

Biditem

1330

Walls

Takeoff Qty: 120.000 CY

Bid Qty: 120.000 CY

Summary table with 12 columns: Base Labor, Burden, Total Labor, Equipment, Perm Matls, Const Matls, Sub, Trucking, Travel, Services, Total. Rows for U. Cost and Total.

Summary table with 7 columns: Manhours, Unit/MH, MH/Unit, \$/MH, Base Labor/MH, Total Labor/MH, Unit/CH. Row for 1,803.0000, 0.0666, 15.0250, 126.2543, 47.1786, 64.4739, 0.3328.

Activity: 030520 2-Sided Walls Gang Form & Strip (Unreviewed) Quantity: 5210.00 Unit: SF

Summary table with 12 columns: Base Labor, Burden, Total Labor, Equipment, Perm Matls, Const Matls, Sub, Trucking, Travel, Services, Total. Rows for U. Cost and Total.

Summary table with 10 columns: Crew \$/Unit, Crew Hrs/Unit, Units/Crew Hr, \$/Crew Hour, Shifts, Units/Shift, Shifts/Unit, \$/Shift. Row for 17.3604, 0.0500, 20.0000, 347.2072, 26.0500, 200.0000, 0.0050, 3,472.0722.

Summary table with 5 columns: Manhours, Unit/MH, MH/Unit, Total Labor/MH, Base Labor/Unit. Row for 1,302.5000, 4.0000, 0.2500, 65.4314, 12.1000.

Calendar: 510 50 HR WK (5 DAYS@10 HR/DAY) Hrs/Shift: 10 WC: Code not found.

Crew: C4 (Mod) CONCRETE FORMING CREW Prod:MU 0.25 Eff: 100.00 Crew Hrs:260.50 Labor Pcs:5.00 Equipment Pcs:1.00

Table with 9 columns: Resource, Description, Pcs/Wste, Quantity, Unit, Unit Cost, Tax/OT %, Actual UC, Total. Rows include 8PKF550, CARPE, LABRA.

Activity: 030525 2-Sided Walls Gang Rebar (Unreviewed) Quantity: 26400.00 Unit: LBS

Summary table with 12 columns: Base Labor, Burden, Total Labor, Equipment, Perm Matls, Const Matls, Sub, Trucking, Travel, Services, Total.

U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	2.50	0.00	0.00	0.00	2.50
Total	0.00	0.00	0.00	0.00	0.00	0.00	66,000.00	0.00	0.00	0.00	66,000.00

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
0.0000	0.0000	12,000,000.0000	0.0000	0.0002	120,000,000.0000	0.0000	300,000,000.0000

Calendar: 510 50 HR WK (5 DAYS@10 HR/DAY) Hrs/Shift: 10 WC: Code not found.

Crew: C5 REBAR CREW Prod:UM 2400000 Eff:100.00 Crew Hrs:0.00 Labor Pcs:5.00 Equipment Pcs:1.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4 REBAR	Rebar	1.00	26,400.00	LBS	2.50	100.000	2.50	66,000.00
8PKF550	MCM Ford F-550-Concrete	1.00	0.00	HR	20.05	100.000	0.00	0.00
CEF	Concrete Foreman	1.00	0.00	MH	40.00	110.000	0.00	0.00
IWREINF	Ironworker Reinforcing Steel	2.00	0.00	MH	45.00	110.000	0.00	0.00
LABRA	Laborer General	2.00	0.00	MH	40.00	110.000	0.00	0.00

Activity: 030530 2-Sided Walls Gang Place (Unreviewed) Quantity: 120.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	88.00	35.15	123.15	8.02	318.00	0.00	0.00	0.00	0.00	0.00	449.17
Total	10,560.00	4,218.55	14,778.55	962.40	38,160.00	0.00	0.00	0.00	0.00	0.00	53,900.95

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
131.1746	0.4000	2.5000	327.9365	4.8000	25.0000	0.0400	11,229.3646

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
240.0000	0.5000	2.0000	61.5773	88.0000

Calendar: 510 50 HR WK (5 DAYS@10 HR/DAY) Hrs/Shift: 10 WC: Code not found.

Crew: C2 CONCRETE PLACING CREW Prod:MU 2 Eff:100.00 Crew Hrs:48.00 Labor Pcs:5.00 Equipment Pcs:1.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
2 READYMIX	Readymix	1.00	120.00	CY	300.00	106.000	318.00	38,160.00
8PKF550	MCM Ford F-550-Concrete	1.00	48.00	HR	20.05	100.000	20.05	962.40
CEF	Concrete Foreman	1.00	48.00	MH	40.00	110.000	63.16	3,031.45
CEFIN	Concrete Finisher	2.00	96.00	MH	40.00	110.000	62.16	5,966.90
LABRA	Laborer General	2.00	96.00	MH	40.00	110.000	60.21	5,780.20

Activity: 030535 2-Sided Walls Gang Finish (Unreviewed) Quantity: 5210.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	2.20	0.92	3.12	0.20	0.00	0.00	0.00	0.00	0.00	0.00	3.32
Total	11,462.00	4,781.53	16,243.53	1,044.61	0.00	0.00	0.00	0.00	0.00	0.00	17,288.14

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
3.3183	0.0100	100.0000	331.8261	5.2100	1,000.0000	0.0010	3,318.2610

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
260.5000	20.0000	0.0500	62.3552	2.2000

Calendar: 510 50 HR WK (5 DAYS@10 HR/DAY) Hrs/Shift: 10 WC: Code not found.

Crew: C1 (Mod) CONCRETE FINISHING CREW Prod:MU 0.05 Eff:100.00 Crew Hrs:52.10 Labor Pcs:5.00 Equipment Pcs:1.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
8PKF550	MCM Ford F-550-Concrete	1.00	52.10	HR	20.05	100.000	20.05	1,044.61
CEF	Concrete Foreman	1.00	52.10	MH	40.00	110.000	63.16	3,290.39
CEFIN	Concrete Finisher	4.00	208.40	MH	40.00	110.000	62.16	12,953.14

Biditem - Parent

1500

METALS

Takeoff Qty: 1.000 LS
 Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
--	------------	--------	-------------	-----------	------------	-------------	-----	----------	--------	----------	-------

U. Cost	880.00	324.21	1,204.21	731.32	6,360.00	0.00	0.00	0.00	0.00	0.00	8,295.53
Total	880.00	324.21	1,204.21	731.32	6,360.00	0.00	0.00	0.00	0.00	0.00	8,295.53
Manhours		Unit/MH		MH/Unit		\$/MH		Base Labor/MH		Total Labor/MH	Unit/CH
20.0000		0.0500		20.0000		414.7765		44.0000		60.2105	0.0000

Biditem

1510

Weirs

Takeoff Qty: 1.000 LS
Bid Qty: 1.000 LS

U. Cost	880.00	324.21	1,204.21	731.32	6,360.00	0.00	0.00	0.00	0.00	0.00	8,295.53
Total	880.00	324.21	1,204.21	731.32	6,360.00	0.00	0.00	0.00	0.00	0.00	8,295.53
Manhours		Unit/MH		MH/Unit		\$/MH		Base Labor/MH		Total Labor/MH	Unit/CH
20.0000		0.0500		20.0000		414.7765		44.0000		60.2105	0.1000

Activity: 050001 Weir, Stainless Steel (Unreviewed) Quantity: 2.00 Unit: EA

U. Cost	440.00	162.11	602.11	365.66	3,180.00	0.00	0.00	0.00	0.00	0.00	4,147.77	
Total	880.00	324.21	1,204.21	731.32	6,360.00	0.00	0.00	0.00	0.00	0.00	8,295.53	
Crew \$/Unit		Crew Hrs/Unit		Units/Crew Hr		\$/Crew Hour		Shifts		Units/Shift	Shifts/Unit	\$/Shift
967.7650		5.0000		0.2000		193.5530		1.0000		2.0000	0.5000	8,295.5300
Manhours		Unit/MH		MH/Unit		\$/MH		Total Labor/MH		Base Labor/Unit		
20.0000		0.1000		10.0000		60.2105		440.0000				

Calendar: 510 50 HR WK (5 DAYS@10 HR/DAY) Hrs/Shift: 10 WC: Code not found.
Crew: LAB2 (Mod) 2 MAN LABOR CREW Prod: CH 10 Eff: 100.00 Crew Hrs: 10.00 Labor Pcs: 2.00 Equipment Pcs: 2.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
2 WEIR SS	Stainless Steel Weir Box (2" width)	1.00	2.00	EA	3,000.00	106.000	3,180.00	6,360.00
8EXCAT301	CAT 301 Mini Ex	1.00	10.00	HR	50.03	106.000	53.03	530.32
8PKF350	MCM Ford F-350-Excavation	1.00	10.00	HR	20.10	100.000	20.10	201.00
LABRA	Laborer General	2.00	20.00	MH	40.00	110.000	60.21	1,204.21

Biditem - Parent

3100

EARTHWORK

Takeoff Qty: 1.000 LS
Bid Qty: 1.000 LS

U. Cost	95,713.53	34,028.74	129,742.27	201,450.74	59,777.38	69,960.00	940,220.00	24,240.00	0.00	21,000.00	1,446,390.39
Total	95,713.53	34,028.74	129,742.27	201,450.74	59,777.38	69,960.00	940,220.00	24,240.00	0.00	21,000.00	1,446,390.39
Manhours		Unit/MH		MH/Unit		\$/MH		Base Labor/MH		Total Labor/MH	Unit/CH
1,966.1800		0.0005		1,966.1800		735.6348		48.6799		65.9870	0.0000

Biditem

3105

SWPPP

Takeoff Qty: 1.000 LS
Bid Qty: 1.000 LS

U. Cost	4,400.00	1,621.04	6,021.04	3,119.70	0.00	0.00	0.00	0.00	0.00	5,000.00	14,140.74
Total	4,400.00	1,621.04	6,021.04	3,119.70	0.00	0.00	0.00	0.00	0.00	5,000.00	14,140.74
Manhours		Unit/MH		MH/Unit		\$/MH		Base Labor/MH		Total Labor/MH	Unit/CH
100.0000		0.0100		100.0000		141.4074		44.0000		60.2104	0.0200

Activity: 310690 SWPPP & BMP (Unreviewed) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	4,400.00	1,621.04	6,021.04	3,119.70	0.00	0.00	0.00	0.00	0.00	5,000.00	14,140.74
Total	4,400.00	1,621.04	6,021.04	3,119.70	0.00	0.00	0.00	0.00	0.00	5,000.00	14,140.74

	Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
	9,140.7400	50.0000	0.0200	182.8148	5.0000	0.2000	5.0000	2,828.1480

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	100.0000	0.0100	100.0000	60.2104	4,400.0000

Calendar: 510 50 HR WK (5 DAYS@10 HR/DAY) Hrs/Shift: 10 WC: Code not found.

Crew: LAB2 (Mod) 2 MAN LABOR CREW Prod: CH 50 Eff: 100.00 Crew Hrs: 50.00 Labor Pcs: 2.00 Equipment Pcs: 2.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
7 SWPPP PLAN	SWPPP PLAN	1.00	1.00	LS	5,000.00	100.000	5,000.00	5,000.00
8LOS272	CAT 272, JD332 - Skid 95HP	1.00	50.00	HR	39.90	106.000	42.29	2,114.70
8PKF350	MCM Ford F-350-Excavation	1.00	50.00	HR	20.10	100.000	20.10	1,005.00
LABRA	Laborer General	2.00	100.00	MH	40.00	110.000	60.21	6,021.04

Biditem Control of Water

3110

Takeoff Qty: 1.000 LS
Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	71,731.00	25,639.01	97,370.01	169,517.04	0.00	69,960.00	115,250.00	0.00	0.00	0.00	452,097.05
Total	71,731.00	25,639.01	97,370.01	169,517.04	0.00	69,960.00	115,250.00	0.00	0.00	0.00	452,097.05

	Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
	1,488.0000	0.0007	1,488.0000	303.8287	48.2063	65.4368	0.0013

Activity: 310159 Cofferdam (Unreviewed) Quantity: 230.00 Unit: FT

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	425.00	0.00	0.00	0.00	425.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	97,750.00	0.00	0.00	0.00	97,750.00

Calendar: 510 50 HR WK (5 DAYS@10 HR/DAY) Hrs/Shift: 10 WC: Code not found.

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4 S SACK CD	Supersack Cofferdam	1.00	230.00	FT	350.00	100.000	350.00	80,500.00
4 S SACK RE	Removal Supersack Cofferdam	1.00	230.00	FT	75.00	100.000	75.00	17,250.00

Activity: 310160 Dewatering (Unreviewed) Quantity: 35.00 Unit: DAYS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	1,925.00	689.21	2,614.21	4,215.22	0.00	1,696.00	500.00	0.00	0.00	0.00	9,025.43
Total	67,375.00	24,122.18	91,497.18	147,532.70	0.00	59,360.00	17,500.00	0.00	0.00	0.00	315,889.88

	Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
	6,829.4251	10.0000	0.1000	682.9425	35.0000	1.0000	1.0000	9,025.4251

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	1,400.0000	0.0250	40.0000	65.3551	1,925.0000

Calendar: 510 50 HR WK (5 DAYS@10 HR/DAY) Hrs/Shift: 10 WC: Code not found.

Crew: LAB4 (Mod) 4 MAN LABOR CREW Prod: HU 10 Eff: 100.00 Crew Hrs: 350.00 Labor Pcs: 4.00 Equipment Pcs: 8.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
3 HOSE RENT	10" HDPE hose (rent)	1.00	3,500.00	FT	16.00	106.000	16.96	59,360.00
4 MOB	PUMP MOB	1.00	3.50	TL	5,000.00	100.000	5,000.00	17,500.00
8EXCAT335	CAT335, JD350 - 80,000 lbs	1.00	350.00	HR	121.30	106.000	128.58	45,002.30

8PKF350	MCM Ford F-350-Excavation	1.00	350.00	HR	20.10	100.000	20.10	7,035.00
8PMP8D	8" Centrifugal, Trash - Dies	6.00	2,100.00	HR	42.90	106.000	45.47	95,495.40
LABRA	Laborer General	2.00	700.00	MH	40.00	110.000	60.21	42,147.28
LABRF	Labor/Excavation Foreman	1.00	350.00	MH	45.00	110.000	67.74	23,707.85
OPEX	Operator Excavator	1.00	350.00	MH	50.00	110.000	73.26	25,642.05

Activity: 310161 Maintenance Dewatering (Unreviewed) Quantity: 2.00 Unit: MO

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	2,178.00	758.42	2,936.42	10,992.17	0.00	5,300.00	0.00	0.00	0.00	0.00	19,228.59
Total	4,356.00	1,516.83	5,872.83	21,984.34	0.00	10,600.00	0.00	0.00	0.00	0.00	38,457.17

	Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
	13,928.5850	220.0000	0.0045	63.3118	44.0000	0.0455	22.0000	874.0266

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	88.0000	0.0227	44.0000	66.7367	2,178.0000

Calendar: 510 50 HR WK (5 DAYS@10 HR/DAY) Hrs/Shift: 10 WC: Code not found.

Crew: LAB2 (Mod) 2 MAN LABOR CREW Prod:HU 220 Eff: 100.00 Crew Hrs:440.00 Labor Pcs:0.20 Equipment Pcs:1.70

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
3 HOSE (RENT)	Hose Rent	1.00	2.00	MO	5,000.00	106.000	5,300.00	10,600.00
8EXCAT336	CAT336 - 89,000 lbs	0.10	44.00	HR	138.90	106.000	147.23	6,478.30
8PKF350	MCM Ford F-350-Excavation	0.10	44.00	HR	20.10	100.000	20.10	884.40
8PMP4D	4" Centrifugal, Trash - Dies	1.50	660.00	HR	20.90	106.000	22.15	14,621.64
LABRA	Laborer General	0.10	44.00	MH	40.00	110.000	60.21	2,649.26
OPEX	Operator Excavator	0.10	44.00	MH	50.00	110.000	73.26	3,223.57

Biditem Structural Excavation

3120

Takeoff Qty: 1.000 LS
Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	3,300.00	1,115.78	4,415.78	4,868.84	0.00	0.00	0.00	11,400.00	0.00	0.00	20,684.62
Total	3,300.00	1,115.78	4,415.78	4,868.84	0.00	0.00	0.00	11,400.00	0.00	0.00	20,684.62

	Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
	60.0000	0.0167	60.0000	344.7437	55.0000	73.5963	0.0500

Activity: 310340 Structure Excavation (Unreviewed) Quantity: 500.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	6.60	2.23	8.83	9.74	0.00	0.00	0.00	22.80	0.00	0.00	41.37
Total	3,300.00	1,115.78	4,415.78	4,868.84	0.00	0.00	0.00	11,400.00	0.00	0.00	20,684.62

	Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
	18.5692	0.0400	25.0000	464.2310	2.0000	250.0000	0.0040	10,342.3100

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	60.0000	8.3333	0.1200	73.5963	6.6000

Calendar: 510 50 HR WK (5 DAYS@10 HR/DAY) Hrs/Shift: 10 WC: Code not found.

Crew: EX326 CAT 326 EXCAVATOR CREW Prod:UH 25 Eff: 100.00 Crew Hrs:20.00 Labor Pcs:3.00 Equipment Pcs:3.00

Notes: Assume material is disposed within 1 hour drive (2 hour round trip)

Assume 25% of the material is reused and 75% is disposed.

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
5TRUCK	Trucking - Hourly	1.00	38.00	TL	300.00	100.000	300.00	11,400.00
8EXCAT326	CAT326, JD300 - 66,000 lbs	1.00	20.00	HR	117.05	106.000	124.07	2,481.46
8LO950	CAT 950, JD644 - 4CY	1.00	20.00	HR	93.65	106.000	99.27	1,985.38

8PKF350	MCM Ford F-350-Excavation	1.00	20.00	HR	20.10	100.000	20.10	402.00
OPEX	Operator Excavator	1.00	20.00	MH	50.00	110.000	73.26	1,465.26
OPFO	Operator Foreman	1.00	20.00	MH	50.00	110.000	74.26	1,485.26
OPLO	Operator Loader	1.00	20.00	MH	50.00	110.000	73.26	1,465.26

Biditem

Excavation - Liner Prep

3125

Takeoff Qty: 260.000 CY
 Bid Qty: 260.000 CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	6.60	2.23	8.83	9.74	0.00	0.00	0.00	30.00	0.00	0.00	48.57
Total	1,716.00	580.22	2,296.22	2,531.80	0.00	0.00	0.00	7,800.00	0.00	0.00	12,628.02

	Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
	31.2000	8.3333	0.1200	404.7442	55.0000	73.5968	25.0000

Activity: 310340 Structure Excavation (Unreviewed) Quantity: 260.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	6.60	2.23	8.83	9.74	0.00	0.00	0.00	30.00	0.00	0.00	48.57
Total	1,716.00	580.22	2,296.22	2,531.80	0.00	0.00	0.00	7,800.00	0.00	0.00	12,628.02

	Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
	18.5693	0.0400	25.0000	464.2327	1.0400	250.0000	0.0040	12,142.3269

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	31.2000	8.3333	0.1200	73.5968	6.6000

Calendar: 510 50 HR WK (5 DAYS@10 HR/DAY) Hrs/Shift: 10 WC: Code not found.

Crew: EX326 CAT 326 EXCAVATOR CREW Prod:UH 25 Eff:100.00 Crew Hrs:10.40 Labor Pcs:3.00 Equipment Pcs:3.00

Notes: Assume material is disposed within 1 hour drive (2 hour round trip)

Assume 25% of the material is reused and 75% is disposed.

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
5TRUCK	Trucking - Hourly	1.00	26.00	TL	300.00	100.000	300.00	7,800.00
8EXCAT326	CAT326, JD300 - 66,000 lbs	1.00	10.40	HR	117.05	106.000	124.07	1,290.36
8LO950	CAT 950, JD644 - 4CY	1.00	10.40	HR	93.65	106.000	99.27	1,032.40
8PKF350	MCM Ford F-350-Excavation	1.00	10.40	HR	20.10	100.000	20.10	209.04
OPEX	Operator Excavator	1.00	10.40	MH	50.00	110.000	73.26	761.94
OPFO	Operator Foreman	1.00	10.40	MH	50.00	110.000	74.26	772.34
OPLO	Operator Loader	1.00	10.40	MH	50.00	110.000	73.26	761.94

Biditem

Structural Fill

3130

Takeoff Qty: 1.000 LS
 Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	1,881.00	648.00	2,529.00	3,343.42	17,887.50	0.00	0.00	0.00	0.00	0.00	23,759.92
Total	1,881.00	648.00	2,529.00	3,343.42	17,887.50	0.00	0.00	0.00	0.00	0.00	23,759.92

	Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
	36.0000	0.0278	36.0000	659.9978	52.2500	70.2500	0.1111

Activity: 310600 Structural Backfill & Compacting (Unreviewed) Quantity: 225.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	8.36	2.88	11.24	14.86	79.50	0.00	0.00	0.00	0.00	0.00	105.60
Total	1,881.00	648.00	2,529.00	3,343.42	17,887.50	0.00	0.00	0.00	0.00	0.00	23,759.92

	Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
--	--------------	---------------	---------------	--------------	--------	-------------	-------------	----------

26.0996	0.0400	25.0000	652.4911	0.9000	250.0000	0.0040	26,399.9111
---------	--------	---------	----------	--------	----------	--------	-------------

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
36.0000	6.2500	0.1600	70.2500	8.3600

Calendar: 510 50 HR WK (5 DAYS@10 HR/DAY) Hrs/Shift: 10 WC: Code not found.

Crew: EXSB (Mod) STRUCTURAL BACKFILL Prod:UH 25 Eff:100.00 Crew Hrs:9.00 Labor Pcs:4.00 Equipment Pcs:4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
2 TYPE SF	Type SF Aggregate	1.00	225.00	CY	75.00	106.000	79.50	17,887.50
8EXCAT336	CAT336 - 89,000 lbs	1.00	9.00	HR	138.90	106.000	147.23	1,325.11
8LO966	CAT 966, JD744 - 4.5CY	1.00	9.00	HR	99.85	106.000	105.84	952.57
8PKF350	MCM Ford F-350-Excavation	1.00	9.00	HR	20.10	100.000	20.10	180.90
8WT4	Water Truck-4000 Gal	1.00	9.00	HR	92.75	106.000	98.32	884.84
OPEX	Operator Excavator	1.00	9.00	MH	50.00	110.000	73.26	659.37
OPFO	Operator Foreman	1.00	9.00	MH	50.00	110.000	74.26	668.37
OPLO	Operator Loader	1.00	9.00	MH	50.00	110.000	73.26	659.37
TDWT	Truck Driver (Water Truck)	1.00	9.00	MH	40.00	110.000	60.21	541.89

Biditem

3140

Common Fill

Takeoff Qty: 1.000 LS
 Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	2,299.00	791.98	3,090.98	4,086.39	0.00	0.00	0.00	0.00	0.00	0.00	7,177.37
Total	2,299.00	791.98	3,090.98	4,086.39	0.00	0.00	0.00	0.00	0.00	0.00	7,177.37

Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
44.0000	0.0227	44.0000	163.1220	52.2500	70.2495	0.0909

Activity: 310601 Common Backfill (Unreviewed) Quantity: 275.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	8.36	2.88	11.24	14.86	0.00	0.00	0.00	0.00	0.00	0.00	26.10
Total	2,299.00	791.98	3,090.98	4,086.39	0.00	0.00	0.00	0.00	0.00	0.00	7,177.37

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
26.0995	0.0400	25.0000	652.4882	1.1000	250.0000	0.0040	6,524.8818

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
44.0000	6.2500	0.1600	70.2495	8.3600

Calendar: 510 50 HR WK (5 DAYS@10 HR/DAY) Hrs/Shift: 10 WC: Code not found.

Crew: EXSB (Mod) STRUCTURAL BACKFILL Prod:UH 25 Eff:100.00 Crew Hrs:11.00 Labor Pcs:4.00 Equipment Pcs:4.00

Notes: Assume onsite excavated material is suitable for common fill

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
8EXCAT336	CAT336 - 89,000 lbs	1.00	11.00	HR	138.90	106.000	147.23	1,619.57
8LO966	CAT 966, JD744 - 4.5CY	1.00	11.00	HR	99.85	106.000	105.84	1,164.25
8PKF350	MCM Ford F-350-Excavation	1.00	11.00	HR	20.10	100.000	20.10	221.10
8WT4	Water Truck-4000 Gal	1.00	11.00	HR	92.75	106.000	98.32	1,081.47
OPEX	Operator Excavator	1.00	11.00	MH	50.00	110.000	73.26	805.89
OPFO	Operator Foreman	1.00	11.00	MH	50.00	110.000	74.26	816.89
OPLO	Operator Loader	1.00	11.00	MH	50.00	110.000	73.26	805.89
TDWT	Truck Driver (Water Truck)	1.00	11.00	MH	40.00	110.000	60.21	662.31

Biditem

3145

Access Road

Takeoff Qty: 290.000 CY
 Bid Qty: 290.000 CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	11.29	3.89	15.18	18.38	19.19	0.00	0.00	0.00	0.00	0.00	52.76
Total	3,275.03	1,128.22	4,403.25	5,330.87	5,565.00	0.00	0.00	0.00	0.00	0.00	15,299.12

Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
62.6800	4.6267	0.2161	244.0830	52.2500	70.2497	18.5106

Activity: 310355 Import & Place Fill Material (Unreviewed) Quantity: 70.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	13.94	4.80	18.75	17.78	79.50	0.00	0.00	0.00	0.00	0.00	116.03
Total	976.03	336.24	1,312.27	1,244.48	5,565.00	0.00	0.00	0.00	0.00	0.00	8,121.75

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
36.5250	0.0667	14.9999	547.8711	0.4667	149.9989	0.0067	17,403.6257

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
18.6800	3.7473	0.2669	70.2500	13.9433

Calendar: 510 50 HR WK (5 DAYS@10 HR/DAY) Hrs/Shift: 10 WC: Code not found.

Crew: GR3 12M FINISH CREW Prod:UH 14.9999 Eff: 100.00 Crew Hrs:4.67 Labor Pcs:4.00 Equipment Pcs:3.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
2 AGG	Agg Fill	1.00	70.00	CY	75.00	106.000	79.50	5,565.00
8GR12	Grader-Cat 12M	1.00	4.67	HR	97.20	106.000	103.03	481.16
8ROV84	Vibrating Roller - 84"	1.00	4.67	HR	61.45	106.000	65.14	304.19
8WT4	Water Truck-4000 Gal	1.00	4.67	HR	92.75	106.000	98.31	459.13
OPFO	Operator Foreman	1.00	4.67	MH	50.00	110.000	74.26	346.81
OPGR	Operator Motor Grader	1.00	4.67	MH	50.00	110.000	73.26	342.14
OPRO	Operator Roller/Compactor	1.00	4.67	MH	50.00	110.000	73.26	342.14
TDWT	Truck Driver (Water Truck)	1.00	4.67	MH	40.00	110.000	60.21	281.18

Activity: 310601 Common Backfill (Unreviewed) Quantity: 220.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	10.45	3.60	14.05	18.57	0.00	0.00	0.00	0.00	0.00	0.00	32.62
Total	2,299.00	791.98	3,090.98	4,086.39	0.00	0.00	0.00	0.00	0.00	0.00	7,177.37

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
32.6244	0.0500	20.0000	652.4882	1.1000	200.0000	0.0050	6,524.8818

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
44.0000	5.0000	0.2000	70.2495	10.4500

Calendar: 510 50 HR WK (5 DAYS@10 HR/DAY) Hrs/Shift: 10 WC: Code not found.

Crew: EXSB (Mod) STRUCTURAL BACKFILL Prod:UH 20 Eff: 100.00 Crew Hrs:11.00 Labor Pcs:4.00 Equipment Pcs:4.00

Notes: Assume onsite excavated material is suitable for common fill

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
8EXCAT336	CAT336 - 89,000 lbs	1.00	11.00	HR	138.90	106.000	147.23	1,619.57
8LO966	CAT 966, JD744 - 4.5CY	1.00	11.00	HR	99.85	106.000	105.84	1,164.25
8PKF350	MCM Ford F-350-Excavation	1.00	11.00	HR	20.10	100.000	20.10	221.10
8WT4	Water Truck-4000 Gal	1.00	11.00	HR	92.75	106.000	98.32	1,081.47
OPEX	Operator Excavator	1.00	11.00	MH	50.00	110.000	73.26	805.89
OPFO	Operator Foreman	1.00	11.00	MH	50.00	110.000	74.26	816.89
OPLO	Operator Loader	1.00	11.00	MH	50.00	110.000	73.26	805.89
TDWT	Truck Driver (Water Truck)	1.00	11.00	MH	40.00	110.000	60.21	662.31

Biditem

3150

Trenching

Takeoff Qty: 1.000 LS

Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	924.00	312.41	1,236.41	1,529.78	0.00	0.00	0.00	5,040.00	0.00	0.00	7,806.19
Total	924.00	312.41	1,236.41	1,529.78	0.00	0.00	0.00	5,040.00	0.00	0.00	7,806.19

Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
16.8000	0.0595	16.8000	464.6542	55.0000	73.5958	0.1786

Activity: 310800 Trenching (Unreviewed) Quantity: 140.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	6.60	2.23	8.83	10.93	0.00	0.00	0.00	36.00	0.00	0.00	55.76
Total	924.00	312.41	1,236.41	1,529.78	0.00	0.00	0.00	5,040.00	0.00	0.00	7,806.19

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
19.7585	0.0400	25.0000	493.9625	0.5600	250.0000	0.0040	13,939.6250

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
16.8000	8.3333	0.1200	73.5958	6.6000

Calendar: 510 50 HR WK (5 DAYS@10 HR/DAY) Hrs/Shift: 10 WC: Code not found.

Crew: EX336 CAT 336 EXCAVATOR CREW Prod:UH 25 Eff: 100.00 Crew Hrs:5.60 Labor Pcs:3.00 Equipment Pcs:3.00

Notes: Assume 1/2 of excavated material is disposed offsite.

Assume 1/2 of excavated material is blended with bentonite for backfill and remains onsite

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
5TRUCK	Trucking - Hourly	1.00	14.00	TL	300.00	100.000	300.00	4,200.00
5TRUCK ONSIT	Trucking - Hourly Onsite Stockpiling	1.00	5.60	HR	150.00	100.000	150.00	840.00
8EXCAT336	CAT336 - 89,000 lbs	1.00	5.60	HR	138.90	106.000	147.23	824.51
8LO966	CAT 966, JD744 - 4.5CY	1.00	5.60	HR	99.85	106.000	105.84	592.71
8PKF350	MCM Ford F-350-Excavation	1.00	5.60	HR	20.10	100.000	20.10	112.56
OPEX	Operator Excavator	1.00	5.60	MH	50.00	110.000	73.26	410.27
OPFO	Operator Foreman	1.00	5.60	MH	50.00	110.000	74.26	415.87
OPLO	Operator Loader	1.00	5.60	MH	50.00	110.000	73.26	410.27

Biditem

3160

Bentonite Fill

Takeoff Qty: 1.000 LS

Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	4,427.50	1,543.66	5,971.16	6,720.90	35,476.88	0.00	0.00	0.00	0.00	0.00	48,168.94
Total	4,427.50	1,543.66	5,971.16	6,720.90	35,476.88	0.00	0.00	0.00	0.00	0.00	48,168.94

Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
87.5000	0.0114	87.5000	550.5022	50.6000	68.2418	0.0571

Activity: 310371 Bentonite Backfill (Unreviewed) Quantity: 140.00 Unit: CY

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	31.63	11.03	42.65	48.01	253.41	0.00	0.00	0.00	0.00	0.00	344.06
Total	4,427.50	1,543.66	5,971.16	6,720.90	35,476.88	0.00	0.00	0.00	0.00	0.00	48,168.94

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
90.6576	0.1250	8.0000	725.2606	1.7500	80.0000	0.0125	27,525.1086

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
87.5000	1.6000	0.6250	68.2418	31.6250

Calendar: 510 50 HR WK (5 DAYS@10 HR/DAY) Hrs/Shift: 10 WC: Code not found.

Crew: EX326 (Mod) CAT 326 EXCAVATOR CREW Prod:UH 8 Eff: 100.00 Crew Hrs:17.50 Labor Pcs:5.00 Equipment Pcs:5.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
----------	-------------	----------	----------	------	-----------	----------	-----------	-------

2 BENTONITE	Bentonite (bulk bag)	1.00	43.75	CY	600.00	106.000	636.00	27,825.00
2 CLAY FILL	Clay Fill	1.00	96.25	CY	75.00	106.000	79.50	7,651.88
8EXCAT326	CAT326, JD300 - 66,000 lbs	1.00	17.50	HR	117.05	106.000	124.07	2,171.28
8LO950	CAT 950, JD644 - 4CY	1.00	17.50	HR	93.65	106.000	99.27	1,737.21
8LOS272	CAT 272, JD332 - Skid 95HP	1.00	17.50	HR	39.90	106.000	42.29	740.15
8PKF350	MCM Ford F-350-Excavation	1.00	17.50	HR	20.10	100.000	20.10	351.75
8WT4	Water Truck-4000 Gal	1.00	17.50	HR	92.75	106.000	98.31	1,720.51
LABRA	Laborer General	1.00	17.50	MH	40.00	110.000	60.21	1,053.68
OPEX	Operator Excavator	1.00	17.50	MH	50.00	110.000	73.26	1,282.10
OPFO	Operator Foreman	1.00	17.50	MH	50.00	110.000	74.26	1,299.60
OPLO	Operator Loader	1.00	17.50	MH	50.00	110.000	73.26	1,282.10
TDWT	Truck Driver (Water Truck)	1.00	17.50	MH	40.00	110.000	60.21	1,053.68

Biditem

3170

Piezometer

Takeoff Qty: 1.000 LS

Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	1,760.00	648.42	2,408.42	402.00	848.00	0.00	36,000.00	0.00	0.00	0.00	39,658.42
Total	1,760.00	648.42	2,408.42	402.00	848.00	0.00	36,000.00	0.00	0.00	0.00	39,658.42

Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
40.0000	0.0250	40.0000	991.4605	44.0000	60.2105	0.0500

Activity: 310031 Piezometer Slotted Pipe (Unreviewed) Quantity: 80.00 Unit: FT

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	22.00	8.11	30.11	5.03	10.60	0.00	450.00	0.00	0.00	0.00	495.73
Total	1,760.00	648.42	2,408.42	402.00	848.00	0.00	36,000.00	0.00	0.00	0.00	39,658.42

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
35.1303	0.2500	4.0000	140.5210	2.0000	40.0000	0.0250	19,829.2100

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
40.0000	2.0000	0.5000	60.2105	22.0000

Calendar: 510 50 HR WK (5 DAYS@10 HR/DAY) Hrs/Shift:10 WC: Code not found.

Crew: LAB2 2 MAN LABOR CREW Prod:CH 20 Eff:100.00 Crew Hrs:20.00 Labor Pcs:2.00 Equipment Pcs:1.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
2 SLOT PIPE	Slotted Pipe	1.00	80.00	FT	10.00	106.000	10.60	848.00
4 DRILL SUB	Drill Sub	1.00	2.00	DAYS	12,000.00	100.000	12,000.00	24,000.00
4 SUB MOB	Sub Mob	1.00	1.00	LS	12,000.00	100.000	12,000.00	12,000.00
8PKF350	MCM Ford F-350-Excavation	1.00	20.00	HR	20.10	100.000	20.10	402.00
LABRA	Laborer General	2.00	40.00	MH	40.00	110.000	60.21	2,408.42

Biditem

3180

Geomembrane Liner

Takeoff Qty: 1.000 LS

Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	788,970.00	0.00	0.00	16,000.00	804,970.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	788,970.00	0.00	0.00	16,000.00	804,970.00

Activity: 130001 Geomembrane Liner (Unreviewed) Quantity: 17000.00 Unit: SF

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	46.41	0.00	0.00	0.94	47.35
Total	0.00	0.00	0.00	0.00	0.00	0.00	788,970.00	0.00	0.00	16,000.00	804,970.00

Calendar: 510 50 HR WK (5 DAYS@10 HR/DAY) Hrs/Shift: 10 WC: Code not found.

Notes: Pricing based on notes added to quote - \$520k for 15,000 sf installed

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4 LINER SUB	Furnish and Install Gemembrane Liner	1.00	17,000.00	SF	46.41	100.000	46.41	788,970.00
7 SALES TAX	Sales Tax on Liner Mat'ls Pricing (\$100k)	1.00	1.00	LS	6,000.00	100.000	6,000.00	6,000.00
7 TARIFFS	Tariffs - 10% Assumed	1.00	1.00	LS	10,000.00	100.000	10,000.00	10,000.00

Biditem - Parent

EXTERIOR IMPROVEMENTS

3200

Takeoff Qty: 1.000 LS
Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	17,622.00	6,198.26	23,820.26	17,244.90	12,115.80	0.00	90,250.00	0.00	0.00	2,500.00	145,930.96
Total	17,622.00	6,198.26	23,820.26	17,244.90	12,115.80	0.00	90,250.00	0.00	0.00	2,500.00	145,930.96

	Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
	360.0000	0.0028	360.0000	405.3638	48.9500	66.1674	0.0000

Biditem

Fencing

3210

Takeoff Qty: 1.000 LS
Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	59,500.00	0.00	0.00	0.00	59,500.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	59,500.00	0.00	0.00	0.00	59,500.00

Activity: 321270 Chain Link Fences (Unreviewed) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	59,500.00	0.00	0.00	0.00	59,500.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	59,500.00	0.00	0.00	0.00	59,500.00

Calendar: 510 50 HR WK (5 DAYS@10 HR/DAY) Hrs/Shift: 10 WC: Code not found.

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4 12FT GATE	12ft Gate	1.00	1.00	LS	6,000.00	100.000	6,000.00	6,000.00
4 4FT GATE	4 ft Gate	1.00	1.00	EA	1,500.00	100.000	1,500.00	1,500.00
4 FENCE	Fence	1.00	520.00	LF	100.00	100.000	100.00	52,000.00

Biditem

Site Grading

3220

Takeoff Qty: 1.000 LS
Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	6,270.00	2,159.98	8,429.98	8,681.79	0.00	0.00	0.00	0.00	0.00	0.00	17,111.77
Total	6,270.00	2,159.98	8,429.98	8,681.79	0.00	0.00	0.00	0.00	0.00	0.00	17,111.77

	Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
	120.0000	0.0083	120.0000	142.5981	52.2500	70.2498	0.0333

Activity: 320560 Site Gradin (Unreviewed) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	6,270.00	2,159.98	8,429.98	8,681.79	0.00	0.00	0.00	0.00	0.00	0.00	17,111.77
Total	6,270.00	2,159.98	8,429.98	8,681.79	0.00	0.00	0.00	0.00	0.00	0.00	17,111.77

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
--------------	---------------	---------------	--------------	--------	-------------	-------------	----------

17,111.7700	30.0000	0.0333	570.3923	3.0000	0.3333	3.0000	5,703.9233
-------------	---------	--------	----------	--------	--------	--------	------------

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
120.0000	0.0083	120.0000	70.2498	6,270.0000

Calendar: 510 50 HR WK (5 DAYS@10 HR/DAY) Hrs/Shift: 10 WC: Code not found.

Crew: GR4 LOADER FINISH CREW Prod:CH 30 Eff:100.00 Crew Hrs:30.00 Labor Pcs:4.00 Equipment Pcs:4.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
8LO966	CAT 966, JD744 - 4.5CY	1.00	30.00	HR	99.85	106.000	105.84	3,175.23
8PKF350	MCM Ford F-350-Excavation	1.00	30.00	HR	20.10	100.000	20.10	603.00
8ROV84	Vibrating Roller - 84"	1.00	30.00	HR	61.45	106.000	65.14	1,954.11
8WT4	Water Truck-4000 Gal	1.00	30.00	HR	92.75	106.000	98.32	2,949.45
OPFO	Operator Foreman	1.00	30.00	MH	50.00	110.000	74.26	2,227.89
OPLO	Operator Loader	1.00	30.00	MH	50.00	110.000	73.26	2,197.89
OPRO	Operator Roller/Compactor	1.00	30.00	MH	50.00	110.000	73.26	2,197.89
TDWT	Truck Driver (Water Truck)	1.00	30.00	MH	40.00	110.000	60.21	1,806.31

Notes: Pricing based on 6 anchor locations

Biditem

Debris Boom Anchors

3230

Takeoff Qty: 1.000 LS
Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	1,606.00	571.68	2,177.68	2,383.94	5,755.80	0.00	750.00	0.00	0.00	2,500.00	13,567.42
Total	1,606.00	571.68	2,177.68	2,383.94	5,755.80	0.00	750.00	0.00	0.00	2,500.00	13,567.42

Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
34.0000	0.0294	34.0000	399.0418	47.2353	64.0494	0.1250

Activity: 031071 Eco Block & Chain (Unreviewed) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	0.00	0.00	0.00	0.00	5,755.80	0.00	750.00	0.00	0.00	2,500.00	9,005.80
Total	0.00	0.00	0.00	0.00	5,755.80	0.00	750.00	0.00	0.00	2,500.00	9,005.80

Calendar: 510 50 HR WK (5 DAYS@10 HR/DAY) Hrs/Shift: 10 WC: Code not found.

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
2 BUOY	24" Buoy	1.00	6.00	EA	530.00	106.000	561.80	3,370.80
2 CHAIN	20' Chains	1.00	6.00	EA	125.00	106.000	132.50	795.00
2 ECOBLOCK	Eco Block	1.00	6.00	EA	200.00	106.000	212.00	1,272.00
2 SHACKLE	Chain Shackle (1,500 lb)	1.00	12.00	EA	25.00	106.000	26.50	318.00
4 EYE BOLTS	Eye Bolts w/ Adhesive Anchor	1.00	6.00	EA	125.00	100.000	125.00	750.00
7 FREIGHT	Freight	1.00	1.00	TL	2,500.00	100.000	2,500.00	2,500.00

Activity: 320001 Eco Block Anchor Install (Unreviewed) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	1,606.00	571.68	2,177.68	2,383.94	0.00	0.00	0.00	0.00	0.00	0.00	4,561.62
Total	1,606.00	571.68	2,177.68	2,383.94	0.00	0.00	0.00	0.00	0.00	0.00	4,561.62

Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
4,561.6200	8.0000	0.1250	570.2025	0.8000	1.2500	0.8000	5,702.0250

Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
34.0000	0.0294	34.0000	64.0494	1,606.0000

Calendar: 510 50 HR WK (5 DAYS@10 HR/DAY) Hrs/Shift: 10 WC: Code not found.

Crew: EX336 (Mod) CAT 336 EXCAVATOR CREW Prod:CH 8 Eff:100.00 Crew Hrs:8.00 Labor Pcs:4.25 Equipment Pcs:3.25

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
----------	-------------	----------	----------	------	-----------	----------	-----------	-------

8EXCAT336	CAT336 - 89,000 lbs	1.00	8.00	HR	138.90	106.000	147.23	1,177.87
8LO950	CAT 950, JD644 - 4CY	0.25	2.00	HR	93.65	106.000	99.27	198.54
8LO966	CAT 966, JD744 - 4.5CY	1.00	8.00	HR	99.85	106.000	105.84	846.73
8PKF350	MCM Ford F-350-Excavation	1.00	8.00	HR	20.10	100.000	20.10	160.80
LABRA	Laborer General	3.00	24.00	MH	40.00	110.000	60.21	1,445.05
OPEX	Operator Excavator	1.00	8.00	MH	50.00	110.000	73.26	586.10
OPLO	Operator Loader	0.25	2.00	MH	50.00	110.000	73.27	146.53

Biditem

Relocate Existing Dock

3240

Takeoff Qty: 1.000 LS

Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	5,874.00	2,104.09	7,978.09	4,651.07	0.00	0.00	7,500.00	0.00	0.00	0.00	20,129.16
Total	5,874.00	2,104.09	7,978.09	4,651.07	0.00	0.00	7,500.00	0.00	0.00	0.00	20,129.16

	Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
	126.0000	0.0079	126.0000	159.7552	46.6190	63.3182	0.0417

Activity: 320002 Relocate Dock (Unreviewed) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	5,874.00	2,104.09	7,978.09	4,651.07	0.00	0.00	7,500.00	0.00	0.00	0.00	20,129.16
Total	5,874.00	2,104.09	7,978.09	4,651.07	0.00	0.00	7,500.00	0.00	0.00	0.00	20,129.16

	Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
	12,629.1600	24.0000	0.0417	526.2150	2.4000	0.4167	2.4000	8,387.1500

	Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit
	126.0000	0.0079	126.0000	63.3182	5,874.0000

Calendar: 510 50 HR WK (5 DAYS@10 HR/DAY) Hrs/Shift: 10 WC: Code not found.

Crew: EX336 (Mod) CAT 336 EXCAVATOR CREW Prod:CH 24 Eff: 100.00 Crew Hrs:24.00 Labor Pcs:5.25 Equipment Pcs:2.25

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4 CONC ANCHO	Concrete Anchor	1.00	5.00	CY	1,500.00	100.000	1,500.00	7,500.00
8EXCAT336	CAT336 - 89,000 lbs	1.00	24.00	HR	138.90	106.000	147.23	3,533.62
8LO966	CAT 966, JD744 - 4.5CY	0.25	6.00	HR	99.85	106.000	105.84	635.05
8PKF350	MCM Ford F-350-Excavation	1.00	24.00	HR	20.10	100.000	20.10	482.40
LABRA	Laborer General	4.00	96.00	MH	40.00	110.000	60.21	5,780.20
OPEX	Operator Excavator	1.00	24.00	MH	50.00	110.000	73.26	1,758.31
OPLO	Operator Loader	0.25	6.00	MH	50.00	110.000	73.26	439.58

Biditem

Downstream Outfall Piping Extension

3250

Takeoff Qty: 1.000 LS

Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	3,872.00	1,362.51	5,234.51	1,528.10	6,360.00	0.00	0.00	0.00	0.00	0.00	13,122.61
Total	3,872.00	1,362.51	5,234.51	1,528.10	6,360.00	0.00	0.00	0.00	0.00	0.00	13,122.61

	Manhours	Unit/MH	MH/Unit	\$/MH	Base Labor/MH	Total Labor/MH	Unit/CH
	80.0000	0.0125	80.0000	164.0326	48.4000	65.4314	0.0625

Activity: 320003 Wastewater Outfall Extension (Unreviewed) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	3,872.00	1,362.51	5,234.51	1,528.10	6,360.00	0.00	0.00	0.00	0.00	0.00	13,122.61
Total	3,872.00	1,362.51	5,234.51	1,528.10	6,360.00	0.00	0.00	0.00	0.00	0.00	13,122.61

	Crew \$/Unit	Crew Hrs/Unit	Units/Crew Hr	\$/Crew Hour	Shifts	Units/Shift	Shifts/Unit	\$/Shift
--	--------------	---------------	---------------	--------------	--------	-------------	-------------	----------

6,762.6100	16.0000	0.0625	422.6631	1.6000	0.6250	1.6000	8,201.6313
Manhours	Unit/MH	MH/Unit	Total Labor/MH	Base Labor/Unit			
80.0000	0.0125	80.0000	65.4314	3,872.0000			

Calendar: 510 50 HR WK (5 DAYS@10 HR/DAY) Hrs/Shift: 10 WC: Code not found.

Crew: PC2 (Mod) PIPE CREW - SMALL Prod: CH 16 Eff: 100.00 Crew Hrs: 16.00 Labor Pcs: 5.00 Equipment Pcs: 1.00

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
2 PIPE ELBOW	Pipe Elbow	1.00	2.00	EA	400.00	106.000	424.00	848.00
2 PIPE FL	Pipe Flange	1.00	4.00	EA	500.00	106.000	530.00	2,120.00
2 STEEL PIPE	Steel Pipe	1.00	40.00	FT	80.00	106.000	84.80	3,392.00
8BH451	Backhoe-Cat 450 W/ Hoepack	1.00	16.00	HR	90.10	106.000	95.51	1,528.10
IWSTR	Ironworker Structural Steel	2.00	32.00	MH	45.00	110.000	66.74	2,135.57
LABRB	Laborer Pipelayer	2.00	32.00	MH	40.00	110.000	60.21	1,926.73
OPBH	Operator Backhoe	1.00	16.00	MH	50.00	110.000	73.26	1,172.21

Notes: Pricing assumes materials can be re-used

Biditem **Relocate Siphon**
3260 Takeoff Qty: 1.000 LS
Bid Qty: 1.000 LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	22,500.00	0.00	0.00	0.00	22,500.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	22,500.00	0.00	0.00	0.00	22,500.00

Activity: 320004 Relocate Siphon (Unreviewed) Quantity: 1.00 Unit: LS

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
U. Cost	0.00	0.00	0.00	0.00	0.00	0.00	22,500.00	0.00	0.00	0.00	22,500.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	22,500.00	0.00	0.00	0.00	22,500.00

Calendar: 510 50 HR WK (5 DAYS@10 HR/DAY) Hrs/Shift: 10 WC: Code not found.

Notes: Costs based on \$7,500 for excavator based crew / cost per day

Resource	Description	Pcs/Wste	Quantity	Unit	Unit Cost	Tax/OT %	Actual UC	Total
4 RE MANHOLE	Relocate Manhole	1.00	1.00	LS	7,500.00	100.000	7,500.00	7,500.00
4 RE SIPHON	Relocate Siphon Pipe	1.00	1.00	LS	7,500.00	100.000	7,500.00	7,500.00
4 SIPHON/LIN	Siphon / Liner Interface Work	1.00	1.00	LS	7,500.00	100.000	7,500.00	7,500.00

Report Summary

	Base Labor	Burden	Total Labor	Equipment	Perm Matls	Const Matls	Sub	Trucking	Travel	Services	Total
Total	246,808	89,379	336,186	253,478	138,673	76,797	1,141,970	25,740	0	23,500	1,996,345

Job Notes

Estimate created on: 09/29/2025 by User#: 6 - Grant Wilson
 Source estimate used: H:\HEAVYBID\EST\2024-MASTER

*****Estimate created on: 11/06/2025 by User#: 6 - Grant Wilson
 Source estimate used: H:\HEAVYBID\EST\2025-39

*****Estimate created on: 12/08/2025 by User#: 6 - Grant Wilson
 Source estimate used: H:\HEAVYBID\EST\2025-39-1

Calendars Used In Estimate

510 50 HR WK (5 DAYS@10 HR/DAY)

Appendix C

Winchester Dam	
PFM Information	
Structure	Winchester Dam
Structure Type	Embankment Dam
Loading Condition	Normal
PFM Failure Type	Internal Erosion
Location(s)	Embankment
PFM Source	July 2022 SQRA
PFM Source Date	July 26, 2022
PFM Description	
PFM Number	1N
PFM Title	Internal erosion through the embankment except at the spillway/original outlet works.
PFM Description	<p>Failure process:</p> <ol style="list-style-type: none"> 1. Reservoir is at normal maximum water surface elevation (3,904.6 ft) 2. Seepage through the embankment and existing defect(s) in the concrete core wall initiates internal erosion of the downstream shell material exiting at the unprotected face near the toe. 3. Backwards erosion piping progresses to the concrete core wall. 4. Internal erosion and seepage continue unnoticed. 5. Internal erosion progresses backwards enlarging the seepage pathways and increasing the hydraulic gradient through the embankment. 6. Seepage continues to erode material away from the downstream face of the core wall. 7. Embankment material collapses into the void created by the seepage pathway. 8. The concrete core wall topples downstream due to loss of support on the downstream side. 9. Embankment material continues to collapse until the crest is breached. 10. Uncontrolled release of the reservoir occurs through the crest breach.
Supporting Details	
<p>Embankment</p> <ul style="list-style-type: none"> ● Dimensions <ul style="list-style-type: none"> ● Crest width: approximately 140 feet ● Upstream slope: approximately 3:1 (H:V) ● Downstream slope: varies from 1.5:1 to approx. 1:1 (H:V) ● Max height: 40 feet ● Hydraulic height: 36 feet (per IDWR inspection reports) ● Two-lane road across crest ● Concrete core wall <ul style="list-style-type: none"> ● 1910 drawings show it was notched into bedrock for the full width of the dam. ● Design drawings show it tapering at a 2':12' slope. ● Damaged and "repaired" during 1948 overtopping. ● Construction history <ul style="list-style-type: none"> ● Originally constructed in 1910 by Craig Mountain Lumber Company ● 1948: Original timber spillway between road embankment and core wall failed, causing overtopping of the core wall and washout of a substantial portion of the downstream fill all 	

the way to the streambed elevation. The core wall was observed to have “bulged” downstream, cracked, and water was seen flowing out from underneath. Emergency repairs were made including using two steel cables with turnbuckles to attempt to pull the bulge back upstream. Material was bulldozed from the adjacent hillside to fill in the downstream slope. (1948 IDWR Special Inspection)

- Original Low-Level Outlet leaked from the beginning and was plugged. No replacement was installed.
- Spillway and roadway crossing were enlarged ca. 2000. Two 20’ wide fuse plugs added at this time.

Hydraulics

- Freeboard: approx. 7’
- PMF: 6,300 CFS and will overtop the embankment
- Normal maximum water surface elevation (3,904.6 ft)

Field observations

- Minimal riprap on upstream slope for wave protection.
- Steep and varied slopes on the downstream face.
- Water flowing out of the downstream toe for about 15’ on either side of the spillway.
 - Left side was approx. double the right side. Estimated flow rate to be approx. 50 and 25 GPM, respectively.
 - Reportedly, the seepage changes with reservoir elevation.
 - No other areas of seepage observed.
- History of sinkhole development at spillway apron.
 - Two sinkholes have been observed and repaired since 2018.
 - Sinkhole occurrence has become more frequent over the last 10 years.
 - Additional sinkhole has developed adjacent to sinkhole previously repaired with CDF. Was not observable during field inspection because of reservoir elevation.
 - Tracer dye test showed direct connection between sinkholes and seepage at the toe in less than 1 hour.
- In July 2022, observed water flowing into the upstream slope in the area where log boom anchors were recently installed on the right side of the spillway.
 - Could hear gurgling water and see a small whirlpool.
- During July 2022 field inspection, there was a noticeable hydrogen sulfide odor present at the downstream toe. Unsure whether this was from the wastewater treatment plant effluent line that discharges at the downstream portion of the spillway or from something else that might indicate water coming from the reservoir.

Performance Monitoring Information

- No instrumentation installed.
- Visual observations by dam owner.
- IDWR inspection every two years.

Potential Interim Risk Reduction Measures Potential Dam Safety Management Actions	
Inspections	<ul style="list-style-type: none"> ● Perform and document at least weekly (or daily during elevated reservoir elevation) visual inspections.
Surveillance and Monitoring	<ul style="list-style-type: none"> ● Install seepage weirs. ● Install remote reservoir level gauge and rate of change alarm. ● Install piezometers upstream and downstream of the core wall.
EAP	<ul style="list-style-type: none"> ● Install early warning system and include notification sign at Hwy 95. ● Update and exercise EAP.
Follow-Up Studies	<ul style="list-style-type: none"> ● Study to better evaluate consequences. ● More precise breach/flood modeling. ● Geotechnical investigation in the embankment.
Others	<ul style="list-style-type: none"> ● Remove vegetation from the toe and the groins. ● Stockpile material – sand and gravel. ● Install a downstream filter and toe drain. ● Pressure grouting program. ● Upstream geomembrane liner. ● Sheet pile wall or slurry wall to eliminate the core wall.

Life Safety Consequences	
Consequence Description	<p>Highway 95</p> <ul style="list-style-type: none"> - First Hwy 95 crossing approx. 1.5 miles downstream. - Crosses back and forth in the canyon for about 12 miles. - Steep narrow canyon. Minimal areas for cars to turn around. - Two RR bridge crossings approx. 5 and 6 miles downstream. - ITD traffic count: 3,080 vehicles per day, average <p>No houses in the inundation area until Culdesac and Lapwai.</p> <p>Culdesac</p> <ul style="list-style-type: none"> - Population ~375 (2020) - Creek runs in levee through town. - Approx. 40' bottom width and substantial banks. <p>Lapwai</p> <ul style="list-style-type: none"> - Population ~1,300 (2020) - Creek still channelized in levee but smaller. - HCOM shows floodwave exceeds the banks. - Elementary school <p>HCOM analysis says about 200 nighttime PAR. Sounded approximately right to workshop participants.</p> <p>Floodwaters in January 2022 washed out NB lane of Hwy 95 approx. 4 miles south of Lapwai.</p>

Winchester Dam	
PFM Information	
Structure	Winchester Dam
Structure Type	Embankment Dam
Loading Condition	Normal
PFM Failure Type	Internal Erosion
Location(s)	Spillway/Embankment Interface
PFM Source	July 2022 SQRA
PFM Source Date	July 26, 2022
PFM Description	
PFM Number	2N
PFM Title	Internal erosion along spillway
PFM Description	<p>Failure process:</p> <ol style="list-style-type: none"> 1. Reservoir is at normal maximum water surface elevation (3,904.6 ft) 2. Seepage through granular layer under the spillway slab initiates internal erosion at the downstream toe of the spillway into the plunge pool. 3. Backwards erosion piping progresses under the spillway slab until it reaches the concrete core wall. 4. Internal erosion and seepage continue unnoticed. 5. Internal erosion progresses backwards enlarging the seepage pathways and increasing the hydraulic gradient through the embankment. 6. Seepage continues to erode material from beneath the spillway slab. 7. Sections of the spillway collapse into the void created by the seepage pathway. 8. Flows through the spillway erode the slope downstream of the core wall. 9. The concrete core wall topples downstream due to loss of support on the downstream side. 10. Embankment material continues to collapse until the crest is breached. 11. Uncontrolled release of the reservoir occurs through the crest breach.
Supporting Details	
<p>Embankment</p> <ul style="list-style-type: none"> ● Dimensions <ul style="list-style-type: none"> ● Crest width: approximately 140 feet ● Upstream slope: approximately 3:1 (H:V) ● Downstream slope: varies from 1.5:1 to approx. 1:1 (H:V) ● Max height: 40 feet ● Hydraulic height: 36 feet (per IDWR inspection reports) ● Two-lane road across crest ● Concrete core wall <ul style="list-style-type: none"> ● 1910 drawings show it was notched into bedrock for the full width of the dam. ● Design drawings show it tapering at a 2':12' slope ● Damaged and "repaired" during 1948 overtopping. ● Construction history <ul style="list-style-type: none"> ● Originally constructed in 1910 by Craig Mountain Lumber Company ● 1948: Original timber spillway between road embankment and core wall failed, causing 	

<ul style="list-style-type: none"> • Could hear gurgling water and see a small whirlpool. • During July 2022 field inspection, there was a noticeable hydrogen sulfide odor present at the downstream toe. Unsure whether this was from the wastewater treatment plant effluent line that discharges at the downstream portion of the spillway or from something else that might indicate water coming from the reservoir. • Observed cracking in the spillway walls at the location of the cutoff wall. • Observed longitudinal crack in the spillway slab just after the transition to the steep chute section. • Seepage observed coming into the spillway through construction joints in the spillway walls of the box culvert. <ul style="list-style-type: none"> • Transverse cracking in the roadway asphalt are located approximately above the leakage within the box culvert. • These cracks reportedly expand during the winter.
Performance Monitoring Information
<ul style="list-style-type: none"> • No instrumentation installed. • Visual observations by dam owner. • IDWR inspection every two years.

Evaluation Factors	
Adverse (More Likely)	Favorable (Less Likely)
Current history of seepage, sinkholes, and material loss.	Very wide crest.
Sinkhole development has become more frequent.	
Documentation from 1948 overtopping that the core wall cracked.	Core wall is present.
No instrumentation.	During 1948 overtopping, the core wall did not completely topple.
No way to completely drain the reservoir.	Relatively low head.
Spillway gate is manually operated.	
Once the failure mode starts happening, intervention would be difficult.	This failure mode would take a long time to develop.
Repair effectiveness is questionable.	Repairs to sinkholes have been made in the past.
Upstream end of spillway has a 18" cutoff wall.	Regular observations by trained personnel. Operations personnel are aware of the past issues and the need to remain aware.
Tracer dye test showed direct connection between sinkholes and seepage at the toe in less than 1 hour.	No evidence of spillway settlement (vertical offsets at cracks, etc.)
Gravel under upstream portion of spillway provides direct hydraulic connection between the reservoir and the dam crest.	Instability and erosion may be limited to just the width of the spillway.
Observed cracking in spillway slab and walls.	Slopes look generally fine with no obvious signs of settlement.
Seepage was observed into the spillway (in the box culvert).	
Plunge pool masks any evidence of material migration under the spillway.	
Spillway slab will act as a roof.	

Life Safety Consequences	
Consequence Description	<p>Highway 95</p> <ul style="list-style-type: none"> - First Hwy 95 crossing approx. 1.5 miles downstream. - Crosses back and forth in the canyon for about 12 miles. - Steep narrow canyon. Minimal areas for cars to turn around. - Two RR bridge crossings approx. 5 and 6 miles downstream. - ITD traffic count: 3,080 vehicles per day, average (<p>No houses in the inundation area until Culdesac and Lapwai.</p> <p>Culdesac</p> <ul style="list-style-type: none"> - Population ~375 (2020) - Creek runs in levee through town. - Approx. 40' bottom width and substantial banks. <p>Lapwai</p> <ul style="list-style-type: none"> - Population ~1,300 (2020) - Creek still channelized in levee but smaller. - HCOM shows floodwave exceeds the banks. - Elementary school <p>HCOM analysis says about 200 nighttime PAR. Sounded approximately right to workshop participants.</p> <p>Floodwaters in January 2022 washed out NB lane of Hwy 95 approx. 4 miles south of Lapwai.</p>
Estimated PAR	<p>Cities: 200 PAR</p> <p>On Hwy 95 in canyon: 150-300 PAR (100-200 cars and assuming 1.5 people/car)</p> <p>Total estimated PAR: 350-500</p>
Inundation Characteristics	<p>Depths in canyon 6-10 feet</p> <p>Depths in Culdesac 3-6 feet within channel, much less outside.</p> <p>DVs' in the canyon up to 50</p> <p>DV's in Culdesac and Lapwai show up to 50 within the channel and up to 4 outside the banks.</p>
Warning/Evacuation Challenges	<p>HCOM shows arrival time to Hwy 95 between 0.5 to 1 hour. Approximately 2 more hours to reach Culdesac.</p> <p>Minimal cell signal up the canyon and at the dam.</p> <p>Hwy 95 is the only way north/south and there are minimal places to turn around.</p>

Winchester Dam	
PFM Information	
Structure	Winchester Dam
Structure Type	Embankment Dam
Loading Condition	Flood
PFM Failure Type	Embankment Overtopping
Location(s)	Embankment
PFM Source	July 2022 SQRA
PFM Source Date	July 26, 2022
PFM Description	
PFM Number	3F
PFM Title	Half PMF overtopping
PFM Description	<p>Failure process:</p> <ol style="list-style-type: none"> 1. Reservoir is at normal maximum water surface elevation (3,904.6 ft) 2. Reservoir experiences flows up to ½ of the PMF (3,150 CFS) 3. Reservoir water surface elevation rises above the fuse plug crests and causes them to wash out. 4. Reservoir water surface elevation rises and begins overtopping the embankment. 5. Intervention methods are unsuccessful. 6. Overtopping flows cause erosion on the downstream embankment face, causes the concrete core wall to collapse, and leads to uncontrolled reservoir release
Supporting Details	
<p>Embankment</p> <ul style="list-style-type: none"> • Dimensions <ul style="list-style-type: none"> • Crest width: approximately 140 feet • Upstream slope: approximately 3:1 (H:V) • Downstream slope: varies from 1.5:1 to approx. 1:1 (H:V) • Max height: 40 feet • Hydraulic height: 36 feet (per IDWR inspection reports) • Two-lane road across crest • Concrete core wall <ul style="list-style-type: none"> • 1910 drawings show it was notched into bedrock for the full width of the dam. • Design drawings show it tapering at a 1:6 slope. • Damaged and “repaired” during 1948 overtopping. • Construction history <ul style="list-style-type: none"> • Originally constructed in 1910 by Craig Mountain Lumber Company • 1948: Original timber spillway between road embankment and core wall failed, causing overtopping of the core wall and washout of a substantial portion of the downstream fill all the way to the streambed elevation. The core wall was observed to have “bulged” downstream, cracked, and water was seen flowing out from underneath. Emergency repairs were made including using two steel cables with turnbuckles to attempt to pull the bulge back upstream. Material was bulldozed from the adjacent hillside to fill in the downstream slope. (1948 IDWR Special Inspection) • Original Low-Level Outlet leaked from the beginning and was plugged. No replacement was installed. 	

Performance Monitoring Information	
<ul style="list-style-type: none"> No instrumentation installed. Visual observations by dam owner. IDWR inspection every two years. 	
Evaluation Factors	
Adverse (More Likely)	Favorable (Less Likely)
No instrumentation.	Very wide crest.
No way to completely drain the reservoir.	Core wall is present.
Documentation from 1948 overtopping that the core wall cracked.	During 1948 overtopping, the core wall did not completely topple.
Dependent on fuse plugs to properly operate to help reduce overtopping.	Regular observations by trained personnel. Operations personnel are aware of the past issues and the need to remain aware.
Half PMF overtopping: 2' for 24-36 hours.	Overtopping duration may not be long enough to lead to complete failure.
Spillway notch through the core wall creates a concentrated area for overtopping flow.	
Spillway gate is manually operated.	Dam crest is paved.
Once the failure mode starts happening, intervention would be difficult.	Downstream slope is riprapped.
Spillway walls downstream of the roadway embankment can be overtopped without overtopping the roadway.	

Failure Likelihood Summary	
Failure Likelihood	<p>Initial Estimate 10^{-4} to 10^{-5} (Category 5): 2 10^{-5} to 10^{-6} (Category 6): 5</p> <p>Final Estimate 3.16×10^{-4} to 3.16×10^{-5} (1/100,000): consensus</p>
Justification	<p>Category 5: Riprap may not be large enough to withstand 2' overtopping for 24-36 hrs. High hazard dams are supposed to be able to pass a half PMF, which is a known defect, but the evidence is weighted towards less likely.</p> <p>Category 6: Very wide (and paved) crest. Downstream slope is riprapped. Fuse plugs may help moderate the beginning of the flood. Core wall may help slow the erosion.</p>
Confidence	High
Rationale	Direct evidence of failure mode. Does not pass the half PMF without overtopping, which is a known defect.

<p>Inundation Characteristics</p>	<p>Depths in canyon 6-10 feet Depths in Culdesac 3-6 feet within channel, much less outside. DVs' in the canyon up to 50 DV's in Culdesac and Lapwai show up to 50 within the channel and up to 4 outside the banks.</p>
<p>Warning/Evacuation Challenges</p>	<p>HCOM shows arrival time to Hwy 95 between 0.5 to 1 hour. Approximately 2 more hours to reach Culdesac. Minimal cell signal up the canyon and at the dam. Hwy 95 is the only way north/south and there are minimal places to turn around.</p>
<p>Potential Life Loss</p>	<p>Fatality rate for towns/surrounding: assume 10% Fatality rate for highway traffic: assume 50%</p> <p>PLL Towns/surrounding: $200 \times 10\% = 20$ Highway: $350-500 \times 50\% = 175-250$ Total: 200+ PLL</p> <p>Therefore, 100-1,000 bin</p>
<p>Justification</p>	<p>Culdesac and Lapwai have small populations and the majority of the floodwave would be contained in the levee channels through the towns. Inundation maps show some limited amount of inundation outside the levees. Hwy 95 canyon between Winchester and Culdesac is very steep and narrow with minimal areas for cars to turn around. Floodwave would take between 1 and 3 hours to reach and move through the canyon.</p> <p>During flood: no justification for higher PLL and not likely to reduce below 100.</p> <p>During fuse plug failure: justification to center a bin on 1 PLL (based on previous times when fuse plugs have failed). So 0.316-3.16</p>
<p>Confidence</p>	<p>Low</p>
<p>Rationale</p>	<p>Many unknowns related to population numbers, especially on the highway. Many unknowns related to flood routing, topography, and debris plugging.</p>

<ul style="list-style-type: none"> • Normal maximum water surface elevation (3,904.6 ft) • Drainage area is 13 square miles (Phase 1 Report). • Estimated flow through single fuse plug bay is 400 CFS at 40” deep. <p>Field observations</p> <ul style="list-style-type: none"> • Left fuse plug had upstream bulging CMU blocks.
Performance Monitoring Information
<ul style="list-style-type: none"> • No instrumentation installed. • Visual observations by dam owner. • IDWR inspection every two years.

Evaluation Factors	
Adverse (More Likely)	Favorable (Less Likely)
No instrumentation.	Regular observations by trained personnel. Operations personnel are aware of the past issues and the need to remain aware.
Spillway gate is manually operated.	Spillway is designed for this flow capacity.
Spillway gate has limited capacity.	Duration would be short and flows would decrease over time.
Dependent on fuse plugs to properly operate to help reduce overtopping.	Flows would only continue until reservoir reaches spillway invert elevation.
Once the failure mode starts happening, intervention would be difficult.	
Fuse plugs have been washed out twice in the past.	
Preventing overtopping requires significant effort and forecasting from operations personnel.	
Could happen at any time and would happen quickly.	
Lake surface commonly freezes over. Ice pack and wind could initiate this failure mode.	

	<p>HCOM analysis says about 200 nighttime PAR. Sounded approximately right to workshop participants.</p> <p>Floodwaters in January 2022 washed out NB lane of Hwy 95 approx. 4 miles south of Lapwai.</p>
Estimated PAR	<p>Cities: 200 PAR On Hwy 95 in canyon: 150-300 PAR (100-200 cars and assuming 1.5 people/car)</p> <p>Total estimated PAR: 350-500</p>
Inundation Characteristics	<p>Depths in canyon 6-10 feet Depths in Culdesac 3-6 feet within channel, much less outside. DVs' in the canyon up to 50 DV's in Culdesac and Lapwai show up to 50 within the channel and up to 4 outside the banks.</p>
Warning/Evacuation Challenges	<p>HCOM shows arrival time to Hwy 95 between 0.5 to 1 hour. Approximately 2 more hours to reach Culdesac. Minimal cell signal up the canyon and at the dam. Hwy 95 is the only way north/south and there are minimal places to turn around.</p>
Potential Life Loss	<p>Fatality rate for towns/surrounding: assume 10% Fatality rate for highway traffic: assume 50%</p> <p>PLL Towns/surrounding: $200 \times 10\% = 20$ Highway: $350-500 \times 50\% = 175-250$ Total: 200+ PLL</p> <p>Therefore, 100-1,000 bin</p>
Justification	<p>Culdesac and Lapwai have small populations and the majority of the floodwave would be contained in the levee channels through the towns. Inundation maps show some limited amount of inundation outside the levees. Hwy 95 canyon between Winchester and Culdesac is very steep and narrow with minimal areas for cars to turn around. Floodwave would take between 1 and 3 hours to reach and move through the canyon.</p> <p>During flood: no justification for higher PLL and not likely to reduce below 100.</p> <p>During fuse plug failure: justification to center a bin on 1 PLL (based on previous times when fuse plugs have failed). So 0.316-3.16</p>
Confidence	Low
Rationale	<p>Many unknowns related to population numbers, especially on the highway. Many unknowns related to flood routing, topography, and debris plugging.</p>

Exhibit A

CITY OF WINCHESTER
PO BOX 245
WINCHESTER, ID 83555
(208) 924-5358
winchcty@connectwireless.us

22 January 2026

Idaho State Legislature
State Capitol
700 W Jefferson St
Boise, ID 83720

Regarding Repair/Replacement of Winchester Lake Dam

Dear Members of the Idaho State Legislature,

I am writing to follow up on our previous correspondence regarding the urgent need for repair or replacement of the Winchester Lake dam. As a concerned member of the Winchester community, I must emphasize the critical importance of this project for our residents, local businesses, and the vitality of Winchester Lake State Park.

With the legislature now in session, we recognize that you are facing a particularly challenging year, marked by a tight budget and necessary budget cuts. We are all aware of the difficult decisions that must be made. However, it is important to remember that anything that hurts our local economies has a trickle effect, ultimately impacting the state as a whole and the areas surrounding us.

The deteriorating condition of the dam has resulted in lowered water levels, which has had a profound effect on our community. Winchester Lake is not only a centerpiece of our recreational life but also a vital economic engine for local businesses. Restaurants, shops, outfitters, and lodging providers depend on the steady flow of visitors drawn to the lake and the state park. With diminished water levels, we have witnessed a significant decline in

tourism, directly impacting these businesses. Many have reported reduced revenue, staff cutbacks, and even closures, which in turn affects employment and the overall economic health of Winchester.

Recent data and reports highlight the severity of this decline. According to local sources, the drop in water levels has led to a noticeable reduction in the number of visitors to Winchester Lake State Park, resulting in fewer bookings at campgrounds and lower sales for local retailers and restaurants. The Idaho Department of Fish and Game has noted that modifications to the dam have caused lake levels to drop by approximately three feet, making docks less usable and further discouraging tourism and recreation. This downturn in tourism has a direct and measurable impact on the revenue of local businesses, with some reporting losses significant enough to threaten their continued operation.

This economic hardship does not remain isolated. When local businesses struggle, the effects ripple outward—reducing tax revenues, limiting community investments, and weakening the broader regional economy. The loss of tourism and commerce in Winchester inevitably impacts neighboring towns and the state’s financial well-being.

Winchester Lake State Park—a valued destination for outdoor enthusiasts, families, and tourists—relies on the dam to maintain healthy and vibrant conditions for fishing, boating, camping, and wildlife observation. Without immediate action to repair or replace the dam, the park risks losing its appeal and its ability to provide economic and recreational benefits to the region.

It is encouraging to know that the Idaho Fish and Game Department has been granted spending authority in the range of \$2.5 to \$3 million for the completion of this much-needed project. However, I want to stress that receiving the actual budget dollars is essential to move forward; the authority alone is not enough. The sooner these funds are allocated and made available, the sooner our community can begin to recover and thrive once more.

I respectfully urge the legislature to expedite funding and support for the Winchester Lake dam project. Timely action will not only restore the lake’s

water levels but also revitalize tourism, safeguard local businesses, and preserve the unique character of Winchester and its surroundings.

Thank you for your attention to this matter and for your continued commitment to the well-being of Idaho's communities. We look forward to your response and to working together to secure a vibrant future for Winchester.

Sincerely,

Exhibit B



February 23, 2026

Idaho Department Fish & Game
Attn: Tim Eddy, Bureau of Engineering
PO Box 25
Boise, ID 83707-0025

COPY

Re: Winchester Dam (aka Lapwei Lake)
Spillway Modification & Geomembrane Liner

IDWR File: 85-2020
NATDAM: ID06213

Dear Mr. Eddy,

Thank you for providing the Idaho Department of Water Resources (IDWR) Dam Safety Program the final design package that addresses the design modifications to the referenced embankment dam. We are pleased to inform you that IDWR has reviewed and approved the design documents prepared by your engineer, Mark Merklein, P.E. consisting of the *Design Documentation Report, Design Drawings, and Technical Specifications*. Based on our design review, we understand construction will consist of modification to the spillway to improve flow capacity, the addition of a geomembrane liner on the upstream slope of the earthen dam to reduce leakage, and the extension of the existing siphon pipe deeper into the reservoir. Cover sheets bearing signed approval dated January 28, 2026 for all but the design drawings are included herewith; the latter including all pages that are included in the Volume 2–Construction Drawings.

Note that IDWR Dam Safety approval for construction is authorized subject to each of the four (4) conditions:

- 1) The *Engineer in Responsible Charge* (Engineer) is Mr. Mark Merklein, P.E. who is responsible for supervising construction in accordance with the approved design. If this information is incorrect, or another licensed engineer has assumed supervisory duties, please immediately inform us as to whom this obligation has been assigned,
- 2) Should significant revision to the approved design plans or specifications become necessary during construction, please notify this office in writing prior to implementing the changes. Engineers from this office are available to approve changes in the field provided such revisions are consistent with accepted engineering standards and construction practices,
- 3) Upon completion of construction the Engineer shall certify that the work was performed in accordance with the approved design. The letter of completion shall be accompanied by a summary of all field and laboratory tests deemed by the Engineer necessary to certify a satisfactory completion of construction,
- 4) Two sets of as-constructed drawings signed by the Engineer (one printed & one set digital format) shall be provided within 60 days of completion. If no changes to the approved design occurred during construction, please make certain this fact is included in the letter of completion.

IDWR Dam Safety cannot accept the work as complete until the above listed conditions are satisfied. Should you have any questions, please call me at (208) 287-4927, or you may contact Michelle Richman in Coeur d'Alene @ (208) 762-2800.

Sincerely,



John Falk, P.E.

Dam Safety Program Manager

Cc: Erik Boe – IDWR Resource Protection
Mark Merklein – McMillen Engineering
David White – North Idaho Region Parks Manager
Enc: Design Drawings, Technical Specifications, and Design Documentation Report

BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF THE REGIONAL WATER
SUSTAINABILITY PRIORITY LIST

RESOLUTION TO UPDATE THE LIST, AWARD
FUNDING, AND ADOPT TERMS & CONDITIONS
FOR THE WINCHESTER DAM REPAIR PROJECT

1 WHEREAS, in July 2021 the Idaho Water Resource Board (IWRB) adopted an initial Regional Water
2 Sustainability Priority List to help guide the IWRB’s spending for large, regional water sustainability
3 projects from ARPA funds, state general funds, or other applicable sources. The IWRB also, in January
4 2022, adopted threshold criteria indicating that a project must help achieve water supply sustainability
5 on a regional, basin-wide, or statewide basis to be included on the Regional Water Sustainability Priority
6 List; and
7

8 WHEREAS, on May 23, 2025, the IWRB adopted Resolution No. 17-2025, updating criteria for the
9 inclusion of projects on the Regional Water Sustainability Priority List. The criteria include a process for
10 how projects can be added, types of information required to be submitted in requests, considerations for
11 inclusion, and a process for removing projects from the list; and
12

13 WHEREAS, Idaho Code § 42-1760 authorizes the Idaho Water Resource Board (IWRB) to expend,
14 loan, or grant money from the Water Management Account for water projects that conserve or increase
15 water supply, improve drought resiliency, address water sustainability, or support flood management;
16 and
17

18 WHEREAS, the Idaho Department of Fish and Game (IDFG) submitted to the IWRB for its
19 Winchester Dam Repair Project (Project) to be added to the Regional Water Sustainability Priority List;
20 and
21

22 WHEREAS, the IDFG presented the proposal to the IWRB Finance Committee on March 8, 2026,
23 requesting funding for approximately 1/3 (one third) of the total Project costs estimated to be \$3,600,000
24 with a target completion date of June 2028, and a maximum reimbursement amount from IWRB of
25 \$1,000,000; and
26

27 WHEREAS, on May 8, 2026, the Finance Committee recommended that the IWRB add the
28 Winchester Dam Repair Project to the Regional Water Sustainability List and approve the requested funds;
29 and
30

31 WHEREAS, the IWRB has directed IWRB staff to work with project sponsors to develop
32 appropriate contract terms and conditions to be brought back to the IWRB for approval; and
33

34 WHEREAS, IWRB staff and IDFG staff have reviewed the proposed Terms and Conditions for the
35 award included in Attachment A.
36

37 NOW, THEREFORE BE IT RESOLVED that the IWRB approves adding the Winchester Dam Repair
38 Project to the Regional Water Sustainability Program Priority List.

39 NOW, THEREFORE BE IT FURTHER RESOLVED that the IWRB approves \$1,000,000 in Regional
40 Water Sustainability funding from the Water Management Account to IDFG for the Project.

41
42 NOW, THEREFORE BE IT FURTHER RESOLVED that the IWRB approves the Terms and Conditions
43 for the IDFG's Project as specified in Attachment A to this resolution.

44
45 BE IT FURTHER RESOLVED that the contract for this project will also contain standard IWRB
46 contract conditions and other project-specific Terms and Conditions not specified in this resolution.

DATED this 21st day of May 2026.

JEFF RAYBOULD, Chairman
Idaho Water Resource Board

ATTEST _____
DEAN STEVENSON, Secretary

ATTACHMENT A: Terms & Conditions

Winchester Dam Repair Project

This project will rehabilitate Winchester Dam by adding capacity to the spillway. This will be done by creating an ogee crested weir spanning the entire length of the spillway and raising the spillway chute walls to contain the required flows. In addition, the upstream surface will be outfitted with a geomembrane liner system to deter seepage through the dam surface and reduce the amount of water at the toe of the dam entering Lapwai Creek. The dam is owned by the Idaho Department of Fish and Game (IDFG) and the surrounding property is the site of Winchester Lake State Park. The dam is rated as a high hazard dam by Idaho Department of Water Resources and because of the needed repairs, Risk Management is conditionally insuring it with the lowering of the water by 40" and until the spillway repairs are made.

The IDFG will obtain all needed permits, approvals, certifications, and real estate interests needed to complete the project. Construction is scheduled to begin in July 2027 and is projected to be completed by June 2028 – the project timeline ranges from 9 months to 12 months, depending on supply chain and sourcing of appropriate materials.

Invoice-Reimbursement Contract and Proposed Terms & Conditions

- This is an invoice-reimbursement not to exceed Contract where the IWRB has approved funding of \$1,000,000. The total cost for the project is estimated at \$3,600,000. The Board will reimburse the Sponsor an amount equal to 1/3 (one third) of the approved receipts or invoices, less a 10% retainage until the final invoice and Certificate of Project Completion is provided at the end of the project. The Sponsor shall pay the remainder of the project costs. The Board will not reimburse the Sponsor for expenses incurred prior to the fund award date (May 21, 2026).
- When requested by the IWRB, IDFG will provide a monthly progress report to the Contract Manager. The progress report shall include at a minimum:
 - Updated schedule to completion
 - Issues encountered in the reporting period
 - Final cost forecasts where applicable
 - Up to date project budget
- The Contractor shall provide with the final invoice a Certificate of Project Completion and a financial summary of the Project's costs with a detailed list of the type and amount of funds used to pay for the Project. The financial summary shall include the following:
 - Total final cost of the Project based on expenditures.
 - List all funding sources and the amount used on any aspect of the Project.
 - If a Federal or State grant was awarded for any portion of the Project, include the amount awarded.

MEMO



To: Idaho Water Resource Board (IWRB/Board)
From: Mary Condon, Project Manager Supervisor
Date: May 13, 2026
Subject: Mountain Home Plateau Aquifer Stabilization Regional Water Sustainability Program

REQUESTED ACTION: Consider Resolution to Approve Funding

Background: Elmore County is requesting support, resources, and funding for several initiatives and projects aimed at stabilizing the aquifer through the Mountain Home Plateau Aquifer Stabilization Program under the Regional Water Sustainability Project Priority List.

On March 22, 2026, the IWRB placed the Mountain Home Plateau Aquifer Stabilization Program on the Regional Water Sustainability Project Priority List with an earmark of \$8,000,000 in funding through Resolution No. 11-2026. The earmarked funding is not authorized for spending without further approval from the Board.

Keri Hill for Elmore County provided a presentation on their funding request during the May 8th Finance Committee. The formal request for funding is included in your materials.

Proposal:

- 1 South Fork (SF) Boise River Diversion Project - Final Design & National Environmental Policy Act (NEPA): Advance SF Boise River Diversion Project to 90% design and build upon existing pre-NEPA work and finish environmental review and permitting, including Environmental Assessment and coordination with federal and cooperating agencies.
- 2 Mountain Home Irrigation District Canal System Alternatives Study: Further evaluate canal system infrastructure, including any canal system losses or deteriorating conditions, for improvement and efficiency options.
- 3 Snake River Pump Station and Pipeline Alternatives Study: Analyze options for delivering the permitted Snake River water right from alternative intake locations and pipeline configurations for delivery, including evaluating landowner willingness for soft conversions from groundwater supplies to primary surface water supplies.

Benefits: Stabilizing the declining aquifer levels secures the future for the residents of Mountain Home, the Mountain Home Air Force Base, and the many other surrounding communities that rely on the Mountain Home Plateau Aquifer. Public outreach, grant and funding opportunity coordination, and long-term oversight and continuance of the stabilization effort requires a governing agency with the capacity and legal means to continue the work. Securing additional surface water and restoring aquifer levels will benefit the agricultural community, a vital economic driver for the region and provide sufficient water supply to support new industrial and commercial development. Stabilization of the water supply is necessary before growth can begin.

The estimated cost in realizing the utilization of the SF Boise River and Snake River surface water and eventual stabilization of the aquifer in addition to the efforts outlined above is more than \$100 million dollars. Cooperation with other natural resource agencies and stakeholder engagement for additional funding and opportunities is imperative to meet the long-term goal.

Financial Analysis: The total costs of the three proposed projects are estimated at \$1,469,800. Elmore County is requesting the IWRB cover 75% of the proposed project costs for a total of \$1,101,150. The total estimated costs of the proposed projects are outlined below:

Estimated Costs	Total Cost	Project Cost	IWRB Portion Cost
SF Boise River – 90% Design & NEPA	\$ 876,400		\$ 507,750
MHID Canal System Alternatives Study	\$ 158,400		\$ 158,400
Snake River Pump Station & Pipeline Alternatives Study	\$ 435,000		\$435,000
Total Project Costs	\$1,469,800		\$ 1,101,150

The total cost share request from the IWRB is \$1,101,150.

Recommendation: The funds requested will be used to pursue each of the above-mentioned endeavors as quickly as possible. The county is committed to moving quickly to stabilize the aquifer as each of these projects are already underway. The County recently adopted Resolution No. 948-26 on May 15, 2026, cementing a commitment to aquifer stabilization and vested responsibility in the proposed projects until an appropriate entity capable of managing aquifer stabilization projects and assessing the necessary fees has been established.

The proposed projects meet the qualification criteria to address a regional water sustainability issue, and the proposed projects are consistent with the goals established by the Board in the Idaho State Water Plan. Staff recommends approval of the funding request, for the total amount of \$1,101,150.

Attachment(s):

- *Elmore County Board of Commissioners “Mountain Home Plateau Aquifer Regional Water Sustainability Program Funding Request”*
- *Elmore County Resolution No. 948-26*
- *Draft Resolution to Award Funding for Aquifer Stabilization Projects for the Mountain Home Plateau Aquifer Stabilization Program*

IWRB FINANCE COMMITTEE FUNDING REQUEST

Date: May 1, 2026
To: Idaho Water Resource Board Finance Committee
From: Elmore County Board of Commissioners
Subject: **Funding Request for the Mountain Home Plateau Aquifer Regional Water Sustainability Program**

Problem Statement

The Mountain Home Plateau Aquifer is experiencing a long-term groundwater deficit estimated to be 30-40,000 acre-feet per year, driven by groundwater withdrawals that significantly exceed natural recharge. Current use is estimated between 60,000 to 80,000 acre-feet annually, while recharge is approximately half of that, resulting in continued depletion of stored groundwater and declining water levels across the region. (SPF 2017)

This deficit has persisted for decades and has resulted in measurable declines in aquifer levels, increased pumping costs, and growing risk to agricultural, municipal, and industrial water supplies. Without intervention, the region faces the likelihood of regulatory curtailment, loss of water availability, and significant economic impacts.

Stabilizing the aquifer will require a shift in how water is supplied and managed across the region, including development of new supply sources and more efficient use of existing systems.

Proposed Approach

To address this deficit, Elmore County proposes a coordinated strategy centered on securing additional surface water supplies and reducing reliance on groundwater. This approach focuses on developing water from both the South Fork Boise River and the Snake River, and using that supply to offset groundwater pumping through aquifer recharge, direct surface water delivery, and soft conversions from groundwater to surface water use, supported by targeted improvements to water delivery efficiency. By integrating new surface water supply with system optimization and reduced groundwater demand, this effort is intended to stabilize the aquifer, improve long-term water reliability, and support continued agricultural, municipal, and economic sustainability in the region. These improvements will also enhance water security for the Mountain Home Air Force Base, supporting mission readiness and contributing to national defense.

IWRB FINANCE COMMITTEE FUNDING REQUEST
Mountain Home Plateau Aquifer Regional Water Sustainability Program

May 1, 2026

Page 2

Supporting Actions Being Pursued by Elmore County

a. District Formation

Elmore County is actively advancing district formation as an ongoing effort to establish a long-term governance and funding framework to support the operation, maintenance, and financing of water infrastructure developed to address the Mountain Home Plateau Aquifer deficit.

Consistent with guidance from the Idaho Water Resource Board, the County recognizes that long-term ownership and operation of large-scale water projects will be most appropriately carried out by a special purpose district rather than the County itself. The County anticipates that, at the appropriate time, project assets and associated water rights would be transferred to one or more districts whose members directly benefit from the projects.

Ongoing work includes a comprehensive evaluation of existing Idaho statutory frameworks, focusing initially on groundwater districts and irrigation districts, to determine their appropriateness to the Mountain Home Plateau generally and the individual projects and their benefited water users specifically. Particular attention will be given to limitations within existing frameworks, especially regarding cost allocation, to ensure financial responsibility is borne equitably by those benefiting from the broader regional benefits of aquifer stabilization. The County also intends to evaluate how the development and implementation of a groundwater management plan could inform this process.

The County is evaluating alternative governance models, including potential modifications to existing statutes or development of a new district type capable of equitably distributing costs among all beneficiaries, including agricultural, municipal, industrial, and domestic users. This evaluation will incorporate historical efforts in the region, lessons learned from other basins, and consideration of ongoing groundwater model development to better define areas of benefit and inform cost allocation strategies.

Legal counsel and financial professionals are being engaged to analyze statutory pathways and develop recommendations. The County plans to coordinate with the Idaho Water Users Association, and continue to coordinate with the Idaho Water Resource Board and other stakeholders to evaluate feasibility and build consensus around a preferred approach. This coordination is anticipated to include multiple meetings with legal counsel, up to three meetings with the Idaho Water Users Association, up to three meetings with IWRB staff, and up to six stakeholder outreach meetings with irrigation districts, municipalities, agricultural users, and other affected parties.

In addition, the County is developing a public education and outreach strategy to inform stakeholders and the broader community about the purpose, benefits, and implications of district formation, including potential cost allocation and funding mechanisms. This may include preparation of informational materials, public meetings, and stakeholder engagement efforts to build understanding and support. Where district formation or associated funding

IWRB FINANCE COMMITTEE FUNDING REQUEST
Mountain Home Plateau Aquifer Regional Water Sustainability Program

May 1, 2026

Page 3

mechanisms require formal approval, including potential voting requirements, the County will evaluate statutory processes, timelines, and procedural steps necessary to successfully advance those actions.

Work sessions with the Elmore County Board of Commissioners are assumed to review findings, refine direction, and guide decision-making. The outcome of this effort will be a recommended district formation strategy, including an implementation pathway and, if necessary, draft legislative concepts to support long-term governance, funding, and operation of water infrastructure in the region.

b. Water Right Expansion

In parallel, the County is actively pursuing and refining additional surface water rights to support the continued development, refinement, and expansion of surface water rights necessary to implement the County's long-term water supply strategy. This work will include evaluation of existing permits and identification of opportunities for amendments to points of diversion, place of use, and beneficial use to align with the preferred infrastructure alternatives.

Technical analyses are ongoing to support water right applications and amendments, including evaluation of water demand, system capacity, and intended uses such as irrigation, aquifer recharge, and municipal supply. The County continues to coordinate with the Idaho Department of Water Resources to ensure applications are complete, technically sound, and aligned with regulatory requirements.

Extensive coordination with local landowners will be conducted to identify potential water users, confirm participation interest, and refine the place of use associated with water right applications. This effort assumes coordination with approximately 10 to 15 landowners, including up to six meetings to gather input and support application development.

The County will also coordinate with IWRB staff prior to submission of water right applications to ensure alignment with program objectives and funding considerations, with up to three coordination meetings anticipated. In addition, up to four meetings or work sessions with the Elmore County Board of Commissioners are assumed to review progress, refine strategy, and obtain direction on application submittals.

Deliverables will include completed water right applications, amendments, and supporting technical documentation suitable for agency review and processing.

c. Capital Funding Procurement

The County is also actively engaged in identifying, coordinating, and securing the significant capital funding required to implement the proposed water supply projects. Collectively, these efforts are anticipated to require in excess of \$100 million in capital investment, making coordinated funding procurement a critical component of the overall strategy. These projects

IWRB FINANCE COMMITTEE FUNDING REQUEST
Mountain Home Plateau Aquifer Regional Water Sustainability Program

May 1, 2026

Page 4

are not feasible without substantial state and federal commitment and must be advanced through a deliberate and coordinated funding approach.

The County is working closely with the Idaho Water Resource Board to align project components with existing and future funding opportunities, including the Mountain Home Plateau Aquifer Regional Water Sustainability Program. In parallel, the County is pursuing federal funding through programs such as the Natural Resources Conservation Service Regional Conservation Partnership Program (RCPP), which prioritizes projects that convert groundwater use to surface water and support aquifer recharge.

A key element of this effort includes building upon the State's existing investment in water infrastructure supporting the Mountain Home Air Force Base. These projects present a unique opportunity to leverage additional federal funding through the Department of Defense, including the Defense Community Infrastructure Program (DCIP) and the Office of Local Defense Community Cooperation (OLDCC), given the direct relationship between long-term water reliability and mission sustainability at the installation.

The County continues to coordinate with local and regional partners, including the Mountain Home Irrigation District and the Mountain Home Air Force Base, to align funding strategies and maximize leverage across multiple sources. This effort will include development of funding strategies, preparation of grant and funding applications, and coordination with funding agencies.

Public education and outreach are supporting these efforts by communicating project benefits, costs, and long-term value to stakeholders and the community, which is critical to advancing local funding mechanisms such as bonding or other financing strategies.

These supporting actions are being advanced concurrently with the capital project efforts described below and are essential to ensuring that proposed infrastructure can be permitted, funded, implemented, and sustainably operated over the long term.

Scope of Work

1 South Fork Boise River Diversion Project

Final Design and NEPA

The South Fork Boise River Diversion Project is advancing from 60% design level to a 90% design, representing a critical step toward construction readiness. The existing 60% design has already established key elements of the project, including pump sizing and specifications, electrical and power requirements, control systems, pipeline configuration, site access, and preliminary geotechnical conditions. The 90% design effort is refining and finalizing these components to a level sufficient for permitting, final design, and construction and to support

IWRB FINANCE COMMITTEE FUNDING REQUEST
Mountain Home Plateau Aquifer Regional Water Sustainability Program

May 1, 2026

Page 5

advancement of associated water rights, capital funding strategies, and long-term operational planning.

This phase will include advancement of both final engineering design and environmental review to support federal permitting. Engineering work will include development of a comprehensive design package consisting of detailed drawings and a supporting design memorandum, while environmental efforts will advance National Environmental Policy Act (NEPA) compliance to support federal decision-making. Civil design will advance pipeline alignment and elevation profiles, finalize grading based on geotechnical findings, and refine access roads and site layouts. Mechanical and hydraulic analyses will be completed to confirm system performance, including pump hydraulics, pipeline integrity, and transient (surge) conditions under various operational scenarios such as startup, shutdown, and power failure. Electrical and controls design will be finalized, including system load requirements, standby power needs, communications, and overall control philosophy. Structural design will address foundations, equipment supports, and critical infrastructure components necessary for long-term operation and maintenance.

In parallel, this effort will advance environmental review and permitting for the project through completion of NEPA requirements. Building on preliminary work already completed, including wetlands delineations, cultural resource surveys, and initial biological assessments, this phase will finalize environmental studies necessary to support federal review. This includes completion of botany and wildlife evaluations, refinement of impact analyses, and preparation of supporting technical documentation.

The 90% design will also include preparation of a Class 1 Opinion of Probable Construction Cost, improves cost certainty and support funding and implementation decisions and inform ongoing capital funding procurement efforts, including alignment with state and federal funding programs and project phasing strategies. Project management and coordination will occur throughout the effort, including regular communication and up to four meetings with the Elmore County Board of Commissioners to review progress and refine project direction.

Completion of the 90% design and NEPA process will position the project for final permitting, funding acquisition, and construction, directly advancing a key component of the County's strategy to reduce groundwater demand and stabilize the aquifer. In parallel, this work will support refinement of water right implementation, coordination with funding partners, and evaluation of long-term ownership and operational structures, including potential transfer of project assets and water rights to a future special purpose district.

IWRB FINANCE COMMITTEE FUNDING REQUEST
Mountain Home Plateau Aquifer Regional Water Sustainability Program

May 1, 2026

Page 6

Schedule

The 90% design effort is currently underway, funded by the County, and is anticipated to be completed by August 2026. The County is requesting funding to complete the remaining 25% of the design effort, including final engineering refinements, cost estimating, and preparation of deliverables necessary to advance the project to permitting and construction readiness. In parallel, environmental review and permitting under NEPA is anticipated to occur over approximately 24 to 30 months, including completion of remaining environmental studies, agency coordination, and preparation of required documentation. The County will work closely with the U.S. Forest Service to advance the process, with the goal of achieving formal agency engagement on an Environmental Assessment (EA) by Q4 2027, positioning the project for completion of NEPA and subsequent advancement toward final permitting and construction.

2 MHID Canal System Alternatives Study

The MHID Canal System evaluation will focus on improving the efficiency, reliability, and long-term functionality of the existing conveyance system, which is a critical component of the region's surface water infrastructure. The Canal system is located in the South Fork Boise River watershed, extending from Little Camas Reservoir to a final tunnel that discharges into the Canyon Creek watershed. This effort will quantify water losses, assess aging infrastructure conditions, and identify targeted improvements to increase system performance and support broader water supply objectives, including improved surface water delivery, aquifer recharge, and alignment with long-term water rights and funding strategies.

Field-based flow measurements will be conducted at multiple locations along the canal during the irrigation season to quantify seepage losses and identify reaches experiencing excessive leakage. Where feasible, monitoring instrumentation will be utilized at key inlet and outlet locations to evaluate system-wide performance under varying flow conditions. These measurements will be supplemented by visual inspections of the canal system to identify structural deficiencies, areas of potential overflow, and other operational concerns.

Tunnel conditions will be evaluated through review of existing inspection data and video records, combined with targeted additional data collection for select tunnels to better understand structural integrity, hydraulic capacity constraints, and rehabilitation feasibility. Based on this analysis, alternatives will be developed to reduce seepage losses, improve conveyance efficiency, and reduce the risk of tunnel failure. These alternatives may include canal lining, targeted rehabilitation measures, and operational improvements. Seepage loss improvements within the Canal system will result in increased water delivery to the Mountain Home Plateau. The study does not seek to reduce seepage losses from MHID facilities within the Mountain Home Plateau.

The work will culminate in a technical memorandum summarizing findings, identifying priority improvements, and providing conceptual-level cost estimates and operational

IWRB FINANCE COMMITTEE FUNDING REQUEST
Mountain Home Plateau Aquifer Regional Water Sustainability Program

May 1, 2026

Page 7

considerations, which will inform future capital funding procurement efforts and project phasing.

In addition, the evaluation will support refinement of water right implementation by identifying how increased delivery efficiency can be utilized within existing and future water rights, and will inform long-term governance considerations, including potential integration of improved infrastructure into a future district framework responsible for operation, maintenance, and cost allocation.

This effort will directly support maximizing the effectiveness of existing infrastructure as part of the broader aquifer stabilization strategy.

Schedule

This effort is anticipated to require approximately 5 months of active work, including 4 months of field measurements and analysis during canal flow conditions and approximately 1 month of evaluation during non-flow conditions. Due to current drought conditions, the canal is anticipated to be empty by June 2026, allowing non-flow-related tasks to be completed this year; however, sufficient flow conditions may not be available in 2026 to complete the required field measurements. As a result, additional data collection may be required during the 2027 irrigation season, extending the overall schedule to completion in 2027.

3 Snake River Pipeline and Pump Station Alternatives Study

The Snake River Pipeline and Pump Station Alternatives Study will evaluate feasible and cost-effective approaches for developing a reliable surface water supply to the Mountain Home Plateau. This effort will include evaluation of multiple potential pump station locations along the Snake River, including both existing and new intake sites, as well as development of conceptual pipeline alignments to convey water to the Mountain Home area.

The study will assess system requirements such as pump sizing, pipeline diameter, routing constraints, and the potential need for booster stations or other supporting infrastructure. Conceptual-level cost estimates and operational cost comparisons will be developed for each alternative, along with evaluation of key constraints including power availability, environmental permitting considerations, access, and easement requirements.

A key component of this effort will be coordination with local landowners to identify lands that could be served by the system through “soft conversions” from groundwater to surface water supply, assess interest in participation, and define anticipated water delivery needs including flow rates and pressures. This coordination will help ensure that the selected alternative is both technically feasible and aligned with regional demand.

In parallel, this effort will support the continued development, refinement, and expansion of surface water rights necessary to implement the preferred alternative. This includes evaluation of existing Snake River water rights and identification of opportunities for additional water

IWRB FINANCE COMMITTEE FUNDING REQUEST
Mountain Home Plateau Aquifer Regional Water Sustainability Program

May 1, 2026

Page 8

right acquisition or amendments to points of diversion, place of use, and beneficial use to align with the selected infrastructure configuration. Technical analyses will be conducted to support water right applications, including evaluation of water demand, system capacity, and intended uses such as irrigation, aquifer recharge, and municipal supply. The County will coordinate with the Idaho Department of Water Resources to ensure applications are complete, technically sound, and aligned with regulatory requirements, and will engage with IWRB staff prior to submittal to ensure consistency with program objectives. Coordination with participating landowners will also inform the development of place of use and beneficial use definitions associated with new or amended water rights.

This effort will also be closely coordinated with ongoing capital funding procurement activities to align project alternatives with available state and federal funding opportunities and to support development of a phased implementation strategy. In addition, the evaluation will inform long-term governance considerations, including how infrastructure, water rights, and participating users may be incorporated into a future district structure responsible for operation, maintenance, and cost allocation.

The outcome of this effort will be identification of a preferred alternative that can be advanced into permitting, water right development, and final design.

Schedule

This effort is anticipated to require approximately 4 months to complete following Notice to Proceed and Elmore County's initial coordination with affected landowners. The schedule assumes timely landowner engagement to support evaluation of service areas, with completion resulting in identification of a preferred alternative suitable for advancement into permitting and design.

Budget

Elmore County has demonstrated a sustained financial and institutional commitment to addressing water supply challenges on the Mountain Home Plateau. Since July 2015, the County has expended approximately \$3,442,258 in internal County funds to advance evaluation, planning, and early implementation efforts, in addition to securing a \$140,400 planning grant from the Idaho Department of Environmental Quality (DEQ) for the initial study of the South Fork Boise River Diversion Project.

These County-funded expenditures include approximately \$2,418,957 on the South Fork Boise River Diversion Project, \$267,418 on the MHID Canal System (including a \$200,000 match to an IWRB Aging Infrastructure Grant), and \$753,883 on the Snake River Pump Station and Pipeline Project. Collectively, these investments have advanced the South Fork Boise River Diversion Project into 90% engineering design; supported preliminary NEPA studies, funded preliminary feasibility evaluation of Snake River supply alternatives, and informed an economic analysis to evaluate the regional impacts of water supply under various scenarios.

IWRB FINANCE COMMITTEE FUNDING REQUEST
Mountain Home Plateau Aquifer Regional Water Sustainability Program

May 1, 2026

Page 9

Additional investments include consulting and legal services necessary to develop and advance water supply alternatives; securing a 200 cubic feet per second flood water right (permit 63-34348) from the South Fork Boise River and 20 cubic feet per second surface water right (permit No. 02-10535) from the Snake River; providing matching funds for Mountain Home Irrigation District aging infrastructure grant projects; and conducting historical research to better understand longstanding limitations in surface water delivery to the region. The County has also committed significant staff and consultant resources to regional coordination and stakeholder engagement, including participation in quarterly Water Advisory Group meetings, technical involvement in the WeSPAM groundwater model advisory committee, ongoing coordination with local stakeholders, and numerous presentations at the local and regional level, including regular updates to the Idaho Water Resource Board.

Building on this substantial local investment and the progress made to date, Elmore County is requesting that the \$3,442,258 in prior County expenditures be recognized as match toward this funding request under the Mountain Home Plateau Aquifer Regional Water Sustainability Program. The following budget proposal identifies the requested funding necessary to advance the next phase of work and reflects the coordinated effort required to stabilize the aquifer and secure long-term water reliability.

Table 1 Budget Request

No.	Project Component	Description of Work	Total Project Cost	IWRB Request
1	South Fork Boise River Diversion Project - Final Design and NEPA	Advances the South Fork Boise River Diversion Project through final engineering design and completion of NEPA review, positioning the project for permitting, funding, construction readiness, and integration into a long-term governance structure through future district formation.	\$ 876,400	\$ 507,750
2	MHID Canal System Alternatives Study	Evaluates canal system losses, infrastructure conditions, and improvement alternatives to increase water delivery efficiency.	\$ 158,400	\$158,400
3	Snake River Pump Station and Pipeline Alternatives Study	Evaluates pipeline and pump station alternatives, supports water right development, coordinates with landowners, and aligns the project with funding and long-term governance to advance a preferred alternative toward design and permitting.	\$ 435,000	\$ 435,000
Total			1,469,800	1,101,150

Supporting actions are embedded within each project component.

IWRB FINANCE COMMITTEE FUNDING REQUEST
Mountain Home Plateau Aquifer Regional Water Sustainability Program

May 1, 2026

Page 10

Summary

Elmore County is requesting support from the Idaho Water Resource Board through the Mountain Home Plateau Aquifer Regional Water Sustainability Program to advance key efforts necessary to stabilize the Mountain Home Plateau Aquifer and secure long-term water reliability. The proposed work builds on years of planning and investment and is focused on moving priority projects toward implementation.

The request will support development of new surface water supplies, improvements to existing delivery systems, advancement of water rights, and establishment of a long-term governance and funding framework. It also includes environmental review and funding coordination needed to position these projects for construction.

These efforts represent a coordinated, regional approach to reducing groundwater reliance and addressing a long-standing water deficit. Given the scale of the need and the importance of water reliability to the community and the Mountain Home Air Force Base, continued state partnership is essential. Approval of this request will enable the County to advance implementable solutions and leverage additional federal and local funding to support long-term success.

References

SPF Water Engineering, LLC. 2017. *Elmore County Water Supply Alternatives*.
<https://idwr.idaho.gov/wp-content/uploads/sites/2/iwrb/2017/20170228-Elmore-County-Water-Supply-Report.pdf>.

RESOLUTION NO 948-26

A RESOLUTION OF THE BOARD OF COUNTY COMMISSIONERS OF ELMORE COUNTY, IDAHO, RECOGNIZING ELMORE COUNTY'S ROLE IN ADVANCING SURFACE WATER SUPPLY AND AQUIFER STABILIZATION PROJECTS

WHEREAS, the Mountain Home Plateau Aquifer in Elmore County is experiencing long-term groundwater declines caused by groundwater withdrawals exceeding natural recharge; and

WHEREAS, the aquifer is the primary water source for the majority of Elmore County residents, agriculture, businesses, the City of Mountain Home, and Mountain Home Air Force Base; and

WHEREAS, Elmore County has worked for more than a decade to pursue solutions to aquifer decline through water rights development, aquifer recharge projects, infrastructure planning, permitting, stakeholder coordination, and funding efforts; and

WHEREAS, Elmore County has worked closely with the Idaho Water Resource Board ("IWRB"), Idaho Department of Water Resources, Mountain Home Irrigation District, and other regional partners to advance these efforts; and

WHEREAS, the IWRB has provided important technical, financial, and collaborative support toward regional aquifer sustainability efforts; and

WHEREAS, in 1996, the State of Idaho established the Mountain Home Ground Water Advisory Committee to, among other things, "[d]evelop a draft groundwater management plan" for the area and "[d]evelop and propose implementation of a ground water recharge program;" and

WHEREAS, in 2017, the Committee assigned its recharge water right to Elmore County, noting that the County's water supply development efforts "have served a genuine need to improve ground water recharge" in the area; and

WHEREAS, no other ground water district or other legal entity has yet been established to manage and advance regional water supply projects for the Mountain Home Plateau; and

WHEREAS, Elmore County has informally served as the lead coordinating entity for these efforts and desires to formally acknowledge and continue that role until a future management entity is established;

NOW, THEREFORE, BE IT RESOLVED by the Board of County Commissioners of Elmore County, Idaho, as follows:

Elmore County formally recognizes the importance of developing long-term solutions to stabilize the Mountain Home Plateau Aquifer and protect the region's water future.

Elmore County acknowledges and appreciates the IWRB's continued partnership and support in advancing aquifer sustainability and regional water supply efforts.

As solutions to aquifer water level decline are developed and finalized, Elmore County will work with IWRB and stakeholders to establish the appropriate district or management entity for long-term project ownership and management.

Until a future district or other management entity is established, Elmore County shall continue serving as the lead coordinating entity for the advancement of regional water supply, aquifer recharge, infrastructure, permitting, and funding efforts related to aquifer stabilization projects.

This Resolution formalizes the role Elmore County has undertaken for more than a decade in pursuing collaborative solutions to address groundwater decline and improve long-term water sustainability for the region.

PASSED AND ADOPTED by the Board of County Commissioners of Elmore County, Idaho, this 15th day of May 2026.

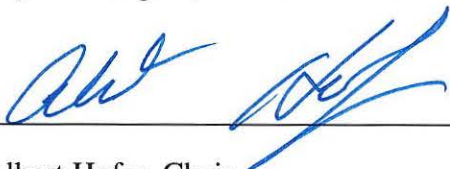
Board of Elmore County Commissioners



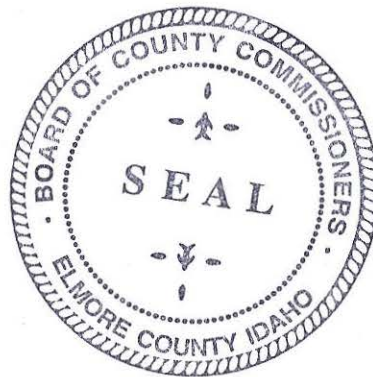
By: Franklin L. Corbus, Commissioner



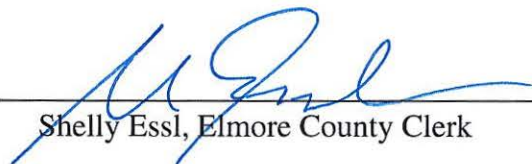
By: Crystal Rodgers, Commissioner



By: Albert Hofer, Chair



ATTEST: _____


Shelly Essl, Elmore County Clerk

BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF THE MOUNTAIN HOME
PLATEAU AQUIFER REGIONAL WATER
SUSTAINABILITY PROGRAM

RESOLUTION TO AWARD FUNDING AND
EXECUTE ASSOCIATED PROJECT CONTRACTS

1 WHEREAS, since July 2021, the IWRB has maintained a list of priority Regional Water Sustainability
2 Projects (RWSP Priority List). The RWSP Priority List is intended to help guide the IWRB’s spending from
3 state general funds, American Rescue Plan Act (ARPA) funds, or other applicable sources for projects that
4 support water supply sustainability on a regional, basin, or statewide scale. The IWRB also adopts criteria
5 for inclusion of projects on the RWSP Priority List and has approved funding for projects on a case-by-case
6 basis; and
7

8 WHEREAS, on March 27, 2026, the IWRB adopted Resolution No. 11-2026, updating the RWSP to
9 include the Mountain Home Plateau Aquifer Stabilization Program (Program) to support projects and
10 programs that contribute to aquifer stabilization in the region, and obligated \$8,000,000 for the Program
11 subject to further IWRB approval for specific expenditures; and
12

13 WHEREAS, Elmore County presented a proposal to the IWRB Finance Committee on May 8, 2026,
14 requesting funding under the Program for the following projects (collectively, “Projects”):
15

- 16 1) South Fork Boise River Diversion Project Final Design and NEPA in the amount of
- 17 \$507,750;
- 18 2) Mountain Home Irrigation District (MHID) Canal System Alternatives Study in the amount of
- 19 \$158,400; and
- 20 3) Snake River Pipeline and Pump Station Alternatives Study in the amount of \$435,000, for a
- 21 total funding request of \$1,101,150; and
22

23 WHEREAS, the Finance Committee expressed support for the Projects while emphasizing the need
24 for the establishment of an appropriate entity or special purpose district to assume long-term ownership,
25 operations, maintenance, and financial responsibility for infrastructure developed under the Program;
26 and
27

28 WHEREAS, Elmore County passed Resolution No 948-26 on May 15, 2026, describing a
29 commitment by Elmore County to serve as the responsible project sponsor and contract party for
30 purposes of project administration, coordination, and compliance with IWRB funding requirements until
31 such an entity is established and assumes responsibility for the Projects; and
32

33 WHEREAS, on May 8, 2026, the Finance Committee recommended approval of funding for the
34 Projects from funds obligated in the Water Management Account for the Mountain Home Plateau Aquifer
35 Stabilization Program; and
36
37

38 NOW, THEREFORE BE IT RESOLVED that the IWRB approves expenditure of up to \$1,101,150 from
39 the funds obligated in the Water Management Account to the Mountain Home Plateau Aquifer
40 Stabilization Regional Water Sustainability Program to Elmore County for the Projects and associated
41 amounts identified above.

42
43 BE IT FURTHER RESOLVED that future funding may be contingent upon formation of a separate
44 entity to assume long-term ownership, operation, maintenance, and financial responsibility.

45
46 BE IT FURTHER RESOLVED IWRB staff is directed to work with the project sponsor to draft
47 contracts for the Projects, including appropriate terms and conditions.

48
49 BE IT FURTHER RESOLVED that the IWRB authorizes its Chairman or designee, to execute the
50 necessary agreements or contracts for the purpose of this resolution.

51
52

DATED this 21st day of May 2026.

JEFF RAYBOULD, Chairman
Idaho Water Resource Board

ATTEST _____
DEAN STEVENSON, Secretary

MEMO



To: Idaho Water Resource Board (IWRB/Board)
From: Mary Condon, Project Manager Supervisor
Date: May 13, 2026
Subject: Grant Application Timing

REQUESTED ACTION: Consider Administrative Change to the Grant Application Deadlines and Timing

Background:

The IWRB currently administers four grant programs: Aging Infrastructure, Flood Management, Groundwater to Surface Water Conversions, and Measuring & Monitoring.

In March of 2026, an overview of the grant processing, timing, and constraints faced by contract managers was presented to the Board. In May, the following proposed changes to the grant cycle timing were presented to the IWRB Finance Committee and recommended to present to the Board for implementation.

Current Timing:

Grant Program Timelines		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Flood Management Due First Friday in June Supplemental Jan 2026	Application Consultation												
	Staff Review & Ranking			D									
	Finance Committee & Board Meeting				R								
	Contract Development												
	Contract Mgt., Invoicing, Inspection						→						
Aging Infrastructure Due First Friday in August	Application Consultation												
	Staff Review & Ranking					D							
	Finance Committee & Board Meeting						R						
	Contract Development												
	Contract Mgt., Invoicing, Inspection								→				
Groundwater to Surface Water Conversions Due First Friday in August	Application Consultation												
	Staff Review & Ranking					D							
	Finance Committee & Board Meeting						R						
	Contract Development												
	Contract Mgt., Invoicing, Inspection								→				
Telemetry/ Measuring & Monitoring Last Friday in September	Application Consultation												
	Staff Review & Ranking						D						
	Finance Committee & Board Meeting								R				
	Contract Development												
	Contract Mgt., Invoicing, Inspection										→		

Note: Explanatory information on how to interpret the calendar and the symbols depicted above are on page 2.

Proposals:

1. Measuring & Monitoring Grant

- Open to year-round, beginning each fiscal year on July 1.
- Review of proposals will be conducted as quickly as possible to meet the next available IWRB regular Board meeting schedule for recommendations, but no later than 120 days after an applicant’s submittal is received by IWRB and Idaho Department of Water Resources (IDWR) staff.

2. Groundwater to Surface Water Conversion Grant

- Move the due date up one month to the first Friday in July.
- Review of proposals will be conducted to meet the regular September IWRB Board meeting for recommendations.

New Timing as of May 21, 2026:

Grant Program Timelines		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Flood Management Due First Friday in June Awards Jul-Aug	Application Consultation												
	Staff Review & Ranking			D									
	Finance Committee & Board Meeting				R								
	Contract Development												
	Contract Mgt., Invoicing, Inspection							→					
Groundwater to Surface Water Conversions Due First Friday in July Awards Sep-Nov	Application Consultation												
	Staff Review & Ranking				D								
	Finance Committee & Board Meeting						R						
	Contract Development												
	Contract Mgt., Invoicing, Inspection								→				
Aging Infrastructure Due First Friday in August Awards Sep-Nov	Application Consultation												
	Staff Review & Ranking					D							
	Finance Committee & Board Meeting						R						
	Contract Development												
	Contract Mgt., Invoicing, Inspection								→				
Telemetry/ Measuring & Monitoring Accepted Year-Round Awards at Regular IWRB Meetings	Application Consultation												
	Staff Review & Ranking				D	→							
	Finance Committee & Board Meeting		R				R		R		R		R
	Contract Development												
	Contract Mgt., Invoicing, Inspection	→		→		→		→		→		→	

Explanatory Information for Interpreting the Grant Calendar:

The calendar above is broken into each of the four grant types administered by the IWRB, and then further broken into the five phases of each grant award cycle, from announcement of available funding and due date through close-out.

Application Consultation is typically more involved immediately prior to the application due date, with announcements for a new grant and available funding at least 45 days prior to the application due date. The due dates are listed under each grant type in the left most column and is additionally identified in the calendar month with a “D” for each grant.

Staff Review and Ranking is performed by a minimum of three IWRB staff and typically takes 30 days to complete the review and ranking of the applications received.

Finance Committee and Board meeting time during the grant cycle includes IWRB staff time to prepare materials and coordinate with the applicants for any additional information. This phase in the cycle takes at least 30 days and will typically end once the grants are awarded through resolution, identified in the calendar month with an “R,” at a regular Board meeting There have been cases where the grants could not be awarded due to additional questions and concerns from IWRB that required extending this step through to the next regular Board meeting.

Contract Development includes IWRB staff reaching out to awardees for any additional information, drafting contracts, and routing contracts through the IDWR legal team as well as to the awardee’s legal team for review and acceptance. This phase in the grant cycle is more involved immediately following the award date and for the next 60 days, however, some contracts take much longer to execute.

Finally, Contract Management begins when a contract has been signed and executed, and will continue through the life of the contract, including invoicing, and ending with a final inspection. The arrow in the calendar for this phase depicts the beginning of contract management for a particular award cycle immediately following the execution of the grant contract with the awardee, which is as early as 45 days after the award (R) but that the management of a contract lasts longer than one year through multi-year contracts.

MEMO



To: Idaho Water Resource Board (IWRB/Board)
From: Mary Condon, Project Manager Supervisor
Date: May 13, 2026
Subject: Grant Criteria

REQUESTED ACTION: Consider Resolution to Adopt Revised Grant Criteria for Aging Infrastructure, Measuring & Monitoring, and Groundwater to Surface Water Conversion Grants

The IWRB currently administers four grant programs: Aging Infrastructure, Flood Management, Groundwater to Surface Water Conversions, and Measuring & Monitoring.

Revisions:

Consider revisions to the grant criteria for the Aging Infrastructure, Measuring & Monitoring, and the Groundwater to Surface Water Conversions to a standard format with additional language addressing the following: response times for applicants; registration with the State of Idaho for vendors and reimbursements; reimbursement procedures; in-kind work proposed budgets, reimbursement requests, and record keeping; and mandatory insurance requirement to address contract manager constraints and improve workflow efficiency.

Additionally, the following is specific to each grant criteria:

- A. A copy of the proposed revised Aging Infrastructure Grant Criteria is attached for consideration ahead of the August application filing date with additional language for applicants that propose projects expected to reduce incidental recharge.
- B. A copy of the proposed revised Groundwater to Surface Water Conversion Grant Criteria is attached for consideration for an additional requirement of the applicant to include the list of groundwater rights on the proposed converted project lands.
- C. A copy of the proposed revised Measuring & Monitoring Support Grant Criteria is attached for consideration to open the eligible project locations to Statewide.

Attachment(s):

- *Aging Infrastructure Criteria – Clean draft with highlighted changes*
- *Groundwater to Surface Water Conversion Grant Criteria – Clean draft with highlighted changes*
- *Measuring & Monitoring Support Grant Criteria – Clean draft with highlighted changes*
- *Draft Resolution to Adopt Updated Aging Infrastructure Grant Criteria*
- *Draft Resolution to Adopt Updated Groundwater to Surface Water Conversion Grant Criteria*
- *Draft Resolution to Adopt Updated Measuring & Monitoring Grant Criteria*



IWRB Aging Infrastructure Grant Criteria

The Idaho legislature has appropriated funding to the Idaho Water Resource Board (IWRB) to be used for grants for water projects to **rehabilitate or improve aging water infrastructure**.

Projects that rehabilitate or improve Idaho's water infrastructure support the Idaho economy, provide economic value, and ensure long-term water resource stability and sustainability. The IWRB has developed these criteria to provide financial assistance on a statewide competitive basis through grants to eligible entities interested in pursuing eligible projects to rehabilitate or improve aging water infrastructure.

Eligible Projects: The IWRB defines an aging water infrastructure project as any new project, or new phase of an improvement project intended to repair, maintain, replace, or improve existing infrastructure that supports irrigation water delivery, storage, drainage, treatment, and use of water for irrigation. Water efficiency projects that reduce incidental recharge will be evaluated on a case-by-case basis.

Ineligible Projects:

- Projects that are already completed or underway by the application deadline
- Municipal drinking or wastewater systems

Eligible Entities: Irrigation Districts, Irrigation Boards of Control, Canal Companies, Drainage Districts, Groundwater Districts, Ditch Companies, Lateral Ditch Users Associations, Reservoir Districts, Municipal Irrigation Districts (formed per Title 50, Chapter 18, Idaho Code), Municipalities, Counties, Water Districts, and **Soil and Water Conservation Districts**.

Eligible Geographic Area: Statewide

Program Budget: No more than 50% of the total budget may be spent within a single IWRB district. This limit may be waived if there are no competing funding demands.

Funding Details:

- Funding Details: Up to \$2,000,000 per project; one project per application
- IWRB grant portion cannot exceed 50% of total project costs
- Costs incurred prior to the grant award date are not eligible for reimbursement
- Reimbursement requests can be made once a cost-reimbursement contract is established between the awardee and IWRB
- Reimbursement of invoices will not surpass 50% of the invoice amount ("Reimbursable Funds") submitted to Board Staff. **Of the Reimbursable Funds, 10% will be retained until Awardee submits a certificate of completion**

- Contract term will not exceed 3 years after the grant funding award (date of IWRB Resolution) unless an extension is approved by IWRB's contract manager
- Funds may be reallocated if a project is not completed within the term of the cost-reimbursement contract, or if the Awardee does not provide contract development information requested within 90 days after the grant award date

Application Requirements: For the grant proposal to be considered, the following must be provided:

- A **cover letter** that is addressed to the IWRB and with the eligible entity's letterhead. The letter must contain a project summary and the project manager's contact information. The summary must include the funding request dollar amount and expected total project cost, as well as all other funding sources.
- An **application** containing the following:
 1. Project sponsor (eligible entity) description (organization type, background, revenue sources, current operations)
 2. Project purpose and description (narrative, infrastructure description, repair, rehabilitation, improvement needs/objectives/benefits, 30% design plans, land entitlements at project location, description of any known environmental issues, urgency regarding repair or improvement)
 3. Photographs and description of damage, if applicable
 4. Project location (county, water source, PLS and/or Lat/Long), including map
 5. Public Benefits achieved pursuant to IC § 42-1760(2)(d) (protects existing water rights and uses, consider effects on other water uses including environmental quality, provides water for future development, improving aging water storage and infrastructure)
 - Water efficiency projects that reduce incidental recharge within a groundwater management area (GWMA) or critical groundwater area (CGWA) must provide a mitigation plan or component that results in a zero net impact, and the project is not inconsistent with the State Water Plan. Project locations within the Eastern Snake Plain Aquifer (ESPA) GWMA that reduce incidental recharge must additionally show how the project will support aquifer stabilization efforts
 6. Project timeline, including start and completion date
 7. Detailed cost estimates, including all labor and materials. In-kind work must be detailed and included in cost estimates.
 - Water efficiency projects that reduce incidental recharge within a GWMA or CGWA must break out costs not associated with reductions to incidental recharge separately to be considered for partial funding
 8. Entity's relevant experience or contractor's relevant experience completing stream channel repair or improvement projects
 9. Summary table that documents cost-share percentage for each funding source including in-kind work. If other grants are required to complete the project (USACE, NRCS, FEMA, etc.), include timelines for receiving those funds
- **Required regulatory approval** and permit documents; if project has not yet received permit documents, note this in the application's project schedule.
- **Proof of liability** insurance for general construction, i.e., ICRMP.

- **Completed Applicant Information Sheet** provided by IWRB.
- Addresses all **evaluation criteria** described below.

Evaluation Criteria: Grant applications submitted by an eligible entity for an eligible project will be evaluated, scored (*120-point scale*), and ranked according to the following criteria. **Applications that do not meet the eligibility requirements will not be scored and will be returned.** Project scoring will be used to prioritize funding. Applications shall discuss how the project under consideration meets the evaluation criteria.

Project Details (up to 50 points)

- Eligible entity: Description of the eligible entity that includes organization type, background, revenue sources, and current operations. (*10 points*)
- Project proposal: Description of the project, where it will occur, and its benefits. Include pictures of the existing infrastructure (if applicable), and detailed map(s) of the project area that have a legend, county, and coordinate or PLS (Township, Range, Section) information. (*10 points*)
- Project schedule: The project's timeline of important milestones, such as obtaining funds, permitting, and construction. The time to complete the project is irrelevant, grading only pertains to the quality of the schedule. (*10 points*)
- Plans and specifications: Relevant drawings and material specifications for construction. (*10 points*)
- Project team: The organization(s) and personnel involved in completing the project. Provide the roles, time commitment, and relevant experience. (*10 points*)

Urgency of Project (up to 20 points)

- Urgency of the project (e.g., infrastructure age, infrastructure function) (*20 points*)

Public Interest of Project (up to 30 points)

- Economic values supported by the existing and/or additional infrastructure. This includes consideration of the communities, irrigated acres, provision of water for future development and economic activity served by the water infrastructure. (*15 points*)
- Uses/benefits identified in Section 42-1760(2)(d), Idaho Code. (*15 points*):
 - water quality
 - fish and wildlife
 - recreation
 - hydropower
 - water supply stability and sustainability
 - drought resiliency
 - public safety
 - other benefits to the citizens of the State
 - Water efficiency projects that reduce incidental recharge within a groundwater management area (GWMA) or critical groundwater area (CGWA) must provide a mitigation plan or component that results in a zero net impact, and the project is not inconsistent with the State Water Plan. Project locations within the Eastern Snake Plain Aquifer (ESPA) GWMA that reduce incidental recharge must additionally show how the project will support aquifer stabilization efforts

Budget Planning and Cost-Effectiveness (up to 20 points)

- Cost-effectiveness of the project compared to other options explored by the eligible entity. (*10 points*)

- Cost estimate describing all foreseen costs of materials and labor, as well as justification for those costs. Include all sources of funding for the project and their amounts. (10 points)
-Water efficiency projects that reduce incidental recharge within a GWMA or CGWA must break out costs not associated with reductions to incidental recharge separately to be considered for partial funding

Application Submittal:

- Applications can be emailed to IWRBGrants@idwr.idaho.gov. Applications that are emailed must be received by the application due date.
- Applications that are mailed must be received on the application due date. Mailing address:
ATTENTION: IWRB GRANTS TEAM
IDAHO DEPARTMENT OF WATER RESOURCES
PO BOX 83720
BOISE, ID 83720-0098
- Applications can be dropped off in person on the 6th floor of the Idaho Water Center in Boise. Applications must be dropped off on weekdays, excluding holidays, between the hours of 8:00am and 5:00pm. The Idaho Water Center is located at:
IDAHO WATER CENTER
322 E FRONT ST STE 648
BOISE, ID 83702-7371

Grant Process:

- IWRB staff evaluate and score applications based on IWRB approved evaluation criteria
- IWRB staff present funding recommendations to IWRB Finance Committee
- Funding awarded at a regular IWRB meeting
- IWRB staff will notify eligible entity of grant approval and will administer cost-reimbursement contracts

Additional Conditions of Award:

Funding may be reallocated if:

- Requested information necessary to develop a contract is not received from the project Awardee within 90 days of the award dated resolution
- A proposed contract is not signed and returned within 60 days of issuance
- If the project is not completed within the award contract term
- The contract expires without a renewal or extension request from the awardee

Cost-Reimbursement Process:

- Awardee must be registered with the Idaho Secretary of State (SCO) in [IPRO Supplier Portal](#) and in [PaymentWorks](#), See "Action Center" on the homepage of SCO at <https://www.sco.idaho.gov/LivePages/scohome.aspx>
- Funds will be distributed upon the awardee submitting an IWRB acceptable funding reimbursement request to the IWRB.
- Reimbursement of invoices will not surpass 50% of the invoice amount ("Reimbursable Funds") submitted to IWRB staff. Of the Reimbursable Funds, 10% of the funds will be retained until Awardee submits a certificate of completion.
- The IWRB and IDWR staff will review and upon approval, pay invoices in accordance with Idaho Code § 67-2302
- In-kind services, labor, and materials must be invoiced to the IWRB to be eligible for

reimbursement

- The IWRB shall determine the value of in-kind contributions of materials and labor
- Invoices should be sent to IdwrPayable@idwr.idaho.gov
- A certificate of project completion and a financial summary of the total project cost shall be submitted by the awardee in order to receive final reimbursement

In-kind Matching Funds Documentation. In-kind matching contributions must be adequately documented and verifiable from the awardee's official records. Documentation must be sufficient to answer the following:

- Awardee must be able to demonstrate that the contribution is from an acceptable source.
- Awardee must be able to demonstrate what is being used as match is suitable for match.
- The IWRB shall determine the value of the in-kind contribution
 - Awardee is responsible for providing accurate documentation to support their in-kind valuation
 - Value shall be based on standard objective sources rather than awardees' estimate
- Awardee must certify that the information is correct and IWRB must review and approve

Accounting records must be supported by source documentation such as vouchers, canceled checks, invoices, payroll, time and attendance records, contract and sub-grant award documents, or other required forms.

Force account labor and equipment. The use of the awardee's staff (labor) and/or equipment costs must be verifiable from the awardee's accounting system. For labor, the records must include: the name of each worker, dates worked, hourly rate of pay, number of hours worked specific to the grant activity, and the total cost for each worker. Documentation of equipment costs must include the type of equipment used, dates used, hourly rate value, number of hours used, how the hourly rate was determined and total cost.

Donated contract labor and volunteer services may be counted as matching share if they are an integral and necessary part of the approved work.

- Rates claimed for volunteer services must be consistent with those rates paid for similar work in other activities and must not include fringe benefits and overhead costs.
- Match must be documented and, to the extent feasible, supported by the same methods used by the awardee for its own employees.
- At minimum this includes signed and dated time sheets filled out by volunteers working and approved by the supervisor with first-hand knowledge of the activity

IWRB Districts are as follows:

District No. 1: Boundary, Bonner, Kootenai, Shoshone, Benewah, Latah, Clearwater, Nez Perce, Lewis and Idaho counties.

District No 2: Adams, Valley, Washington, Payette, Gem, Boise, Canyon, Ada, Elmore and Owyhee counties.

District No. 3: Camas, Gooding, Jerome, Twin Falls, Cassia, Blaine, Lincoln, Minidoka, Lemhi, Custer and Butte counties.

District No. 4: Clark, Fremont, Jefferson, Madison, Teton, Bingham, Bonneville, Power, Bannock, Caribou, Oneida, Franklin and Bear Lake counties.

** No more than 50% of the total budget may be spent within a single IWRB district.
This limit may be waived if there are no competing funding demands.*



IWRB ESPA Groundwater to Surface Water Conversion Grant Criteria

The Idaho Water Resource Board (IWRB) is offering grant funding to be used for water projects targeted at converting lands irrigated from groundwater to surface water irrigation (Conversion Projects).

Projects that convert irrigated lands from groundwater to surface water irrigation support the Idaho economy, provide economic value, and ensure long-term water resource stability and sustainability. The IWRB has developed these criteria to provide financial assistance on a competitive basis through grants to eligible entities interested in pursuing eligible projects to convert existing irrigated lands from groundwater to surface water irrigation.

Eligible Projects: Projects located in an eligible geographic area that propose to convert from groundwater to surface water irrigation. “Hard Conversions” are projects that would permanently convert to the use of surface water. “Soft Conversions” would partially convert to the use of surface water but may have to use groundwater when surface water is not available.

Ineligible Projects:

- Projects that are already completed or underway by the application deadline

Eligible Entities: Groundwater Districts, Irrigation Districts, Irrigation Boards of Control, Canal Companies, and Municipalities. Individuals must apply through one of the eligible entities.

Eligible Geographic Area: Eastern Snake Plain Aquifer (ESPA) area of common groundwater supply

Funding Details:

- IWRB grant portion cannot exceed (50%) of total project costs for soft conversions. IWRB grant portion cannot exceed (75%) of total project costs for hard conversions.
- Must agree to cease pumping the proposed portion of groundwater related to project and that delivered conversion water will be used only on lands with an existing groundwater right tied to this project. Groundwater rights previously used on the conversion project lands cannot be put in the Water Bank for lease.
- If project construction is underway or completed by the application deadline the project is not eligible for this funding opportunity. Projects that have previously been awarded conversion grant funding are eligible to apply for additional funding.
- Costs incurred prior to the grant award date are not eligible for reimbursement
- Reimbursement requests can be made once a cost-reimbursement contract is established between the awardee and IWRB

- Reimbursement of invoices will not surpass 50% for soft and 75% for hard conversions of the invoice amount (“Reimbursable Funds”) submitted to Board Staff. Of the Reimbursable Funds, 10% will be retained until Awardee submits a certificate of completion.
- Contract term will not exceed 3 years after the grant funding award (date of IWRB Resolution) unless an extension is approved by IWRB’s contract manager.
- Funds may be reallocated if a project is not completed within the term of the cost-reimbursement contract, or if the Awardee does not provide contract development information requested within 90 days after the grant award date

Application Requirements: For the grant proposal to be considered, the following must be provided:

- A **cover letter** that is addressed to the IWRB and with the eligible entity’s letterhead. The letter must contain a project summary and the project manager’s contact information. The summary must include the funding request dollar amount and expected total project cost, as well as all other funding sources.
- An **application** containing the following:
 1. Project sponsor (eligible entity) description (organization type, background, revenue sources, current operations)
 2. Project description (narrative, infrastructure description, repair, rehabilitation, improvement needs/objectives/benefits, 30% design plans, land entitlements at project location, description of any known environmental issues)
 3. Project location (county, water source, PLS and/or Lat/Long), including map
 4. Project timeline, including start and completion date
 5. **Detailed cost estimates**, including all labor and materials. In-kind work must be detailed and included in cost estimates.
 6. Summary table that documents cost-share percentage for each funding source including in-kind work. If other grants are required to complete the project (USACE, NRCS, FEMA, etc.), include timelines for receiving those funds.
- Documentation is required from **Irrigation District/Canal Company of support** for the project **and agreement to deliver** the surface water supply for the conversion project. Documentation of long-term leases, storage water, existing shares, etc. to support the proposed project *if* not directly diverted from a river. Documentation should address the term of the surface water delivery agreement and how often water will be available to support the project.
- Documentation from **Groundwater District of support** for the project and agreement to administer the pumping reduction.
 - **List of groundwater rights** on conversion project lands
 - **Proof of liability** insurance for general construction, i.e., ICRMP.
 - **Completed Applicant Information Sheet** provided by IWRB.
- Addresses all **evaluation criteria** described below.

Evaluation Criteria: To maximize the effective and efficient use of available funds, grant applications submitted by eligible entities for eligible projects will be evaluated, scored (*100-point scale*), and ranked according to the following criteria. **Applications that do not meet the eligibility requirements will not be scored and will be returned.** Project scoring will be used to prioritize funding. Applications shall discuss how the project under consideration meets the evaluation criteria.

Benefits/Effectiveness (Up to 75 points)

- Project with a greater percentage of pumping offset will receive more points. (15 points)
- The application demonstrates a reduction in average annual groundwater pumping in acre-feet associated with this project. (10 points)
- The applicant demonstrates the dependability of the surface water supply in terms of quantity and seasonal availability. (5 points)
- The applicant demonstrates aquifer storage benefits and/or reach gain benefits associated with the project. Applicants should submit modeling results to support their claims. (20 points)
- The applicant demonstrates the project involves multiple entities, or the project is regionally focused. (5 points)
- The project includes a recharge component. (10 points)
- Conversions that are greater than 85% efficient will receive more points. (10 points)

Project Proposal Clarity and Detail (up to 15 points)

- Clarity and detail of project proposal and location: need, description, budget and benefits, detailed map(s) of project area that have a legend, county, and coordinate or PLS (Township, Range, Section) information. (5 points)
- Plans and specifications included with the grant application (5 points)
- Description of the personnel (entity's employees, contractors and/or volunteers) that will plan, design, construct and implement the proposed project (descriptions may include the number, qualifications (resumes if applicable) and time of personnel that will be involved in the project. (5 points)

Urgency of Project (up to 10 points)

- Urgency of the project – The project is necessary to avoid curtailment or to help support a settlement (10 points)

Application Submittal:

Applications can be emailed to IWRBGrants@idwr.idaho.gov. Applications that are emailed must be received by the application due date.

Applications that are mailed must be received on the application due date. Mailing address:

ATTENTION: IWRB GRANTS TEAM
IDAHO DEPARTMENT OF WATER RESOURCES
PO BOX 83720
BOISE, ID 83720-0098

Applications can be dropped off in person on the 6th floor of the Idaho Water Center in Boise. Applications must be dropped off on weekdays, excluding holidays, between the hours of 8:00am and 5:00pm. The Idaho Water Center is located at:

IDAHO WATER CENTER
322 E Front St, Suite 648
Boise, ID 83702-7371

Grant Process:

- IWRB staff evaluate and score applications based on IWRB approved evaluation criteria
- IDWR staff will perform modeling of application conversion scenario to calculate benefit
- IWRB staff present funding recommendations to IWRB Finance Committee
- Funding awarded at a regular IWRB meeting

- IWRB staff will notify project applicants of grant approval and will administer cost-reimbursement contracts

Additional Conditions of Award:

Funding may be reallocated if:

- Requested information necessary to develop a contract is not received from the project Awardee within 90 days of the award dated resolution
- A proposed contract is not signed and returned within 60 days of issuance
- If the project is not completed within the award contract term
- The contract expires without a renewal or extension request from the Awardee

Cost-Reimbursement Process:

- Awardee must be registered with the Idaho Secretary of State (SCO) in IPRO Supplier Portal and in PaymentWorks, See "Action Center" on the homepage of SCO at <https://www.sco.idaho.gov/LivePages/scohome.aspx>
- Funds will be distributed upon Awardee submitting an IWRB acceptable funding reimbursement request to the IWRB
- Reimbursement of invoices will not surpass 50% for soft conversions and 75% for hard conversions of the invoice amount ("Reimbursable Funds") submitted to IWRB staff. Of the Reimbursable Funds, 10% of funds will be retained until Awardee submits a certificate of completion.
- The IWRB and IDWR staff will review and upon approval, pay invoices in accordance with Idaho Code § 67-2302
- In-kind services, labor, and materials must be invoiced to IWRB to be eligible for reimbursement
- The IWRB shall determine the value of in-kind contributions of materials and labor
- Invoices should be sent to IdwrPayable@idwr.idaho.gov
- A certificate of project completion and a financial summary of the total project cost shall be submitted by the Awardee in order to receive final reimbursement

In-kind Matching Funds Documentation. In-kind matching contributions must be adequately documented and verifiable from the Awardee's official records. Documentation must be sufficient to answer the following:

- Awardee must be able to demonstrate that the contribution is from an acceptable source.
- Awardee must be able to demonstrate what is being used as match is suitable for match.
- The IWRB shall determine the value of the in-kind contribution
 - Awardee is responsible for providing accurate documentation to support their in-kind valuation
 - Value shall be based on standard objective sources rather than Awardees' estimates
- Awardee must certify that the information is correct and IWRB must review and approve

Accounting records must be supported by source documentation such as vouchers, canceled checks, invoices, payroll, time and attendance records, contract and sub-grant award documents, or other required forms.

Force account labor and equipment. The use of the Awardee's staff (labor) and/or equipment costs must be verifiable from the Awardee's accounting system. For labor, the records must include: the name of each worker, dates worked, hourly rate of pay, number of hours worked specific to the grant activity, and the total cost for each worker. Documentation of equipment costs must include the type of

equipment used, dates used, hourly rate value, number of hours used, how the hourly rate was determined and total cost.

Donated contract labor and volunteer services may be counted as matching share if they are an integral and necessary part of the approved work.

- Rates claimed for volunteer services must be consistent with those rates paid for similar work in other activities and must not include fringe benefits and overhead costs.
- Match must be documented and, to the extent feasible, supported by the same methods used by the Awardee for its own employees.
- At minimum this includes signed and dated time sheets filled out by volunteers working and approved by the supervisor with first-hand knowledge of the activity

DRAFT



IWRB Measuring & Monitoring Support Grant Criteria

The Idaho Water Resource Board (IWRB) has allocated funding to continue to promote water conservation efforts throughout the **state of Idaho** through the purchase and installation of monitoring equipment, measurement devices, or other supportive infrastructure for ground and surface water diversions.

Funding under this program seeks to continue and expand upon the previous Telemetry grant utilizing funding from the Bureau of Reclamation. Measurement and monitoring equipment must meet current Idaho Department of Water Resources Standards – [IDWR Water Measurement Information](#).

Eligible Projects: Projects considered under this program are for the purchase and installation of monitoring and measurement equipment for both surface and groundwater diversions. *Example projects: New monitoring wells, flumes, weirs, telemetry equipment, software development, automation equipment, etc.*

Ineligible Projects:

- Projects that are completed by the application deadline are not eligible for this program.

Eligible Entities: Irrigation Districts, Irrigation Boards of Control, Canal Companies, Drainage Districts, Groundwater Districts, Ditch Companies, Lateral Ditch Users Associations, Reservoir Districts, Municipal Irrigation Districts (formed per Title 42, chapter 18, Idaho Code), Municipalities, Counties, and Water Districts. Individuals must apply through one of the eligible entities.

Eligible Geographic Area: **Statewide, with preference for projects in response to an active measurement order issued by the IDWR Director.**

Funding Details:

- Funding Details: Up to a maximum of \$250,000 per project; one project per application
- IWRB grant portion cannot exceed 50% of total project costs
- Reimbursement requests can be made once a cost-reimbursement contract is established between the applicant and IWRB
- **Reimbursement of invoices will not surpass 50% of the invoice amount (“Reimbursable Funds”) submitted to Board Staff. **Of the Reimbursable Funds, 10% will be retained until Awardee submits a certificate of completion.****
- Contract term will not exceed 3 years after the grant funding award (date of IWRB Resolution) unless an extension is approved by IWRB’s contract manager.
- Funds may be reallocated if a project is not completed within the term of the cost-reimbursement contract, or if the awardee does not provide contract development information requested within 90 days after the grant award date

Application Requirements: For the grant proposal to be considered, the following must be provided:

- A **cover letter** that is addressed to the IWRB and with the eligible entity's letterhead. The letter must contain a project summary and the project manager's contact information. The summary must include the funding request dollar amount and expected total project cost, as well as all other funding sources.
- An **application** containing the following:
 1. Project sponsor (eligible entity) description (organization type, background, revenue sources, current operations)
 2. Project description (narrative, conceptual plan and design, land entitlements at project location, description of any known environmental issues).
 3. Project location (county, water source, map with legend and PLS (Township, Range, Sections) or Lat/Long)
 4. Detailed cost estimate and budget, including labor and materials. In-kind work must be detailed and included in cost estimates.
 5. Project funding sources (IWRB grant, other state and federal grants, sponsor's contribution)
 6. Project timeline and implementation schedule
- **Proof of liability** insurance for general construction, i.e., ICRMP.
- **Completed Applicant Information Sheet** provided by IWRB.
- Addresses all **evaluation criteria** described below.

Evaluation Criteria: To maximize the effective and efficient use of available funds, grant applications submitted by eligible entities for eligible projects will be evaluated, scored (100-point scale) according to the following criteria. Applications that do not meet the eligibility requirements will not be scored and will be returned. Project scoring may be used to prioritize funding. The application shall discuss how the project for the purchase of and/or the installation of monitoring equipment, measurement devices, or supporting infrastructure meets the following criteria:

Measurement Order (up to 10 points)

- The applicant is complying with an active measurement order issued by the IDWR Director (10 points)

2024 SWC/Ground Water District Settlement Agreement in the ESPA (up to 30 points)

- The applicant can demonstrate how this project will further agreement priorities regarding water resources. (30 points)

Equipment Installation (up to 20 points)

- A new install of monitoring, telemetry, and/or measurement equipment on the **Project** diversion works. (20 points); or
- A retrofit of existing monitoring, telemetry and/or measurement equipment already installed on the **Project** diversion works. (10 points)

Project Implementation Schedule (up to 20 points)

- The Project will be completed in 1 year; (20 points) or
- The Project will be completed in 2 years; (10 points) or
- The Project will be completed in subsequent years. (5 points)

Project Proposal & Clarity (up to 20 points)

- Clarity and description of the Project: identifies the Project's need, proposed budget, and public interest. (10 points)

- Plans, timeline, and drawings for the Project. (5 points)
- Description of the equipment being installed. (5 points)

Application Submittal:

Completed applications can be emailed to the Idaho Water Resource Board’s Grants Team at IWRBGrants@IDWR.Idaho.gov and must be received by the application date.

Applications that are mailed must be postmarked by the application date. Mailing Address:

ATTN: IWRB GRANTS TEAM – MEASURING & MONITORING SUPPORT GRANT TEAM
IDAHO DEPARTMENT OF WATER RESOURCES
PO BOX 83720
BOISE, ID 83720

Applications can also be dropped off in person on the 6th floor of the Idaho Water Center in Boise, ID, and must be received by 5:00 pm on the application date. The Idaho Water Center is located at:

IDAHO WATER CENTER
322 E. Front Street, Suite 648
Boise, ID 83702-7371

For questions on the application package or to schedule a meeting with the Grants Team, email us at IWRBGrants@IDWR.Idaho.gov and please specify the Measuring & Monitoring Support Grant Program.

Grant Process:

- IWRB staff evaluate and score applications based on IWRB approved evaluation criteria
- IWRB staff present funding recommendations to IWRB Finance Committee
- Funding awarded at a regular IWRB meeting
- IWRB staff will notify project applicants of grant approval and will administer cost-reimbursement contracts

Additional Conditions of Award:

Funding may be reallocated if:

- Requested information necessary to develop a contract is not received from the project Awardee within 90 days of the award dated resolution
- A proposed contract is not signed and returned within 60 days of issuance
- If the project is not completed within the award contract term
- The contract expires without a renewal or extension request from the Awardee

Cost-Reimbursement Process:

- Awardee must be registered with the Idaho Secretary of State (SCO) in IPRO Supplier Portal and in PaymentWorks, See “Action Center” on the homepage of SCO at <https://www.sco.idaho.gov/LivePages/scohome.aspx>
- Funds will be distributed upon Awardee submitting an IWRB acceptable funding reimbursement request to the IWRB
- Reimbursement of invoices will not surpass 50% of the invoice amount (“Reimbursable Funds”) submitted to IWRB staff. Of the Reimbursable Funds, 10% of funds will be retained until Awardee submits a certificate of completion.
- The IWRB and IDWR staff will review and upon approval, pay invoices in accordance with Idaho Code § 67-2302

- In-kind services, labor, and materials must be invoiced to IWRB to be eligible for reimbursement
- The IWRB shall determine the value of in-kind contributions of materials and labor
- Invoices should be sent to IdwrPayable@idwr.idaho.gov
- A certificate of project completion and a financial summary of the total project cost shall be submitted by the Awardee in order to receive final reimbursement

In-kind Matching Funds Documentation. In-kind matching contributions must be adequately documented and verifiable from the Awardee's official records. Documentation must be sufficient to answer the following:

- Awardee must be able to demonstrate that the contribution is from an acceptable source.
- Awardee must be able to demonstrate what is being used as match is suitable for match.
- The IWRB shall determine the value of the in-kind contribution
 - Awardee is responsible for providing accurate documentation to support their in-kind valuation
 - Value shall be based on standard objective sources rather than Awardees' estimates
- Awardee must certify that the information is correct and IWRB must review and approve

Accounting records must be supported by source documentation such as vouchers, canceled checks, invoices, payroll, time and attendance records, contract and sub-grant award documents, or other required forms.

Force account labor and equipment. The use of the Awardee's staff (labor) and/or equipment costs must be verifiable from the Awardee's accounting system. For labor, the records must include: the name of each worker, dates worked, hourly rate of pay, number of hours worked specific to the grant activity, and the total cost for each worker. Documentation of equipment costs must include the type of equipment used, dates used, hourly rate value, number of hours used, how the hourly rate was determined and total cost.

Donated contract labor and volunteer services may be counted as matching share if they are an integral and necessary part of the approved work.

- Rates claimed for volunteer services must be consistent with those rates paid for similar work in other activities and must not include fringe benefits and overhead costs.
- Match must be documented and, to the extent feasible, supported by the same methods used by the Awardee for its own employees.
- At minimum this includes signed and dated time sheets filled out by volunteers working and approved by the supervisor with first-hand knowledge of the activity

BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF AGING WATER
INFRASTRUCTURE GRANTS

RESOLUTION TO ADOPT UPDATED
CRITERIA

1 WHEREAS, House Bill 769 passed and approved in 2022 by the Idaho Legislature directed
2 the Idaho Water Resource Board (IWRB) to develop a grant program and criteria to provide
3 funding for projects that rehabilitate or improve aging water infrastructure; and
4

5 WHEREAS, pursuant to Section 42-1760, Idaho Code, state general funds deposited into
6 the Water Management Account (WMA) are continuously appropriated to the IWRB for water
7 projects that conserve or increase water supply, improve drought resiliency, address water
8 sustainability, or support flood management, including the development of grant programs
9 pursuant to Section 42-1760 (2) (c), Idaho Code; and
10

11 WHEREAS, on June 7, 2022, the IWRB adopted Resolution No. 21-2022 establishing Aging
12 Infrastructure Grants and associated criteria; and
13

14 WHEREAS, the IWRB last updated the criteria for the award of Aging Infrastructure Grants
15 through Resolution No. 21-2025 on May 23, 2025; and
16

17 WHEREAS, on May 8, 2026, the IWRB Finance Committee recommended newly updated
18 criteria for the award of Aging Infrastructure Grants for consideration by the full Board; and
19

20 NOW, THEREFORE BE IT RESOLVED that the IWRB adopts the attached criteria for the
21 award of Aging Infrastructure Grants from the Water Management Account.
22

23 BE IT FURTHER RESOLVED that the IWRB may consider scheduling a single or multiple
24 award cycle(s) in a fiscal year, as funds are available, which will be announced at least 45 days
25 prior to an application deadline.

DATED this 21st day of May 2026.

JEFF RAYBOULD, Chairman
Idaho Water Resource Board

ATTEST _____
DEAN STEVENSON, Secretary

DRAFT

BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF ESPA GROUNDWATER
TO SURFACE WATER CONVERSION GRANTS

RESOLUTION TO ADOPT UPDATED
CRITERIA

1 WHEREAS, the Idaho Water Resource Board (IWRB) adopted criteria creating the ESPA
2 Groundwater to Surface Water Conversion Grant program through Resolution No. 22-2025 on
3 May 23, 2025, as part of the Eastern Snake Plain Aquifer (ESPA) Regional Water Sustainability
4 (RWS) Project Priority List; and

5
6 WHEREAS, pursuant to Section 42-1760, Idaho Code, state general funds deposited into
7 the Water Management Account (WMA) are continuously appropriated to the IWRB for water
8 projects that conserve or increase water supply, improve drought resiliency, address water
9 sustainability, or support flood management; and

10
11 WHEREAS, on May 8, 2026, the IWRB Finance Committee recommended newly updated
12 criteria for the award of ESPA Groundwater to Surface Water Conversion Grants for consideration
13 by the full Board; and

14
15 NOW, THEREFORE BE IT RESOLVED that the IWRB adopts the attached criteria for the
16 award of ESPA Groundwater to Surface Water Conversion Grants from the Water Management
17 Account.

18
19 BE IT FURTHER RESOLVED that the IWRB may consider scheduling a single or multiple
20 award cycle(s) in a fiscal year, as funds are available, which will be announced at least 45 days
21 prior to an application deadline.

DATED this 21st day of May 2026.

JEFF RAYBOULD, Chairman
Idaho Water Resource Board

ATTEST _____
DEAN STEVENSON, Secretary

BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF MEASURING &
MONITORING SUPPORT GRANTS

RESOLUTION TO ADOPT UPDATED
CRITERIA

1 WHEREAS, the Idaho Water Resource Board (IWRB) adopted criteria creating the
2 Monitoring Support Grant Program, through Resolution No. 24-2025 on May 23, 2025, to provide
3 financial assistance within the Eastern Snake Plain Aquifer (ESPA) Area of Common Ground Water
4 Supply (ACGWS), to increase the measurement and monitoring capability of irrigators within the
5 ESPA ACGWS; and

6
7 WHEREAS, pursuant to Section 42-1760, Idaho Code, state general funds deposited into
8 the Water Management Account (WMA) are continuously appropriated to the IWRB for water
9 projects that conserve or increase water supply, improve drought resiliency, address water
10 sustainability, or support flood management, including priority consideration for certain water
11 measurement infrastructure projects above Milner Dam; and

12
13 WHEREAS, the Director of the Idaho Department of Water Resources (IDWR) has issued
14 orders requiring measuring devices (Measurement Orders) to specified water users within
15 designated water districts across the state of Idaho to better administer water resources, and
16 there is a great number of water users within water districts, including outside of the ESPA
17 ACGWS, in need of funding assistance to comply with measurement orders; and

18
19 WHEREAS, staff have developed updated criteria for the award of Measuring &
20 Monitoring Support grants to open the eligible geographic area to the entire state of Idaho; and

21
22 WHEREAS, on May 8, 2026, the IWRB Finance Committee recommended newly updated
23 criteria for the award of Measuring & Monitoring Support grants for consideration by the full
24 Board.

25
26 NOW, THEREFORE BE IT RESOLVED that the IWRB adopts the attached criteria for the
27 award of Measuring & Monitoring Support grants from the Water Management Account.

28
29 BE IT FURTHER RESOLVED that the IWRB may schedule a single or multiple award cycle(s)
30 in a fiscal year, as funds are available, which will be announced at least 45 days prior to an
31 application deadline.

DATED this 21st day of May 2026.

JEFF RAYBOULD, Chairman
Idaho Water Resource Board

ATTEST _____
DEAN STEVENSON, Secretary

MEMO



To: Idaho Water Resource Board (Board)
From: Neeley Miller, Senior Planner
Date: May 13, 2026
Subject: Proposed Secondary Aquifer Planning, Management & Implementation Fund – Fiscal Year 2027 Budget

REQUESTED ACTION: Consider Resolution to Adopt Recommended Fiscal Year (FY) 2027 Secondary Aquifer Fund Budget

On May 8, 2026, staff discussed the proposed FY 2027 budget for the Secondary Aquifer Planning, Management & Implementation Fund (Secondary Aquifer Fund) with the Planning Committee. The Planning Committee recommended the Board adopt the attached Secondary Fund Budget

Attachment(s):

- *Resolution to Acknowledge Updated Environmental Assessment*

BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF STATEWIDE WATER
SUSTAINABILITY AND AQUIFER STABILIZATION,
AND THE SECONDARY AQUIFER PLANNING,
MANAGEMENT, AND IMPLEMENTATION FUND
FISCAL YEAR 2027 BUDGET

RESOLUTION TO PASS FISCAL YEAR 2027
BUDGET

1 WHEREAS, the Idaho Legislature, pursuant to Idaho Code § 63-2520, directs certain
2 Cigarette Tax revenues to the Idaho Water Resource Board’s (IWRB) Secondary Aquifer Planning,
3 Management, and Implementation Fund (Secondary Aquifer Fund); and
4

5 WHEREAS, through House Bill 547 (2014) the Legislature allocated \$5 million annually
6 through 2019 from such revenues for aquifer stabilization, and through House Bill 256 (2019)
7 established an ongoing \$5 million General Fund appropriation to the Secondary Aquifer Fund for
8 statewide water sustainability and aquifer stabilization, with unallocated funds carried forward
9 into Fiscal Year 2027; and
10

11 WHEREAS, many aquifers across Idaho—including the Eastern Snake Plain, Mountain
12 Home, Wood River Valley, Big Lost, Raft River, Malad Valley, Treasure Valley, Rathdrum Prairie,
13 Palouse Basin, and Lewiston Plateau aquifers—are declining or face existing or potential
14 conjunctive administration conflicts, resulting in groundwater conditions insufficient to sustain
15 irrigation, hydropower, municipal, industrial, and other uses, the curtailment of which would
16 cause severe economic harm to Idaho’s economy; and
17

18 WHEREAS, Senate Concurrent Resolution 137 (2016) recognizes aquifer stabilization and
19 enhancement as in the public interest and directs the IWRB to take actions in aquifers across the
20 state to stabilize and enhance aquifer levels thereby maintaining water supply for consumptive
21 and non-consumptive uses and minimizing harm to Idaho’s economy arising from water supply
22 shortages; and
23

24 WHEREAS, the State of Idaho (State) relies on spring discharge from the Eastern Snake
25 Plain Aquifer (ESPA), including flows at Thousand Springs, to meet minimum streamflow water
26 rights at the Murphy Gage under the Swan Falls Agreement. Prior to significant stabilization
27 efforts around 2014, the ESPA was losing approximately 216,000 acre-feet annually from aquifer
28 storage since the 1950’s, resulting in declining ground water levels and spring flows, and flows at
29 the Murphy Gage approaching minimums in 2013–2014 and falling below minimums in 2015;
30 and

31 WHEREAS, conjunctive administration conflicts in the ESPA over the past two decades
32 posed significant economic risk, leading to the June 30, 2015 agreement between the Idaho
33 Ground Water Appropriators and the Surface Water Coalition to reduce consumptive use by
34 240,000 acre-feet annually and take other actions, supported by Senate Concurrent Resolution
35 138 (2016); and

36
37 WHEREAS, Senate Concurrent Resolution 136 (2016) directed the IWRB to develop the
38 capacity to achieve 250,000 acre-feet of annual average managed recharge to the ESPA by
39 December 31, 2024. Subsequent agreements, including a 2018 agreement with ESPA cities
40 (supported by House Concurrent Resolution 10 (2019)), and the combined actions of demand
41 reduction and managed recharge are intended to stabilize and recover the ESPA; and

42
43 WHEREAS, on November 15, 2024, the Surface Water Coalition and Ground Water
44 Districts on the Eastern Snake Plain Aquifer (ESPA) entered into a settlement agreement (2024
45 Stipulated Mitigation Plan) establishing a mitigation framework of groundwater use reductions,
46 storage water deliveries, and managed aquifer recharge, aligned with the State of Idaho's
47 objective to increase recharge from 250,000 to an annual average of 350,000 acre-feet; and
48 Senate Concurrent Resolution 110 (2025) expresses legislative support for the agreement and
49 the IWRB's efforts to address water supply challenges and expand aquifer recharge; and

50
51 WHEREAS, on November 21, 2026, the IWRB adopted amendments to State Water Plan
52 policies 4B, 4D, and 4E and the ESPA Comprehensive Aquifer Management Plan (Resolution 53-
53 2025) to increase the goal for state-funded managed aquifer recharge to an annual average of
54 350,000 acre-feet, which became effective following submission to the 2026 Legislature; and

55
56 WHEREAS, the Department of Water Resources has designated Ground Water
57 Management Areas in multiple basins, including the Eastern Snake Plain, Big Wood River, Malad
58 Valley, Mountain Home and the Lewiston Plateau Aquifers, in response to declining ground water
59 levels; and

60
61 WHEREAS, on May 8, 2026, the IWRB Finance Committee recommended the approval of
62 a Fiscal Year 2027 Budget for the use of available funds in the Secondary Aquifer Fund for
63 statewide water sustainability and aquifer stabilization purposes; and

64
65 NOW THEREFORE BE IT RESOLVED that the IWRB adopts the Fiscal Year 2027 Budget for
66 the continuously appropriated Secondary Aquifer Planning, Management, and Implementation
67 Fund as shown in Attachment A to this resolution.

68 BE IT FURTHER RESOLVED that the budget may be adjusted based on actual Cigarette Tax
69 revenues received Idaho Code § 63-2520, interest earnings, and Fiscal Year 2026 carryover.
70

71 BE IT FURTHER RESOLVED that expenditures identified in Attachment A for ESPA managed
72 recharge operations, and investigations for development of additional ESPA managed recharge
73 capacity may proceed without further approvals; provided the IWRB shall be kept apprised.
74

75 BE IT FURTHER RESOLVED that expenditures identified in Attachment A for monitoring,
76 modeling, hydrologic studies, settlement support, federal funding assistance, and administrative
77 costs may proceed without further approval, provided the IWRB is kept apprised.
78

79 BE IT FURTHER RESOLVED that expenditures identified in Attachment A for the
80 Cooperative Cloud Seeding Program Operations and Maintenance costs may proceed with no
81 further approvals, with the expectation of shared financial participation among the state, water
82 users, and Idaho Power Company.
83

84 BE IT FURTHER RESOLVED that the IWRB may modify this budget during Fiscal Year 2027
85 at a properly noticed meeting of the IWRB.

DATED this 21st day of May 2026

JEFF RAYBOULD, Chairman
Idaho Water Resource Board

ATTEST _____
DEAN STEVENSON, Secretary

ATTACHMENT A:

FY2027 PROPOSED BUDGET FOR THE SECONDARY AQUIFER FUND

Estimated Carry-Over From FY26
 General Fund (2027)
 HB547 funds - receipt of Cigarette Tax proceeds
 Recharge Conveyance Reserve**
 Estimated interest

\$	7,463,919
\$	5,000,000
\$	5,000,000
\$	3,500,000
\$	750,000
\$	21,713,919

TOTAL

Category		Sub-Category	FY27
ESPA MANAGED RECHARGE PROGRAM			
ESPA Recharge Operations		Conveyance Cost	3,500,000
		O&M (equipment, supplies, operational fees, etc.)	225,000
		Recharge Monitoring	975,000
		TOTAL	\$4,700,000
ESPA Managed Recharge Infrastructure Projects	Budgeted Infrastructure Projects	Infrastructure projects to improve IWRB recharge capacity	7,100,000 *
		Projects in development with the following partners:	
		New Sweden Irrigation District	
		Farmers Friend Irrigation Company	
		Bingham Groundwater District	
		Idaho Irrigation District	
TOTAL	\$7,100,000		
ESPA Recharge Investigations	Budgeted Investigations	Canal improvement and recharge site feasibility investigations	350,000
		TOTAL	\$350,000
ESPA MANAGED RECHARGE TOTAL			\$12,150,000
CLOUD SEEDING PROGRAM			
Collaborative Program Operations & Maintenance	Upper Snake River Basin	2026-2027 Project Operations (=2/3 * \$2,031,900)	1,354,600
	Wood River Basin	2026-2027 Project Operations (=2/3 * \$831,750)	554,500
	Boise River Basin	2026-2027 Project Operations (=2/3 * \$1,122,750)	748,500
	Collaborative Program Administration	Estimated Water User Contributions (11.13%)	-443,820
	Administration	Operational Modeling and Computing Support (\$290k total 50/50)	145,000
Statewide Operations & Maintenance	Bear River Basin	2026-2027 Pilot Project Operations	1,000,000 *
	New Basins	Infrastructure and Administration	500,000 *
	HCRCD Program	2026-2027 Upper Snake Project Operations	120,000 *
	Administration	Partnership Collaborations, Staff Travel, WMA/NAWMC Memberships	20,000
TOTAL			\$3,998,780
Collaborative Program Capital	Weather Instrumentation	Replacements/Enhancements/Upgrades	0
	Modeling	Model Improvements	225,000
	Technology	Computing and Modeling Infrastructure (HPC)	500,000 *
Statewide Capital	Equipment	Remote Ground Generators	60,000
TOTAL			\$785,000
Reserve			\$250,000
CLOUD SEEDING PROGRAM TOTAL			\$5,033,780
TREASURE VALLEY			
Monitoring in support of the Treasure Valley model (annual)			170,000
Treasure Valley Recharge Pilot Project			250,000
Treasure Valley Groundwater Level Synoptic (Year 1 of 2)			150,000
Star Watershed Project (Year 2 of 2)			50,000
TOTAL			\$620,000
RAFT RIVER BASIN			
Raft River Hydrologic Studies and Monitoring			50,000
RAFT RIVER TOTAL			\$50,000
PORTNEUF BASIN			
Portneuf Hydrogeologic Study (Year 4 of 4)			150,000
TOTAL			\$150,000
BEAR RIVER BASIN			
Water Sustainability			200,000 *
TOTAL			\$200,000
LEMHI BASIN			
Support of Water Sustainability Initiatives per settlement			250,000 *
TOTAL			\$250,000

MID-SNAKE BASIN			
Mid-Snake Water Quality Monitoring (annual)			50,000
TOTAL			\$50,000
PALOUSE BASIN			
Aquifer monitoring			100,000
TOTAL			\$100,000
MOUNTAIN HOME BASIN			
Groundwater Model Development (Year 3 of 4)			250,000
TOTAL			\$250,000
BIG LOST BASIN			
Monitoring in support of Big Lost model development (annual)			130,000
TOTAL			\$130,000
WOOD RIVER BASIN			
Conservation, infrastructure and efficiency fund (CIEF) associated with settlement (year 2 of 3)			200,000
Modeling and Analysis			100,000
TOTAL			\$300,000
HYDROLOGY ACTIVITIES			
ESPA monitoring			300,000
Statewide surface water and aquifer monitoring			650,000
Monitor Well Drilling Program (WeSPAM, ESPAM, Northern)			750,000
TOTAL			\$1,700,000
STATEWIDE			
Professional Services (includes media & federal outreach services) and administrative costs			250,000
TOTAL			\$250,000
GRAND TOTAL			\$21,233,780
Reserve for Work in Other Priority Aquifers Total		\$	480,139 *

*These items will require the IWRB pass an additional resolution to authorize funding.

**\$12,378,211 Total Recharge Conveyance Reserve

MEMO



To: Idaho Water Resource Board (IWRB/Board)
From: Cynthia Bridge Clark, Planning & Projects Bureau Chief
Date: May 15, 2026
Subject: Fiscal Year (FY) 2027 Water Management Account Spending Plan

REQUESTED ACTION: Consider Adoption of a FY 2027 Water Management Account Spending Plan Incorporating FY 2027 Appropriations

BACKGROUND:

The IWRB manages three primary funding accounts to support water development and water sustainability efforts: the Revolving Development Account (RDA), Water Management Account (WMA), and the Secondary Aquifer Planning, Management, and Implementation Fund (Secondary Fund).

The RDA primarily funds loans, Board owned water facilities, and specific water development projects. The Secondary Fund and WMA are managed through annual or periodic spending plans adopted by the IWRB to direct funding toward priority water sustainability projects, grants, loans, and other Board-approved initiatives.

To guide investments in projects that support water supply sustainability on a regional, basin-wide, or statewide scale in accordance with legislative direction, the IWRB maintains a list of priority projects: Regional Water Sustainability Projects Priority List (RWSP Priority List). The Board also administers targeted grant programs addressing aging infrastructure, flood management, groundwater-to-surface water conversions, measurement and monitoring, and water delivery system efficiency.

Since 2019, including FY 2027 appropriations, the Idaho Legislature has appropriated approximately \$394 million to the IWRB’s Water Management Account (WMA) to support water project development and water sustainability initiatives.

FY 2027 LEGISLATIVE APPROPRIATIONS (SENATE BILL 1363):

Through Senate Bill (SB) 1363 (FY 2027 Natural Resources Maintenance Appropriation), the Legislature provided funding and direction for the WMA:

Section 16 – Flood Management Program (\$1,000,000):

- Transfers \$1 million from the Idaho Department of Water Resources (IDWR) General Fund to the Water Management Fund for flood-related activities, including hydrologic data collection, monitoring and modeling, stream channel repair and improvement, flood risk reduction, and flood prevention projects.
- These funds are to be administered by the IWRB through a competitive, matching grant process prioritizing projects based on public benefit.

Section 17 – Water Projects (\$30,000,000): Transfers \$30 million from the IDWR General Fund to the WMA for water projects on or around July 1, 2026.

Section 18 – WMA Project Fund Criteria: Establishes legislative intent and constraints governing the use of the \$30 million appropriation.

- Funds must be used for planning, construction, rehabilitation, reconstruction, and improvement of water infrastructure statewide.
- Priority categories include: Aquifer recharge and groundwater management; Water storage and conveyance infrastructure (e.g., reservoirs, canals, pipelines); Water supply efficiency and conservation improvements; and Emergency infrastructure repairs to ensure system resilience.
- Geographic distribution of expenditures: No more than 50% of the funds may be used within a single IWRB district unless there are no competing applications.
- Requires reporting to the Joint Finance-Appropriations Committee and germane legislative committees by December 5, 2026.

FY 2027 SPENDING PLAN:

The IWRB’s FY 2026 WMA spending plan incorporated the \$30 million ongoing appropriation authorized under House Bill 445, enacted during the 2025 legislative session. It was last amended on March 27, 2026 (Resolution No. 10-2026) to reflect new IWRB funding obligations.

On May 8, 2026, the Finance Committee recommended a proposed spending plan for FY 2027 for consideration by the full Board which incorporates FY 2027 appropriations under SB 1363. The following table reflects the recommended allocation of the FY 2027 \$30 million appropriation:

Proposed WMA Spending Plan for FY 2027 \$30M Appropriation
(SB 1363, Sec 17, Leg 2026)

Program/Project	Proposed Funding	Funds Budgeted by IWRB Spending Plan Resolution (as of 3/27/2026)	Total
Statewide Aging Infrastructure Grants	\$4,000,000	\$26,274,363	\$30,274,363
Bear River Basin Lake Additional Storage & Other Projects	\$2,000,000	\$2,000,000	\$4,000,000
ESPA GW to SW Conversion Grants	\$8,000,000	\$38,621,296	\$46,621,296
ESPA Recharge Infrastructure	\$10,000,000	\$26,040,727	\$36,040,727
Statewide Measuring & Monitoring Support Grants	\$1,000,000	\$815,102	\$1,815,102
Surface Water Coalition Operational Efficiencies Program	\$4,000,000	\$27,332,574	\$31,332,574
Winchester Dam Repair Project (RWSP)	\$1,000,000	\$0	\$1,000,000
Total	\$30,000,000	\$121,084,061	\$151,084,061

Other funding obligations incorporated in the recommended spending plan include:

- \$1M for the Winchester Dam Repair Regional Water Sustainability Project;
- An additional \$500,000 for the ESPA Groundwater Measurement Database to address

additional Information Technology infrastructure requirements; and

- Finance Committee recommended adjustments to the funding structure for the Lost Valley Reservoir Company loan, including funding approximately \$4.2 million of the \$13.2 million loan from the RDA to reduce demands on the WMA.

Attachment(s):

- *IWRB Resolution: WMA FY2027 Spending Plan*

BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF THE IDAHO WATER
RESOURCE BOARD’S WATER MANAGEMENT
ACCOUNT

RESOLUTION TO APPROVE A FISCAL YEAR
2027 WATER MANAGEMENT ACCOUNT
SPENDING PLAN

1 WHEREAS, the Water Management Account (WMA) was created pursuant to Idaho Code § 42-
2 1760 and is administered by the Idaho Water Resource Board (IWRB); and
3

4 WHEREAS, through House Bill (HB) 285, the 2019 Idaho Legislature appropriated \$20 Million to
5 the WMA for the Anderson Ranch Reservoir Enlargement (Anderson Ranch Dam Raise) and the Mountain
6 Home Air Force Base Sustainable Water Project (MHAFB Project), and amended Idaho Code § 42-1760 to
7 authorize the use of WMA funds for those projects, aquifer recharge infrastructure, and other projects
8 selected by the IWRB; and
9

10 WHEREAS, through Senate Bill (SB) 1121, the Idaho Legislature appropriated \$50 Million to the
11 Water Management Account, and the IWRB, through Resolution No. 07-2021, allocated funds
12 appropriated under HB 285 and SB 1121 to the Anderson Ranch Dam Raise, MAHFB Project, Eastern Snake
13 Plain Aquifer (ESPA) recharge infrastructure, and the Bear Lake Additional Water Storage project; and
14

15 WHEREAS, the 2022 Idaho Legislature, through HB 769, appropriated \$75 Million to the WMA for
16 large water projects and directed the IWRB to use the funding for expenditures, loans, or grants for water
17 projects, including studies, to address water sustainability, rehabilitate or improve aging water
18 infrastructure, or support flood management, provided that no more than one-third of the funds be used
19 for grants and that grant awards be made through a competitive process that considers public input and
20 prioritizes projects based on public benefit; and
21

22 WHEREAS, the 2023 Idaho Legislature, through House Bill 361, appropriated an additional \$150
23 million to the WMA for purposes similar to HB 769 and subject to similar grant limitations and
24 requirements, pursuant to which the IWRB established the Aging Infrastructure Grant Program; and
25

26 WHEREAS, the 2024 Idaho Legislature, through SB 1411, appropriated \$30 Million to the WMA to
27 be used for large water projects at the direction of the IWRB; and
28

29 WHEREAS, the 2025 Idaho Legislature, through House Bill 445, appropriated \$30 million ongoing
30 to the Water Management Account (WMA) for the planning, construction, rehabilitation, reconstruction,
31 and improvement of water infrastructure throughout the state, while limiting the use of no more than
32 fifty percent (50%) of the annual appropriation within a single Idaho Water Resource Board district unless
33 there are no competing applications from other districts; and further directed that, for fiscal year 2026,
34 fifty percent (50%) of the appropriation be allocated to District 3 and fifty percent (50%) to District 4 to
35 support the *2024 Stipulated Mitigation Plan* entered into by surface and ground water users on the
36 Eastern Snake Plain; and
37

38 WHEREAS, the 2026 Idaho Legislature, through Senate Bill 1363, appropriated \$30 Million to the
39 WMA to be used for planning, construction, rehabilitation, reconstruction, and improvement of water
40 infrastructure throughout the state, and directed that of the \$30 Million appropriated in a single year, no
41 more than fifty percent (50%) may be used within a single IWRB district, as defined in Idaho Code § 42-
42 1732 unless there are no competing funding applications for water infrastructure projects in other districts
43 for the current fiscal year; and
44

45 WHEREAS, Senate Bill 1363 also authorized the transfer of \$1 million from the Idaho Department
46 of Water Resources General Fund to the Water Management Fund (WMA) for flood-related activities,
47 including hydrologic data collection, monitoring and modeling, flood-damaged stream channel repair and
48 improvement, flood risk reduction, and flood prevention projects, to be administered by the IWRB
49 through a competitive matching grant process prioritizing projects based on public benefit, bringing total
50 legislative appropriations for flood management activities since fiscal year 2019 to approximately \$8.4
51 million; and
52

53 WHEREAS, since July 2021, the IWRB has maintained a list of priority Regional Water Sustainability
54 Projects (RWSP Priority List). The RWSP Priority List is intended to help guide the IWRB's spending from
55 state general funds, American Rescue Plan Act (ARPA) funds, or other applicable sources for projects that
56 support water supply sustainability on a regional, basin, or statewide scale. The IWRB also adopts criteria
57 for inclusion of projects on the RWSP Priority List and has approved funding for projects on a case-by-case
58 basis; and
59

60 WHEREAS, certain projects on the RWSP Priority List were determined eligible for ARPA State
61 Fiscal Recovery Fund support, and the IWRB may allocate WMA funds as necessary to complete those
62 projects if additional funding is required or if certain project activities are determined to be ineligible for
63 ARPA reimbursement; and
64

65 WHEREAS, through Resolution nos. 11-2026 and 10-2026, the Board added the Mountain Home
66 Plateau Aquifer Regional Water Sustainability Program to the RWSP Priority list and obligated \$8M to
67 support projects and programs that contribute to aquifer stabilization and long-term water supply
68 resiliency; and
69

70 WHEREAS, on May 8, 2026, the IWRB's Finance Committee recommended approval of a spending
71 plan for FY 2027 that incorporates legislative appropriations made to the WMA, estimated interest
72 earnings, RWSP Priority List projects, statewide special projects, grant programs, and certain IWRB-
73 approved loans, as reflected in Attachment A; and
74

75 NOW, THEREFORE BE IT RESOLVED that the IWRB adopts the FY 2027 WMA Spending Plan
76 (Spending Plan) attached to this resolution (Attachment A), as recommended by the IWRB Finance
77 Committee.
78

79 NOW, THEREFORE BE IT FURTHER RESOLVED that the projects identified with an asterisk in the
80 Spending Plan are hereby obligated for the referenced purposes but remain subject to additional IWRB
81 approval of the project plan.
82

83 NOW, THEREFORE BE IT FURTHER RESOLVED that the IWRB authorizes its chairman or Executive
84 Manager, Brian Patton, to execute the necessary agreements or contracts for the purpose of this
85 resolution.

86
87 NOW, THEREFORE BE IT FURTHER RESOLVED that for projects identified in the attached Spending
88 Plan and approved by the IWRB for funding from the ARPA State Fiscal Recovery Fund, the IWRB
89 authorizes the expenditure of WMA funds to cover project activities determined to be ineligible or in
90 excess of available ARPA funding.

91
92 NOW, THEREFORE BE IT FURTHER RESOLVED that the attached Spending Plan shall be
93 automatically amended to reflect WMA expenditures approved through future IWRB resolutions.
94

DATED this 21st day of May 2026.

JEFF RAYBOULD, Chairman
Idaho Water Resource Board

ATTEST _____
DEAN STEVENSON, Secretary

ATTACHMENT A
Idaho Water Resource Board - Water Management Account
FY 2027 Spending Plan
Proposed for Adoption by IWRB Resolution(s) May 21, 2026

Appropriations for Regional Water Sustainability Projects, Loans, Aging Infrastructure & Other Grants

FY 2020 (HB 285, Sec 1, Leg 2019)	\$20,000,000
FY 2022 (SB 1121, Sec 1, Leg 2021)	\$50,000,000
FY 2023 (HB 769, Sec 6, Leg 2022 - 1/3 or \$25M to be used for AI Grants)	\$75,000,000
FY 2024 (HB 361, Sec 1, Leg 2023 - 1/3 or \$50M to be used for AI Grants)	\$150,000,000
FY 2025 (SB 1411, Sec 3, Leg 2024)	\$30,000,000
FY 2026 (HB 445, Sec 4, Leg 2025)	\$30,000,000
FY 2027 (SB 1363, Sec 17, Leg 2026)	\$30,000,000
Flood Management Grant Appropriations (FY 2019 - FY 2027)	\$8,400,000
Water Quality Collection Program Appropriation (FY 2020 - FY 2022)	\$600,000
Interest Earned State Treasury (as of Mar 31, 2026)	\$39,710,171
Water Project Loan Interest (as of Mar 31, 2026)	\$5,276
Water Project Loan Repayments (as of Mar 31, 2026)	\$346,074
Misc. Revenue	\$4,350,000
	\$438,411,521

STATEWIDE REGIONAL WATER SUSTAINABILITY PROJECTS & OTHER LARGE PROJECTS <i>(Projects listed in alphabetical order)</i>	Funds Obligated by IWRB Resolution (as of 5/21/2026)	Funds Expended (as of 3/31/2026)
Anderson Ranch Dam Raise **	\$15,000,000 *	(\$1,232,047)
Bear Lake Additional Storage & Bear River Basin Projects	\$4,000,000 *	\$0
City of Gooding - Little Wood River Channel Flood Control Project	\$5,197,000	(\$3,600,000)
City of Nampa Wastewater-to-Irrigation Reuse	\$3,000,000	(\$352,613)
Dworshak/Clearwater Pipeline (Governor's Initiative) & Other Statewide Special Projects	\$60,000,000 *	\$0
Lewiston Orchards Exchange Project **	\$1,287,000	(\$1,287,000)
Lost Valley Reservoir Enlargement - Planning	\$560,000	(\$423,642)
Milner Dam Rehabilitation Project	\$1,500,000	\$0
Mountain Home Air Force Base Water Resilience Project **	\$2,000,000	(\$105,334)
Mountain Home Plateau Aquifer RWS Program	\$8,000,000 *	\$0
Nampa Meridian Irrigation District Ridenbaugh Canal Diversion Modernization Project	\$9,169,047	(\$3,272,114)
Palouse Basin Aquifer Water Supply Planning	\$5,000,000 *	(\$89,660)
Statewide Recharge Infrastructure	\$9,958,860 *	\$0
Thousand Springs Area Water Subordination Agreements	\$8,000,000 *	\$0
Treasure Valley Water Supply Assessment Project (WD 63)	\$474,320	(\$155,450)
Upper Payette Basin Storage Water Project	\$5,000,000	\$0
Winchester Dam Repair Project	\$1,000,000 *	\$0
Total:	\$139,146,227	(\$10,517,859)

* Funds are obligated by IWRB resolution but require additional IWRB approval of project plan.

** IWRB ARPA funding also obligated to project.

Idaho Water Resource Board - Water Management Account
FY 2027 Spending Plan
Proposed for Adoption by IWRB Resolution(s) May 21, 2026

ESPA REGIONAL WATER SUSTAINABILITY PROGRAM (Projects listed in alphabetical order)	Funds Obligated by IWRB Resolution (as of 5/21/2026)	Funds Expended (as of 3/31/2026)
Conservation Reserve Enhancement Program (CREP)	\$100,000	\$0
Eastern Snake Plain Aquifer (ESPA) Groundwater Measurement Database #	\$1,000,000 *	(\$10,725)
ESPA Groundwater to Surface Water Conversion Projects Grants #	\$46,621,296 *	(\$418,316)
ESPA Improvement Projects	\$5,000,000 *	\$0
ESPA Recharge Infrastructure ** #	\$36,040,727	(\$4,327,650)
IDWR Underground Injection Control (UIC) Program Support #	\$500,000 *	(\$243)
Measuring & Monitoring Support Grant #	\$815,102	\$0
Magic Valley Groundwater District Loan ^	\$10,000,000	\$0
Near Blackfoot to Minidoka Reach Gain Improvements Projects	\$5,000,000 *	\$0
Raft River Pipeline Project	\$7,000,000	\$0
Raft River Recharge Group Loan ^	\$14,111,000	\$0
Surface Water Coalition Operational Efficiencies Program #	\$31,332,574	(\$14,283,033)
Upper Snake River Basin Study	\$3,000,000 *	\$0
ESPA Regional Sustainability Program Total:	\$160,520,698	(\$19,039,967)

* Funds are obligated by IWRB resolution but require additional IWRB approval of project plan.

** IWRB ARPA funding also obligated to project.

Funded in part from FY 2026 \$30M Earmark (HB 445, Sec 4, Leg 2025) - IWRB Districts 3 & 4 each must receive 50% of appropriation.

^ Funds obligated for loans will be available for reallocation upon repayment.

STATEWIDE AGING INFRASTRUCTURE GRANTS ^	Funds Obligated by IWRB Resolution (as of 5/21/2026)	Funds Expended (as of 3/31/2026)
FY 2023 (HB 769, Sec 6, 2022 - \$25M)	\$10,679,352	(\$8,527,475)
FY 2023 (Carryover funding from HB 769)	\$13,889,175	(\$7,363,587)
FY 2024 (HB 361, Sec 1, 2023 - \$50M)	\$9,033,074	(\$5,605,532)
FY 2024 (Carryover funding from HB 361)	\$6,843,940	(\$1,636,650)
FY 2025 (Carryover funding from HB 361)	\$9,789,588	(\$2,664,557)
FY 2026 (Carryover funding from HB 361)	\$22,919,008	(\$103,760)
FY 2027 (scheduled)	\$30,274,363 *	\$0
Total:	\$103,428,500	(\$25,901,562)

* Funds are obligated by IWRB resolution but require additional IWRB approval of project plan.

^ Additional funding has been committed to the AIG program, supplementing the initial \$75 million appropriated under HB 769 and HB 361.

Idaho Water Resource Board - Water Management Account
FY 2027 Spending Plan
Proposed for Adoption by IWRB Resolution(s) May 21, 2026

STATEWIDE FLOOD MANAGEMENT GRANTS #	Funds Obligated by IWRB Resolution (as of 5/21/2026)	Funds Expended (as of 3/31/2026)
FY 2024 (SB 1181, Sec 5, Leg 2023)	\$831,015	(\$625,101)
FY 2025 (SB 1269, Sec 15, Leg 2024)	\$695,517	(\$289,331)
FY 2026 (HB 248, Sec 14, Leg 2025)	\$460,646	(\$81,472)
FY 2026 - Supplemental Round	\$559,358	\$0
FY 2027 (SB 1363, Sec 16, Leg 2026) and Carry Over	\$2,216,172 *	\$0
Total:	\$4,762,708	(\$995,905)

From FY 2019 - FY 2023, over \$3.6M in Flood Management Grant projects have been completed.

* Funds are obligated pursuant to the Flood Management Grant appropriation but are contingent upon IWRB approval of individual grant applications.

STATEWIDE LOANS AND OTHER PROGRAMS (Projects listed in alphabetical order)	Funds Obligated by IWRB Resolution (as of 5/21/2026)	Funds Expended (as of 3/31/2026)
Statewide Measuring & Monitoring Support Grant	\$1,000,000 *	\$0
Lost Valley Reservoir Company Loan # ^	\$9,023,715 *	\$0
North Side Pumping Co Loan ^	\$1,200,000	(\$397,737)
Total:	\$11,223,715	(\$397,737)

* Funds are obligated by IWRB resolution but require additional IWRB approval of project plan.

Loan may be funded from the WMA or RDA.

^ Funds obligated for loans will be available for reallocation upon repayment.

COMPLETED PROJECTS & PROGRAMS (Projects listed in alphabetical order)	Funds Obligated by IWRB Resolution (Closed Out)	Funds Expended (Complete)
Flood Management Grants (FY 2019 - FY 2023) #	\$3,637,292	(\$3,637,292)
North Fremont Canal Systems Phase 5 Pipeline Project	\$7,811,056	(\$7,811,056)
Priest Lake Water Management Project	\$4,854,477	(\$4,854,477)
Priest Lake Outlet Dam Litigation	\$2,426,847	(\$2,426,847)
Water Quality Collection Program (Mid-Snake River DOI-USGS Agreement FY 20-22) ^	\$600,000	(\$600,000)
Total:	\$19,329,672	(\$19,329,672)

Idaho HB 712, 2018; HB 285, 2019; HB 646, 2020; SB 1190, 2021; HB 769, 2022

^ HB 285, Sec 4, 2019; HB 646, Sec 6, 2020; SB 1190, Sec 6, 2021

In-Work Total:	\$419,081,849	(\$56,853,030)
Completed Total:	\$19,329,672	(\$19,329,672)
Remainder Available:	\$0	(\$76,182,702)
Total Appropriations (FY 2020-2027)		

MEMO

To: Idaho Water Resource Board (IWRB/Board)
From: Mike Morrison, Engineering Supervisor
Date: May 15, 2026
Subject: House Concurrent Resolution No. 34 – Bear River Legislative Report



REQUESTED ACTION: Provide Direction to Staff Prior to Finalization and Submission of a Report to the Idaho Legislature on June 1, 2026

Pursuant to House Concurrent Resolution No. 34 (HCR-34), Staff have been preparing a report for submission to the Idaho Legislature on June 1, 2026. This is the first of two reports required by HCR-34.

Per HCR-34, this report includes the following:

- A description of the current development of the compact allocation waters for Idaho and Utah.
- The frequency and timing of water supplies that are available for future development in the Lower Division.
- Preliminary opportunities for further development of Idaho's compact allocation to address Idaho's statewide water obligations, including estimated costs and timelines for completing projects related to the opportunities identified in the report.

The second report, due September 30, 2026, will include:

- Recommended and prioritized projects for further development of Idaho's compact allocation.
- An outline of the necessary steps for the IWRB, the Idaho Department of Water Resources, and the Idaho Legislature to secure future development of Idaho's compact allocation waters.

Staff requests that the Board recommend any changes before the report is submitted to the Legislature on June 1, 2026.

Attachment(s):

- *HCR-34 Report: Water Development Opportunities in the Lower Bear River Basin.*
- *PowerPoint Presentation*

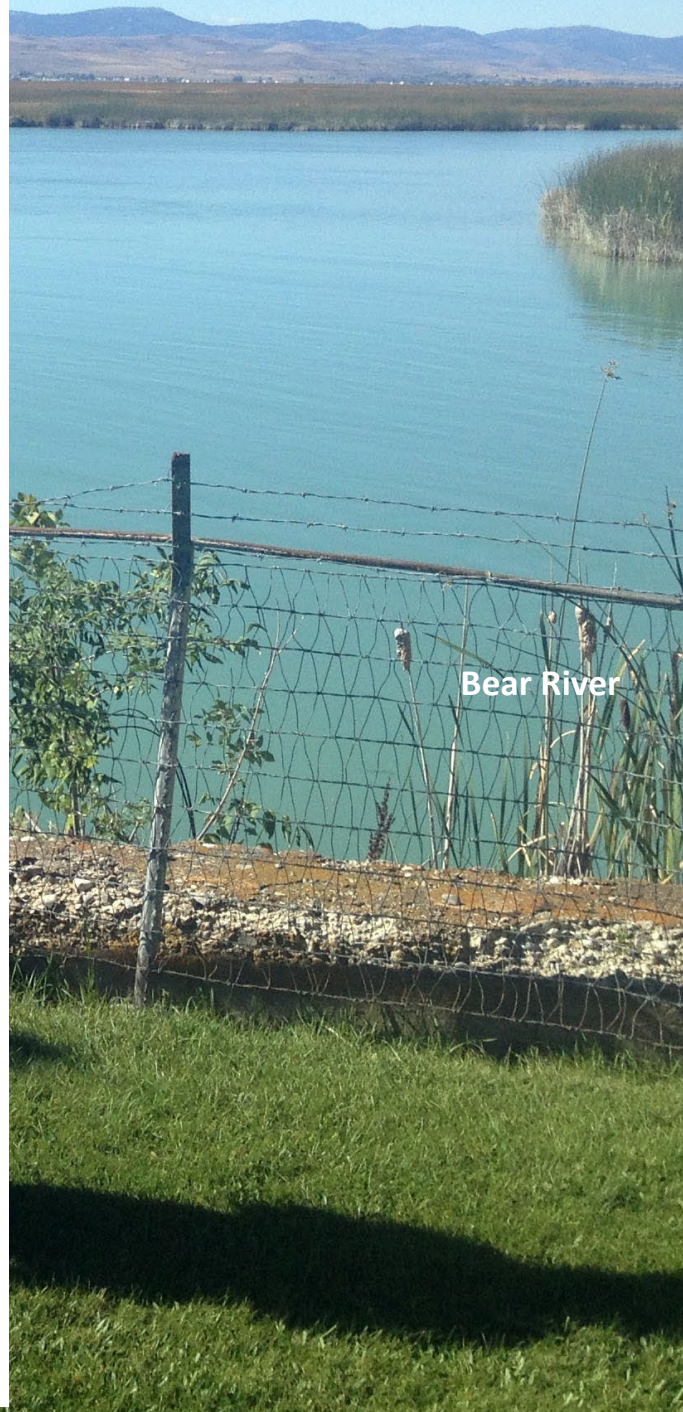
WATER DEVELOPMENT OPPORTUNITIES IN THE LOWER BEAR RIVER BASIN

DRAFT

House Concurrent
Resolution – 34
June 2026



IDAHO WATER RESOURCE BOARD



This page intentionally left blank

Contents

Idaho Water Resource Board Cover Letter2

Executive Summary 3

Introduction5

Purpose..... 5

Background 5

State Allocations in the Bear River Compact..... 7

Use of Allocations by States 7

Bear River Basin Adjudication 8

Frequency & Timing of Developable Water in the Lower Division9

Utilizing the Remaining Compact Allocation in the Lower Division.....12

Development Opportunities in the Lower Division14

Aquifer Recharge Opportunities19

Next Steps22

DRAFT



IDAHO WATER RESOURCE BOARD

June 1, 2026

Brad Little
Governor

Idaho Legislature
State Capitol, 700 W. Jefferson St.
P.O. Box 83720
Boise, Idaho 83720

Jeff Raybould
Chairman
St. Anthony
At Large

Subject: House Concurrent Resolution No. 34: Report on Water Development Opportunities in the Lower Bear River Basin

Jo Ann Cole-Hansen
Vice Chair
Lewiston
At Large

Dear Members of the Legislature:

Dean Stevenson
Secretary
Paul
District 3

Please find enclosed a report prepared by the Idaho Water Resource Board in accordance with the 2026 Idaho Legislature's House Concurrent Resolution No. 34. regarding the allocation and development of water resources in the Lower Division of the Bear River under the Amended Bear River Compact of 1980.

Dale Van Stone
Hope
District 1

This report provides an overview of water apportionment among the states, with a particular focus on Idaho's rights, current use, and future development considerations. Given the importance of the Bear River to agriculture, communities, and economic stability in the region, careful management of this shared resource remains essential.

Albert Barker
Boise
District 2

We would welcome the opportunity to discuss its findings or provide any additional information that may assist in your review.

Brian Olmstead
Twin Falls
At Large

Sincerely,

Marcus Gibbs
Grace
District 4

Jeff Raybould, Chairman
Idaho Water Resource Board

Patrick McMahon
Sun Valley
At Large

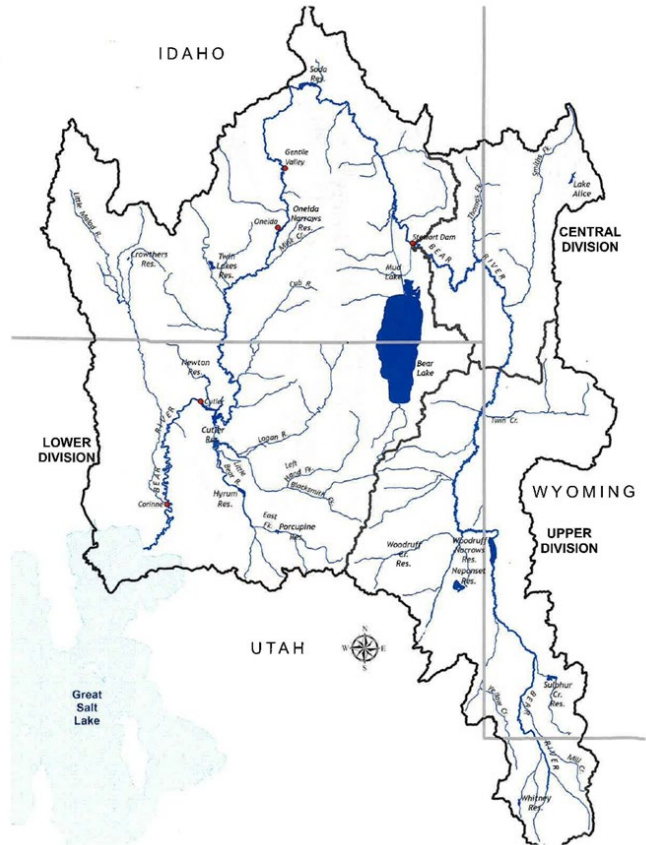
Cc: Governor Brad Little
Idaho Legislature
Bear River Commission
Idaho Water Resource Board Members
Mat Weaver, Director, Idaho Department of Water Resources

Executive Summary

A preliminary analysis conducted by the Idaho Water Resource Board (IWRB/Board) determined that during the driest years, an additional 60,000 acre-feet of water could have been used by crops. Given typical delivery and application losses, this would have required a water supply increase of approximately 100,000-acre feet.

Water availability in the Bear River Lower Division is both seasonal and variable from year-to-year, and the Board believes that full development of Idaho's Compact Allocation will require investment in storage, aquifer recharge, and supporting infrastructure.

As of 2019, there is approximately 108,000 AF of additional consumptive use that could be developed in the Lower Division in Idaho. Based on the timing of water availability, additional opportunities for consumptive use are most reliably present during the winter and spring, primarily during flood-risk management releases



Map of the Bear River Basin showing the Divisions within Wyoming, Idaho, and Utah.



Bear River

and excess runoff in wet years. Once the irrigation season begins, surplus water for additional consumptive use is generally unavailable. These findings can inform future storage or recharge project planning under Idaho's remaining Compact allocation.

Managed Aquifer Recharge (MAR) is a promising use for Idaho's Compact Allocation. Water can be recharged any time excess water is available on the Bear River, and recharged water could be used to mitigate ground water rights for new acres of agricultural land as required by the Bear River Ground Water Management Plan.

Geologic maps and well driller logs indicate that the valley bottoms near the Bear River in the Lower Division consist of gravel, sand, silt, and clay deposited in river and lake environments, as well as basalt and cinders erupted from volcanic vents in the area. Recharge sites constructed in these types of geologic deposits on the Eastern Snake Plain Aquifer (ESPA) have proven capable of infiltrating at least 10 cubic feet per second (CFS) per day or 600 acre-feet per month for MAR. However, more detailed studies will be required on potential recharge sites in the Lower Division of the Bear River to confirm the geological setting and infiltration capacity. There is currently no ground water model for the Lower Division that can be used to estimate volumetric recharge rates and travel time.



Bear Lake

Efforts to either increase storage capacity or make better use of existing capacity represent another opportunity for making Idaho's compact allocation available for agricultural use. Increases in storage capacity will not, of themselves, increase Idaho's ability to consume water from the Bear River; however, increased storage will enable more arable land to be put into production, and it will enable cultivation of more water intensive, but higher value crops in Idaho.

Current efforts to make more efficient use of Bear Lake's storage capacity could make Idaho's entire compact allocation available for agricultural use. These efforts could enable an average 138,000 AF increase in storage water that could be carried over from one year to the next but would require the purchase of property and easements and the modification of existing roads and bridges to mitigate the risks of flooding in the Gentile Valley.



IWRB Members and staff touring the Bear Lake System, 2024

The Board explored other ways to increase Bear Lake's effective storage capacity, and it explored the potential for smaller storage projects at other locations along the River.

The Board also examined the feasibility of transferring Idaho Compact Allocation waters from the Bear River to the Snake River via either the Portneuf or Blackfoot Rivers. Although possible, it is unlikely that either river has sufficient capacity to carry enough water to make the project economically viable.

Introduction

Purpose

This is the first of two reports submitted by the IWRB to the leadership of the Idaho House and Senate in accordance with House Concurrent Resolution No. 34 (HCR-34), passed by the 2025 Idaho Legislature. This report includes the following:

- I. Current development of Idaho and Utah compact allocations;
- II. Frequency and timing of water supply, in the Lower Division that is available for further development; and
- III. Preliminary opportunities for development of Idaho’s remaining allocation to address statewide water obligations, including estimated costs and timelines for completing projects related to the opportunities identified in the report.



Bear Lake

Background

The Bear River (the “River” or “The Bear”) originates in Utah's Uinta mountains and meanders over 500 miles, crossing state lines five times before emptying into the Great Salt Lake at a point just 90 miles from the River's headwaters. The Bear supplies approximately 60% of all the freshwater flowing into the Great Salt Lake. It has the distinction of being the longest North American river that does not ultimately flow into an ocean.

The Bear River is a vital water source for Idaho, Wyoming, and Utah. Its distribution is governed by the Amended Bear River Compact of 1980 (the Compact), which was ratified by all three states and approved by the United States Congress. For administrative purposes, the Compact divides the river into three segments: the Upper Division, the Central Division, and the Lower Division. This report focuses on the allocation and development of water in the Lower Division, which extends from Stewart Dam, just north of Bear Lake in Idaho, to the Great Salt Lake in Utah.

Diversion of water from the Bear River for irrigation began in the 1860s, and irrigation is still by far the largest consumptive use of water taken from the River. By the early 1900s, electric utilities had begun construction of a series of hydroelectric dams and reservoirs that now control flow through the entire Lower Division. Today, PacifiCorp operates these dams to produce inexpensive electricity, and although power generation is not a consumptive use of water, PacifiCorp has entered into a number of storage agreements with agricultural users that obligate the company to deliver water when required by contract holders. The Board notes that the timing of water deliveries needed for agricultural users is not always optimal for power generation.

Bear River Ground Water Management Area

The Idaho Department of Water Resources (IDWR) designated the Bear River Basin in Idaho as a Ground Water Management Area in 2001. Excluded from this designation is the Bancroft-Lund Ground Water Management Area near Grace, Idaho. A Ground Water Management Area is defined as any ground water basin that the director of IDWR has determined may be approaching the conditions of a Critical Ground Water Area. A Critical Ground Water Area is defined as any ground water basin not having sufficient ground water to provide a reasonably safe supply for irrigation of cultivated lands, or other uses in the basin at the then current rates of withdrawal, or rates of withdrawal projected by consideration of valid and outstanding applications and permits.

IDWR determined that management of water appropriations within the Bear River Ground Water Management Area would be guided by a management plan adopted by IDWR in 2003. The plan requires that the impact on senior water rights of proposed new ground water use must be determined before a water right permit is issued. If the new use depletes the supply of water available to senior water rights when water is needed, the new use cannot be permitted unless the injury to the senior water right is fully mitigated.

Bear River Compact Water Allocations

State Allocations in the Bear River Compact

The Amended Bear River Compact (Compact) allocates the waters of the Bear River among Idaho, Utah, and Wyoming and divides the river into three segments: the Upper Division (headwaters to Pixley Dam), the Central Division (Pixley Dam to Stewart Dam), and the Lower Division (Stewart Dam to the Great Salt Lake). The Compact recognizes and grandfathers all consumptive use in the basin developed prior to January 1, 1976 and establishes the allowable consumptive use in acre-feet (AF) to be developed after January 1, 1976, that is available to each state in each division.

The Compact authorizes Idaho, Utah, and Wyoming to develop consumptive use after January 1, 1976, in the Upper Division and Central Division as follows:

- Idaho 2,000 AF
- Utah 13,000 AF
- Wyoming 13,000 AF

The Compact also authorizes Idaho and Utah to develop consumptive use after January 1, 1976, in the Lower Division in a tiered priority system:

- Idaho holds the first right to use remaining water, resulting in an annual consumptive use of not more than 125,000 AF.
- Utah holds the second right to use remaining water, resulting in an annual consumptive use of not more than 275,000 AF, satisfied only after Idaho's first right has been met.
- Idaho and Utah each hold additional right to annual consumptive use, on an equal basis, of 75,000 AF of the remaining water after the first and second rights have been satisfied.
- Any water remaining after the above allocations are satisfied is divided 30% to Idaho and 70% to Utah.

Use of Allocations by States

The Bear River Commission periodically determines the development of Compact Allocations by each state in the Bear River Basin. Studies are completed by the Technical Advisory Committee (TAC) of the Bear River Commission. The TAC is composed of technical staff from each state. Under the Bear River Commission's adopted Depletion Procedures, consumptive use estimates since January 1, 1979, are updated every 10 years in the Lower Division and every five years in the Upper and Central Divisions. Studies were completed for 1990, 2009, and 2019.



Idaho, Wyoming, and Utah Bear River Basin Map Illustration

The current development of Compact Allocations was last analyzed in the 2019 Depletion Update¹. The TAC evaluated changes in consumptive use since January 1, 1976; to quantify the amount each state has developed of its allocation in the Bear River Basin (Table 1). Idaho has approximately 800 AF of its allocation remaining to be developed in the Central Division. Idaho has approximately 108,000 AF of its allocation remaining to be developed in the Lower Division. Due to the minimal remaining allocation in the Central Division, this report will focus on opportunities for developing consumptive use in the Lower Division in Idaho.

Bear River Commission
Estimated Annual Depletions (Acre-Feet)¹
Changes from January 1, 1976, to December 31, 2019

ABOVE STEWART DAM

State	Allocation	Agricultural Depletions	M&I Depletions	Reservoir Evaporation	Total Depletions	Remaining Allocation
Utah	13,000	5,839	-8	582	6,413	6,587
Wyoming	13,000	5,058	826	140	6,024	6,976
Idaho	2,000	1,150	3	0	1,153	847

LOWER DIVISION

State	Allocation	Agricultural Depletions	M&I Depletions	Reservoir Evaporation	Total Depletions	Remaining Allocation
Idaho	125,000 ²	16,387	245	11	16,643	108,357
Utah	275,000 ³	-16,879	11,543	0	-5,336	275,000

¹Any reductions in pre-1976 depletions are reflected in the above numbers.

²First right under Compact. Compact grants additional rights.

³Second right under Compact. Compact grants additional rights.

Table 1. Summary table of depletion amounts from the Bear River Commission’s 2019 Depletion Update.

Bear River Basin Adjudication

The Bear River Basin Adjudication (BRBA), initiated on June 15, 2021, is a general stream adjudication to determine the nature, extent, and priority of all surface-water and ground water rights in IDWR Administrative Basins 11, 13, 15, and 17 (portions of Bannock, Bear Lake, Caribou, Cassia, Franklin, Oneida, and Power Counties). Approximately 14,000 water-right claims are expected. Water right

¹ 2019 Bear River Commission Depletion Update:
[https://www.bearrivercommission.org/docs/BRC%202019%20Depletions%20Report%20\(Final%20Adopted%202023-04-18\)%20\(w%20appendices\).pdf](https://www.bearrivercommission.org/docs/BRC%202019%20Depletions%20Report%20(Final%20Adopted%202023-04-18)%20(w%20appendices).pdf)

partial decrees for Basins 11 and 13 are anticipated to be complete in 2031, with Basins 15 and 17 scheduled for 2034.

The consumptive use (depletion) values in Table 1 provide the best available estimates of consumptive use in the Bear River Basin since January 1, 1976. The BRBA introduces uncertainty into these consumptive use estimates because water rights in the Bear River Basin have not been adjudicated for many years. The review process during the BRBA may confirm or revise individual water rights which could impact consumptive use estimates.

Frequency & Timing of Developable Water in the Lower Division

A preliminary estimate of Idaho's remaining water development potential in the Lower Division was completed using historical daily streamflow records from 1990 to 2023 for the streamflow gage on the Bear River near Collinston, Utah² and the Bear River at the Idaho-Utah State Line³. The analysis calculated the minimum daily flow between the two gages. The Collinston stream gage represents outflow from Cutler Reservoir and is effectively the end of the regulated system for Lower Division deliveries. This gage is assumed to represent surplus streamflow that exited the Bear River system. Based on Water Delivery Schedule No. 1, the only senior water right downstream of Cutler Reservoir and the Collinston stream gage is the Bear River Migratory Bird Refuge water right ([29-1014](#)), which has a 1928 priority date and diverts before the river enters the Great Salt Lake. To account for this senior obligation, the method subtracts 1,000 CFS from the surplus flow.



Aerial View of Bear Lake

The surplus was calculated on a daily timestep and converted to an annual volume for each water year (October–September) (Table 2, Table 3, Figure 1). It represents a preliminary estimate of water that could be available for upstream storage or development during high-flow periods, absent additional legal, operational, or infrastructure constraints. This estimate at the Idaho-Utah State line may exceed the amount available for upstream development due to ground water or tributary inputs to the Bear River.

² Daily streamflow data for the Bear River near Collinston: <https://waterdata.usgs.gov/monitoring-location/USGS-10118000/#dataTypeId=daily-00060-0&period=periodOfRecord&showFieldMeasurements=false> Data were only available through the end of the 2022 water year.

³ Daily streamflow data for the Bear River at the Idaho-Utah State Line: <https://waterdata.usgs.gov/monitoring-location/USGS-10092700/#dataTypeId=daily-00060-0&period=periodOfRecord&showFieldMeasurements=true>

Table 2. Bear River water available at the Idaho-Utah State Line, Water Years 1990–2023

Water Year	Bear River Water Available (AF)	Water Year	Bear River Water Available (AF)
1990	200	2007	2,300
1991	17,500	2008	1,400
1992	-	2009	35,800
1993	86,100	2010	-
1994	3,000	2011	176,500
1995	28,400	2012	73,700
1996	85,800	2013	-
1997	350,900	2014	-
1998	421,800	2015	7,400
1999	326,800	2016	12,000
2000	64,900	2017	285,600
2001	300	2018	166,400
2002	100	2019	48,100
2003	-	2020	39,100
2004	1,000	2021	-
2005	78,100	2022	-
2006	95,700	2023	154,400

Table 3. Likelihood that new reservoir space fills based on water available at the Idaho-Utah State line

Reservoir Space (AF)	Number of Years Space Would Have Filled 1990-2023	% of Years Filled 1990-2023
25,000	17	50%
50,000	13	38%
75,000	11	32%
100,000	7	21%
150,000	7	21%
200,000	4	12%

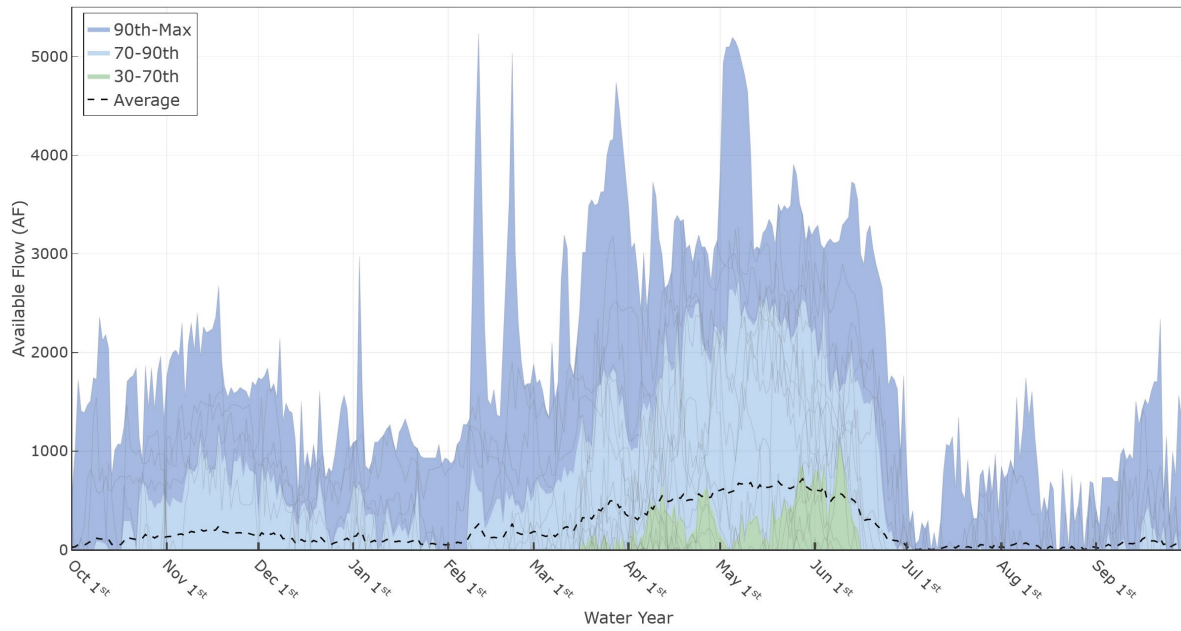


Figure 1. Hydrograph of Bear River Water Available at the Idaho-Utah Stateline by water year, 1990 to 2023 (amount in acre-feet and timing of availability).

DRAFT

Water Deficit in the Lower Division in Idaho

The IWRB completed a preliminary analysis to estimate the amount of additional water that could be utilized by water users in the Lower Division in Idaho. The analysis compared the amount of water used in a year with a full water supply to that used in the year with the lowest water supply. The resulting estimate is that in the driest year, an additional 60,000 AF of water supply could have been used by crops to eliminate stress.



*Bear River at Idaho-Utah State Line
Photo Courtesy of NOAA*

The United States Geological Survey estimated that in 2015, crops in Idaho consumed 58% of the total water withdrawn for irrigation. The remaining 42% were returned to the water cycle by conveyance losses, surface runoff, and infiltration. Assuming that losses for irrigation water deliveries in the Lower Division in Idaho are roughly the same as the statewide average, it would take approximately 40,000 AF to deliver the 60,000 AF of additional water that could be used by crops.

A “ballpark” estimate of approximately 100,000 AF could be utilized by water users in the Lower Division in Idaho to meet full crop requirements in years with the lowest water supply. This consists of approximately 60,000 AF for crop use and approximately 40,000 AF for delivery and application losses.

Utilizing the Remaining Compact Allocation in the Lower Division

Idaho has approximately 108,000 acre-feet (AF) remaining of its 125,000 AF of Bear River Compact allocation in the Lower Division in Idaho. The rural nature of this area of Idaho means that new uses for this water will primarily be for irrigating agricultural crops. Several options exist for utilizing Idaho’s remaining allocation:

- Irrigate existing or new agricultural acres using new surface water rights:

Water users would develop new surface water rights for irrigation. These new water rights would have very junior priority dates. They would accrue natural flow during spring months in some years and then be curtailed nearly every year during the summer months. These water rights would provide an unreliable water supply for irrigating agricultural crops.

- Irrigate existing or new agricultural acres using new reservoir storage:

An entity would develop a new water right for reservoir storage. This new water right would have a relatively junior priority date. It would accrue natural flow during spring runoff events and outside the irrigation season when there is excess water flowing in the Bear River. The new storage water would be delivered during the irrigation season to water users for the irrigation of new acres of agricultural land.

- Mitigate new ground water rights for existing or new agricultural acres using new reservoir storage:

An entity would develop a new water right for reservoir storage. This new water right would have a relatively junior priority date. It would accrue natural flow during spring runoff events and outside the irrigation season when there is excess water flowing in the Bear River. Storage water would be delivered to senior water right holders during the irrigation season to mitigate new ground water rights, as required by the Bear River Ground Water Management Plan.

- Mitigate new ground water rights for existing or new agricultural acres using managed aquifer recharge:

The water recharged would be used to mitigate ground water rights for new acres of agricultural land, as required by the Bear River Ground Water Management Plan.

DRAFT

Development Opportunities in the Lower Division

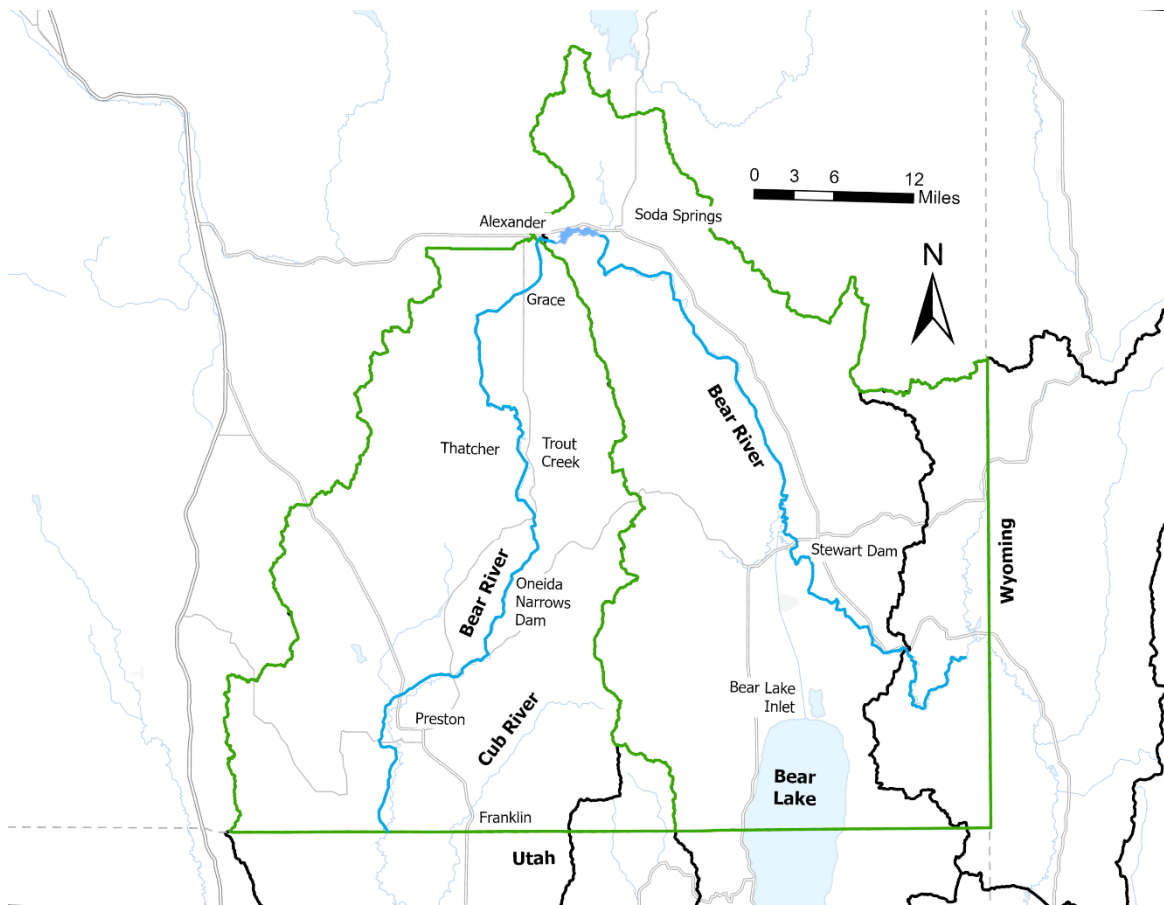


Figure 2. Development Opportunities in the Lower Division in Idaho.

Storage Opportunities

Aside from evaporative losses, new storage will not consume a significant portion of Idaho's allocation under the Bear River Compact; however, properly managed storage can enable development of additional agricultural lands and enable cultivation of high-value, water-intensive crops on lands that are already under cultivation. As discussed in the previous section, new storage can also be used to enable aquifer recharge and mitigate new ground water rights.

As a general rule, there are more opportunities to use water stored at higher river elevations than there are for water stored at lower elevations: Water stored in Bear Lake could, potentially, be delivered at any point between Stewart Dam and the Idaho-Utah border and is thus the most flexible location for storage in the Lower Bear River. The alternatives discussed below are summarized in Table 5.

Increasing Storage at Bear Lake:

Increasing storage efficiency in Bear Lake is the largest opportunity for increasing storage in the Lower Division of the Bear River System. The dam could be filled to an elevation of 5923.65'; however, the 1968 Bear Lake National Refuge Operations Agreement sets an upper operating height of 5920.5 +/-

0.5 feet. To minimize the risk of flooding the Gentile Valley, PacifiCorp's March 31st target elevation is two feet less (5918.0') providing reserve capacity capable of absorbing higher-than-expected springtime flows. This practice has successfully precluded flooding in the Gentile Valley, but it has also resulted in reduced water storage during dry years.

It is estimated that increasing PacifiCorp's target elevation by 1.5 feet (5919.5') would result in an increase of 455,000 acre-feet of storage, with an average of 84,000 acre-feet available for carryover from one year to the next. Increasing PTE by 2.5 feet to the 5920.5-foot operating limit imposed by the 1968 Bear Lake Refuge Operations Agreement would permit storage of 680,000 acre-feet with an average of 138,000 acre-feet available for carryover.

Some proposals for enabling an increase in Pacificorp's target elevation while mitigating the risks of flooding in the Gentile Valley are:

- Raising Bear Lake Dam 1.5 to 2.5 feet. Given the nature and age of the existing dam, this may not be an economically feasible option.
- Developing more accurate methods for forecasting Spring flows into the Bear.
- Obtaining easements and modifying or relocating selected infrastructure in the Gentile Valley to allow occasional flooding.

Questions regarding the potential for additional storage in Bear Lake were addressed through a joint modeling effort involving the Utah Division of Water Resources, the Idaho Department of Water Resources (on behalf of the IWRB), and PacifiCorp. The 2020 study, *Impacts on Bear Lake Storage Under Alternative High-Runoff Management Operations*⁴, evaluated changes to PacifiCorp's high-runoff management operations at Bear Lake and concluded that modest adjustments to the March 31 Target Elevation and Gentile Valley flow targets could allow for substantial additional storage without exceeding the lake's Ordinary High-Water Mark. Implementation of any such operational changes would require continued coordination with PacifiCorp, Utah, Wyoming, and the Bear River Commission.

It is important to note that under PacifiCorp's existing water rights, any additional water captured by changing flood control operations at Bear Lake is allocated to existing PacifiCorp storage contracts. Since the storage allocations are limited each year by the 2004 Amended and Restated Bear Lake Settlement Agreement⁵. New water would not count against Idaho's allocation under the Bear River Compact.

The Board has filed for a new water right. If new water is stored under this water right rather than PacifiCorp's existing water rights, the additional water captured by changing flood control operations at Bear Lake could be used for new uses under Idaho's allocation under the Bear River Compact.

⁴ Impacts on Bear Lake Storage Under Alternative High-Runoff Management Operations: <https://water.utah.gov/wp-content/uploads/2020/12/BearLakeReport.pdf>

⁵ 2004 Amended and Restated Bear Lake Settlement Agreement: <https://bearrivercommission.org/docs/Amended%20and%20Restated%20Bear%20Lake%20Settlement%20Agreement.pdf>

Increasing Water availability from Bear Lake

The Lifton Pumping Station can draw water from lake levels as low as 5902.0 feet. Modifying the Lifton pumps by extending the penstocks deeper into the lake would permit greater usable capacity of the lake without the need to increase PacifiCorp's target elevation. It is likely that this modification will require larger pumps than currently exist at Lifton. Reducing lake levels below 5902 feet would violate the 2004 Amended and Restated Bear Lake Settlement Agreement and it would violate the minimum lake level water right held by the Idaho Water Resource Board (Water Right 11-7406). It should also be noted that reducing lake elevation below 5902.0 feet would reduce marina drafts to the point that some boats would no longer be able to operate, and this reduction is likely to have substantial negative environmental impacts.

Caribou Dam

This is a plan to build a storage reservoir approximately 2 miles upstream from Soda Springs, Idaho. Not only would Caribou Dam provide additional storage, but if operated in conjunction with Bear Lake Dam, it could enable PacifiCorp to increase its March 31st target elevation. The cost of the dam itself is estimated at approximately \$50 Million. This does not include the costs of compensating PacifiCorp for lost Power Generation at its downstream hydroelectric facilities.

High Oneida and Low Oneida Dam Projects

The High Oneida and Low Oneida Dam Projects are two different proposals to build dams at the same site downstream from the existing Oneida Narrows Dam. The High Oneida Dam proposal is for a 315-foot dam with a total capacity of 435,000 AF and 295,000 AF of active capacity. The estimated construction cost is \$320 Million.

The Low Oneida Dam proposal is for a 265-foot-high dam with a total storage capacity of 140,000 AF and an active storage capacity of 120,000 AF. The estimated construction cost is \$220 Million.

Mapleton Dam Project

The Mapleton Dam site is located approximately 3 miles northeast of the town of Franklin on the Cub River. The proposed 160-foot dam would have a total storage capacity of 34,500 AF. Construction costs are estimated to be \$120 Million. This does not include the costs of relocating East Cub River Road and purchasing the numerous homes and commercial businesses that have been built in the location of the proposed reservoir. Because of its location near the Utah Border, there is relatively little opportunity to use water from this project in Idaho.

Trout Creek Reservoir

The Trout Creek Reservoir is a water storage project proposed by the Last Chance Canal Company. The proposed 18,000 AF reservoir would be located about 1 mile northeast of Thatcher, Idaho and it would store water from the Last Chance Canal Company's East Branch and Bench B's Canals. No formal design study has been completed; however, construction costs could be \$40 Million or more.

Rocky Point Dam

The proposed Rocky Point Dam project would replace the storage volume lost when PacifiCorp decreased Bear Lake target elevations from 5920.5' to 5918.0'. The 90-foot tall rockfill dam would be located about 3 miles north of Bear Lake Dam and have a total storage capacity of 300,000 AF. It should be noted that in the event that PacifiCorp resumes use of the 5920.5' target elevation, the additional storage capacity of the Rocky Point Dam would be rendered superfluous. It should also be noted that substantial infrastructure would need to be relocated for this project, including portions of Highway 30, a railroad, power transmission lines, a natural gas pipeline, and numerous homes and farms.

Small Reservoir Infrastructure Projects

There are numerous small, privately owned reservoirs along the Lower Bear River and its tributaries. These are connected to the Bear River via a system of canals. With some modification, it is possible that some of these reservoirs and their associated canals could be used to store a portion of Idaho's Bear River Compact Allocation; however, this option has not been studied in-depth.

Diversion

Bear-Portneuf Diversion Project

The Bear-Portneuf Diversion Project would divert water from the Bear River to the Portneuf from whence it would be able to flow into the Snake River at the American Falls Reservoir. The greatest need for additional water in the Snake River occurs over a 1-month period during Spring. Diverting Idaho's entire unused 108,000 AF allocation during the month of April would require a flow rate of 1,815 CFS. Project cost is estimated to be no less than \$380 Million, of which \$170 Million would be required for the interconnect between the two rivers, and the remaining \$210 Million would be required to modify the Portneuf River and nearby transportation infrastructure.

It is estimated that the Portneuf River can accommodate additional flows of, at most, 500 CFS, so this project would require extensive channelization of the Portneuf, relocation of roads, and reconstruction of more than 20 road and railroad bridges. The environmental impacts of such a large increase in springtime flows are unknown, and it is likely that the time required to conduct the required environmental studies and to obtain the necessary permits and easements will require two or more decades.

It should also be noted that any diversion of water from the Bear is likely to negatively impact PacifiCorp's electrical production at dams below the point of diversion.

Bear-Blackfoot Diversion Project

The Bear-Blackfoot Diversion project would divert water from the Bear River to the Blackfoot River. The Blackfoot River ultimately empties into the Snake River between Aberdeen and American Falls. The additional water provided from the Bear River could be used to augment Springtime flows in the Snake River.

This project has not received as much attention as the Bear-Portneuf diversion project; however, a preliminary investigation has revealed two significant challenges that this project would face. First, it is unlikely that the Blackfoot River could accommodate the additional flow from the Bear River, and so there would need to be substantial modification of the existing river channel and nearby highway infrastructure. The second challenge would be the need to pump water over a 400-foot elevation between the two rivers. This would require the construction of substantial lift stations and would also consume substantial amounts of electric power.

As with the Bear-Portneuf diversion project, any diversion of water from the Bear is likely to negatively impact PacifiCorp’s electrical production at dams below the point of diversion.

Pumped Storage

Pumped storage facilities store excess electrical energy by pumping water uphill into a reservoir when system demand is low and excess energy is available. This water can then be used to generate electricity during times of peak demand. By its nature, however, pumped storage is not a consumptive use of water, so pumped storage would not consume a significant portion of Idaho's Bear River Compact allocation.

Table 5. Cost Estimates for Development Opportunities in the Lower Division in Idaho

Project Name	Type	Capacity	Minimum Timeline (yrs)	Est Construction Cost (\$2025 Dollars)
BEAR LAKE ADDITIONAL STORAGE AND GENTILE VALLEY FLOOD CONTROL MITIGATION MEASURES	Storage	450,000 AF	5	\$10.3 Million
BEAR LAKE INLET MODIFICATION	Storage	100,000 AF	5	\$4 Million
CARIBOU DAM	Storage	47,500 AF	10	\$50 Million
HIGH ONEIDA DAM	Storage	435,000 AF	10	\$220 Million
LOW ONEIDA DAM	Storage	140,000 AF	10	\$320 Million
MAPLETON DAM PROJECT	Storage	34,500 AF	20	\$120 Million
TROUT CREEK	Storage	18,000 AF	7	\$40 Million
ROCKY POINT IRRIGATION	Storage	300,000 AF	20	\$350 Million
BEAR-PORTNEUF DIVERSION PROJECT	Diversion	1,815 CFS	20	\$380 Million
AQUIFER RECHARGE	Recharge	108,000 AF	10	\$85 Million
PUMPED STORAGE PROJECTS	Pumped Storage	Small		

Aquifer Recharge Opportunities

Depth to Ground Water

The Standards and Procedures⁶ for the IWRB Managed Aquifer Recharge (MAR) Program on the Eastern Snake Plain Aquifer (ESPA) state that the pre-recharge ground water table should be a minimum of 30 feet below ground surface, as measured in the closest accessible well. This limit is recommended to protect subterranean infrastructure (e.g., basements, septic systems) and to ensure recharge water does not cause issues with flooding, sub-irrigating farmland, or returning as surface water, providing minimal benefit to the aquifer. It is recommended that recharge operations cease when the ground water table elevation rises to 15 feet or less below ground surface during MAR operations, as measured in the closest accessible well.

Preliminary estimates of depths to ground water in the Lower Division in Idaho were made based on an IDWR study⁷ completed in 2024. There are areas in the Lower Division of the Bear River Basin where ground water is deeper than 30 feet below the ground surface. Using the Standards and Procedures for the IWRB MAR Program on the ESPA as guidance, there appear to be areas in the Lower Division of the Bear River Basin that could be favorable for managed aquifer recharge. More detailed studies will be required to confirm that the ground water table is at least 30 feet below ground surface in areas considered for aquifer recharge activities.

Table 6. Depth to Ground Water in the Lower Division in Idaho

Area	Depth to Ground Water Near Bear River (ft)	Depth to Ground Water Near Mountain Front (ft)
Bear Lake to Soda Springs	20	200
Soda Springs to Oneida Narrows Reservoir	200	300
Oneida Narrows Reservoir to the State Line	100	150

Ground water level trends vary by well in the Lower Division in Idaho (Figure 3 and Figure 4). Some wells show a downward trend in water levels over time. Water levels in other wells are relatively stable over time. More detailed studies will be required to identify areas with declining ground water levels and determine if ground water recharge can be a useful mitigation tool to stabilize ground water levels in those areas.

⁶ IWRB Managed Aquifer Recharge Program Standard and Procedures: <https://iwrbrecharge-idwr.hub.arcgis.com/pages/8c3cae26abdb45e8bb638da1686e5fbe>

⁷ Ground Water Conditions in the Bear River Ground Water Management Area: <https://idwr.idaho.gov/wp-content/uploads/sites/2/publications/20240801-Ground-Water-Conditions-in-the-Bear-River-GWMA.pdf>

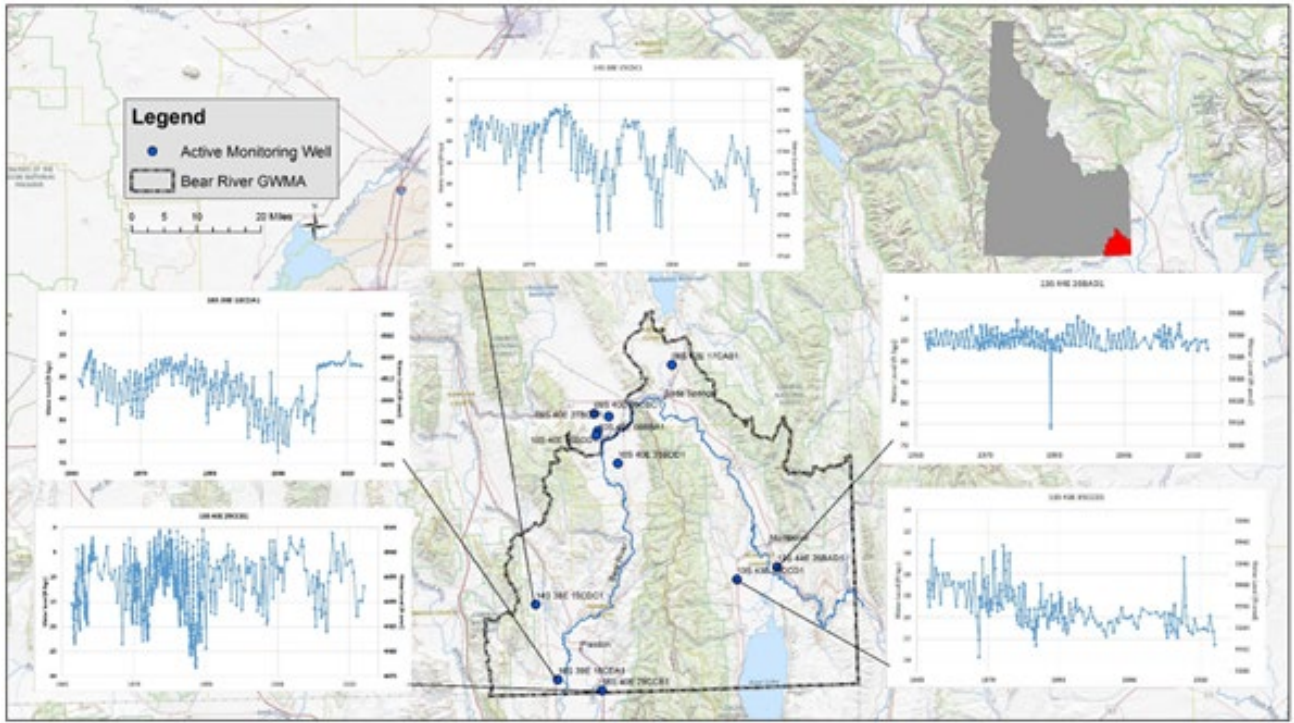


Figure 3. Ground water level trends in the Lower Division in Idaho.

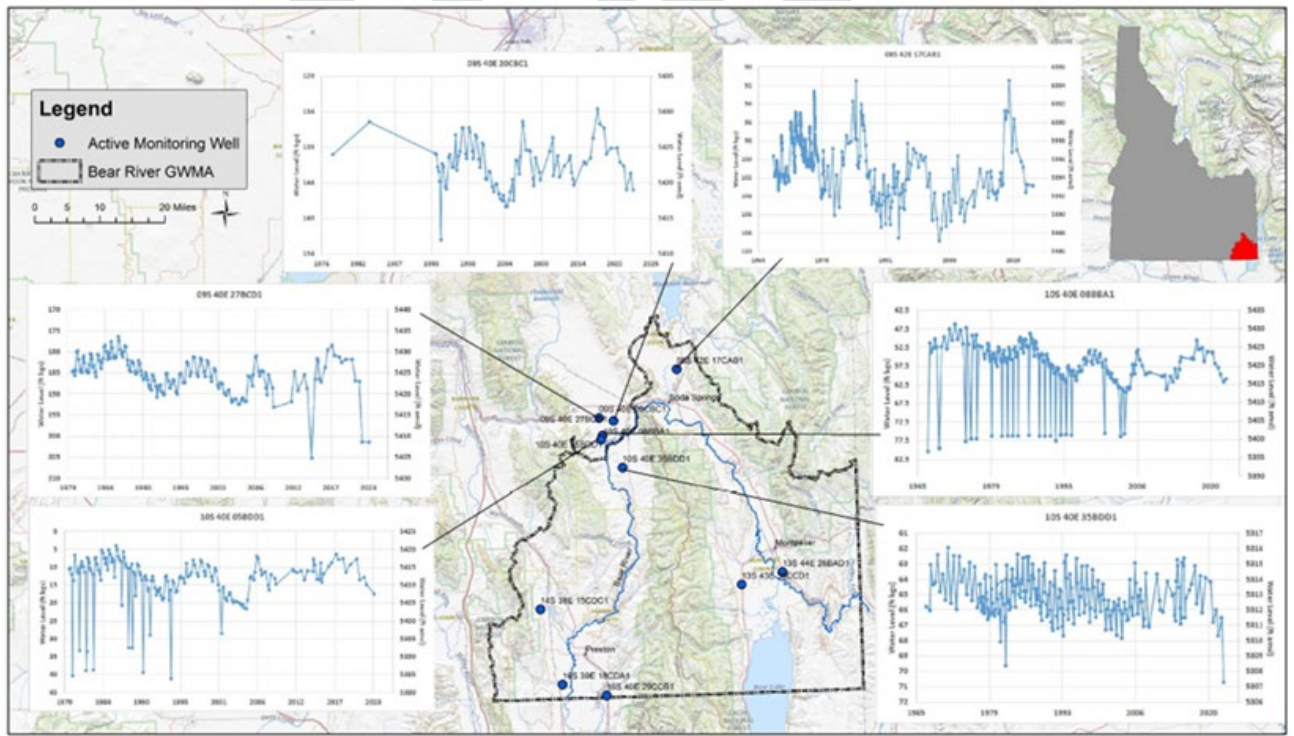


Figure 4. Ground water level trends in the Lower Division in Idaho.

Delivery system

The IWRB utilizes infiltration basins and recharge wells for MAR. The IWRB generally contracts with entities such as canal companies or irrigation districts that own diversion infrastructure to accomplish MAR. The IWRB generally does not own the infrastructure or dedicated recharge sites, and it is not accountable for contractor operations. The Standards and Procedures for the IWRB MAR Program on the ESPA state that a canal system must have an average diversion rate of at least 20 cubic feet per second (CFS). This minimum is designed to ensure MAR occurs at a sufficient rate to impact the aquifer and to reduce administrative oversight and operational costs.

IDWR has been doing water right accounting in the Bear River since the 1990s. The water right accounting program is a computational computer program that watermasters use to administer water rights. It computes the natural flow available to water rights using streamflow, reservoir, and diversion measurements reported to IDWR by watermasters. Diversion data from the 2025 irrigation season indicates that five canals diverted water at rates exceeding 20 CFS.

Table 7. Maximum Water Diversion Rates in 2025 for Canals in the Lower Division in Idaho

Hydrologic ID	Canal Name	Maximum Diversion Rate in 2025 (CFS)
10079600	Last Chance	250
10079800	Bench B	225
10080105	Gentile Valley	51
10090250	West Cache	145
10092650	Cub River	128

Using the Standards and Procedures for the IWRB MAR Program on the ESPA as guidance, there appear to be canals in the Lower Division of the Bear River that could convey enough water for managed aquifer recharge. The IWRB would need to contact these canal companies to determine their level of interest in participating in managed aquifer recharge activities. Staff estimates the capital costs of such a program to be \$85 Million with annual Operations and Maintenance costs of \$1 Million. More detailed studies will be required to confirm that these canals have the capacity to convey recharge water, or could be improved to have the capacity, and are appropriately located to deliver water to recharge sites.

Geology

The Standards and Procedures for the IWRB MAR Program on the ESPA state that an individual recharge site must be capable of infiltrating at least 10 CFS per day or 600 AF per month. This minimum is designed to ensure MAR occurs at a sufficient rate or volume to impact the aquifer and to reduce administrative oversight and operational costs. Geologic maps and well driller logs indicate that the valley bottoms near the Bear River in the Lower Division consist of gravel, sand, silt, and clay deposited

in river and lake environments, as well as basalt and cinders erupted from volcanic vents in the area. These types of geologic deposits on the ESPA have proven capable of infiltrating at least 10 CFS per day, or 600 AF per month, for MAR. Well logs indicate a laterally extensive clay layer approximately 100 feet below the ground surface in the Preston, Idaho, and Franklin, Idaho areas that could impact the effectiveness of MAR in those areas. However, more detailed studies will be required on potential recharge sites in the Lower Division in Idaho to confirm the geological setting and infiltration capacity.

Location Requirements

The Standards and Procedures for the IWRB MAR Program on the ESPA state that a MAR location must retain at least 15% of the five-year volumetric recharge in the aquifer or have a 50% volumetric travel time exceeding four months to any reach of the Snake River or its tributaries. 50% volumetric travel time refers to the time required for 50% of the recharged volume to discharge to any modeled reaches of the Snake River. A primary goal is to increase predictability for water users by managing for a reliable water supply. Any site with a five-year retention of less than 15% or a 50% volumetric travel time of less than four months does not help achieve that goal. Rapid returns to the Snake River result in minimal impact to the aquifer or the capture of water that would otherwise flow out of the Upper Snake River Basin reservoir system.

There is no existing ground water model for the Lower Diversion in Idaho that can be used to determine volumetric recharge and volumetric travel time. Detailed studies will be required to determine these values for potential recharge sites.

Next Steps

This is the first of two reports being prepared by the IWRB for the Idaho Legislature. The second report, due September 30, 2026, will recommend and prioritize projects for further development of Idaho's Compact Allocation, and it will outline the necessary steps that the Board, IDWR, and the Idaho Legislature will need to take to secure future development of Idaho's compact allocation waters.

IDAHO
Water Resource Board



HCR-34 Report

May 21, 2026
Mike Morrison, Matt Anders, and
Ethan Geisler

1

IDAHO
Water Resource Board



HCR-34

A CONCURRENT RESOLUTION STATING FINDINGS OF THE LEGISLATURE AND REAFFIRMING IDAHO'S RIGHTS PURSUANT TO THE BEAR RIVER COMPACT

- Directs the Idaho Water Resource Board to prepare two reports for the Idaho Legislature.
 - The first report is due June 1, 2026.
 - The second report is due September 30, 2026.

2

MA1



First Report (Due June 1, 2026)

The first report shall include the following:

- A description of the current development of the compact allocation waters for Idaho and Utah.
- The frequency and timing of water supplies in the Lower Division that are available for further development.
- Preliminary opportunities for further development of Idaho's compact allocation to address Idaho's statewide water obligations, including estimated costs and timelines for completing projects related to the opportunities identified in the report.

3

MA1



Second Report (Due September 30, 2026)

The second report shall include the following:

- Recommended and prioritized projects for further development of Idaho's compact allocation.
- An outline of the necessary steps for the Idaho Water Resource Board, the Idaho Department of Water Resources, and the Idaho Legislature to secure future development of Idaho's compact allocation waters.

4

MA1



Idaho Compact Allocation and Depletions

- Based on the 2019 Depletions Update
 - Central Division = <1000 AF remaining
 - Lower division = ~108,000 AF remaining

**Bear River Commission
Estimated Annual Depletions (Acre-Feet)¹
Changes from January 1, 1976, to December 31, 2019**

ABOVE STEWART DAM

State	Allocation	Agricultural Depletions	M&I Depletions	Reservoir Evaporation	Total Depletions	Remaining Allocation
Utah	13,000	5,839	-8	582	6,413	6,587
Wyoming	13,000	5,058	826	140	6,024	6,976
Idaho	2,000	1,150	3	0	1,153	847

LOWER DIVISION

State	Allocation	Agricultural Depletions	M&I Depletions	Reservoir Evaporation	Total Depletions	Remaining Allocation
Idaho	125,000 ²	16,387	245	11	16,643	108,357
Utah	275,000 ³	-16,879	11,543	0	-5,336	275,000

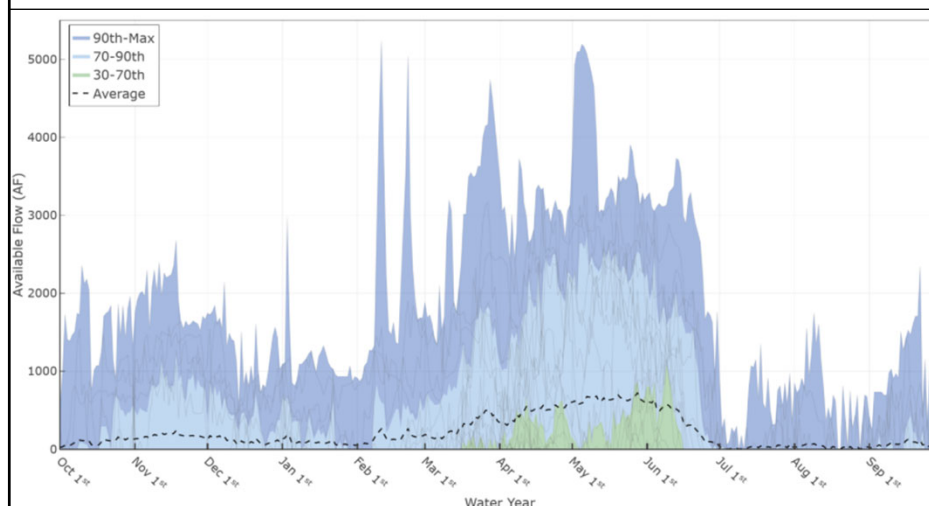
¹Any reductions in pre-1976 depletions are reflected in the above numbers.
²First right under Compact. Compact grants additional rights.
³Second right under Compact. Compact grants additional rights.

5



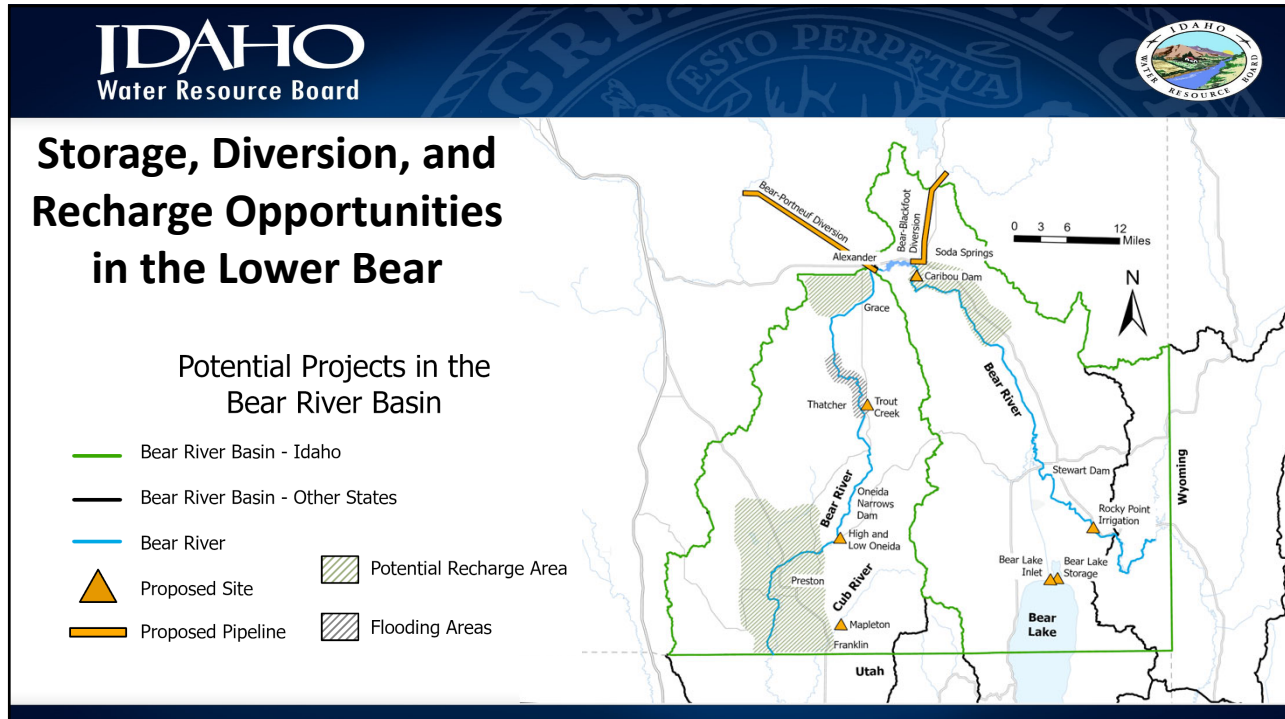
Frequency and Timing of Water Supply: Idaho-Utah Stateline

MA1



Reservoir Space (AF)	Number of Years Space Would Have Filled 1990-2023
25,000	17
50,000	13
75,000	11
100,000	7
150,000	7
200,000	4

6



7

Preliminary opportunities for development of Idaho's compact allocation

Project Name	Type	Capacity	Timeline (yrs)	Cost \$Millions (2025)
Bear Lake Additional Storage and Gentile Valley Flood Control Mitigation Measures	Storage	450,000 AF	5	10.3
Bear Lake Inlet Modification	Storage	100,000 AF	5	4
Caribou Dam	Storage	47,500 AF	10	50
High Oneida Dam	Storage	435,000 AF	10	220
Low Oneida Dam	Storage	140,000 AF	10	320
Mapleton Dam Project	Storage	34,500 AF	20	120
Trout Creek	Storage	18,000 AF	7	40
Rocky Point Irrigation	Storage	300,000 AF	20	350
Small Reservoir Infrastructure Projects	Storage	Varies	5	Varies
Bear-Portneuf Diversion Project	Diversion	1,815 CFS	20	380
Bear-BlackFoot Diversion Project	Diversion	1,815 CFS	20	500 - 1,000
Aquifer Recharge	Recharge	108,000 AF	10	85
Pumped Storage Projects	Pumped Storage	Small	10	

8



Managed Aquifer Recharge MA1

- The standards and procedures used elsewhere in Idaho indicate the Lower Division of the Bear River Basin could be favorable for managed aquifer recharge
 - Depth to groundwater
 - Delivery systems
 - Geology
 - Retention in the aquifer

9



QUESTIONS OR
RECOMMENDATIONS?



10

MEMO



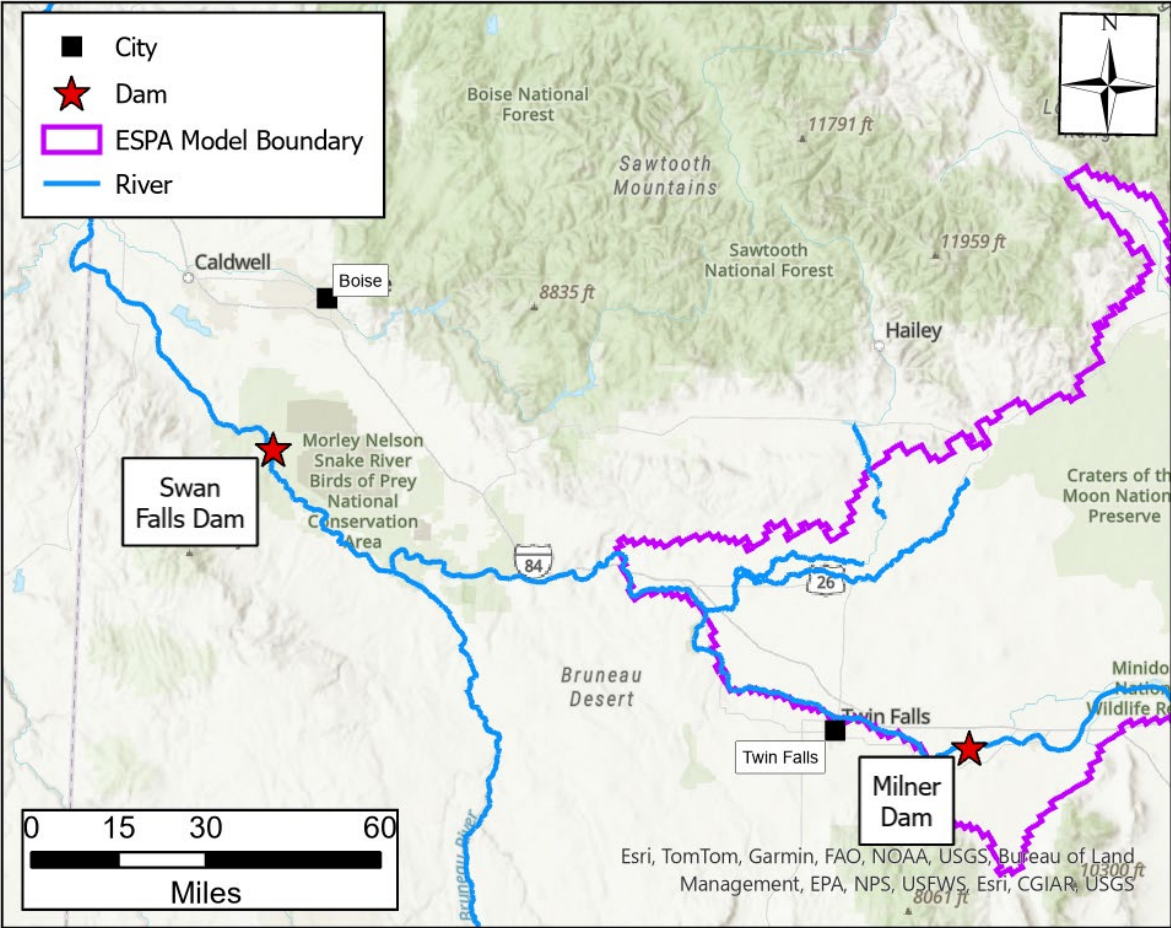
To: Idaho Water Resource Board (IWRB)
From: Matt Anders, Planning & Projects Section Supervisor
Date: May 21, 2026
Subject: March 2026 Minimum Streamflow Water Right Shortfall at Swan Falls Dam

REQUESTED ACTION: Consider Utilizing IWRB Palisades Storage Water to Offset the 2026 Swan Falls Minimum Streamflow Shortfall

Background

The reach of the Snake River from Milner Dam to Swan Falls Dam is 181 miles long (Figure 1). The river flows through an incised canyon that extends to depths of more than 700 feet below a relatively flat basalt plain. The water elevation along this reach falls 1,824 feet from Milner Dam to Swan Falls Dam, representing an average gradient of approximately 10 feet per mile. Idaho Power Company owns Swan Falls Dam and uses it to generate hydropower.

Figure 1. Location of Swan Falls Dam in southwest Idaho.



Swan Falls Settlement Agreement

The Swan Falls Settlement Agreement resolved an ongoing controversy over how to balance water use for agriculture and hydropower generation in the Snake River Basin. In the late 1970s, a group of Idaho Power Company (IPCo) ratepayers initiated a lawsuit against IPCo, contending that it had failed to adequately protect its water rights for hydropower generation at Swan Falls Dam. The ratepayers alleged that IPCo's failure to protest junior water uses upstream of Swan Falls Dam resulted in less water for power generation and higher electricity rates for its customers. The Idaho Supreme Court ruled in favor of the ratepayers, holding that the water rights at Swan Falls Dam were not subordinated to junior water rights.

Following the decision, Idaho Power Company pursued curtailment of approximately 7,500 junior water rights upstream of Swan Falls Dam. Given the catastrophic consequences that such curtailment would have had on agriculture in southern Idaho, the State of Idaho negotiated with IPCo to resolve the issue. The State's primary interests were to protect existing water uses and ensure State control of water allocation. IPCo's interest was to maintain adequate water in the Snake River for hydropower generation at Swan Falls Dam. The parties signed a settlement agreement in 1984 with the following key features:

- Idaho Power Company agreed to subordinate its water rights at Swan Falls and ten other hydropower facilities to all upstream water uses in existence at the time of the agreement.
- The State of Idaho agreed to a 3,900 cubic feet per second (cfs) minimum stream flow from April to October and a 5,600 cfs minimum stream flow from November to March at Swan Falls Dam.
- The State of Idaho placed into a trust IPCo's water rights in excess of the minimum stream flows, but less than 8,400 cfs. Future water rights licensed by the Idaho Department of Water Resources (IDWR) for this water became known as "Trust Water Rights."

Swan Falls Hydrology

Inflows to the Snake River between Milner Dam and Swan Falls Dam include flows from above Milner Dam, spring discharge, tributary inflows, irrigation return flows, and groundwater seepage. In high runoff years, flow from above Milner Dam is a substantial portion of the discharge in the Snake River below Milner Dam. In low runoff years, little or no water is released past Milner Dam.

Springs between Milner Dam and King Hill contribute most of the flow in the Snake River at Swan Falls at times when there is no flow past Milner Dam. Flow in the river in July increases from essentially zero at Milner Dam to approximately 4,500 cfs at King Hill. Springs discharging from the ESPA and other gains between Milner Dam and King Hill contribute a larger percentage of Snake River flow during July than during other times of the year.

The primary tributaries to the Snake River between Milner Dam and Swan Falls include Salmon Falls Creek, Rock Creek, the Malad River, and the Bruneau River. The peak runoff from these streams occurs

between late April and early June. High flows from these tributaries can exceed 1,500 cfs. These tributaries contribute very little flow to the Snake River during low runoff years and in July.

Water District 02 was created by IDWR to administer water rights on the Snake River between Milner Dam and Swan Falls Dam. There are approximately 770 water rights authorizing diversions from the Snake River between Milner Dam and Swan Falls. The average maximum diversion rate in Water District 02 in July is approximately 1,500 cfs.

Swan Falls Adjusted Average Daily Flow (AADF)

The discharge at the Snake River at the Murphy stream gage is used to represent the discharge in the Snake River at Swan Falls Dam. A measurement protocol referred to as the Adjusted Average Daily Flow (AADF) was developed by the Swan Falls Technical Working Group, which included representatives from IPCo, the Idaho Ground Water Appropriators, IDWR, the City of Pocatello, and the United States Geological Survey. The calculation is:

$$\begin{aligned} \text{AADF at Swan Falls} = & \\ & \text{measured flow at the Snake River at Murphy stream gage} \\ & + \text{change in storage at Storage Swan Falls Reservoir} \\ & + \text{change in storage at Storage CJ Strike Reservoir} \\ & + \text{change in storage at Storage Bliss Reservoir} \\ & + \text{change in storage at Lower Salmon Falls Reservoir} \\ & - \text{Idaho Power storage delivery past Milner Dam} \end{aligned}$$

A 3-day average of the AADF value is used to represent the streamflow in the Snake River at Swan Falls Dam. Averaging is used to “smooth” short-term fluctuations resulting from IPCo operations, natural flow variations, irrigation diversions and returns, and measurement error that may not be fully quantified by the AADF calculation.

March 2026 Swan Falls Minimum Streamflow Shortfall

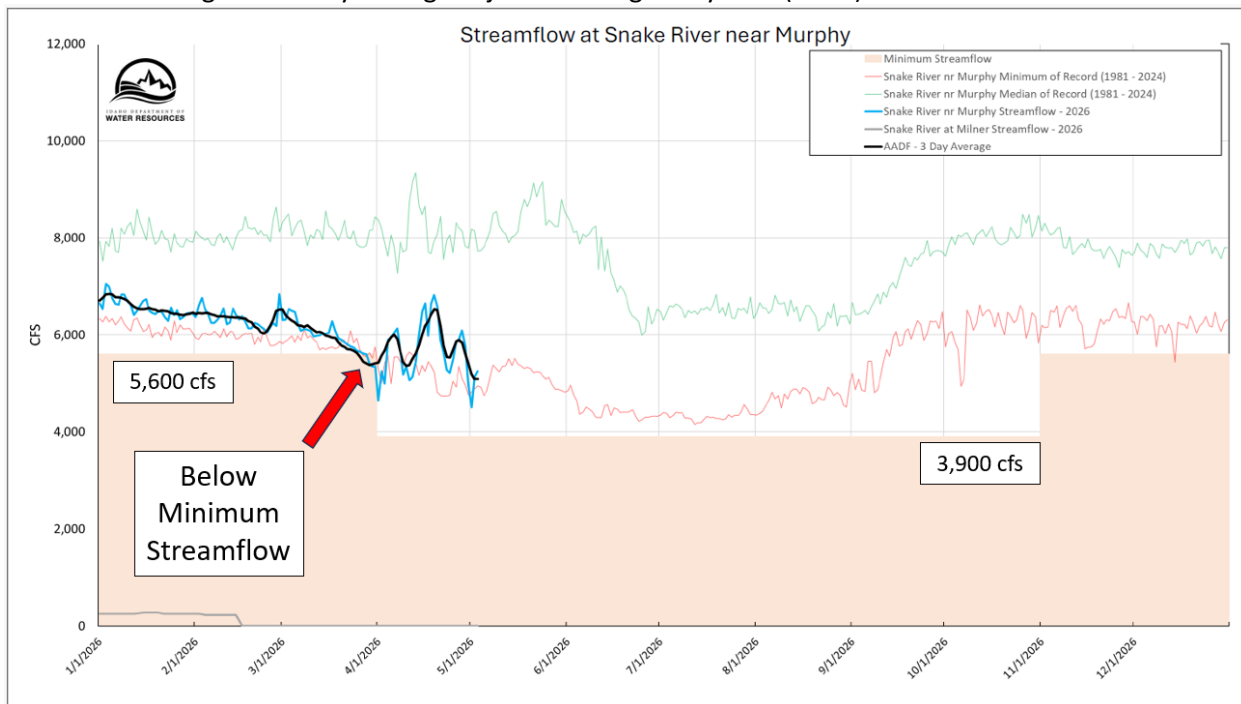
Inflows to the Snake River between Milner Dam and Swan Falls Dam were below average, and irrigation diversions were above average at the end of March 2026. Spring discharge from the ESPA in the Milner Dam to King Hill reach of the river was below average. Inflow from tributary streams was below average due to the absence of low-elevation snow. Irrigation return flow to the Snake River from the south side of the river began earlier than normal and was at approximately average rates of discharge for the start of the irrigation season. Irrigation diversions in Water District 02 began earlier than normal and were at approximately average rates for the start of the irrigation season. The combination of relatively low inflows and high irrigation diversions resulted in the 3-day average AADF falling below 5,600 cfs during the last few days of March (Table 1 and Figure 2).

Table 1. Minimum Streamflow Shortfall at Swan Falls Dam

Day	3-day Average AADF (cfs)	Shortfall (AF)
3/26/26	5,522	155
3/27/26	5,439	319
3/28/26	5,410	377
3/29/26	5,380	436
3/30/26	5,378	440
3/31/26	5,417	363
Total	---	2,091*

* Preliminary total shortfall

Figure 2. 3-Day Average Adjusted Average Daily Flow (AADF) at Swan Falls Dam



The Idaho Water Resource Board (IWRB) has 5,000 acre-feet (AF) of storage space in the Palisades Reservoir 1939 priority space. If the IWRB decides to offset the March 2026 shortfall of the Swan Falls minimum streamflow water right with this storage water, IPCo will likely request delivery of the IWRB storage in July, at the same time it has its storage delivered past Milner Dam. The following is an estimate of the impact on the IWRB’s 2026 storage allocation if the IWRB chooses to address the shortfall with storage water:

- Estimated 2026 storage allocation as of May 10, 2026 3,900 AF
- Swan Falls Dam minimum streamflow shortfall (preliminary) 2,091 AF
- Remaining 2026 storage allocation 1,809 AF

Water District 01 procedures state that any storage water delivered past Milner Dam becomes last-to-fill space in the subsequent water year. If the IWRB delivers 2,091 AF to Idaho Power Company, that amount of the IWRB reservoir space will become last-to-fill in the 2027 irrigation season.

To accomplish the delivery, the IWRB must complete a private lease through the Water District 01 Rental Pool. Section 6.7 of the Water District 01 Rental Pool Procedures states that “the IWRB may lease its existing storage (up to 5,000 acre-feet) to Idaho Power and have it released past Milner for the purpose of mitigating minimum flows at Murphy. The administrative fee must be paid by the IWRB for any storage used for such purpose.” The Water District 01 rental pool administrative fee is \$2.30 per AF. The total administrative fee would be \$4,808.

Attachment(s):

1. *Resolution to Offset the March 2026 Shortfall to the Swan Falls Minimum Streamflow Water Right*
2. *IWRB Resolution No. 3-15*
3. *PowerPoint Presentation*

IN THE MATTER OF THE SWAN FALLS
AGREEMENT MINIMUM FLOWS

RESOLUTION TO OFFSET THE MARCH 2026
SHORTFALL TO THE SWAN FALLS
MINIMUM STREAMFLOW WATER RIGHT

1 WHEREAS, as a result of the Swan Falls Settlement, the Idaho Water Resource Board
2 (IWRB) holds decreed minimum streamflow water rights (2-201, 2-223, and 2-224) at the Murphy
3 Gaging Station, just downstream of Swan Falls Dam, was increased to an average daily flow of
4 3,900 cfs between April 1st and October 31st of every year, and 5,600 cfs between November 1st
5 and March 31st of every year; and
6

7 WHEREAS, Idaho Power Company holds decreed hydropower water rights (2-100, 2-
8 2032A, 2-4000A, 2-4001A) for its mid Snake River hydropower facilities in the amount of 3,900 cfs
9 between April 1st and October 31st and 5,600 cfs between November 1st and March 31st,
10 measured at the Murphy Gage; and
11

12 WHEREAS, the State of Idaho, by and through the Governor, holds hydropower water
13 rights in trust for the benefit of Idaho Power Company and the people of Idaho; and
14

15 WHEREAS, the hydropower water rights (2-2032B, 2-4000B, and 2-4001B) held in trust by
16 the State of Idaho are subordinated to water rights diverting trust water within the area shown
17 on Appendix A of IDAPA 37.03.08.030; provided, however, these water rights are subject to
18 curtailment if the average daily flow at the Murphy Gage falls below 3,900 cfs between April 1st
19 and October 31st and 5,600 cfs between November 1st and March 31st measured at the Murphy
20 Gage (Murphy minimum flows); and
21

22 WHEREAS, the Director of the Idaho Department of Water Resources, on October 27, 2014,
23 issued the "Final Order Regarding the Measuring and Reporting the 'Average Daily Flow' as
24 Measured at the Murphy Gaging Station"; and
25

26 WHEREAS, the IWRB also holds 5,000 acre-feet of storage space in the U.S. Bureau of
27 Reclamation's Palisades Reservoir through Contract No. 14-06-100-1836; and
28

29 WHEREAS, on March 20, 2015, the IWRB passed Resolution No. 3-15, establishing a "Debit
30 System" to make IWRB's Palisades storage water available to augment flows at the Murphy Gage
31 in the event the Murphy gage drops below the Murphy minimum flows, an interim plan
32 established by IWRB to maintain the Murphy minimum flow while a long-term adaptive
33 management plan is developed for maintaining the Murphy minimum flow; and
34

35 WHEREAS, the adjusted average daily flow at the Murphy Gage was below the 5,600 cfs
36 minimum flow for several days in March 2026.
37

38 NOW, THEREFORE BE IT RESOLVED, as established in Resolution No. 3-15, the IWRB hereby
39 agrees to utilize the Debit System to make available to Idaho Power Company IWRB's Palisades
40 storage water to offset debits accruing to Idaho Power Company in March 2026 on an acre-foot
41 for acre-foot basis.

42
43 NOW, THEREFORE BE IT FURTHER RESOLVED, that the Idaho Power Company shall be
44 entitled to call for delivery of storage water from the IWRB's Palisades Reservoir storage space, in
45 a volume equivalent to the shortfall at the Murphy Gage, on a schedule determined by the Idaho
46 Power Company, until the volume of the shortfall is replaced or the IWRB storage water is fully
47 utilized.

48
49 NOW, THEREFORE BE IT FURTHER RESOLVED that the costs and administrative fees for
50 delivery of the Palisades storage water to the Murphy Gage shall be borne by the IWRB.

51

DATED this 21st day of May 2026.

JEFF RAYBOULD, Chairman
Idaho Water Resource Board

ATTEST _____
DEAN STEVENSON, Secretary

BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF THE SWAN FALLS) A RESOLUTION
AGREEMENT MINIMUM FLOWS)

WHEREAS, as a result of the Swan Falls Settlement, the minimum streamflow at the Murphy Gaging Station, just downstream of Swan Falls Dam, was increased to an average daily flow of 3,900 cfs between April 1st and October 31st of every year, and 5,600 cfs between November 1st and March 31st of every year; and

WHEREAS, the Idaho Water Resource Board (IWRB) holds decreed minimum streamflow water rights at the Murphy Gage; and

WHEREAS, Idaho Power Company holds decreed hydropower water rights for its mid Snake River hydropower facilities in the amount of 3,900 cfs between April 1st and October 31st and 5,600 cfs between November 1st and March 31st measured at the Murphy Gage; and

WHEREAS, the IWRB's and Idaho Power Company's water rights provided that the average daily flow is to be based on the actual flow conditions, which means that the average daily flow at the Murphy Gage is to be adjusted to account for any fluctuations resulting from the operation of the Idaho Power Company's hydropower facilities; and

WHEREAS, the State of Idaho, by and through the Governor, hold hydropower water rights in trust for the benefit of Idaho Power Company and the people of Idaho; and

WHEREAS, the hydropower water rights held in trust by the State of Idaho are subordinated to water rights diverting trust water within the area shown on Appendix A of IDAPA 37.03.08.030; provided, however, these water rights are subject to curtailment if the average daily flow at the Murphy Gage fall below 3,900 cfs between April 1st and October 31st and 5,600 cfs between November 1st and March 31st measured at the Murphy Gage; and

WHEREAS, the Director of the Idaho Department of Water Resources on October 27, 2014 issued the "Final Order Regarding the Measuring and Reporting the 'Average Daily Flow' as Measured at the Murphy Gaging Station" and

WHEREAS, the adjusted average daily flow at the Murphy Gage is beginning to approach the 3,900 cfs minimum flow; and

WHEREAS, the IWRB also holds 5,000 acre-feet of storage space in the U.S. Bureau of Reclamation's Palisades Reservoir through Contract No. 14-06-100-1836; and

WHEREAS, because of the hydrologic complexities of the Snake River system, curtailment is not a satisfactory means of maintaining the Murphy minimum flow; and

WHEREAS, the IWRB desires to establish an interim plan to maintain the Murphy minimum flow while a long term adaptive management plan is developed for maintaining the Murphy minimum flow; and

WHEREAS, due to the uncertainty of whether the river flows will drop below the Murphy adjusted average daily flow, the uncertainty of when and how long that may occur, the IWRB intends to establish a "Debit System" in cooperation with the Idaho Power Company to keep a running accounting of short fall in the adjusted average daily flow at the Murphy Gage; and

Whereas, the IWRB agrees to make available to Idaho Power water accruing to the IWRB's storage space, if necessary, as an offset against debits accruing to Idaho Power Company on an acre-foot for acre-foot basis; provided, however, the IWRB's obligation to provide storage water shall be limited to storage water accruing to its storage space.

NOW, THEREFORE BE IT RESOLVED, that, the Idaho Water Resource Board hereby establishes a "Debit System" to make its Palisades storage water available to augment flows at the Murphy Gage in the event the adjusted average daily flow at the Murphy Gage drops below the Murphy minimum flows.

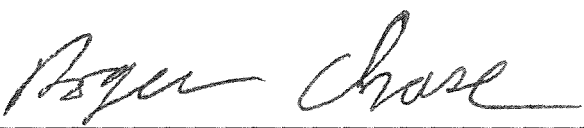
NOW, THEREFORE BE IT FURTHER RESOLVED, in the event river flows drop below the Murphy minimum flows, the Idaho Power Company shall be entitled to call for delivery of storage water from the IWRB's Palisades storage space, in a volume equivalent to the shortfall at the Murphy Gage, on a schedule determined by the Idaho Power Company, until the volume of the shortfall is replaced or the IWRB storage water is fully utilized.

NOW, THEREFORE BE IT FURTHER RESOLVED that the costs and administrative fees for delivery of the Palisades storage water to the Murphy Gage shall be borne by the IWRB; and


NOW, THEREFORE BE IT FURTHER RESOLVED, the IWRB intends to engage the water right holders diverting Trust Water and develop a mechanism whereby in the future the costs of and fees for delivery of the Palisades storage water to the Murphy Gage will be borne by the water right holders diverting Trust Water.

DATED this 20th day of March, 2015.

ATTEST:



ROGER CHASE, Chairman



VINCE ALBERDI, Secretary



2026 Swan Falls Minimum Streamflow Update

Matt Anders
Water Planning and Projects Section

May 21, 2026

1



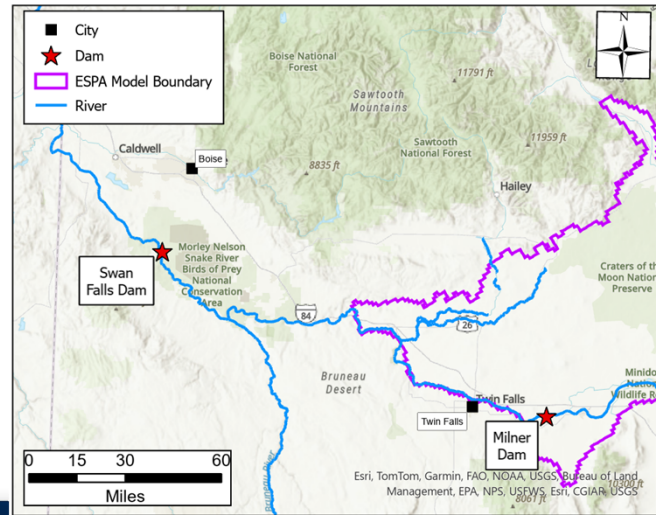
Swan Falls Minimum Streamflow

2



Swan Falls Dam

- Swan Falls Dam is located on the Snake River in southwest Idaho
- Owned and operated by Idaho Power Company
- Litigation determined that the power generation water right at Swan Falls Dam is not subordinated to other beneficial uses



3





Swan Falls Agreement

- 1984 Swan Falls Settlement Agreement
 - Protects Idaho Power's hydropower production water rights
 - Protects IWRB's minimum streamflow water rights
- Minimum Streamflow at Murphy Gage

• 5,600 cfs from November 1 to March 31	Non-Irrigation season
• 3,900 cfs from April 1 to October 31	Irrigation season
- Agreement specifies "actual flow conditions"
 - Adjusted Average Daily Flow (AADF) calculation

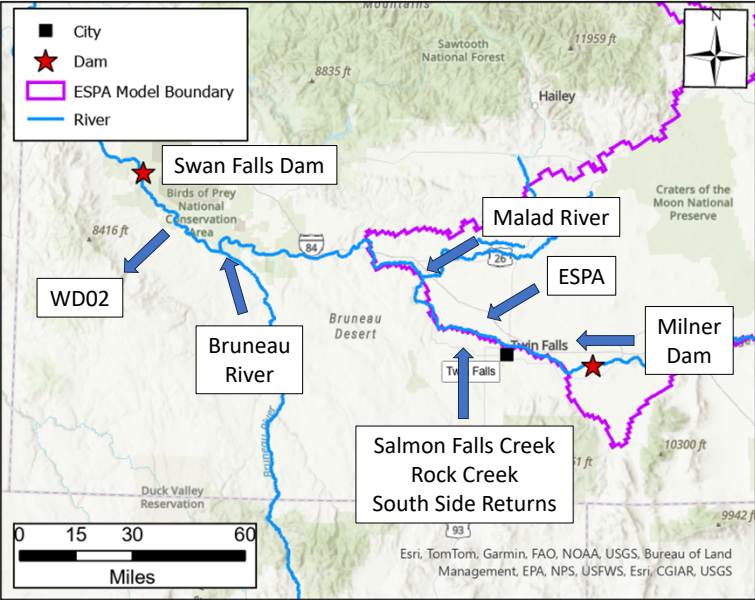
4







Swan Falls – Hydrology

- Inputs to Snake River
 - Milner Dam
 - ESPA - Thousand Springs
 - Salmon Falls Creek
 - Rock Creek
 - South Side Returns
 - Malad River
 - Bruneau River
- Withdrawals from Snake River
 - Irrigation diversions in Water District 02



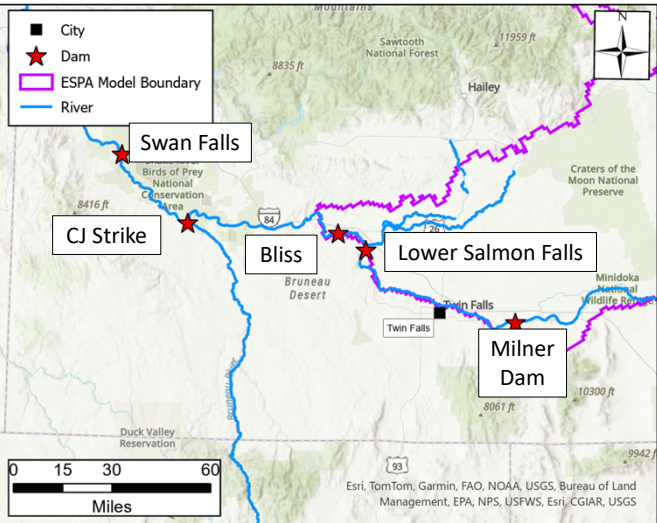
5





Swan Falls Adjusted Average Daily Flow (AADF)

- A technical working group developed this calculation method in 2014
- Adjusted Average Daily Flow (AADF) at Swan Falls =
 - Measured flow at Murphy gage
 - + Δ Storage Swan Falls Reservoir
 - + Δ Storage CJ Strike Reservoir
 - + Δ Storage Bliss Reservoir
 - + Δ Storage Lower Salmon Falls Reservoir
 - Idaho Power storage delivery past Milner Dam
- 3-Day Average - AADF

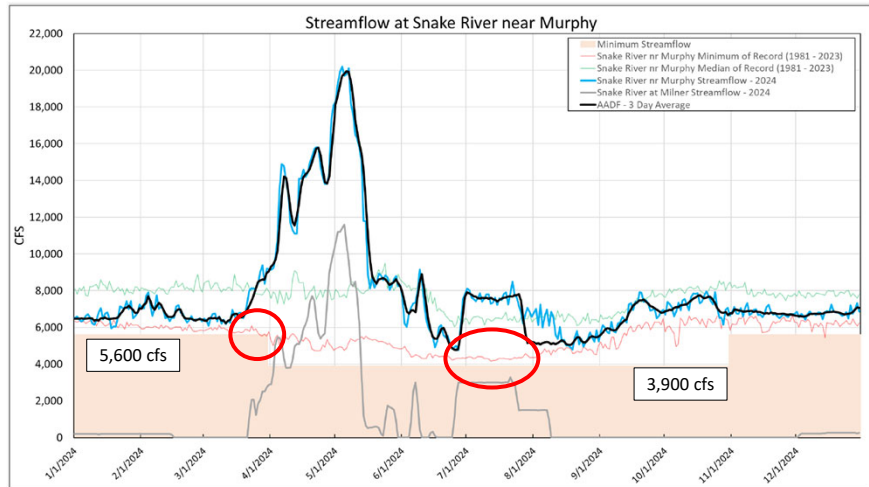


6



Swan Falls Adjusted Average Daily Flow (AADF)

- Example from 2024
- Periodically distributed by email
- Low Flow Periods
 - End of March
 - July

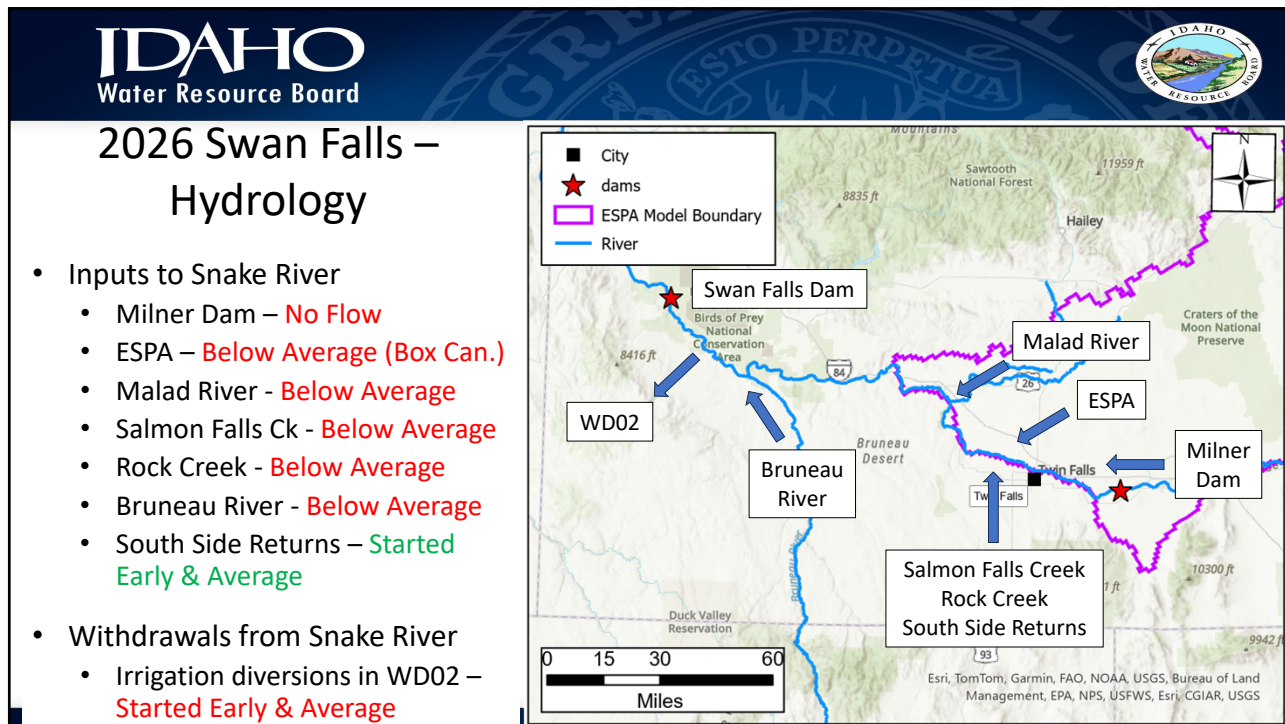


7

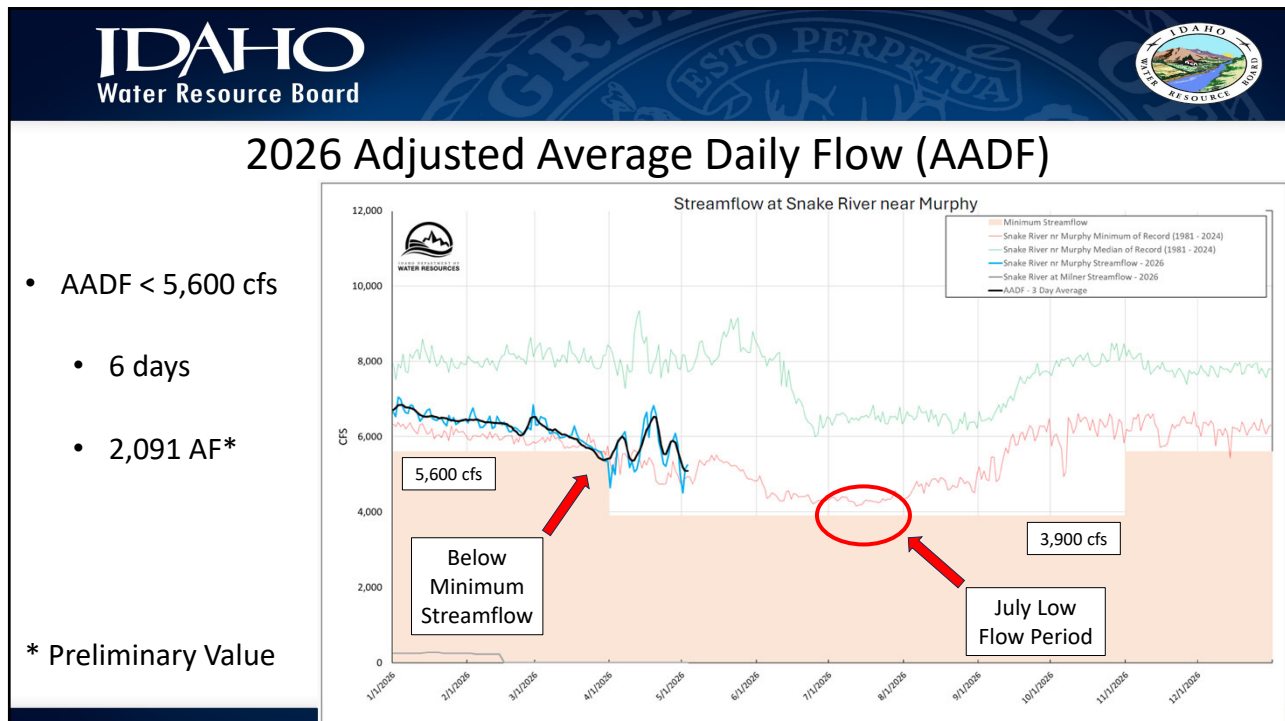


Swan Falls March 2026


8




9



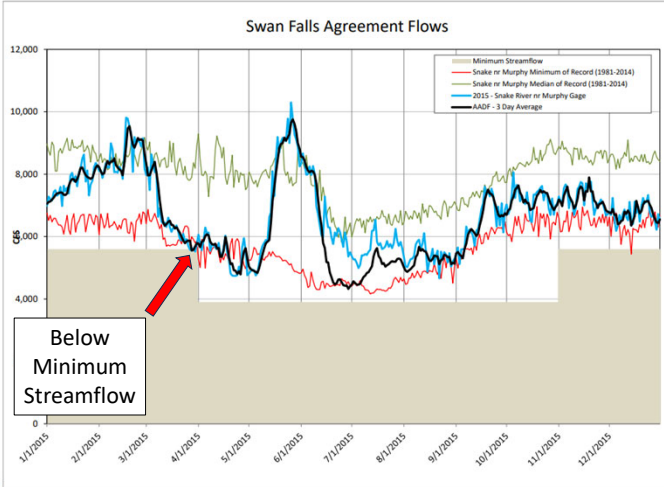
10







2015 Swan Falls Minimum Streamflow Shortfall

- Swan Falls minimum streamflow shortfall = 190 AF
- IWRB passed a resolution establishing a “Debit System” to track the shortfall and deliver the equivalent storage to Idaho Power Company when requested



11





2026 Swan Falls Minimum Streamflow Shortfall

- If IWRB chooses to offset the shortfall with its 5,000 AF of storage in Palisades (1939)
 - Estimated 2026 storage allocation as of May 10th 3,900 AF
 - Swan Falls minimum streamflow shortfall 2,091 AF*
 - Remaining 2026 storage allocation 1,800 AF**
- WD01 rental pool administrative fee (\$2.30/AF) \$4,800
- Idaho Power Company would likely request delivery in July

* Reservoir space would become last-to-fill in the 2027 irrigation season
 ** Volume available for a minimum streamflow shortfall in July 2026 or carryover.

12



Questions?





MEMO

To: Idaho Water Resource Board (IWRB/Board)
From: Matt Anders, Planning & Projects Section Supervisor
Date: May 13, 2026
Subject: ESPA Managed Recharge – Proposed Recharge Project Update

REQUESTED ACTION: Consider Funding for the Proposed Recharge Projects

New Projects Summary

The IWRB has been actively developing managed recharge capacity throughout the Eastern Snake Plain Aquifer (ESPA) since the start of the full-scale program in 2014. The intent of the IWRB is to develop a program that can achieve the goals set by the Legislature and ensure the ESPA remains a sustainable water supply for Idaho. The current focus is on developing capacity in multiple geographic areas to provide both short- and long-term benefits to the aquifer and surface water flows. The IWRB has added approximately 2,300 cfs of recharge capacity across the ESPA over the past twelve years. 2,000 cfs of this capacity is in the Lower Valley, and 300 cfs is in the Upper Valley above American Falls.

Several irrigation entities have submitted proposals to the IWRB for aquifer recharge projects. These projects will support the IWRB goal of recharging 350,000 acre-feet on an average annual basis. This memo provides a summary of one proposed project.

Figure 1. Location of New Proposed Recharge Project

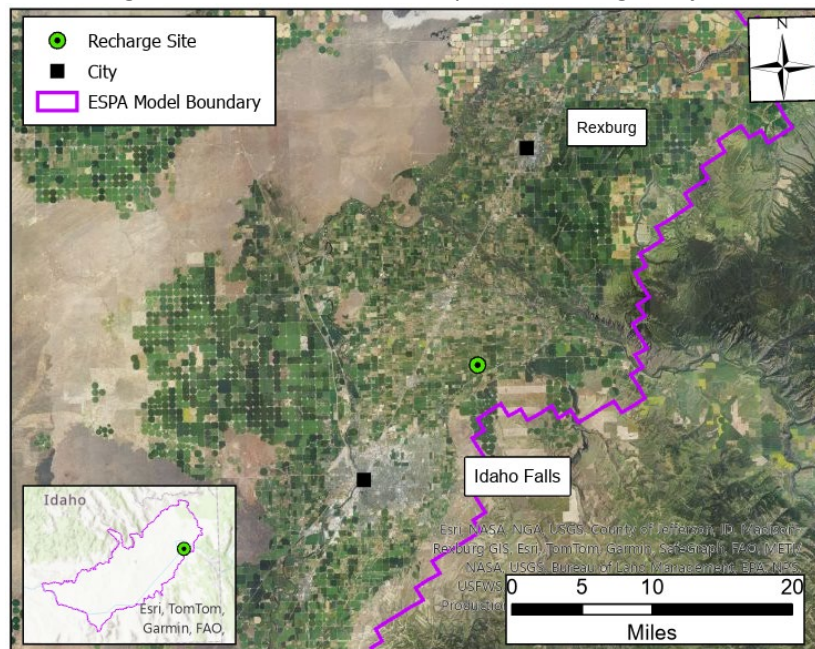


Table 1. Summary of New Proposed Recharge Project

Proposed Recharge Project	Type	Capital Cost	Estimated Cost Per Acre-Foot Recharged ¹	Estimated Recharge Capacity (cfs)	5-Year Retention in Aquifer	50% Response Time (Months) ²	Percent Return to Snake River
New Sweden ID – Hells Half Ace ITD Pit	13-Acre Basin	\$450,000	\$11	30	16%	12 months	Shelley to Near Blackfoot 55% Near Blackfoot to Neeley 36%

¹ Assumed 90 days of recharge available in 50% of the years. Used a conveyance fee of \$7.50 / acre-foot.

² The time required for 50% of the recharged water to discharge to the Snake River

Site Characterization Summary for the Proposed Project

This section includes a memorandum written by the Idaho Department of Water Resources technical staff for the proposed recharge project, summarizing the project cost, its impact on the aquifer, its impact on the Snake River, site hydrogeology, and nearby potential sources of contamination.

MEMO

To: Idaho Water Resource Board (IWRB)

From: Max Deckman, Planning & Projects Bureau Staff

Date: May 15, 2026

Subject: ESPA Managed Recharge – New Sweden Irrigation District Hells Half Acre Recharge Basin Proposal



REQUESTED ACTION: The Idaho Water Resource Board (IWRB) will consider funding the New Sweden Irrigation District Hells Half Acre ITD Pit Recharge Basin Proposal.

The New Sweden Irrigation District submitted a proposal to utilize an existing Idaho Transportation Department (ITD) gravel mine as a recharge basin. Use of this basin would support the IWRB goal of recharging 350,000 acre-feet on an average annual basis. The following memo provides a summary of the proposal and a review of the proposed recharge basin.

I. Project Proposal

The New Sweden Irrigation District (NSID) proposes constructing a diversion structure to deliver water to an existing 13-acre ITD gravel pit located northeast of Blackfoot. The cost of the project is \$450,000. The proposal includes the construction of a check-dam diversion structure, installation of a flow meter, installation of a delivery pipe with a locking device, construction of an inlet structure including riprap and a concrete apron, and construction of up to two monitoring wells.

A three-party access agreement allowing NSID to utilize the basin has been drafted but not executed. It includes a stipulation that NSID shall bear the costs of constructing a dike or other ITD-approved barrier if requested by ITD to protect aggregate removal operations. NSID also shall notify ITD by March 15 of each calendar year if it plans to use the basin for recharge.

The subsurface geology of the site consists of approximately 4 feet of topsoil, overlying 20 to 55 feet of sand and gravel, which in turn overlies basalt of various competencies. This geologic interpretation is based on an analysis of eight domestic and industrial wells within one mile downgradient of the site. The site has been excavated to approximately 30 feet below ground surface by ITD. No additional excavation is required. When the proposed site is not being

used for recharge, ITD will excavate gravel. When ITD permanently finishes excavation, NSID will have the first right of refusal to purchase the property.

The proposed recharge site is located after the last irrigation diversion on the Great Western Canal system. The 13-acre basin is anticipated to recharge approximately 30 cfs, the maximum flow rate the Great Western Canal can deliver to the site. The estimated recharge cost is \$11 per acre-foot, based on the estimated recharge over a 50-year period. Full calculation details are provided in the Appendix.

Upon completion of the site, the IWRB would have the first right of use for IWRB water rights, when in priority, for a period of 50 years.

The breakdown of requested funds is as follows:

Table 1. Project Budget

Expense	Estimated Cost
Diversion and Inlet Structure	\$340,000
Two Monitoring Wells	\$50,000
Headgate Engineering Consultant	\$20,000
Contingency	\$40,000
Total Cost	\$450,000

II. MAR Site Summary

Est. Recharge Capacity:	30 cfs	Operator:	New Sweden ID
Basin Size:	13 acres	Ownership:	State of Idaho
5-yr Retention:	16%	50% Response Time:	12 months
Depth to Water:	30–60 ft	Delivery System:	Great Western Canal

Canal Avg. Diversion Rate: Great Western Canal averaged 370 cfs in June 2025

ESPAM 2.2 and ETRAN V3.4 were used to determine the 5-year retention, 50% response time, and percent return to the various reaches of the Snake River. The water recharged at this site would primarily return to two reaches of the Snake River: the Shelley to Near Blackfoot reach (55%), and the Near Blackfoot to Neeley reach (36%). The time required for 50% of the recharged water to be discharged into the Snake River is approximately 12 months.

While the five-year retention percentage for the majority of the proposed basin is 16%, it is 13% in the southeast corner. Because of this, a portion of the basin may be below the 15% retention rate threshold in the IWRB Eastern Snake Plain Aquifer Recharge Program Standards and Procedures. For reference, the southern portion of the basin is 1.3 miles from the Snake River at its closest.

III. Hydrogeology Summary

Table 2. Generalized Subsurface Geology

Depth	Subsurface Geology
0–40 Feet Below Ground	Alluvium (Sand and Gravel)
Beyond 40 Feet Below Ground	Basalt and Cinders

Subsurface geology, based on nearby well logs (Figure 1), consists of two lithologic groups: a sedimentary unit underlain by a basaltic unit (Table 2). The sedimentary unit is the uppermost lithology in the wells, dominated by alluvial sand and gravel. All eight wells analyzed near the proposed site contained this alluvial sedimentary unit, with thicknesses ranging from 20 to 55 feet. The sedimentary unit is commonly capped by a layer of topsoil, but the basin is excavated through the soil and into the alluvium.

Below the sedimentary unit is the basaltic unit, consisting of fractured basalt, competent basalt, and cinders. Basalt and cinders are commonly interbedded with each other and rarely interbedded with clay. Clay layers are rare in the area and are unlikely to cause perching of recharge water because they are not laterally extensive. Additionally, the water table is commonly found within the basalt, indicating that incidental recharge in the vicinity is reaching the regional aquifer without impediment. This provides evidence that any water perching caused by competent basalt directly below the basin would likely be localized. Vertical and lateral flow through fractured basalt and cinder zones would allow water to dissipate into the regional water table. If construction of the monitor well indicates that the basin is underlain by competent basalt, a shallow monitor well would be constructed to the competent basalt contact, and recharge operations would be managed to prevent any perched water from impacting nearby domestic infrastructure.

Cross-sections A–A’ (Figure 2) and B–B’ (Figure 3) indicate lateral variability in the subsurface geology in the region. These cross-sections cover areas to the south and west of the proposed recharge site. Areas north and east of the site do not have verifiable well logs. The Christensen Well is included in this memo as it is the closest well to the proposed site (Figure 4).

IV. Site Vicinity

The closest domestic residence downgradient of the site is approximately 500 feet south of the project boundary. There are also upgradient domestic residences approximately 2,500

feet to the east of the project area. The primary land uses surrounding the site are irrigated crops, feedlots, domestic residences, and public land (Bureau of Land Management).

To obtain an approved groundwater monitoring plan from the Idaho Department of Environmental Quality (IDEQ) or an injection well permit from the Idaho Department of Water Resources (IDWR) Underground Injection Well program (UIC), a review of facilities and potential areas of concern is typically required. A review of IDEQ's Source Water Assessment and Protection map showed the following potential sources of contamination within a 2-mile radius of the proposed site:

- Abandoned Drums 0.2 miles to the south
- Deep Injection Well 0.6 miles to the southwest
- Gravel Pit 0.6 miles to the south
- Feedlot 0.7 miles to the north
- Feedlot 1.0 miles to the southeast
- North Blackfoot Rest Areas (northbound and southbound) 1.1 miles to the north
- Gravel Pit 1.9 miles to the southeast

An additional water quality consideration for both IDEQ and the UIC Program is the locations of Public Water Systems (PWS) near the site. This site is within the 3-year time-of-travel zone of three PWS:

- Nonpareil Dehydrated Potatos (PWS #6060050)
- Basic American Ingredients Inc Flakes (PWS #6060051)
- Idle Wheels MHP Cat LLC (PWS #6060035)
- Riverview Villa (PWS #6060057)
- Basic American Foods (PWS #6060002)
- Groveland Elementary School Dist 55 (PWS #6060028)
- Nonpareil Office Complex (PWS #6060111)
- Rose Garden Mobile Home Park (PWS #6060067)
- Snake River View Estates (PWS #6060099)

The following PWS have one or more source locations within two miles downgradient of the site:

- FedEx Distribution Center Blackfoot (PWS #6060123)
- Riverview Acres Water ASSN 1 (PWS #6060063)
- Riverview Acres 2 (PWS #6060062)
- Sunset SUBD (PWS #6060082)

V. References

Idaho Department of Water Resources. "Evapotranspiration and Consumptive Irrigation Water Requirements for Idaho - Blackfoot (AM/INL -- ACKI)." ET-IDWR,

ET IDWR website: <https://et-idwr.idaho.gov/stcwrstats.py?station=2154&cover=47&stats=Deficit>

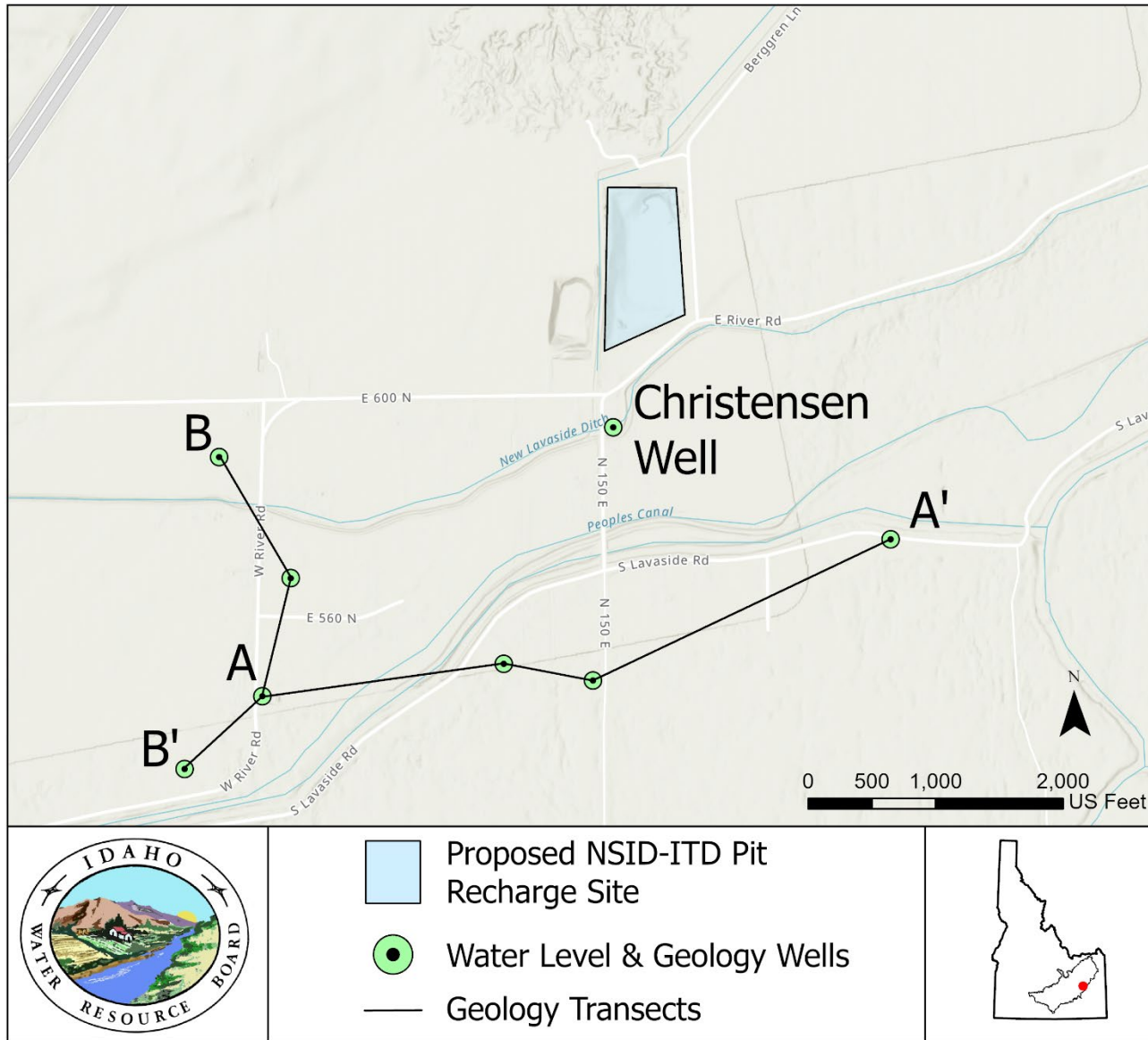


Figure 1. Location of the proposed site and wells used for geologic cross-sections

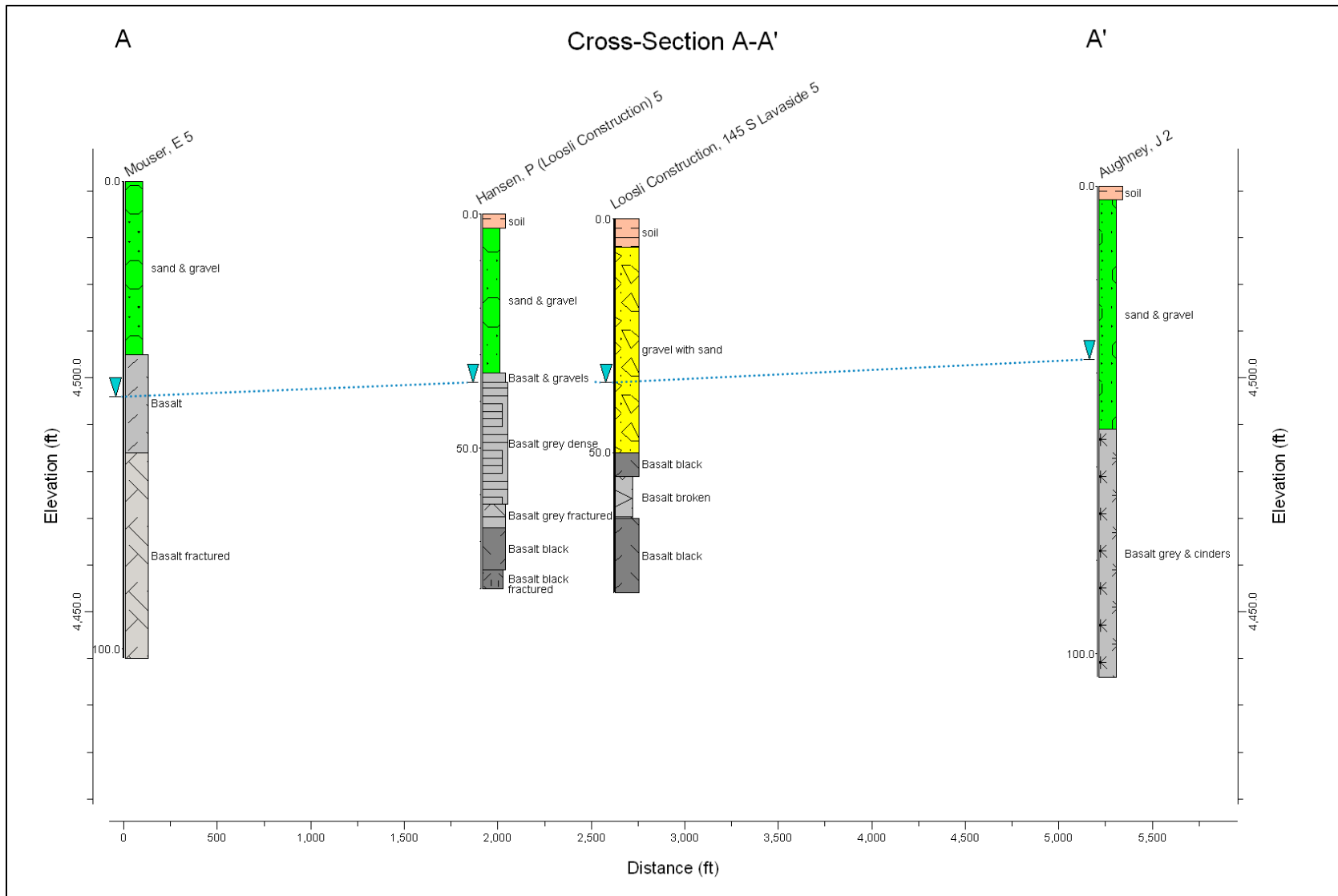


Figure 2. Geologic cross-section going from west (A) to east (A') from wells to the south of the site.

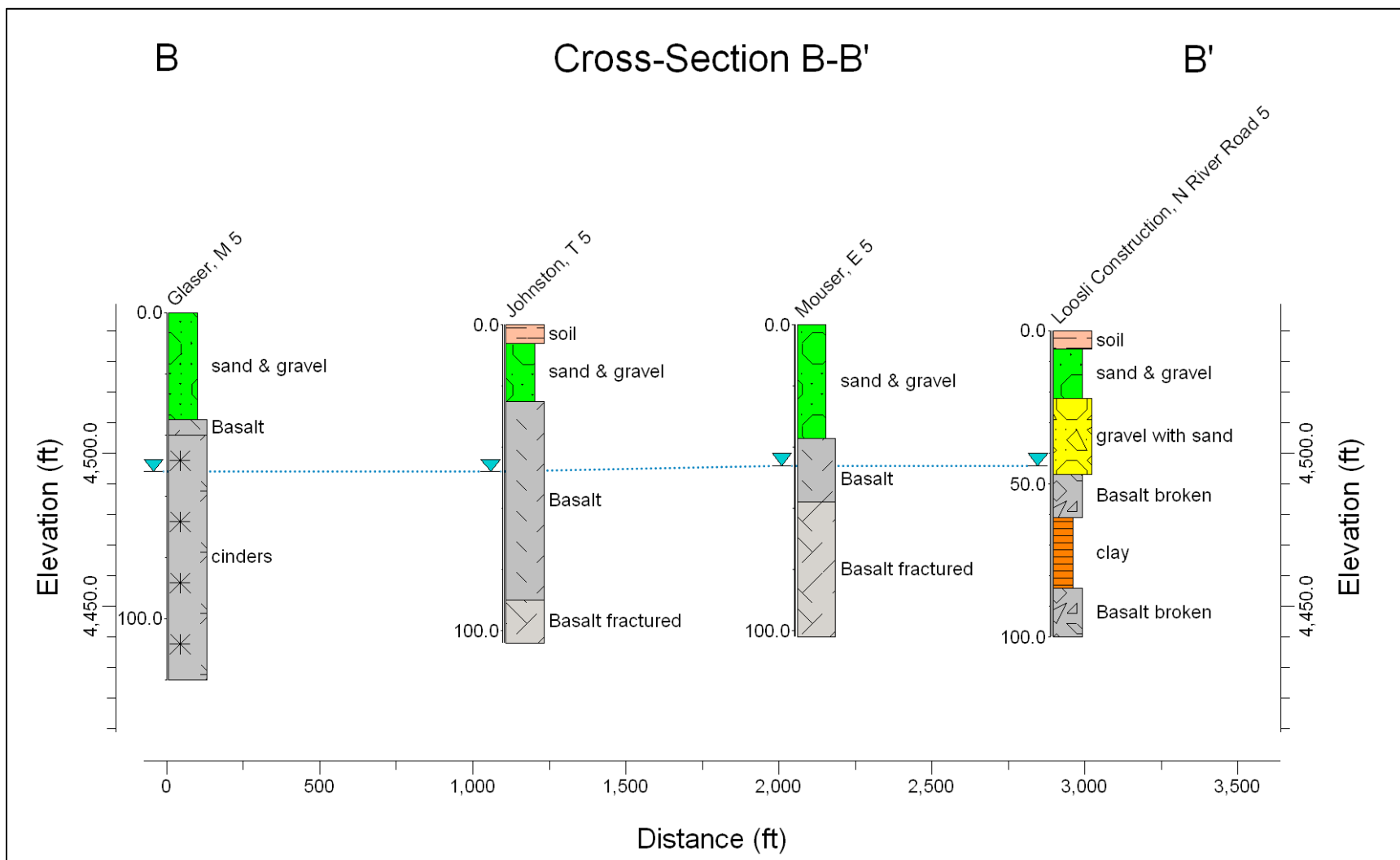


Figure 3. Geologic cross-section going from north (B) to south (B') from wells to the west of the site.

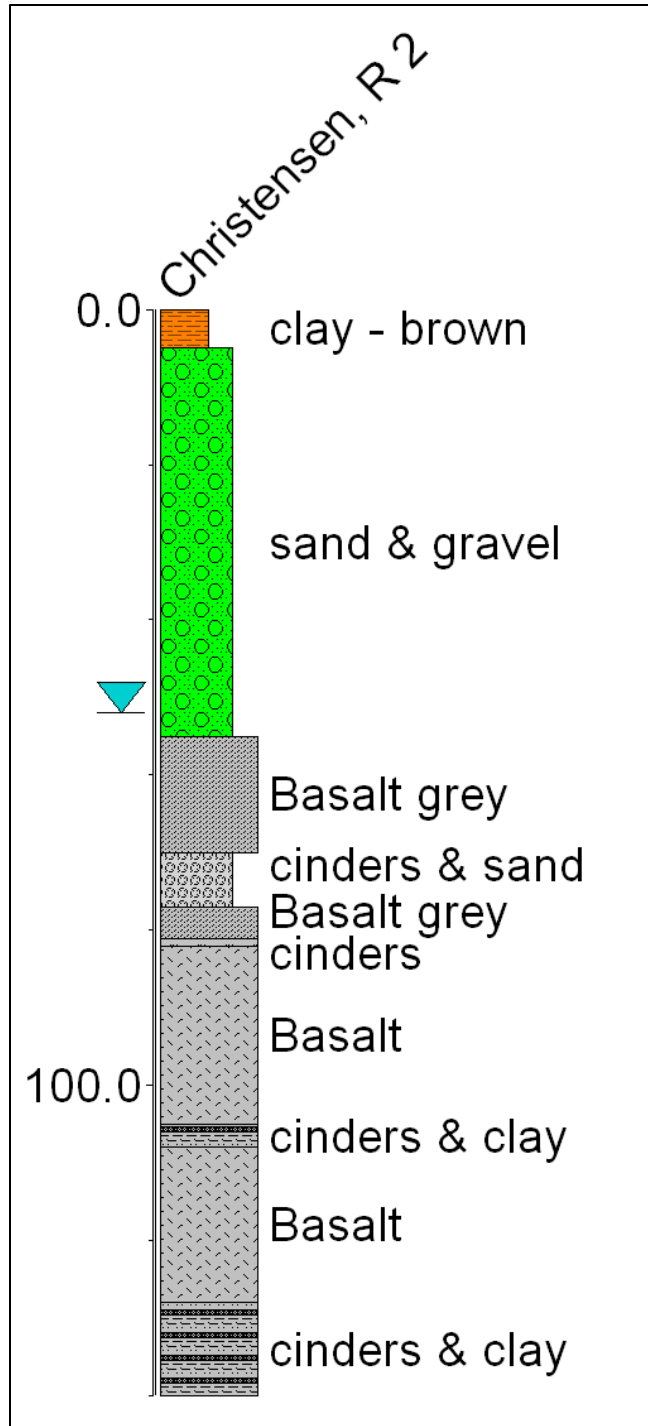


Figure 4. Geologic log for the Christensen Well

VI. Appendix

Cost per acre-foot (AF) of recharge calculation:

$$\begin{aligned}\text{Volume Recharge} &= (\text{Days/year} * \text{Acre-feet / day}) * 50 \text{ years} \\ &= (45 \text{ days/year} * 59.5 \text{ acre-feet / day}) * 50 \text{ years} \\ &= 133,875 \text{ acre-feet}\end{aligned}$$

$$\begin{aligned}\text{Cost} &= \text{Capital Development Costs} + \text{Conveyance Cost for 50 years} \\ &= \$450,000 + (133,875 \text{ acre-feet} * \$7.50 / \text{acre-foot}) \\ &= \$1,454,063\end{aligned}$$

$$\begin{aligned}\text{Cost per Acre-foot} &= \text{Cost} / \text{Volume Recharged} \\ &= 1,454,063 / 133,875 \text{ acre-feet} \\ &= \$11 / \text{acre-foot}\end{aligned}$$

Assumptions:

- 45 days of recharge each year
 - Recharge lasts approximately 90 days during flood control.
 - Flood control occurs in about 50% of the years.
- The time period is 50 years
 - This is the length of time IWRB will have the First Right of Refusal for this proposed site.
- The cost is the capital cost plus the conveyance costs.

Attachment(s):

- *Draft Resolution*
- *PowerPoint Presentation*



IN THE MATTER OF THE NEW SWEDEN
IRRIGATION DISTRICT HELLS HALF ACRES ITD
PIT RECHARGE PROJECT

RESOLUTION TO APPROVE FUNDS FROM
THE WATER MANAGEMENT ACCOUNT
AND PROVIDE SIGNATORY AUTHORITY

1 WHEREAS, about one-third of Idaho’s population resides on the Eastern Snake Plain and
2 the Eastern Snake Plain Aquifer (ESPA) is the primary source of drinking water for both cities and
3 most rural residents of the Eastern Snake Plain; and
4

5 WHEREAS, numerous factors, including drought, have contributed to the loss of
6 approximately 216,000 acre-feet of storage annually from ESPA since the 1950’s, resulting in
7 declining groundwater levels in the aquifer and reduced spring flows to the Snake River; and
8

9 WHEREAS, implementation of managed recharge on the ESPA will assist in the stabilization
10 and improvement of aquifer levels to protect municipal and domestic drinking water supplies,
11 support agriculture and other industries important to the state economy, and help address
12 variability in climatic conditions, including drought; and
13

14 WHEREAS, the 2025 Idaho Legislature passed and approved Senate Concurrent
15 Resolution 110 supporting the 2024 Stipulated Mitigation Plan and supporting the Idaho Water
16 Resource Board (IWRB) revising the State Water Plan and the ESPA Comprehensive Aquifer
17 Management Plan to establish a state-funded ESPA managed aquifer recharge goal of 350,000
18 acre-feet on an average annual basis; and
19

20 WHEREAS, Idaho Code § 42-1760 authorizes the IWRB to expend, loan, or grant money
21 from the Water Management Account for water projects that conserve or increase water supply,
22 improve drought resiliency, address water sustainability, or support flood management,
23 including the identification, study, and construction of managed aquifer recharge sites above
24 Milner Dam; and
25

26 WHEREAS, House Bill 445 (2025) was passed by the State of Idaho legislature,
27 appropriating an ongoing \$30 million to the IWRB to fund water infrastructure projects; and
28

29 WHEREAS, the IWRB passed Resolution 10-2026 for a Water Management Account
30 Spending Plan, which allocates \$10,019,541 for Statewide Recharge Infrastructure; and,
31

32 WHEREAS, New Sweden Irrigation District presented a proposal to the IWRB on May 21,
33 2026, for the Hells Half Acre ITD Pit Recharge Project (“Project”) and associated infrastructure for
34 a proposed cost of \$450,000.

35 NOW THEREFORE BE IT RESOLVED that the IWRB authorizes expenditure of up to
36 \$3,100,000 from the Water Management Account for the construction costs associated with the

37 Project.

38

39 NOW THEREFORE BE IT FURTHER RESOLVED that the IWRB authorizes its chairman or
40 designee to execute the necessary agreements or contracts for the purpose of this resolution.

DATED this 21st day of May 2026.

JEFF RAYBOULD, Chairman
Idaho Water Resource Board

ATTEST _____
DEAN STEVENSON, Secretary









Managed Aquifer Recharge - New Project

Matt Anders
Water Planning and Projects Section
May 21, 2026

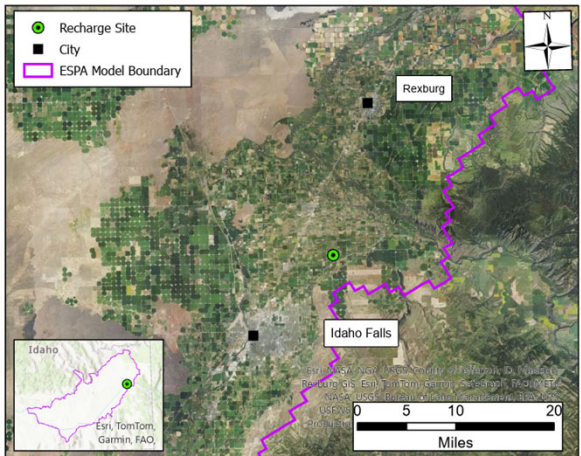
1





New Sweden ID – Hells Half Acres ITD Pit

<ul style="list-style-type: none"> • Type • Cost • Estimated Capacity • 50-Year Estimated Cost • 5-Year Retention • 50% Response • Return to Snake River <ul style="list-style-type: none"> • Shelley to Near Blackfoot • Near Blackfoot to Neeley 	<p>13-Acre Basin</p> <p>\$450,000</p> <p>30 cfs</p> <p>\$11 / AF</p> <p>16%</p> <p>12 months</p> <p>55%</p> <p>36%</p>
--	--



2



Questions?



MEMO



To: Idaho Water Resource Board (IWRB/Board)
From: Planning & Projects Bureau Staff
Date: May 15, 2026
Subject: Flow Augmentation Exchange Agreement

REQUESTED ACTION: IWRB Will Consider a Resolution to Approve Execution of an Agreement Between the IWRB and the U.S. Bureau of Reclamation (Reclamation)

The Board will discuss a potential flow augmentation exchange agreement between the IWRB and Reclamation to address immediate and exceptional drought emergency conditions.

Attachment(s):

- *None*

MEMO



To: Idaho Water Resource Board (Board)
From: Planning & Projects Bureau Staff
Date: May 15, 2026
Subject: Regional Manager Update

INFORMATIONAL ITEM

Scott King, Western Regional Manager with the Idaho Department of Water Resources will provide the Board with a presentation update at the May 21, 2026, meeting.

Attachments:

- *PowerPoint Presentation*

REGIONAL MANAGER'S REPORT

Idaho Water Resource Board

May 21, 2026



1

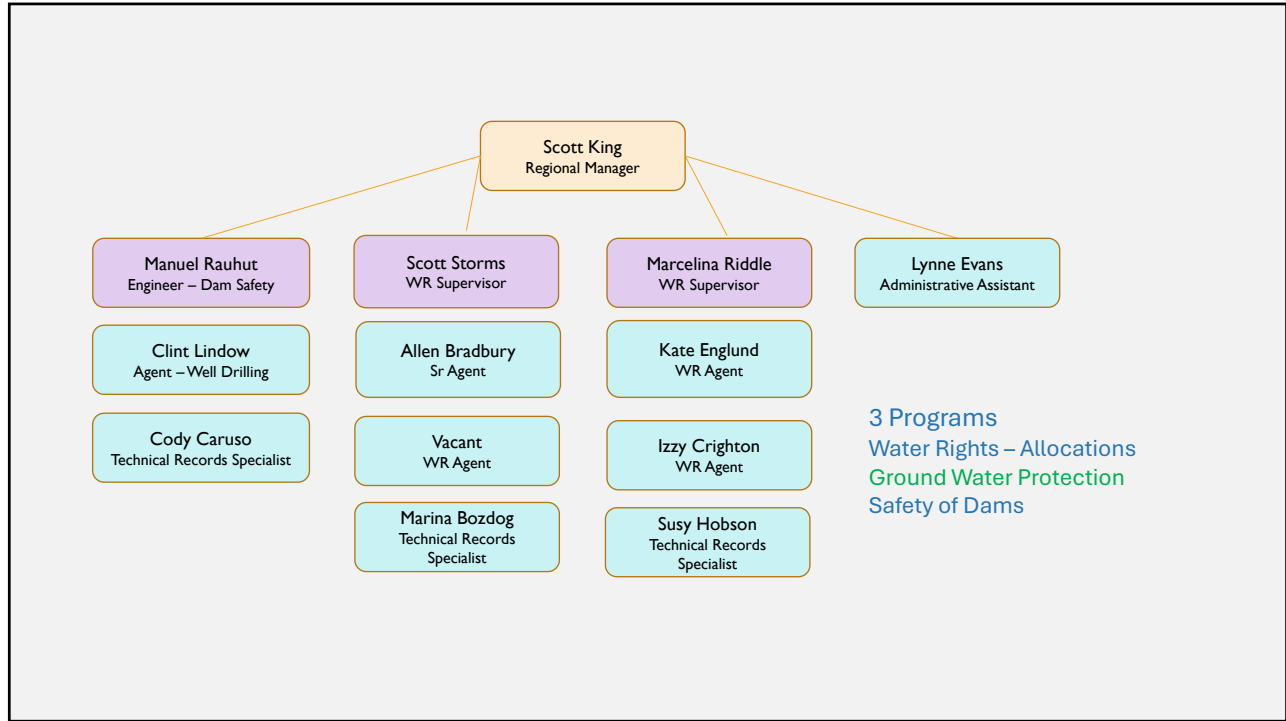
SCOTT KING - IDWR WESTERN REGIONAL MANAGER

- Raised in American Falls.
- Civil Engineering Degrees from Idaho State University (BS) and University of Idaho (MS)
- Joined IDWR Eastern Region in June 1990
- Positions in Energy Division, Water Distribution, Adjudication, Dam Safety
- Joined the private sector in 2004
- Returned to IDWR as Regional Manager in October 2025

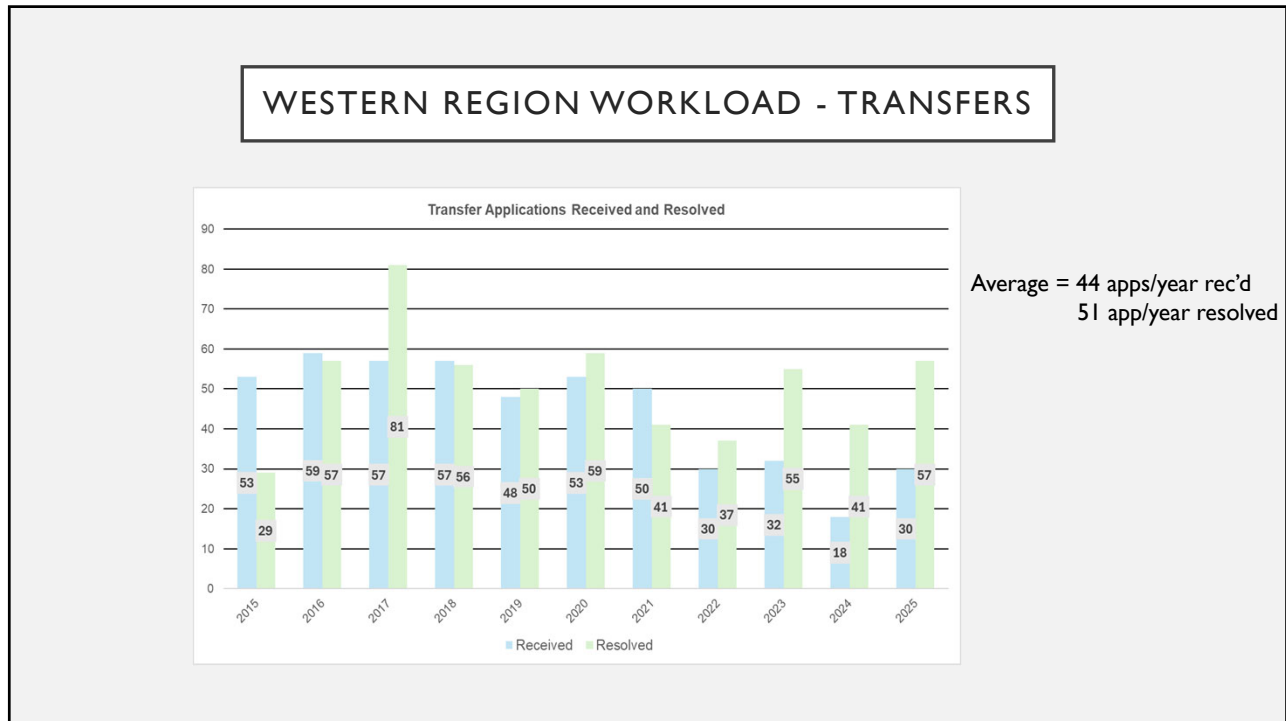


Black Canyon of the Gunnison National Park

2

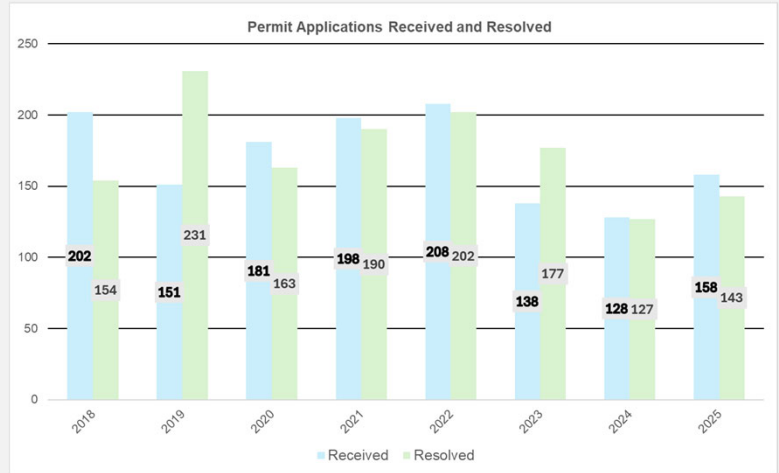


3



4

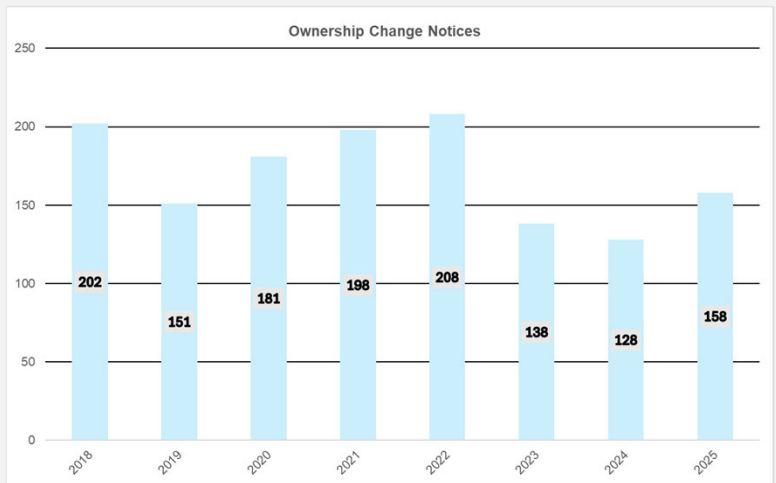
WESTERN REGION WORKLOAD - PERMITS



Average = 170 apps/year

5

WESTERN REGION WORKLOAD – OWNERSHIP NOTICES

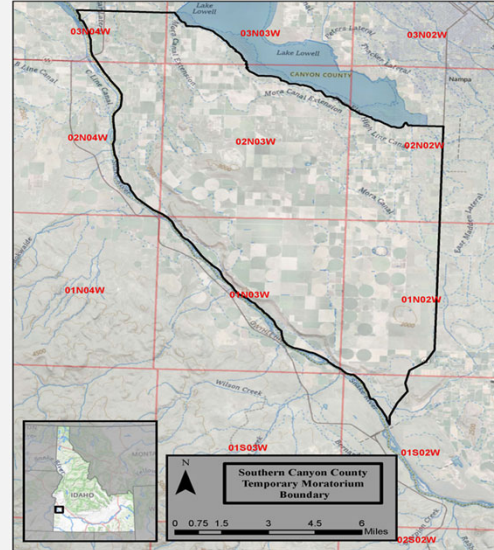


Average = 317 notices/year

6

WATER ALLOCATION

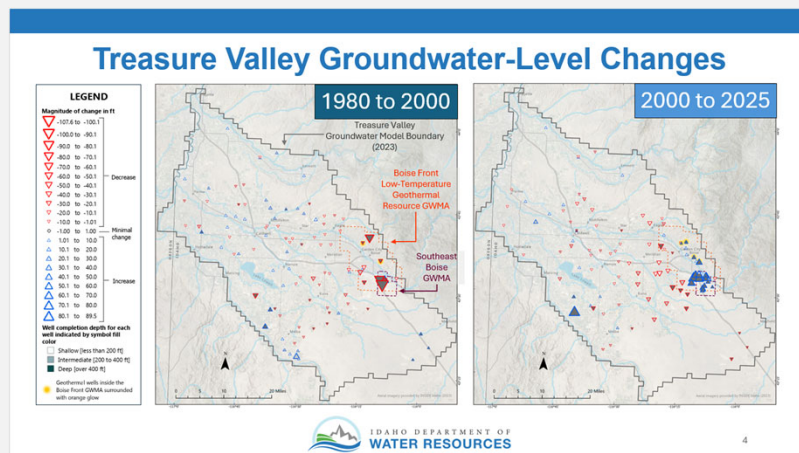
- Southern Canyon County
 - Denied petition for designation as a Critical Ground Water Area
 - Temporary Moratorium Order issued in March
 - Annual ground water levels tend to be stable or increasing
 - Areas with substantial seasonal fluctuations
 - Several concern areas identified
 - Data collection and WeSPAM model improvement



7

WATER ALLOCATION

- South Ada County recharge success and areas of decline
- Data center concerns
- Drain flows



8

GROUND WATER PROTECTION

- Western Region issued nearly 35% of all Drilling Permits during 2025
- The Cascade / Donnolly / McCall area is undergoing heavy development and well construction pressure

9

DAM SAFETY

- Western Region

10

Questions / Discussion



Natural Bridges National Monument
Jacob W. Frank, National Park Service

MEMO



To: Idaho Water Resource Board (Board)
From: Planning & Projects Bureau Staff
Date: May 15, 2026
Subject: Director's Report

INFORMATIONAL ITEM

This item is presented to provide the Idaho Department of Water Resources Director, Mathew Weaver, with an opportunity to share any updates or relevant information with the Board.

Attachments:

- *None*

MEMO



To: Idaho Water Resource Board (Board)
From: Planning & Projects Bureau Staff
Date: May 15, 2026
Subject: Non-Action Items for Discussion

INFORMATIONAL ITEM

This item is presented to provide an opportunity for discussion of non-action items and general Board updates.

Attachments:

- *None*