AGENDA

IDAHO WATER RESOURCE BOARD

Work Session for Board Meeting No. 5-19
May 9, 2019
8:30 a.m.
Red Lion Hotel
Conference Room
621 21st St.
LEWISTON

1. Roll Call
2. Rental Pools
3. Priest Lake Water Management Project Update
4. Bear Lake Update
5. Discussion for State Water Plan Assessment
6. Flood Management Grant Update
7. ESPA Managed Recharge Program Update
8. Mid-Snake Water Quality Monitoring and Modeling
9. Secondary Aquifer Planning Management and Implementation Fund FY 2020
10. Implementation of Red Tape Reduction Act
11. Boise River Feasibility Study
12. Lewiston Orchards Exchange Project Update

The Board will break for lunch at approximately 11:45 a.m.

12:30 p.m. – 4:00 p.m.: The Board will depart for a Field Trip Hosted by Lewiston Orchards Irrigation District and Nez Perce Tribe.

Transportation will be provided for Board Members, IDWR Staff, and invited guests.

Americans with Disabilities

The meeting will be held in facilities that meet the accessibility requirements of the Americans with Disabilities Act. If you require special accommodations to attend, participate in, or understand the meeting, please make advance arrangements by contacting Department staff by email nikki.regent@idwr.idaho.gov or by phone at (208) 287-4800.

Memorandum

To: Idaho Water Resource Board (IWRB)

From: Neeley Miller, Planning & Projects Bureau

Date: April 24, 2019

Re: Priest Lake Water Management Project Update

ACTION: No action needed at this time

Background

- As a result of limited water supply and drought conditions in northern Idaho in 2015 and 2016 it was difficult to maintain required pool levels and downstream flow in the Priest River during the recreational season.
- Priest Lake Water Management Study (Phase 1) was completed in February 2018. The study included the following recommendations:
    - Temporarily raising the surface level of Priest Lake 3 to 6 inches during the recreational season of dry years and integrating real-time streamflow data to allow more flexibility
    - Outlet structure improvements to the scour apron, modifying and strengthening gates, and electrical gate operation
    - Replace the current existing porous breakwater with an impervious sediment retention feature and dredging a portion of the Thororfare channel
- The Phase 1 estimated cost to implement recommendations is approximately $5 million ($2.4 million for outlet structure improvements, and $2.4 - $2.6 million for Thorofare improvements).
- On January 26, 2018 the IWRB passed a resolution asking the Idaho Legislature to repurpose the remaining balance of $2,419,600 in a 2005 CREP appropriation that had not been utilized and direct it towards the Priest Lake Water Management Project. In that resolution, the IWRB also indicated that it expects local contributions of at least $200,000 for the project.
- House Bill 677 passed and approved by the 2018 Legislature included 1) a $2.4 million transfer from the General Fund to the Revolving Development Account, and 2) $2,419,600 of funding in the Revolving Development redirected from the Conservation Reserve Enhancement Program (CREP) to be used for the Priest Lake Water Management Project. On March 27, 2018 Governor Otter signed the budget bill (FY 2019) which includes the funds for the Priest Lake Project.
- On May 18, 2018 the Board adopted a resolution authorizing $600,000 for Engineering and Design work associated with Phase 2 of the Priest Lake Water Management Project.

- Funding Status: $2.4 million + $2.4196 + $200K local contribution -$600K for preliminary engineering design & permitting = $4,419,600 remaining for Final Engineering Design, Bidding Solicitation, Construction and Construction Management.

- In July 2018 Mott MacDonald submitted to IWRB staff the final Priest Lake Water Management Project Phase 2 – Preliminary Engineering Design & Permitting Scope of Work.

- July 2018 – executed contract with Mott MacDonald for Phase 2: Preliminary Engineering Design & Regulatory Permitting

Phase 2 Schedule

Task 1 Data Collection – July to August, 2018

- Kickoff Meeting
- Existing & New Data Collection.
- Site Assessments – Dam, Wetlands, Erosion areas on lake, Thorofare.
- Design Recommendations – Refinement of recommendations from last phase and any new information gathered that could affect the scope of preliminary design.
- Basis of Design – Refinement and update from last phase.
- Steering Committee Meeting #1 – August

Task 2 Preliminary Engineering Design – September to May, 2019

- Regulator Agency & Stakeholder Engagement.
- Steering Committee Meeting #2 – September.
- Public Meeting/Open House – September 27.
- Permitting Level Plans – Draft December; Final March/April 2019.
- Updated Construction Cost Estimates – Draft December; Final April 2019.
- Dam Improvements & Dam Safety Report Submittal. Includes discipline reports (Geotechnical, Structural, Hydraulic, etc.) – Draft December; Final late March 2019.

Task 3 Regulatory Permitting – August 2018 to October 2019

- Consultation with Agencies regarding proposed concepts – September 2018.
- Permit Application Documents – Final April - June 2019.
- Permit Application Submission – Breakwater permit documents submitted April 2019; outlet structure permit documents pending in May/June.

Task 4 Public/Stakeholder Involvement – Ongoing

- Steering Committee Meeting #1 – August
- Steering Committee Meeting #2 – September 2018 (telecon).
- Public Open House –Thursday September 27, 2018 (in person, Priest Lake).
- Steering Committee Meeting #3 – October 2018.
- Steering Committee Meeting #4 – November 2018.
- Steering Committee Meeting #5 – June 2019.

Phase 3 Schedule

Final Engineering Design – TBD Based on status off regulatory permitting process. Likely starting late 2019.

Final engineering and design and services during bidding and construction are not included in the Phase 2 scope of work, but will likely include the following elements:

- Sealed plans, specifications, cost estimates.
- Final computation package for dam safety review.

Bidding and Construction

- Bidding is anticipated in 2020, with construction anticipated in the fall/winter of 2020/2021.

Memorandum

To: Idaho Water Resource Board (IWRB)

From: Brian Patton

Date: May 1, 2019

Re: Bear Lake Update

Jeff Raybould and Roger Chase will provide an update on Bear Lake with the Board.

Memorandum

To: Idaho Water Resource Board (IWRB)

From: Neeley Miller, Planning & Projects Bureau

Date: May 24, 2019

Re: Proposed State Water Plan Assessment

ACTION: No action needed at this time

Background

In 2012 the Idaho Water Resource Board (IWRB) formally adopted and submitted the 2012 Comprehensive State Water Plan (SWP) to the 2013 Idaho Legislature where it became effective. The Plan had not been revised since 1996. The IWRB conducted 40 public meetings over a period of five years in order to address the changing landscape of water in Idaho and incorporate public comment and review. Many of the 1996 policies underwent significant revisions and new policies were added to the Plan.

Additionally, at the request of Governor Otter, the IWRB was tasked with the development of a Sustainability Policy. In the summer of 2016 the IWRB received over 120 comments at the seven public hearings held throughout the state. In November 2017 the IWRB formally adopted and submitted the 2016 Sustainability Section to the 2017 Idaho Legislature where it became effective.

Next Steps

Staff recognizes the need for periodic review of individual policies, and particularly the implementation strategies and milestones to determine if any revisions are needed. The assessment is important because it will assist the IWRB in evaluating the effectiveness of policies as well as the implementation strategies and milestones.

Staff proposes the Water Resource Planning Committee undertake an assessment of the SWP over the course of the next year. Several Committee meetings would be needed to review and evaluate each section of the SWP. Upon completion of the assessment the Committee would provide a recommendation to the IWRB for a path forward.

Proposed Water Resource Planning Committee meetings:

- August 2019
- October 2019
- December 2019
- February 2020
- April 2020
- June 2020

Memorandum

To: Idaho Water Resource Board

From: Neeley Miller, Planning & Projects Bureau

Date: April 24, 2019

Re: Status Update on Flood Management Grants

Action: No action requested at this time

FY 2018 Flood Management Grant Program

House Bill 712 passed and approved by the 2018 Legislature included a FY 2018 transfer of $1,000,000 from the General Fund to the Water Management Fund in the Department of Water Resources budget. This funding was intended for a grant program administered by the Idaho Water Resource Board to provide competitive grants for flood-damaged stream channel repair, stream channel improvement, flood risk reduction, or flood prevention projects.

Staff received a total of eighteen (18) applications during the two rounds of funding. The applications and sponsor's grant documents were evaluated, scored, and ranked according to criteria adopted by Board. The Board authorized funding for fourteen (14) projects throughout Idaho for a total of $1,000,000.

See attached summaries for the status of each flood grant award.

FY 2019 Flood Management Grant Program

On April 8, 2019 the Governor signed HB 285 transferring $21M legislative appropriation to the IWRB's Water Management Account for the Anderson Reservoir Enlargement and/or MHAFB Water Supply Project ($20 M), the FY 2019 Flood Management Grant Program ($800K) and for the Mid-Snake Water Quality Monitoring and Modeling effort ($200K).

On April 18, 2019 the IWRB adopted by resolution the 2019 Flood Management Grant Criteria establishing an application deadline of June 21, 2019. The IWRB plans to award funds at the July Board meeting.

Attachment(s):
2018 Flood Management Grant Status/Summaries

FLOOD MANAGEMENT GRANT PROGRAM

RANKINGS AND PROJECT SUMMARIES

1. **FLOOD CONTROL DISTRICT NO.9 – Bypass Canal and Bannon Flood Mitigation Project**

   The IWRB approved a flood management grant of $90,000.00 to Flood Control District No.9 for design and construction of the $191,604.00 Bypass Canal and Bannon Ditch Flood Mitigation project on the Big Wood River. The project tasks include construction of instream treatments to prevent future flood damage, and stream channel erosion and alignment repairs. Construction commenced in late December, 2018, and the stream channel repairs and improvements were completed on January 25, 2019. IWRB's total grant disbursement was $84,851.70, which is $5,148.30 below the approved grant funding of $90,000.00.

2. **BLAINE COUNTY – Della View Subdivision Flood Mitigation Project**

   The IWRB approved a flood management grant of $121,331.00 to Blaine County for design and construction of the $306,334.00 Big Wood River and Della View Flood Reduction project. The Big Wood River improvement, activation of a side channel, was completed in November, 2018. The construction of the Phase 1 drainage improvements (Alternative 'B') in the Della View Subdivision was delayed due to winter weather, and substantial conflicts with existing utilities. Construction was rescheduled to begin in May or June once flood flows in the Big Wood River have receded, and completed in the summer. Construction of the Phase 2 drainage improvements (Alternatives 'A' & 'C'), was completed in April prior to anticipated flood flows.

3. **CASSIA COUNTY – Raft River Channel Project**

   The IWRB approved a flood management grant of $42,336.38 to Cassia County for design and construction of the $84,672.75 Reid Springs Road Bridge and Raft River Channel Flood Mitigation project, which consists of debris removal, stream channel repairs and improvements, installation of rip rap, and planting of willows for bank stabilization. The initial project goal was to implement the stream channel repairs and improvements for approximately 700-feet of the Raft River channel, but due to extensive permitting requirements, the footprint of the project was reduced to 70-feet upstream of the bridge. The stream channel repairs and improvements, including rip rap installation at the upstream portion of the bridge abutments, were completed in early December, 2018. IWRB's total grant disbursement was $8,075.59, which is $34,260.79 below the approved grant funding of $42,336.38.

4. **FLOOD CONTROL DISTRICT NO.10 – New Dry Creek Diversion Structure Project**

   The IWRB approved a flood management grant of $78,400.00 to Flood Control District No.10 for design and construction of the $156,800.00 New Dry Creek Flood Mitigation project. The project tasks include river bank repairs and armoring where severe bank erosion has occurred on the New Dry Creek diversion structure and Boise Greenbelt. Construction commenced in late

February, and in-river repairs and improvements, and repairs to the Boise Greenbelt were completed on March 12. IWRB's total grant disbursement was $62,156.50, which is $16,243.50 below the approved grant funding of $78,400.00.

5. FLOOD CONTROL DISTRICT NO.10 – Duck Alley Pit Capture Project

The IWRB approved a flood management grant of $153,550.00 to Flood Control District No.10 for design and construction of the $307,100.00 Duck Alley Pit Capture project. The project tasks include river bank reconstruction and stream channel improvements to redirect the river base flows back to the historic Boise River channel. Construction commenced in late February, and the in-water repairs and improvements were completed on March 8. Final site grading and cottonwood tree plantings were completed on March 15. IWRB's total grant disbursement was $105,470.43, which is $48,079.57 below the approved grant funding of $153,550.00.

6. FLOOD CONTROL DISTRICT NO.10 – Porter and Mulchay Project

The IWRB approved a flood management grant of $38,808.00 to Flood Control District No.10 for the $77,616.00 Porter and Mulchay Gravel Removal project. Approximately 4,300 cubic yards of gravel will be removed to reduce erosion to river banks and ranch lands, reduce out of bank flooding, and impacts to the operation of an irrigation diversion structure. Construction was completed in late January, 2019. IWRB's total grant disbursement was $35,250.77, which is $3,557.23 below the approved grant funding of $38,808.00.

7. CLEARWATER SOIL AND WATER CONSERVATION DISTRICT – Quartz Creek Project

The IWRB approved a flood management grant of $155,220.00 to the Clearwater Soil & Water Conservation District for design and construction of the $310,439.00 Quartz Creek Watershed project. The primary tasks for the flood reduction project was to replace sixteen (16) undersized and unsuitable drainage culverts to reduce the risk of flood damage to a major secondary road and to provide stability to the roadway which is heavily used for industrial and recreation uses. However, upon submittal of the final project report, a total of 21 drainage culverts were replaced by the contractor. Construction and installation of the proposed twenty-one (21) drainage culverts commenced in September, and the project was completed by the end of December. Total project costs were $325,876.47, which exceeded the project cost estimate of $310,439.00 by $15,437.47, which is likely due to the replacement of five additional culverts to the project. IWRB's total grant disbursement was the IWRB approved grant of $155,220.00.

8. FLOOD CONTROL DISTRICT NO.10 – Leighton and Wells Project

The IWRB approved a flood management grant of $22,000.00 to Flood Control District No.10 for the $44,000.00 Leighton and Wells Gravel Removal project. Approximately 14,500 cubic yards of gravel was scheduled to be removed to reduce erosion to the river bank and ranch lands, and to minimize out of bank flooding during high flows in the Boise River. However, due to the release of flood flows by the U.S. Army Corps of Engineers, the contractor was only able to

remove approximately 9,000 cubic yards. Construction was completed on March 15, 2019. Total project costs were $50,820.24, which exceeded the project cost estimate of $44,000.00 by $6,820.24. IWRB's total grant disbursement was the IWRB approved grant amount of $22,000.00.

9. <u>FLOOD CONTROL DISTRICT NO.11</u> – Tree and Debris Removal Project

The IWRB approved a flood management grant of $57,675.00 to Flood Control District No.11 for the $115,350.00 tree and debris removal project on the Boise River. The project will help to prevent out of bank flows, which result in flooding of agricultural land and river bank erosion, and impacts to the operation of irrigation diversion structures. However, the Joint Application for Permits between the US Army Corps of Engineers and the Idaho Department of Water Resources (404 Permit) was not approved due to a protest filed by the United States Fish & Wildlife Service. SPF Water Engineering and the District are coordinating with the USFWS on addressing their concerns, and a new Joint (404) Permit Application is scheduled to be submitted to the US Army Corps of Engineers by April 30. It is anticipated that work will not commence until fall.

10. <u>TWIN LAKES CREEK FLOOD CONTROL DISTRICT NO.17</u> – Flood Control and Stream Flow Monitoring Equipment Project

The IWRB approved a flood management grant of $7,750.00 to Twin Lakes Rathdrum Creek Flood Control District No.17 for design and installation of the Flood Control and Stream Flow Monitoring project. The equipment will provide accurate monitoring of lake levels, stream flows, and gate positions. The equipment installation commenced in December and was completed on January 7, 2019. Total project costs were $21,440.00, which exceeded the project cost estimate of $15,500.00. IWRB's total grant disbursement was the IWRB approved grant amount of $7,750.00.

11. <u>TWIN FALLS CANAL COMPANY</u> – East Perrine Pond/Wetland Project

The IWRB approved a flood management grant of $85,340.00 to the Twin Falls Canal Company for design and construction of the $591,800.00 East Perrine Pond/Wetland Flood Reduction project. A 24-acre flood mitigation pond and wetland facility was constructed to reduce the magnitude and duration of flooding of agricultural land and subdivisions downstream of the East Perrine Coulee. It is estimated that the project will remove 3,000 tons of sediment and associated nutrients annually prior to discharging to the Snake River. The removal of the sediments and nutrients will assist in meeting Clean Water Act TMDL water quality targets in the Snake River. The project was substantially completed in December, 2018. The project will be completed in the spring of 2019 with the completion of the wetland plantings. To date, a total of $64,005.00 of the IWRB approved grant funding of $85,340.00 has been disbursed to the Twin Falls Canal Company.

12. CITY OF POCATELLO – Pocatello Creek Bank Stabilization and Flow Control Project

The IWRB approved a flood management grant of $26,105.00 to the City of Pocatello for design and construction of the Pocatello Creek Bank Stabilization and Flow Control project. The goal of the project is to implement streambank stabilization and flow control measures along a 300-feet of Pocatello Creek to reduce flow velocities and down cutting of the banks. The City has completed the initial survey work and has hired a consulting firm to complete the design of the channel improvements in January. The design of the improvements for the project are anticipated to be completed and submitted to the City in April. During May and June, the City will perform a No-Rise analysis and apply for the required permitting. Construction of the streambank and channel improvements are scheduled to commence in June and be completed by the end of July, 2019.

13. NEZ PERCE SOIL & WATER CONSERVATION DISTRICT – Bear Creek Flood Reduction Project

The IWRB approved a flood management grant of $115,460.00 to the Nez Perce Soil & Water Conservation District for design and construction of the $556,681.00 Bear Creek Flood Reduction project. The goal of the project is to implement stream channel improvements and repairs to a 500-foot section of Bear Creek to reduce annual flooding. Proposed improvements include the installation of two rock weirs to stabilize the channel, and to replace an undersized bridge across Bear Creek to prevent damage to the public road and bridge, which provides the only access to State Highway 12 for the residents of the community of Peck. Survey work and was completed in February, and current project activity is primarily environmental permitting, right-of-way coordination, bridge design, and public meetings. Construction work is scheduled to commence in July and completed in November, 2019.

14. RIVERSIDE VILLAGE HOA – Boise River Diversion Project

The IWRB approved a flood management grant of $6,025.00 to the Riverside Village HOA for the design and construction of the Boise River Diversion project. The goal of the project is to implement stream channel stabilization measures and repair a diversion structure to maintain water right diversion flows to the Riverside Village development and the City of Garden City during the low river flows in late summer, fall, and winter. The project was completed in mid-December, 2018. The Eco blocks installed to increase the water level at the diversion structure will be removed each year at the beginning of the irrigation season. IWRB's approved grant amount of $6,025.00 was disbursed in January, 2019.

(Total Undisbursed Funds for Completed Projects - $107,289.39)

Memorandum

To: Idaho Water Resource Board (IWRB)

From: Brian Patton

Date: May 1, 2019

Re: Implementation of Red Tape Reduction Act

Mat Weaver will discuss the Implementation of Red Tape Reduction Act with the Board.

United States Department of the Interior
BUREAU OF RECLAMATION
Pacific Northwest Region
Snake River Area Office
230 Collins Road
Boise, ID 83702-4520

IN REPLY REFER TO:

SRA-1304
2.2.4.21

April 23, 2019

Mr. Roger Chase
Chairman
Idaho Water Resource Board
322 East Front Street
Boise, ID 83702

Mr. Roland Springer
Area Manager
Snake River Area Office
230 Collins Road
Boise, ID 83702

Subject: Boise River Basin Feasibility Study Status Update, Boise Project, Idaho

Dear Messrs. Chase and Springer:

The Idaho Water Resource Board (IWRB) is partnering with the Bureau of Reclamation to complete a feasibility study of new surface water storage options on the Boise River (Study). The Study includes an evaluation of small raises of the three large dams on the Boise River system: Anderson Ranch, Arrowrock, and Lucky Peak Dams. In March 2018, the Memorandum of Agreement was signed which formalized the working relationship between the IWRB and Reclamation. The total Study cost was originally estimated to be $6 million. The IWRB, as the non-federal sponsor, has committed to funding fifty percent of the Study costs up to $3 million.

Reclamation initiated the Study under Public Law 111-11, which authorized the study of projects to address water shortages in the Boise River system. This authorization has been extended to March 30, 2029. The Water Infrastructure Improvements for the Nation Act (WIIN Act, P.L. 114-322) provides a second authority for the Study, and potentially design and construction. The WIIN Act states that continuing authority only applies to projects determined to be feasible before January 1, 2021. Additionally, projects can only receive Federal funds under the WIIN Act if recommended by the Secretary of the Interior and designated by name in Federal appropriations legislation.

Reclamation received $500,000 in appropriations under P.L. 111-11 and $750,000 of WIIN Act funding in 2018 for the Study. Reclamation continues to pursue additional funding under the WIIN Act and through standard budget processes.

After initial technical review of the three dams, Reclamation concluded that an increase in reservoir storage at Arrowrock and Lucky Peak Dams is significantly more complicated than a raise of Anderson

Ranch Dam due to the physical and procedural complexities of each facility. Given the WIIN Act requirement to determine project feasibility before January 1, 2021, Reclamation recommended that Study efforts should be focused on the raise of Anderson Ranch Dam at this time. On July 27, 2018, the IWRB passed a resolution authorizing Reclamation to focus current Study analyses on a raise of Anderson Ranch Dam, with the understanding that the feasibility of small raises at Arrowrock and Lucky Peak Dams could be evaluated further in future analyses.

Project Status

- IWRB has issued $2.5M to Reclamation. Reclamation will speak to the project status of the Federal funding at the May IWRB meeting.
- Completed project activities include:
    - October 26, 2018 – LIDAR data and orthoimagery for all three reservoirs
    - November 8, 2018 – Public Open House held to introduce the study and provide information stations with subject matter experts to address questions from the public. Approximately 70 members from the public members were in attendance.
    - December 3-7, 2018 – Value Planning (VP) Study conducted with a final report delivered in February 2018.

      Reclamation requires VP studies on projects with estimated construction costs exceeding $10M. The VP Study provides a review of technical considerations related to the raise of Anderson Ranch Dam. Other topics such as project access, traffic routing, spillway modification, and construction phasing are also reviewed and documented. The findings of the VP Study will be considered in the project design and environmental compliance analyses.
    - December 25, 2018 – Reclamation awarded a contract to complete the Study and environmental compliance efforts to Sundance-EA Joint Venture.
    - April 30, 2019 – Land, structure, infrastructure, and real estate impact assessment (Rim Analysis) for Anderson Ranch Reservoir
- Ongoing project activities include:
    - May 2019 – Technical analyses of Anderson Ranch Dam, including geotechnical exploration and the preparation of a feasibility-level design, cost estimate, and risk assessment being performed by Reclamation's Technical Service Center in Lakewood, Colorado
    - June 2019 – Land, structure, infrastructure, and real estate impact assessment (Rim Analysis) for Arrowrock and Lucky Peak reservoirs
    - July 2019 – Reclamation is planning the public engagement schedule to initiate the formal National Environmental Policy Act process in July. Public scoping meetings are planned for Boise, Mountain Home, and Pine, Idaho.
    - Ongoing – IWRB is preparing to file a water right permit application for the potential additional storage.
    - Ongoing – IWRB has verbally shared its desire to contract with Reclamation for the new space and undertake a public process to identify users of the space. Reclamation and

IWRB are reviewing authorities and the approach for identifying potential spaceholders and contracting for space.

Key Milestones

Nov 2017 - Jan 2019	Initial screening of three potential dam raise alternatives and development of the Project Management Plan.
July 27, 2018	IWRB resolution passed authorizing Reclamation to focus current Study analyses on the Anderson Ranch Dam raise.
July 2018 - June 2020	Perform feasibility analysis of alternatives.
August 28, 2018	Legislative Infrastructure Tour held to discuss large water infrastructure projects in Idaho with representatives from Idaho's Congressional delegation.
November 8, 2018	Boise River Basin Feasibility Study Open House held.
December 3-7, 2018	Boise River Basin Feasibility Study Value Planning Study conducted.
April 2019	Final Rim Analysis Report for Anderson Ranch Reservoir received.
May 2019	Receive the final feasibility level design and cost estimates for the Anderson Ranch Dam raise.
August 2019	Conduct design, estimate, and construction review for the Anderson Ranch Dam raise.
July 2019 - June 2020	Perform the formal environmental compliance of alternatives.
July 2020 - Aug 2020	Undergo the Department of the Interior approval process of the recommended plan.

Thank you for this opportunity to provide an update on the Boise River Basin Feasibility Study project. If you have any questions, please contact me at 208-383-2222 or via email at msloan@usbr.gov.

Sincerely,

Megan Sloan
Project Manager

Memorandum

To: Idaho Water Resource Board (IWRB)

From: Neeley Miller

Date: May 1, 2019

Re: Lewiston Orchards Exchange Project Update

Representatives from Lewiston Orchards Irrigation district and Nez Perce Tribe will provide an update on the Lewiston Orchards Exchange Project for the Board.

LEWISTON ORCHARDS PROJECT
Water Exchange and Title Transfer

Update

2019 IWRB Presentation

Well Field Location

Pilot Well Construction

Pilot Well Construction

Bucket for Bucket Exchange

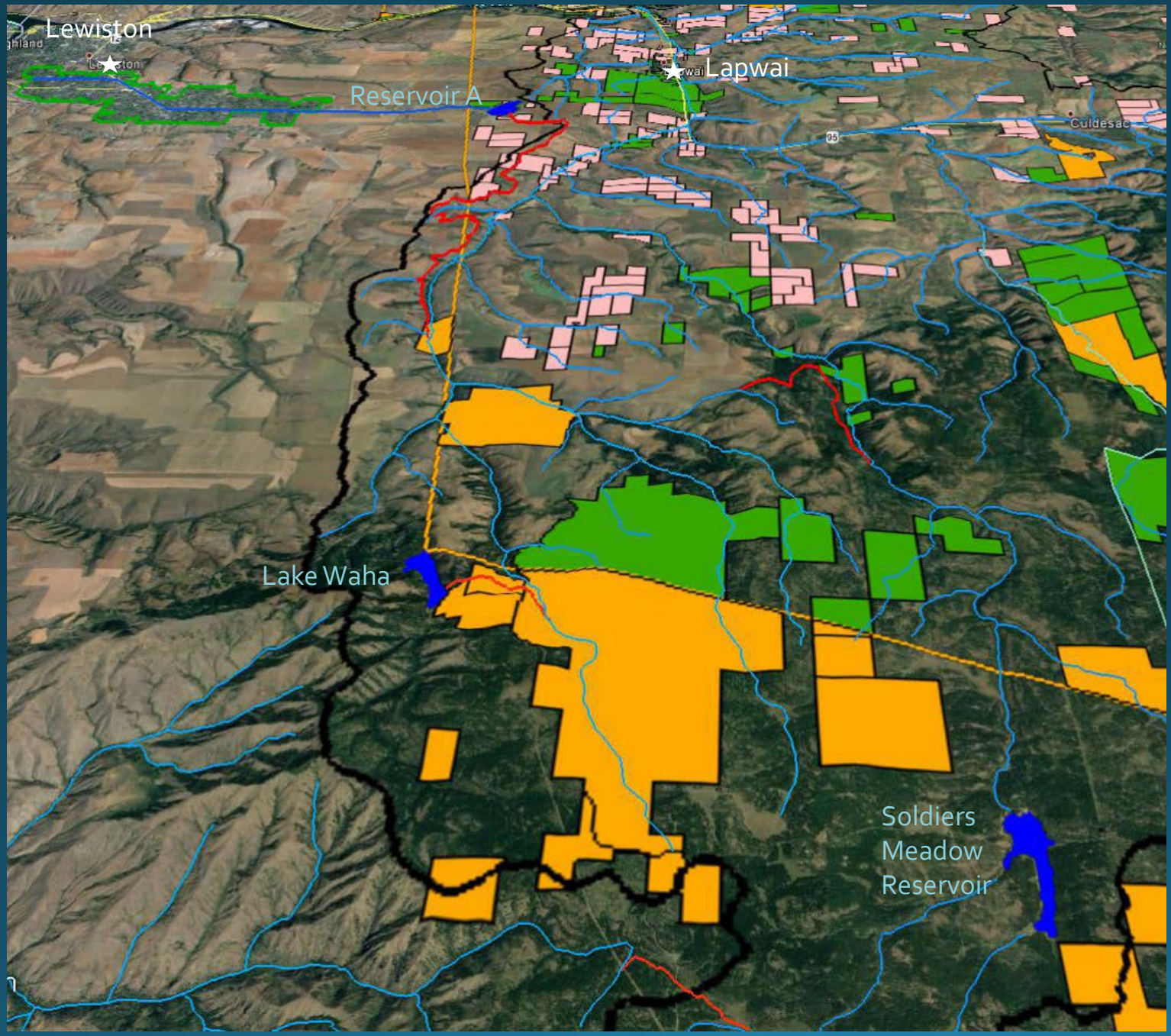
2019 - Current as of 05/07/2019										
Life Stage	Spawning			Juvenile Rearing						
Month	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov, Dec, Jan
Sweetwater Creek Base ByPass Flows	7.8*	7.8*	7.8	3.0	2.5	2.5	2.5	2.5	2.5	Bypass
Incremental Add-In	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Water Exchange Flows (total of 4.5 cfs)	2.2	2.2	1.0	2.0	1.0	1.0	1.0	1.0	1.0	
Total Sweetwater Creek ByPass Flows	**10.0***	**10.0***	**8.8**	**5.0**	**3.5**	**3.5**	**3.5**	**3.5**	**3.5**	
Webb Creek Base ByPass Flows	4.0*	4.0*	4.0	1.5	1.0	1.0	1.0	1.0	1.0	Bypass
Incremental Add-In	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Water Exchange Flows (total of 4.5 cfs)	2.3	2.3	2.3	5.5	3.8	2.0	2.0	1.5	1.5	
Total Webb Creek ByPass Flows	**6.3***	**6.3***	**6.3**	**7.0**	**4.8**	**3.0**	**3.0**	**2.5**	**2.5**	
Water Exchange Flows (total of 4.5 cfs)	**4.5**	**4.5**	**3.3**	**7.5**	**4.8**	**3.0**	**3.0**	**2.5**	**2.5**	
Total Flows Below Webb Confluence	**16.3***	**16.3***	**15.1**	**12.0**	**8.3**	**6.5**	**6.5**	**6.0**	**6.0**	

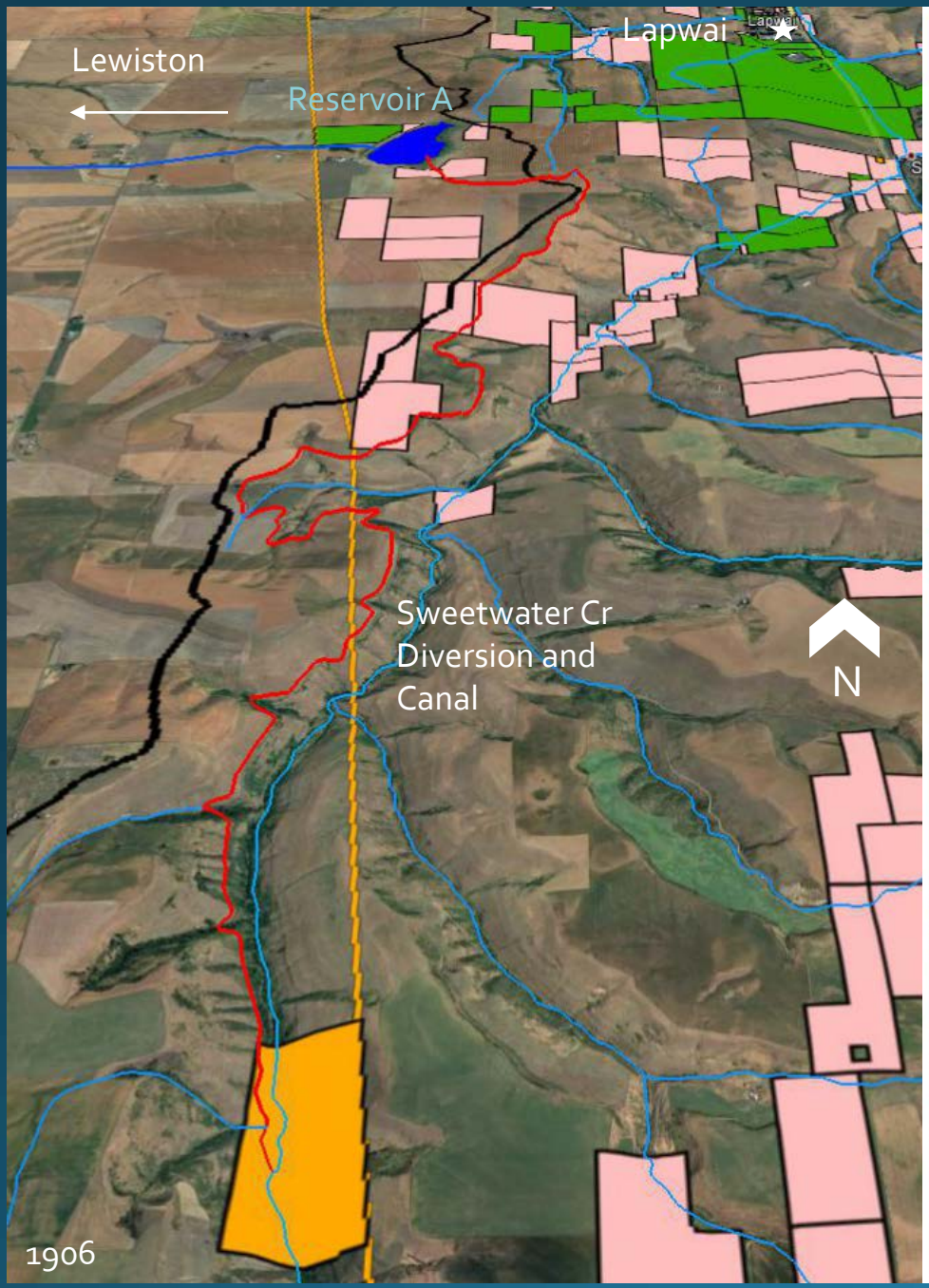
* Specified Stream Flow or all Stream Flow will be bypassed, whichever is less, measured below discharge for Lake Waha and below Soldiers Meadow Reservoir

* Water Subtraction from Combined Storage Accounting of Well 5 starts Nov. 1st of each year

Combined Storage - June 1st (Mann Lake & Soldiers Meadow)	<3,800	3,900	4,000	4,100	4,200	>4,250
Sweetwater Creek Incremental Increase	0.0	0.5	0.9	1.0	1.0	1.0
Webb Creek Incremental Increase	0.0	0.0	0.0	0.3	0.8	1.0

Todays Tour


Lewiston
Lapwai
Reservoir A
Culdesac
Lake Waha
Soldiers
Meadow
Reservoir
N


Lewiston
Lapwai
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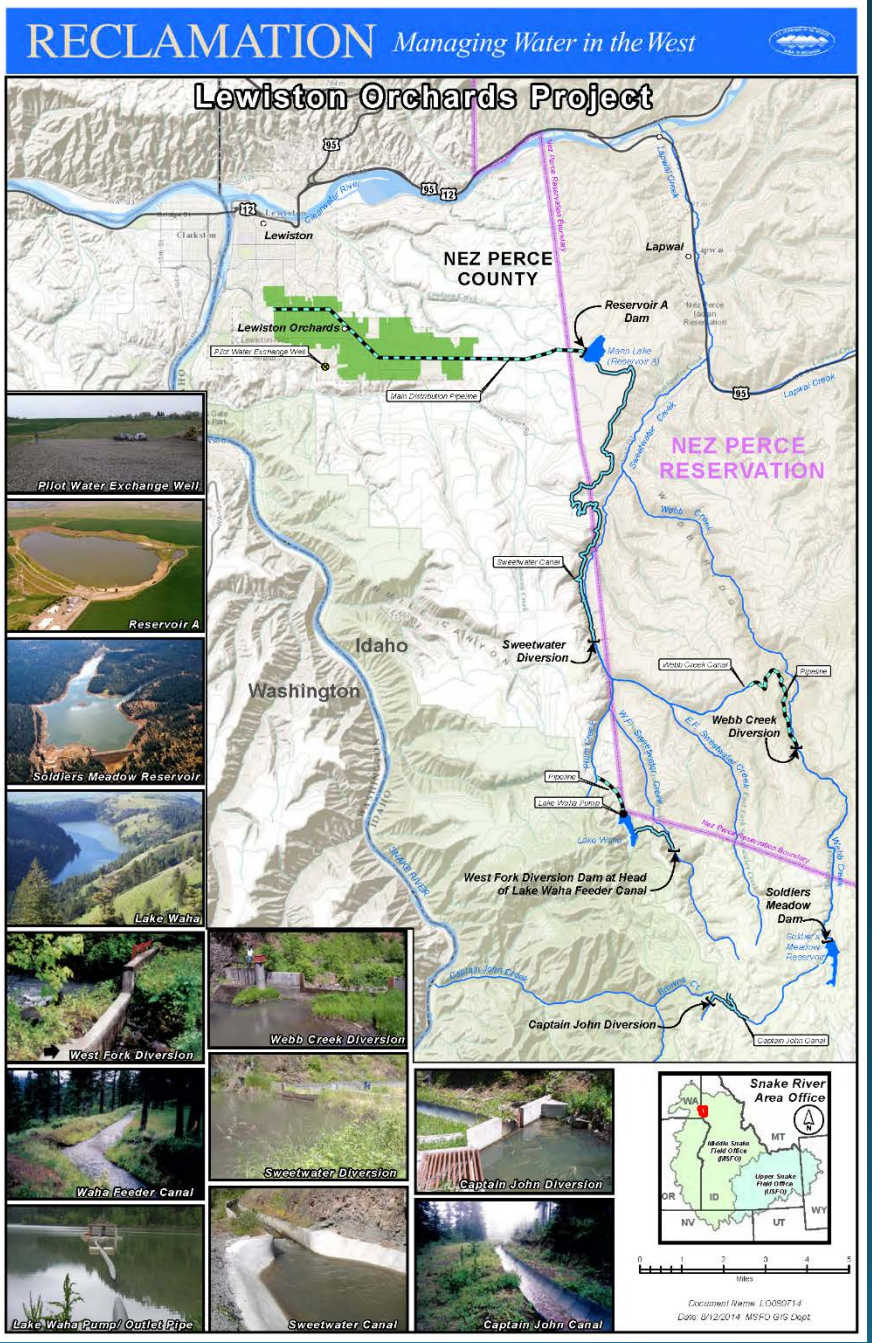
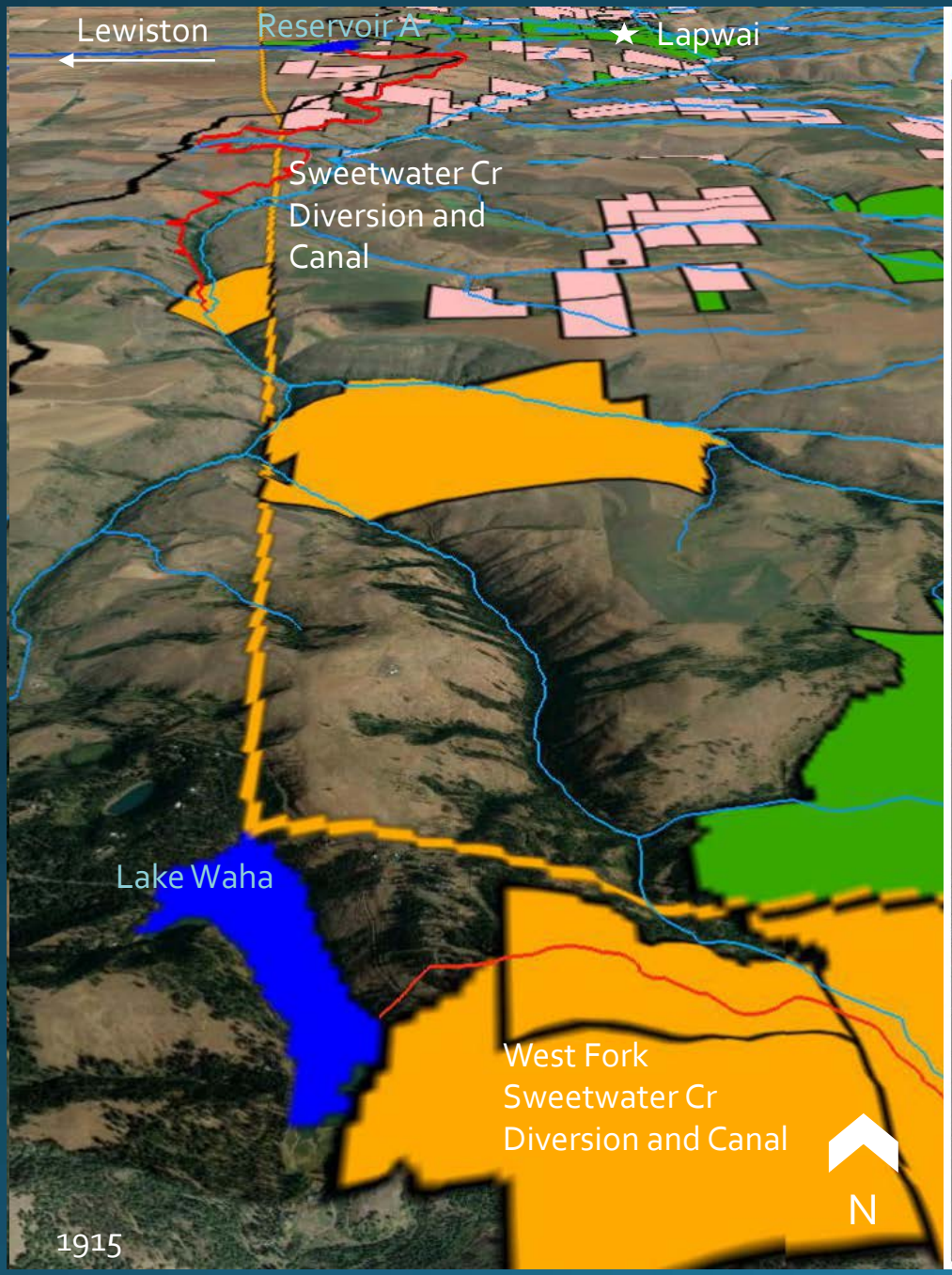
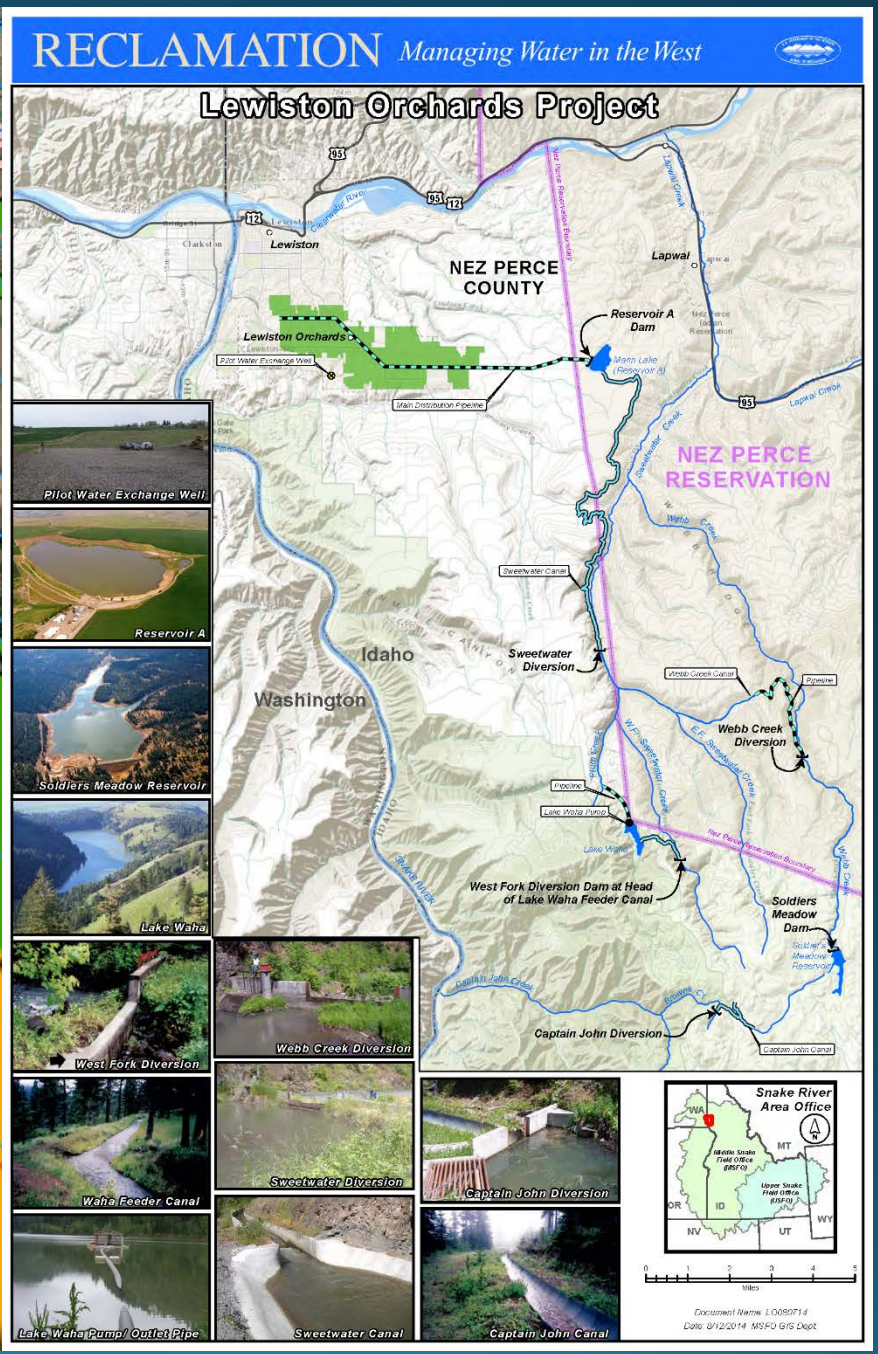

RECLAMATION Managing Water in the West
Lewiston Orchards Project
NEZ PERCE COUNTY
NEZ PERCE RESERVATION
Lewiston
Lapwai
Reservoir A Dam
Lewiston Orchards
Pilot Water Exchange Well
Main Distribution Pipeline
Sweetwater Canal
Sweetwater Diversion
Idaho
Washington
Webb Creek Diversion
West Fork Diversion Dam at Head of Lake Waha Feeder Canal
Soldiers Meadow Dam
Captain John Diversion
Pilot Water Exchange Well
Reservoir A
Soldiers Meadow Reservoir
Lake Waha
West Fork Diversion
Webb Creek Diversion
Waha Feeder Canal
Sweetwater Diversion
Captain John Diversion
Lake Waha Pump/ Outlet Pipe
Sweetwater Canal
Captain John Canal
Snake River Area Office


Lewiston
Reservoir A
Lapwai
Sweetwater Cr
Diversion and
Canal
Lake Waha
West Fork
Sweetwater Cr
Diversion and Canal
N
1915


RECLAMATION Managing Water in the West
Lewiston Orchards Project
NEZ PERCE COUNTY
NEZ PERCE RESERVATION
Lewiston
Lapwai
Reservoir A Dam
Lewiston Orchards
Pilot Water Exchange Well
Main Distribution Pipeline
Sweetwater Canal
Sweetwater Diversion
Idaho
Washington
Webb Creek Diversion
Webb Creek Canal
Pipeline
Lake Waha Pump
West Fork Diversion Dam at Head of Lake Waha Feeder Canal
Soldiers Meadow Dam
Captain John Diversion
Captain John Canal
Pilot Water Exchange Well
Reservoir A
Soldiers Meadow Reservoir
Lake Waha
West Fork Diversion
Webb Creek Diversion
Waha Feeder Canal
Sweetwater Diversion
Captain John Diversion
Lake Waha Pump/ Outlet Pipe
Sweetwater Canal
Captain John Canal
Snake River Area Office
Document Name: L0080714
Date: 8/12/2014 MSPO GIS Dept

Waha Lake Hydrology

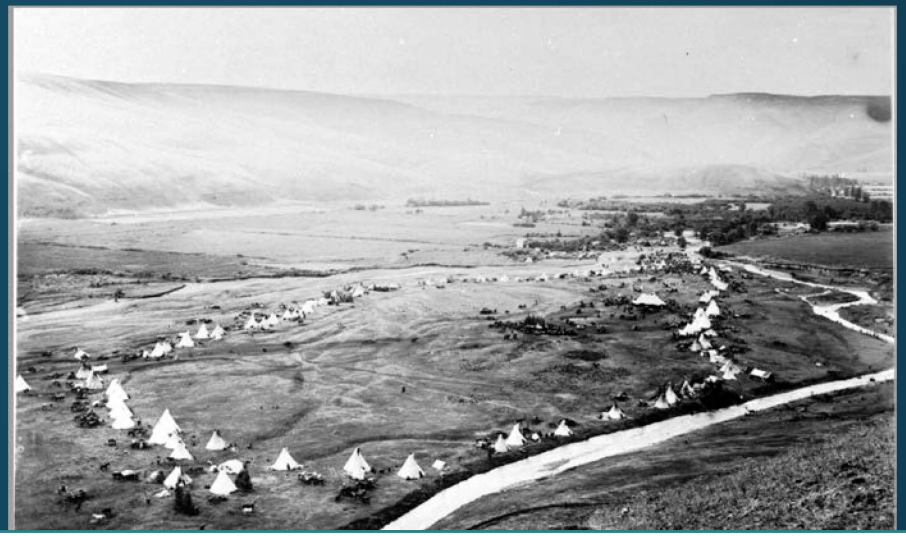
Sweetwater Springs and NPT Fish Hatchery

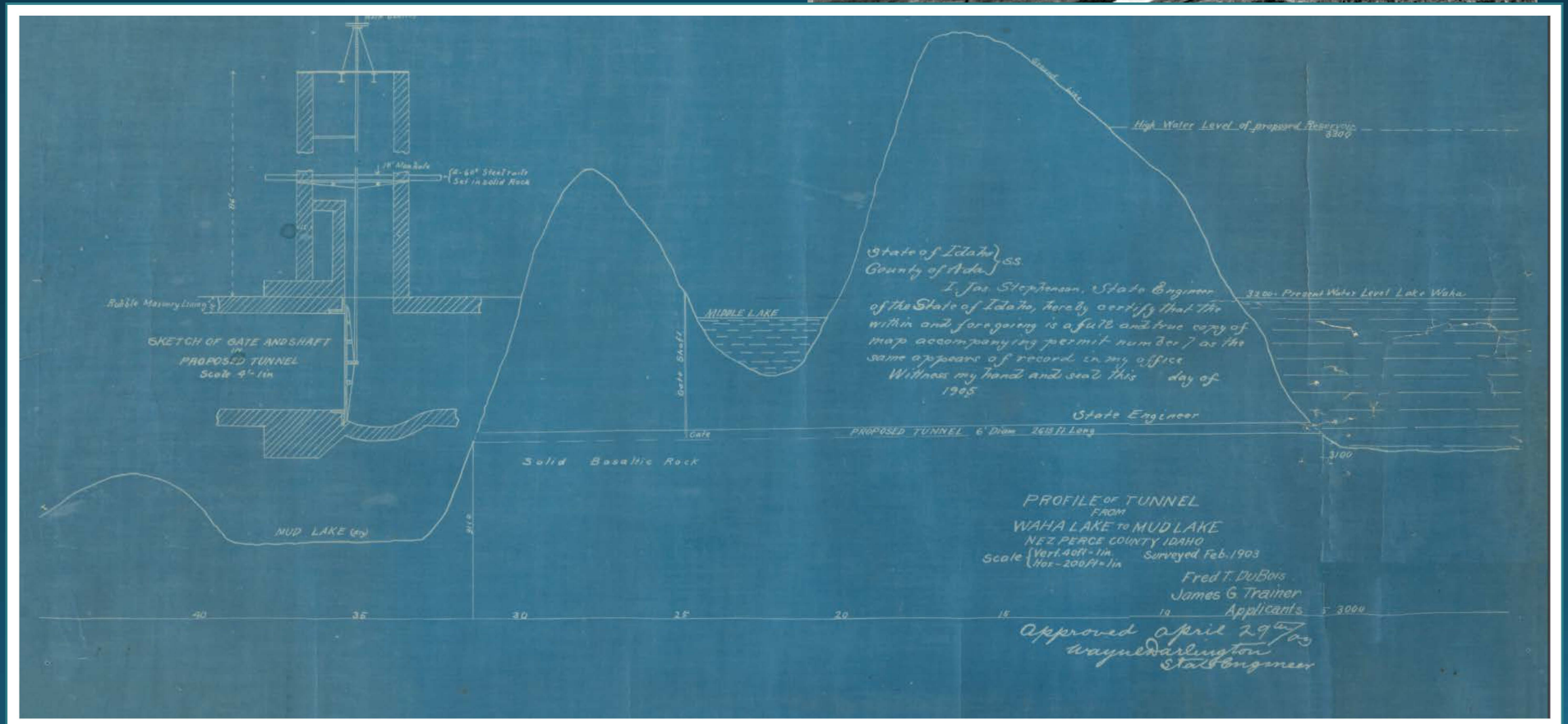
NPT New Water Right for Side Channel

NPT New Water Right for Side Channel

NPT New Water Right for Side Channel

Questions




SKETCH OF GATE AND SHAFT IN PROPOSED TUNNEL
Scale 4'=1in
Rubble Masonry Lining
MIDDLE LAKE
Gate Shaft
Gate
PROPOSED TUNNEL 6' Diam 2618 Ft Long
Solid Basaltic Rock
MUD LAKE (dry)
High Water Level of proposed Reservoir 3309
3200 - Present Water Level Lake Waha
3100
State of Idaho } SS
County of Ada }
I Jas Stephenson, State Engineer of the State of Idaho, hereby certify that the within and foregoing is a full and true copy of map accompanying permit number 7 as the same appears of record in my office
Witness my hand and seal this day of 1905
State Engineer
PROFILE OF TUNNEL FROM WAHA LAKE to MUD LAKE NEZ PERCE COUNTY IDAHO
Scale {Vert 40ft = 1in, Hor - 200ft = 1in
Surveyed Feb. 1903
Fred T. DuBois
James G Trainer
Applicants
Approved April 29th 03
Wayne Darlington
State Engineer