AGENDA COVER MEMORANDUM

Memorandum Date:	February 7, 2024
Meeting Date:	February 27, 2024

TO:	Board of County Commissioners
DEPARTMENT:	Public Works
PRESENTED BY:	Sasha Vartanian, AIC ECS Division Manager Becky Taylor, Senior Transportation Planner
AGENDA ITEM TITLE:	REPORT / Review of EWEB's Leaburg Decommissioning Action Plan (LDAP) and Discussion of Options for Leaburg Dam Road

I. MOTION

Not applicable

II. AGENDA ITEM SUMMARY

This item is a report from staff regarding transportation access options Lane County would like Eugene Water and Electric Board (EWEB) to consider as part of their project to decommission Leaburg Dam.

III. BACKGROUND/IMPLICATIONS OF ACTION

A. Board Action and Other History

There has been no prior Board Action on this item. On September 15, 2023, at the request of concerned citizens, Lane County staff and Commissioner Buch met with area residents and EWEB staff on Leaburg Dam Road to learn more about EWEB's project to remove Leaburg Dam. At the request of Lane County staff, EWEB presented the project to the Lane County Transportation Advisory Committee (TrAC) on September 27, 2023. On December 8, 2023, Lane County and EWEB staff met to coordinate at which time Lane County learned that EWEB would be starting an alternatives analysis to study transportation access options once Leaburg Dam is decommissioned. Lane County staff will share information known at this time, focusing on transportation options that we would like EWEB to explore in their alternatives analysis.

B. Policy Issues

Lane County has no formal role in the EWEB project at this time.

C. Board Goals

Lane County providing input to EWEB on transportation alternatives aligns with Lane County's

Strategic Plan: Priority 1 - Safe and Healthy County. Transportation access is key to safe and healthy outcomes.

D. Financial and/or Resource Considerations

As an EWEB project, there is currently no financial or resource obligation from Lane County. Lane County staff has served as a resource for concerned citizens to facilitate information with EWEB about the project. There could be financial implications for Lane County resulting from EWEB's project, such as: inheriting Leaburg Dam Road Bridge with associated upgrades and/or maintenance costs; establishing a connection either permanent or as evacuation between Leaburg Dam Road and Leashore Drive that would first involve right-of-way acquisition and then ongoing maintenance costs; and impacts to Goodpasture Bridge.

E. Health Implications

As an EWEB project, there are no direct health implications for Lane County, but we want to ensure public health via maintaining sufficient transportation access.

F. Analysis

Lane County would like to communicate preferences to EWEB for consideration in their upcoming alternatives analysis of transportation access options.

G. Alternatives/Options

Alternatives we would like EWEB to explore include:

1. Replacing Leaburg Dam Road Bridge
2. Upgrading Leaburg Dam Road Bridge
3. Establishing an evacuation road between Leaburg Dam Road and Leashore Drive

IV. RECOMMENDATION

Staff recommends all options, above, be explored.

V. TIMING/IMPLEMENTATION

Staff will communicate Lane County's preferences to EWEB for the alternatives analysis which should begin in the coming months. The analysis will inform the permitting process which will take multiple years to complete (2023 – 2032). The decommissioning of the dam is planned for 2033 to 2044. EWEB's Leaburg Decommissioning Action Plan is attached for reference.

VI. FOLLOW-UP

If the Board is interested, staff could ask EWEB to present more information about the project at a future Board meeting.

VII. ATTACHMENTS

EWEB's Leaburg Decommissioning Action Plan

MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

Rely on us.

TO: Commissioners Carlson, Barofsky, McRae, Schlossberg, and Brown

FROM: Lisa Krentz, Electric Generation Manager; Mark Zinniker, Generation Engineering Supervisor; Jeremy Somogye, Generation Engineering Planner IV; Adam Spencer, Communications Specialist III; and Robin Leighty, Regulatory Compliance Specialist

DATE: January 9, 2024

SUBJECT: Leaburg Decommissioning Action Plan (LDAP)

OBJECTIVE: Board endorsement and approval of initial LDAP

Issue
This memo provides the final draft of the Leaburg Decommissioning Action Plan, as outlined in the 2023 EWEB organizational goal #6:

"Consistent with the Record of Decision approved via Resolution 2302, complete an initial Leaburg Decommissioning Action Plan (LDAP), including identification of major project milestones through 2033, by coordinating with key public stakeholders, external agencies, and the Board of Commissioners and integrating with our near-term risk reduction measures to comply with FERC dam safety requirements."

Background
The purpose of the LDAP is to provide an overarching internal plan for progressing toward the decommissioning of the Leaburg Hydroelectric Project. It describes the regulatory process, including information needs, application requirements, and stakeholder engagement consistent with EWEB's mission-based goals and public engagement strategies. It identifies the federal, state, and local permits, as well as other approvals that are expected to be necessary.

Importantly, the LDAP does not answer many of the specific questions that have arisen in response to the Board's January 2023 decommissioning decision. Rather, it is intended to identify the important issues and provide a framework for how those issues will eventually be resolved in full detail.

The LDAP is a living document that will be periodically updated as additional information is developed or becomes available, assumptions are verified, uncertainties are resolved, and parallel, interdependent work, such as the Walterville Strategic Evaluation, are completed. A triple bottom line approach to decision-making, and the management principles established for the Leaburg Strategic Evaluation will be applicable throughout the implementation of the LDAP.

Discussion
In August, staff provided a draft LDAP to the Board for discussion which included three potential regulatory pathways (Integrated, Traditional, or Alternative process) that follow the Federal Energy Regulatory Commission's (FERC) Licensing/Relicensing guidance. However, information received since then has allowed staff to simplify the expected regulatory process. Decommissioning a

hydroelectric project is substantially different from relicensing a project with the expectation of operating it for another 40 to 50 years. Therefore, the regulatory process for decommissioning Leaburg can be completed through a license amendment without the need to choose from one of the three pathways. Our approach will be to submit a license amendment application to separate the Leaburg Development from the Leaburg-Walterville joint operating license, thus allowing the Leaburg development to be decommissioned while the Walterville Development continues to operate.

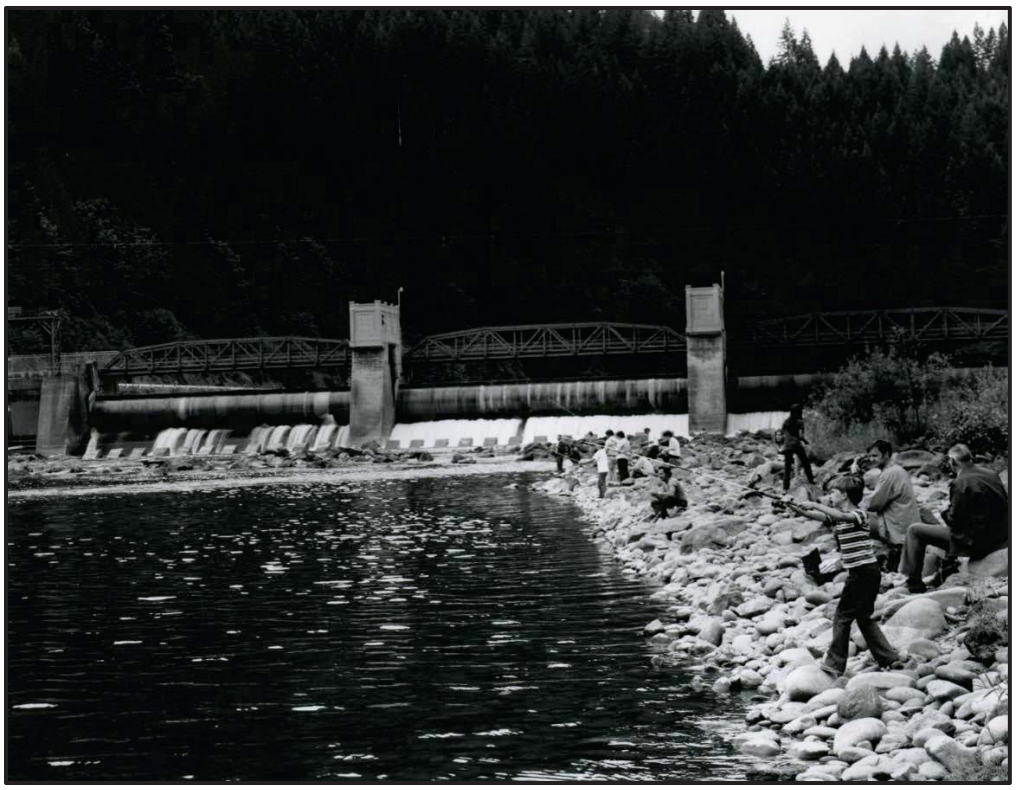
Recommendation and Requested Board Action
Management requests feedback on the LDAP and recommends approval of the initial draft as presented.

Leaburg Decommissioning Action Plan

for

Leaburg–Walterville Hydroelectric Project

FERC Project Number: P-2496-OR



Prepared by Generation Division

Eugene Water & Electric Board

December 2023

EWEB

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Appendix A. Federal Energy Regulatory Commission and the Leaburg-Walterville Hydroelectric Project

Appendix B. Near-Term Risk Reduction Measures

Appendix C. Regulatory Environment

REVISION HISTORY LOG

Rev. No.	Date	Section(s)/ Page No(s).	Reason, Details of Revision	Approved By
1	12/29/23	All	Initial draft	Lisa Krentz

LIST OF ACRONYMS

Board	EWEB Board of Commissioners
cfs	Cubic Feet per Second
FERC-D2SI	Federal Energy Regulatory Commission, Division of Dam Safety and Inspections
ODEQ	Oregon Department of Environmental Quality
FERC-DHAC	Federal Energy Regulatory Commission, Division of Hydropower Administration and Compliance
EA	Environmental Assessment
EIS	Environmental Impact Statement
ESA	Endangered Species Act
FERC or Commission	U.S. Department of Energy, Federal Energy Regulatory Commission
LDAP	Leaburg Decommissioning Action Plan
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMFS	National Oceanic and Atmospheric Administration, Fisheries (National Marine Fisheries Service, also known as NOAA Fisheries)
ODFW	Oregon Department of Fish and Wildlife
SHPO	Oregon State Historic Preservation Officer
USFWS	U.S. Department of the Interior, Fish and Wildlife Service

EXECUTIVE SUMMARY

The Eugene Water& Electric Board (EWEB) is the owner and operator of the Leaburg-Walterville Hydroelectric Project (FERC No. 2496) (Project). The Project license expires on March 31, 2040. The 23.89 MW Project consists of the Leaburg Development and the Walterville Development. The Leaburg Development has been operating as a stormwater conveyance facility since October 2018, when observations of internal erosion of the canal embankments prompted EWEB to dewater the canal and cease power generation. Following a comprehensive risk assessment, EWEB determined that the necessary level of investment to resolve dam safety issues would be considerable. EWEB then conducted a strategic evaluation of long-term options for Leaburg, resulting in a report and recommendations to the EWEB Board of Commissioners (Board). The Board unanimously approved the recommendations put forth per Resolution 2302 on January 3, 2023, which included direction for staff to develop a plan for decommissioning.

This document, the Leaburg Decommissioning Action Plan (LDAP), aims to fulfill the Board's direction. The LDAP outlines EWEB's approach for decommissioning the Leaburg Development through the FERC license amendment process to remove the Leaburg Development from the joint operating license for the Leaburg and Walterville Developments. The Walterville Development would continue to operate. It describes the regulatory process for amending the license, including the information needs, application requirements, and stakeholder engagement consistent with EWEB's mission-based goals, and internal and public engagement strategies. The federal, state, and local permits and other approvals expected to be necessary for implementation are identified.

The LDAP is a living document that will be periodically updated as additional information is developed or becomes available, assumptions are verified, uncertainties are resolved, and parallel, interdependent work, such as the Walterville Strategic Evaluation, are completed. A triple bottom line approach to decision-making, and the management principles established for the Leaburg Strategic Evaluation will be applicable throughout the implementation of the LDAP.

1 INTRODUCTION

The Eugene Water & Electric Board (EWEB) is Oregon's largest customer-owned utility, providing water and electricity to Eugene, and to parts of Springfield and the McKenzie River Valley. EWEB is the owner and operator of the Leaburg-Walterville Hydroelectric Project (Project), FERC No. 2496. The Federal Energy Regulatory Commission (FERC) issued a 40-year license to operate the Project effective April 1, 2000; which expires on March 31, 2040. The Project consists of the Leaburg Development and the Walterville Development. The Project boundary encompasses 692 acres along with the hydroelectric facilities and all lands necessary for operation and maintenance and other Project purposes (e.g., public recreation, protection of environmental resources)[1]. Of this area, approximately 64 acres are for the primary transmission lines. The history of the Project and the current FERC license is provided in Appendix A.

1.1 Leaburg Development

The Leaburg Development is described as follows: (1) a 345-acre-foot reservoir at a normal elevation of 742.5 feet mean sea level (msl); (2) a reinforced concrete diversion dam, 400-feet-long and 22-feet-high, including intake gates, a sluiceway, three 100-foot-long, 9-foot-high spillway roll gates, and fish ladders; (3) a 5-mile long, 15-foot-deep cut and fill unlined canal with a fish screening system at the upper end; (4) a forebay with two reinforced concrete pipe penstocks, 260-feet-long and 12-feet in diameter; (5) a reinforced concrete powerhouse, 32-feet-wide, 82-feet-long, and 40-feet-high, housing two vertical Francis turbine-generator units with a combined installed capacity of 15.9 megawatts (MW); (6) an 1,100-foot-long, 80-foot-wide tailrace (7) the Leaburg switching station; (8) the Holden Creek substation; (9) an 11.5-kilovolt (kV), 0.43 mile generation line connecting the Leaburg switching station to the Holden Creek substation; and (10) appurtenant facilities. The Project boundary of the Leaburg Development encompasses approximately 284 acres. The Leaburg Development operates on a base load, run-of-river basis, and under normal conditions up to 2,500 cubic feet per second (cfs) can be diverted from the McKenzie River into the Leaburg Canal.

1.2 Walterville Development

The Walterville Development is described as follows: (1) a 4-mile-long, 14-foot-deep canal with headworks equipped with two 13-foot-high, 20-foot-wide Tainter gates; (2) a forebay with a 16.5-foot-high, 16.5-foot wide, and 100-foot-long concrete penstock; (3) a structural steel powerhouse 37 feet wide by 88 feet long and 44.5 feet high, housing a single 8.0 MW Kaplan turbine-generator unit; (4) a 2-mile-long, 80-foot-wide tailrace; (5) the Walterville substation; (6) a 6.57-mile segment of 69-kV transmission line between the Walterville substation and the Hayden Bridge substation and a 115-kV segment of the B-1 transmission line extending 0.29 mile between the Hayden Bridge substation and Hayden Bridge Switching Station; and (7) appurtenant facilities. The Project boundary for the Walterville Development encompasses

[1] 18 CFR § 4.41(h)(2)

approximately 345 acres. The Walterville Development operates on a base load, run-of-river basis, and under normal conditions, up to 2,577 cfs can be diverted from the McKenzie River into the Walterville Canal.

1.3 Current Project Conditions and Operations

In September 2018, internal erosion was observed along the embankment of the Leaburg Canal. At the direction of the FERC Division of Dam Safety and Inspections (D2SI)-Portland Regional Office (PRO), on October 10, 2018, EWEB ceased power generation and dewatered the canal to limit further risk and has subsequently been limiting operations of the canal to stormwater conveyance. Leaburg Dam continues to impound water, with water surface elevations maintained consistent with normal operations to ensure safe and reliable operation of fish passage and recreation facilities, and for the provision of water to the Leaburg Hatchery. EWEB continues to operate and maintain the facilities of the Leaburg Development in accordance with the FERC license, while safety issues are addressed.

EWEB continues to operate the Walterville Development in compliance with the FERC license. In 2022, a five-year periodic independent consultant inspection was completed, and the results submitted to the FERC-D2SI. The results identified several Potential Failure Modes (PFMs) that require further evaluation. EWEB has submitted a plan and schedule for the recommended work to D2SI.

After ceasing generation at the Leaburg Development, EWEB completed a comprehensive risk assessment to better understand the level of investment necessary to ensure long-term, safe, and reliable operation. EWEB determined that the necessary level of investment would be considerable.

Following the risk assessment, EWEB conducted a strategic assessment and triple bottom line (social, environmental, and economic) analysis of long-term options for the Leaburg Development. The November 29, 2022 strategic assessment and the November 30, 2022 "Management Recommendation: Future Disposition of the Leaburg Hydroelectric Project," were presented to the EWEB Board on December 6, 2022.

The Board unanimously approved a resolution regarding the future disposition of the Leaburg Hydroelectric Project, Resolution 2302, on January 3, 2023. Resolution 2302 directed the General Manager or delegee to develop, for Board consideration, a Leaburg Decommissioning Action Plan, consistent with the management recommendation. The recommendation included, among other things:

- Permanently discontinuing electric generation at the Leaburg Development (Leaburg decommissioning)
- Modifying canal infrastructure to safely convey tributary stream flows, including storm water, to the McKenzie River (near-term risk reduction)

- Completing a triple bottom line analysis to inform directional decisions (relicense or decommission) associated with the Walterville Development (Walterville Strategic Evaluation)
- Collaborating with the County to resolve transportation access for properties currently relying on the Leaburg Dam bridge (Lane County's Leaburg Dam transportation evaluation)

The referenced documents and additional background information, as well as status and updates related to the Leaburg decommissioning decision are available at https://www.eweb.org/projects/mckenzie-river-hydro-projects/decommissioning-the-leaburg-hydroelectric-project.

2 DECOMMISSIONING ACTION PLAN OVERVIEW

The LDAP describes the actions, activities, and regulatory path that EWEB will pursue in accordance with the Board's Resolution 2302 to decommission the Leaburg Development. The LDAP does not address the questions, comments, and issues raised by the public subsequent to the Board's decision; nor is the LDAP intended to provide a detailed scope, schedule, or budget, or to describe detailed decommissioning options, alternatives, or methods. These details will be developed during future phases of the overall effort.

The LDAP will be a living document, serving as a dynamic roadmap that will require periodic updates as new information becomes available, assumptions are verified, and uncertainties are resolved.

2.1 Basis for Decision Making

In the implementation of the LDAP, EWEB staff will be mindful of the following principles and decision-making criteria, which were established for the Leaburg Strategic Evaluation:

- Triple bottom line approach
- Management recommendation principles
    - Consistency with EWEB mission and values
    - Alignment with EWEB customer-owned priorities
    - Mitigation of risk and uncertainty
    - Minimization of long-term impacts and obligations

2.2 LDAP Management

In the event of a significant change in baseline assumption(s) or if an unforeseen high impact event occurs, staff will inform and discuss with the Board so that they can determine if any change in direction is needed. Staff will also inform and educate current and future Board members of preceding and ongoing evaluations, findings, decision-making criteria, resultant decisions, and other information of interest pertaining to the current decommissioning trajectory.

Similarly, staff will monitor for any significant changes in triple bottom line understandings and report new information that could lead to potential updates in guidance. To the extent that changes in the LDAP impact regulatory commitments and schedules, EWEB will communicate these changes to the FERC-DHAC and FERC-D2SI.

2.3 Interdependencies

Resolution 2302 recommends three actions that will occur in parallel with planning for Leaburg decommissioning:

- Near-term risk reduction
- Walterville Strategic Evaluation
- Lane County's Leaburg Dam transportation evaluation

The outcomes of each parallel action may affect details of the future direction and decisions regarding the Leaburg decommissioning. While acknowledging these interdependencies, the LDAP does not speculate on their future outcomes or other impacts; however, the LDAP will be adjusted as necessary in response to new information. These parallel actions are described in further detail below and the timelines for these activities are outlined in Section 8.

2.3.1 Near-Term Risk Reduction Measures

Near-term risk reduction measures will mitigate the dam safety risks associated with conveying tributary and stormwater flows in the power canal prior to the implementation of the as-yet-to-be-developed decommissioning plan[2]. Completing the near-term risk reduction measures is required by the FERC-D2SI with the expectation that the work will be completed as soon as reasonably practical. EWEB staff are approaching near-term risk reduction with the following goals in mind:

- Implement these measures separately from decommissioning while utilizing the results of the work to inform the decommissioning plan.
- Develop near-term risk reduction design configurations that align with the ultimate decommissioning strategy and design.
- Develop a data collection program for permit authorizations that ensures efficiencies and, to the extent possible, is not duplicative of work required for future decommissioning activities.
- Ensure that the FERC license-related actions associated with near-term risk reduction measures, if any, align with the overall decommissioning strategy.

Appendix B provides summaries of the near-term risk reduction measures currently planned for the Leaburg Development.

[2] The decommissioning plan is a formal regulatory document required by the FERC for those facilities proposed to be decommissioned.

2.3.2 Coordination on Transportation Access Issues

Leaburg Dam currently provides access to residents and landowners on the south side of the McKenzie River, which the removal of Leaburg Dam would eliminate. EWEB is not a transportation utility and does not make transportation decisions. However, EWEB is committed to coordinating with Lane County Public Works and the Oregon Department of Transportation in resolving access issues resulting from dam removal. Post-dam transportation access will be reflected in EWEB's proposed decommissioning plan.

2.3.3 Walterville Strategic Evaluation

Resolution 2302 calls for a strategic evaluation and triple bottom line analysis of the Walterville Development to guide decisions with respect to relicensing or decommissioning this facility at the end of the current license term. This work will be a separate and parallel effort; however, staff are prepared to adjust the LDAP in accordance with the outcome of the Walterville analysis. Concurrently developed information to support the decommissioning of Leaburg will remain valid and applicable to any modified regulatory path. Development of Leaburg-specific information will be necessary regardless of the long-term plan for Walterville.

3 REGULATORY PROCESS

A non-capacity amendment to the joint Leaburg-Walterville FERC license will be required to remove the Leaburg Development from the license and decommission the facility. Resolution 2302 calls for a strategic evaluation and triple bottom line analysis of the Walterville Development to guide decisions with respect to relicensing or decommissioning this facility at the end of the current license term. This work will be a separate and parallel effort; however, staff are prepared to adjust the LDAP in accordance with the outcome of the Walterville analysis. A license amendment would allow the Walterville Development to continue operating for the duration of the existing FERC license. However, as described in Section 3.6, below, there are regulatory risks during the license amendment process that may affect the operation of Walterville.

3.1 Proposed Action

EWEB will prepare a formal, proposed action summarizing the plans and activities associated with the license amendment and decommissioning. FERC-DHAC will evaluate the effects of the proposed action compared to the baseline (existing conditions). The details of the proposed action will develop over time, but for the purposes of this document, the proposed action is described below.

> To address directives from the FERC-D2SI to resolve identified dam safety risks with the Leaburg Canal, the proposed action is an amendment to the license to remove the Leaburg Development from the license and decommission its facilities. EWEB proposes to remove the Leaburg Dam, return the McKenzie River to a free-flowing waterway, and

establish hydraulic connections between adjacent tributaries and the McKenzie River that have been historically collected and conveyed by the Leaburg Canal.

By the time the FERC-DHAC considers the proposed action, EWEB will have identified plans, methods, and schedules for decommissioning, for addressing elements such as removal, modification, or other disposition of facility elements, for restoring the project area, and for avoiding and minimize adverse effects during implementation.

3.2 Application for Non-Capacity Amendment to License

EWEB will request a non-capacity amendment of the license from the FERC-DHAC to remove the Leaburg Development from the Project license for decommissioning while continuing to operate the Walterville Development. The application process involves consultation, data collection, and development of a draft and final application. The application will be comprised of an Initial Statement, revised exhibits, an environmental analysis, and a decommissioning plan. These documents will be developed to support the FERC-DHAC's evaluation of the proposed action, consistent with the National Environmental Policy Act (NEPA). Ultimately, for a license amendment and decommissioning to be implemented, the FERC-DHAC will need to review, analyze, and authorize the removal of the facilities as described in the application for license amendment. The FERC's authority to remove the Leaburg facilities from federal jurisdiction stems from the Federal Power Act (FPA). The FERC is subject to NEPA, because authorizing the license amendment and Leaburg removal is a major federal action. Much of the FERC-DHAC's analyses, and the information that EWEB will develop and provide, will be based on a clear description of the proposed action.

FERC's NEPA document (either an environmental assessment or environmental impact statement) will incorporate an environmental effects analysis as well as necessary analysis under Section 106 of the National Historic Preservation Act (NHPA) and Section 7 of the Endangered Species Act (ESA). EWEB will file a request to the FERC-DHAC for designation as a non-federal representative for the purposes of developing this information and consulting with the appropriate agencies.

3.2.1 Exhibits and Supporting Material

The License amendment application will include updated exhibits that describe the remaining Walterville Development. These include:

Exhibit A: Project description (revised to include Walterville only)

Exhibit B: Statement of Project operation and resource utilization (revised to include Walterville only)

Exhibit E: Environmental report (discussed in the following section)

Exhibit F: Project drawings, general design drawings of the principal project works (revised to include Walterville only)

Exhibit G: Project boundary, and principal Project features (revised to show the reduced area)

Appendices to Application

- Biological Assessment (ESA)
- National Historic Preservation Act report
- Consultation record

3.2.2 Environmental Report

An Exhibit E (Environmental Report) is required to be submitted with the application for license amendment. For the proposed amendment and decommissioning, EWEB will prepare this report to serve as an applicant-prepared environmental assessment. Exhibit E will primarily discuss the anticipated effects of the proposed action on resources within the existing Project boundary. A minor portion of the report will identify the anticipated effect of the removal of Leaburg on resources at Walterville, such as hydrologic and hydraulics, water quality, and operations. To the extent that there are data gaps identified at the start of the license amendment process, EWEB will develop information for inclusion in the environmental report, which typically consists of the following sections:

- Proposed action and alternatives (including the no-action alternative)
- Statutory and regulatory compliance
- Geological and soil resources
- Water use and quality
- Fish, wildlife, and botanical resources
  - Fish and aquatic habitat
  - Terrestrial resources/wetlands
  - Protected species
- Cultural resources
- Socio-economic impacts/environmental justice
- Recreational resources
- Aesthetic resources
- Report on land use
- References

3.2.3 Decommissioning Plan

EWEB's application for license amendment will include a decommissioning plan describing the proposed disposition for the various facilities and components of the Leaburg Development, i.e., what would be removed, abandoned, modified, and/or retained. It will include a narrative of the methods and work activities necessary for decommissioning and measures planned to avoid and minimize impacts from decommissioning activities. A schedule for implementation will also be included.

The draft application for license amendment will be provided to stakeholders (see Section 3.3.1, below) for review and comment and will include a decommissioning plan with designs at approximately the 30% level of completion. This design level will provide sufficient detail for stakeholders to generate meaningful questions and support informative discussion regarding implementation of the proposed action.

The final application for license amendment, which will be submitted to the FERC-DHAC, will include plans at no less than a 60% design level. Design criteria and standards for safe decommissioning will be established through coordination with the FERC-D2SI and the decommissioning plan will have been further developed to describe pre-removal, permitting, construction and project removal, protective measure, and post-removal activities. This level of completion is generally sufficient for environmental report development and for FERC's NEPA evaluation.

The final decommissioning plan will be developed to a near-100% completion for the requisite safety review and approval by the FERC-D2SI. The final plan will include the following:

- Description of the proposed action
- Methods for implementing the following phases
  - Pre-construction
  - Construction
  - Post construction plans (e.g., revegetation plan)
- Schedule
- Construction management plan
- Cost for decommissioning

3.3 Consultation

The FERC's regulations indicate that three-stage consultation is appropriate for this process. These three stages are described as follows:

3.3.1 Stage 1 – Education

Stage 1 involves contacting relevant agencies, Indian tribes, and members of the public to discuss the proposed action. This stage often includes public or one-on-one meetings with stakeholders to identify key information needs and data gaps that may be necessary to fully describe the proposed action and its potential effects.

EWEB anticipates consulting with the following parties on the license amendment and Leaburg decommissioning:

National Marine Fisheries Service
United States Fish and Wildlife Service
National Park Service
United States Environmental Protection Agency

Oregon Department of Fish and Wildlife
Oregon Water Resources Department
Oregon Department of State Lands
Oregon Department of Environmental Quality
Oregon Parks and Recreation Department, State Historic Preservation Officer
Confederated Tribes of the Grand Ronde Community of Oregon
Confederated Tribes of Warm Springs
Confederated Tribes of Siletz Indians
Lane County Parks
Lane County Land Use Planning and Zoning
Lane County Engineering and Construction Services
Lane County Planning Commission
Lane County Transportation Advisory Committee
Members of the public

3.3.2 Stage 2 – Data Gathering

In this step, EWEB will collect data and information (see Section 4, below) and develop a draft application. The draft would be provided to relevant resource agencies, tribes, and other interested entities for review and comment. Following the review, EWEB will address comments and prepare a final application for license amendment which would be submitted to the FERC-DHAC. Stage 2 consultation ends with the filing of the final application.

3.3.3 Stage 3 – Post-Filing

The third stage of consultation is the FERC-DHAC's application review. This includes their process for compliance with NEPA, which incorporates the requirements of the Endangered Species Act, the National Historic Preservation Act, and the Clean Water Act.

3.4 FERC Application Review and NEPA Process

Upon filing the final application for license amendment, the FERC-DHAC will review the application and determine if additional information or studies are necessary. Once additional information has been provided and the FERC-DHAC deems the application complete, the FERC-DHAC will issue a public notice of their acceptance of the application and provide the public with an opportunity to file comments, motions to intervene, and protests. The FERC-DHAC notice will include instructions for filing and identify a deadline for public input.

Once the FERC-DHAC has determined that it has the information necessary to complete its review of the application for a non-capacity amendment, the FERC-DHAC will issue a notice requesting agency preliminary terms and conditions, recommendations, and comments from any interested party. The FERC-DHAC will consider all terms, conditions, recommendations, and comments in its environmental document (EA or EIS) and will issue a draft EA or EIS for public comment. The FERC-DHAC may issue the Order Amending License with the final EA or

EIS. Appendix C provides details on the regulations pertinent to the FERC-DHAC's review and decision.

3.5 Permitting Requirements for Implementation

Before decommissioning activities can commence, federal, state, and county permits, approvals, and reviews will be required.

FERC Division of Dam Safety and Inspections
Review and acceptance of plans, specifications, supporting design reports, Temporary Construction Emergency Action Plan, and Quality Control and Inspection Program
Confirmation of independent professional engineer review and approval of designs for coffer dams and deep excavations
Confirmation of approved Erosion and Sediment Control Plan

U.S. Army Corps of Engineers
Permit under Section 404 of the Clean Water Act for the discharge of dredged or fill material into waters of the U.S., including wetlands.

Oregon Department of Environmental Quality
National Pollutant Discharge Elimination System (NPDES) Permits
Clean Water Act Section 401 Water Quality Certification (required for the FERC license amendment and for a permit from the U.S. Army Corps of Engineers)

Oregon Department of State Lands
Permit to remove or place fill material in waters of the State

Lane County
Permit for floodplain developments within the 1% (100-year) flood hazard areas
Grading, Right-of-Way, Facility, Utility, and Building Permits

Oregon Department of Transportation
Right-of-Way permits

Additional permits may be required depending on the specific details of the decommissioning plan.

3.6 Regulatory Risks

The EWEB project team has identified key regulatory issues that could have a significant impact on how the LDAP proceeds. While this list will change as new information becomes available, the major regulatory risk items that have been identified at this time are described below.

Transportation Facilities

EWEB is not a transportation authority and is therefore not obligated to provide access to local residents. However, the transportation access solution will need to be understood prior to submitting the proposed action. Since this is not entirely in EWEB's control, it creates a potential schedule risk. EWEB will coordinate and collaborate with transportation authorities in their development of solutions that meet EWEB's decommissioning goals.

Clean Water Act, Section 401 Compliance

Pursuant to Section 401 of the CWA, an applicant for a Commission license must obtain certification (or a waiver of certification) from the appropriate state pollution control agency verifying compliance with the CWA before the Commission can issue a license for a project. An amendment to a project license can also be grounds for requiring a 401 certificate. During the relicensing of the Leaburg-Walterville Project, the 401 requirement was deemed to have been waived because the Oregon Department of Environmental Quality (ODEQ) did not act within the specified time. An application to amend the Project license to remove the Leaburg Development would likely trigger a requirement from ODEQ for a 401 certification. This certification process would likely require EWEB to address the ability of the Project to meet beneficial use standards in the amended Project area.

Design Criteria and Standards

Leaburg Canal will need to be decommissioned to a standard acceptable to the FERC-D2SI, which may exceed the standards of the regulatory authorities holding jurisdiction over remaining facilities after decommissioning is complete. The design criteria applicable to the canal and for any new water conveyance structures will be identified during the development of the decommissioning plan.

Endangered Species Act

Section 7 of the Endangered Species Act (ESA) requires federal agencies to ensure that their actions are not likely to jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of the critical habitat of those species. While dam removal, on the surface, will provide benefits to ESA listed species at the Project, the means and methods for removal and the final disposition of facilities will need to be evaluated against the needs of at-risk species.

The National Historic Preservation Act

The NHPA was enacted and amended to require the federal government to accelerate its historic preservation programs and to encourage such efforts on state, local, and private levels. Compliance with the NHPA will be coupled with the Commission's NEPA process where the federal action (licensing) affects cultural resources. The Commission is bound by the provisions of the NHPA, which requires it to take into account the effect of the action on any historic properties, which includes any district, site, building, structure, object, or Traditional Cultural Property that is included in or eligible for inclusion in the National Register of Historic Places, and to give the Advisory Council on Historic Preservation a reasonable opportunity to comment on a proposed action. Risks from the NHPA will lie primarily with how historic structures are

treated in the Leaburg Hydroelectric Project Historic District. NHPA considerations may have a bearing on transportation, disposition of the powerhouse, and removal of the dam.

3.7 Final FERC Approval on Leaburg Decommissioning

Once EWEB has completed all tasks in accordance with the FERC-approved decommissioning plan, including any required monitoring, both the FERC-DHAC and FERC-D2SI will conduct their independent compliance reviews. Once both FERC divisions have confirmed that EWEB's performance of all decommissioning work is acceptable, they will issue letters indicating that the decommissioning is complete. The Leaburg Development will then be officially removed from FERC jurisdiction.

3.8 Conceptual Designs

Although a high-level concept for the preferred decommissioning alternative was developed during the Leaburg Strategic Evaluation process, bringing this alternative to a 30% level of completeness is necessary before beginning meaningful consultation. Variants of this alternative will need to be explored as described in the following sections.

3.8.1 Alternative Decommissioning Configuration and Feasibility Assessments

Although the preferred alternative is feasible, the concept was based on limited information and many assumptions. Continued development of the conceptual design is necessary and will be an iterative process that includes studies to fill information gaps and confirm initial assumptions.

For example, the preferred alternative was based on the assumption that it would not be feasible to re-develop a channel for Cogswell Creek to flow directly to the McKenzie River but would rather be necessary to continue relying on a portion of the canal to convey Cogswell water to the river. These types of assumptions will need to be validated by more detailed investigations and feasibility studies.

Decommissioning and modifying portions of the canal is highly complex and EWEB wants to ensure that the conceptual plans presented in the application for license amendment are truly viable and cost-effective.

3.8.2 Cost Refinements

Estimated costs for decommissioning will continue to be refined throughout design development based on, but not limited to, the following:
Results and information gathered from the studies used to inform designs
Alternatives analyses for specific component projects (e.g., dam removal, access improvements, stream repatriation, embankment modifications, etc.)
Regulatory requirements
Potential community impact mitigation
Board feedback

3.8.3 FERC-D2SI Coordination

EWEB will coordinate with the FERC-D2SI to make sure that FERC dam safety mandates and guidelines are incorporated into the conceptual designs for Leaburg decommissioning. Maintaining routine coordination with the FERC-D2SI and following their guidance will also help ensure that the interdependent near-term risk reduction measures remain aligned with the overall decommissioning plan.

4 INFORMATION NEEDS

EWEB will ensure that the application includes sufficient information for the FERC-DHAC to analyze the proposed action by conducting a gap analysis. The gap analysis will identify or verify the information necessary for the FERC review and other regulatory requirements (e.g., the NEPA, ESA, NHPA), will gather available information, and will determine where additional information is needed. The data gaps may be influenced by questions and information requests from stakeholders. The results of the gap analysis will form the basis for a data development effort.

EWEB intends to prioritize data collection efforts that are directly applicable to developing the decommissioning plan, to preparing the application and environmental report (taking into consideration FERC's evaluation and decision-making protocols), and for complying with regulatory requirements. The overall data development efforts will benefit from the ongoing collection of geotechnical and other data necessary for the planning and design of near-term risk reduction measures. At this time, data collection studies are expected to address the following subjects.

4.1 Transportation

Decommissioning is expected to have impacts to the local transportation system because current infrastructure is in close proximity to residential, commercial, and agricultural developments that are served by a mix of public and private roadways and bridges. EWEB will coordinate with the transportation agencies to assist with collecting the necessary information that will help determine transportation solutions.

4.2 Aquatic Species

The Leaburg Dam is a low-height barrier that included a single fish ladder when it was constructed nearly 100 years ago. Upstream and downstream fish passage improvements have been retrofitted into the dam and canal intake facilities over the years.

The existing infrastructure also provides the Leaburg and McKenzie Fish Hatcheries with a gravity-flow supply for their primary water sources. In addition, the fish passage facilities at Leaburg Dam have provided a valuable location for fish counting and sorting operations.

Decommissioning the Leaburg facilities will trigger a variety of short-term and long-term adverse and beneficial effects on aquatic species through the removal and alteration of infrastructure. Understanding the impacts to aquatic species will be necessary for developing mitigation plans for both migratory and resident aquatic species and complying with the ESA. Aquatic species analysis will consider findings from the water quality, lake sediment, and hydraulic studies.

4.3 Hydraulic and Hydrologic Analysis

The removal of Leaburg Dam, restoring the McKenzie River to its natural channel, conveying stormwater, and repatriating tributary creeks to the river will cause changes to existing water flow regimes. These changes will need to be understood as part of the planning process to address any adverse impacts and to inform the dam removal. Studies of the mainstem river and tributary creeks will also complement the water quality and lake sediment transport studies.

4.4 Lake Sediments

EWEB will need to determine the quantity and properties of the sediment in Leaburg Lake and develop a work plan for managing the sediment during the decommissioning process. Findings from this study will be used in tandem with the water quality and hydraulic studies.

4.5 Water Quality

EWEB is collecting baseline data to understand how Leaburg and Walterville operations affect water quality in the McKenzie River. The preliminary water quality study data collection program includes the common water quality parameters of interest (e.g., dissolved oxygen, temperature). The study scope will be updated as necessary if additional requirements are identified during the data gaps analysis.

Routine water quality analysis performed by EWEB for drinking water source protection is ongoing and relevant data that can supplement the Leaburg-Walterville-specific water quality studies as needed. As an interim measure, EWEB is also monitoring the Leaburg Canal for algal toxins and other potential adverse water quality impacts that might occur with the canal out of service.

4.6 Cultural Resource and Historic Properties

A comprehensive inventory of cultural and historic resources in the boundary of the Leaburg-Walterville Project was completed as a relicensing requirement. To implement the requirement, EWEB signed a Memorandum of Agreement with the FERC-DHAC, the Oregon SHPO, and the Advisory Council on Historic Preservation in 1996, and subsequently prepared a detailed Cultural Resources Management Plan. This plan included Historic Resources Management and Maintenance Guidelines for the identified historic built resources at the Leaburg-Walterville Hydroelectric Project. Per requirements, EWEB also registered these resources on the National Register of Historic Places as the Leaburg Hydroelectric Project Historic District. Since decommissioning of the Leaburg Development will affect the Historic

District, EWEB will need to make decisions on the future disposition of the contributing elements of the Historic District and will consult with the SHPO in accordance with Section 106 of the NHPA. Additional information needs will be identified during that consultation, including how decommissioning would affect the Historic District and other identified cultural resources.

The decommissioning plan may affect cultural and historic resources outside of the Project boundary as well. Once necessary work areas outside the Project boundary are identified, EWEB will conduct cultural resource reviews for those areas, and consult with the SHPO in accordance with Section 106 of the NHPA.

4.7 Wetland and Other Waters

Decommissioning Leaburg will result in changes in flow patterns and flow paths within the McKenzie River as well as areas in proximity to the Leaburg Canal. It will change the ordinary high-water line in certain locations and may change the spatial area and character of adjacent wetlands and other aquatic features. In some areas along the Leaburg Canal, seeps have changed hydrology and led to the establishment of hydric vegetation in areas that were previously upland. In addition, draining Leaburg Canal has allowed hydric vegetation to establish in areas that were previously inundated. EWEB will map and characterize wetlands and other waters as necessary to inform jurisdictional determinations, environmental analyses, and permit requirements.

4.8 Water Rights

EWEB performed research to understand water supply obligations and potential remedies for the various water right stakeholders. With the decision to decommission, a more focused water right study is now possible for identifying potential options for all stakeholders and determining permanent solutions for obligated water right holders that need to be implemented as part of the decommissioning process.

5 PROPERTIES AND ASSETS

EWEB owns ten (10) parcels totaling approximately 542 acres in the Leaburg vicinity that extend beyond the 284-acre Project boundary of the Leaburg Development itself. Stretching over more than five miles of the McKenzie Valley, EWEB lands encompass the McKenzie River, tributary streams, recreational facilities, and irrigation infrastructure, and are bordered by residential, commercial, and agricultural properties, as well as forest lands. EWEB will be required to retain lands within the Project boundary of the Leaburg Development until decommissioning is complete and the license is amended. Once decommissioning is complete, EWEB's long-term property needs will be significantly reduced. As the near-term risk reduction measures are planned, and the proposed action and decommissioning plan are developed, EWEB's property needs will be evaluated with the understanding that long-term ownership and obligations should be minimized.

There are also non-property capital asset components of the Leaburg Development, such as certain pieces of equipment with remaining useful life that retain some market value. Some of the non-property capital assets remain in operation, such as equipment at Leaburg Dam, while other components are no longer in service and aren't expected to return to service. Most of the non-property capital assets hold minimal salvage value and will be made available to demolition contractors to offset their pricing during the bidding process. Out-of-service equipment that can be re-purposed at other power generation facilities and holds more substantial market value, could be auctioned in the nearer term.

5.1 Property and Property Easement Acquisition

To facilitate access for the implementation of near-term risk reduction measures and to carry out decommissioning work, it will be necessary to establish temporary and long-term rights to private lands and public rights-of-way. The following real property acquisitions are expected to be needed:

- Temporary construction easements
- Permanent easements
- Partial parcel acquisitions
- Full parcel acquisitions

5.2 Asset Retention or Release

The sale of property and non-property capital assets in the Leaburg Development will provide opportunities to offset the cost of decommissioning. EWEB will examine the cost, depreciation, and value of capital assets and seek timely sale opportunities.

In the long-term, some property retention may be necessary for other utility needs (e.g., source water quality protection, stormwater conveyance). For properties that are no longer needed, EWEB will look for sale opportunities to recoup costs. EWEB may also consider the release of assets to agencies and organizations for the public benefit.

EWEB will need to consider many issues when deciding whether capital assets are to be released or retained, including, but not limited to:

- Public safety
- Source protection and water quality
- Financial obligations
- Operational obligations
- Maintenance obligations

6 FINANCIAL CONSIDERATIONS

Spending projections for the Leaburg decommissioning effort will be updated annually to account for progress made with project planning and execution. The current spending projection assumes a significant portion of the decommissioning work will be completed by

2041. However, the decommissioning requirements are not entirely in EWEB's control, which could impact the assumed timeline and budget.

Current financial projections are based on the baseline capital cost developed during the Leaburg Strategic Evaluation, with refinements to incorporate new information. The current forecasted costs have a range of accuracy of -30% to +50% of the baseline estimate because the plans are conceptual and only developed to approximately 5%.

Costs include both non-utility capital assets and operations and maintenance (O&M) budget classifications. The current budget categories for Leaburg decommissioning project efforts and their classifications are as follows:

- Near-term risk reduction: non-utility property classification (Capital)
- Water rights: non-utility property classification (Capital)
- Real property: non-utility property classification (Capital)
- Decommissioning to include all related planning, project development and implementation cost: O&M

The near-term risk reduction work qualifies as capital since it involves changes to land. The land and stormwater conveyance facilities that will remain in EWEB's operational control upon completion of the Leaburg decommissioning effort will be classified as non-utility capital assets for the Electric Utility because they are not used in the production of electricity. Based on the current projections, capital expenditures are expected to be approximately 29% of the overall Leaburg spending.

Decommissioning the Leaburg facilities will be expensed as incurred or deferred with regulatory accounting to match the rate-making process. The work involves dismantling and relinquishing facilities. Based on the current projections, O&M expenditures are expected to be approximately 71% of the overall Leaburg spending.

6.1 Spending Projection Refinements

Annual spending projections will reflect the following:

- Updated cost estimates
- Evaluation of consultant and contractor progress (percent completion) relative to estimates
- Updated internal and external resource requirements
- Inflation and material escalation
- Potential external funding sources, including partnerships and grants
- Status of real property and water rights

6.2 Funding Approaches

Given the significant cost associated with both near term risk reduction measures and decommissioning, EWEB will need to take a diversified approach to funding decommissioning projects, including, but not be limited to:

- Electric rate increases
- Bonding/financing
- Partnerships
- External funding opportunities
- Sale of excess non-utility capital assets

The most likely sources of funding for decommissioning projects will be rate increases and financing. Other options such as grant funding and partnerships will be explored but should not be relied upon.

6.3 Partnership and Funding Opportunities

EWEB will look for opportunities to create partnerships that help achieve mutual goals through coordination and collaboration. Partnerships may include, but not limited to:

- Cost sharing to achieve shared interests
- Joint grant applications
- Information and data sharing
- Collaboration on technical and alternatives analysis
- Property ownership transfers

At this stage, EWEB has identified the following stakeholders with whom to actively seek partnership opportunities to achieve shared goals. Additional partners will be identified as part of the planning process.

- National Marine Fisheries Service
- United States Fish and Wildlife Service
- Oregon Department of Fish and Wildlife
- Lane County Public Works
- Oregon Department of Transportation
- Oregon Marine Board
- Oregon Department of State Lands
- McKenzie Watershed Council
- McKenzie Community Partnership

EWEB intends to explore funding and cost saving options through solo or joint-grant applications, cost sharing with external stakeholders, and other mutually beneficial funding strategies. Since most grant funding opportunities require the applicant to provide sufficient scoping details to ensure eligibility and feasibility, EWEB will become better positioned to compete for external funding sources as the decommissioning plans evolve.

7 STAFFING AND RESOURCE PLANNING

Planning and implementing the near-term risk reduction and decommissioning work will require extensive resources, including internal staff and consultant support. Ultimate resource needs are dependent on a number of factors, including the decommissioning program management strategy.

The long-term nature of the near-term risk reduction and decommissioning work creates challenges with ensuring staffing consistency. Staff will develop a succession and data management plan to ensure that project information is easily communicated to new staff, consultants, and key stakeholders, as needed.

Refining the existing high-level concepts into design-based plans will require involvement of subject matter experts from many technical disciplines to perform alternatives analyses on various issues. Concept refinement will rely on the expertise of both internal staff and external consultants. Anticipated subject matter experts include:

Project management
Regulatory and compliance
Legal issues and risks
Public relations and communications
Engineering
- Geotechnical
- Surveying
- Hydraulic/hydrologic
- Transportation
- Structural
- Mechanical

Construction management
Property, land use, and water rights
Cultural resource and historical preservation
Aquatic biology
Terrestrial biology
Recreation
Environmental and social justice
Water resources and water quality

8 TIMELINES, DECISIONS, AND MILESTONES

The timeline for decommissioning the Leaburg Development is uncertain due to a variety of complexities. The complexities derive from a number of parallel activities that will influence key details of the ultimate decommissioning approach. These interdependent activities include the following:

- Implementing near term risk reduction measures to address ongoing dam safety hazards

- Completing the data gap analysis and subsequent data development
- Determining the long-term transportation plan for access across the McKenzie River
- Refining the design concept for the decommissioned configuration of the Leaburg Development
- Completing the Walterville Strategic Evaluation

Some of the near-term risk reduction measures, such as re-routing Johnson Creek directly to McKenzie River, are essentially fast-tracked components of the overall decommissioning of the Leaburg Development. Achieving approvals for the risk reduction project designs will require smaller scale regulatory review and approval processes that should reveal important considerations that will influence EWEB's overall decommissioning approach and timeline.

Findings from data development efforts will provide the information that EWEB needs to refine decommissioning designs. The timeline required to complete the decommissioning design work will depend on the details of those findings and how key stakeholders respond to those details.

Understanding the preferred transportation solutions will be necessary for developing the decommissioning plan, as Leaburg Dam currently provides important access across the McKenzie River. The necessary transportation assessments have schedule complexity and risk due to the fact that EWEB is not in control of the ultimate transportation decision. Therefore, EWEB is prioritizing early collaboration with the local and state transportation agencies to determine preferred solutions.

Finally, staff will review results from the Walterville Strategic Evaluation to determine the effects, if any, on decommissioning at Leaburg. Staff expect that any necessary adjustments to the LDAP will be clear and readily integrated into ongoing work.

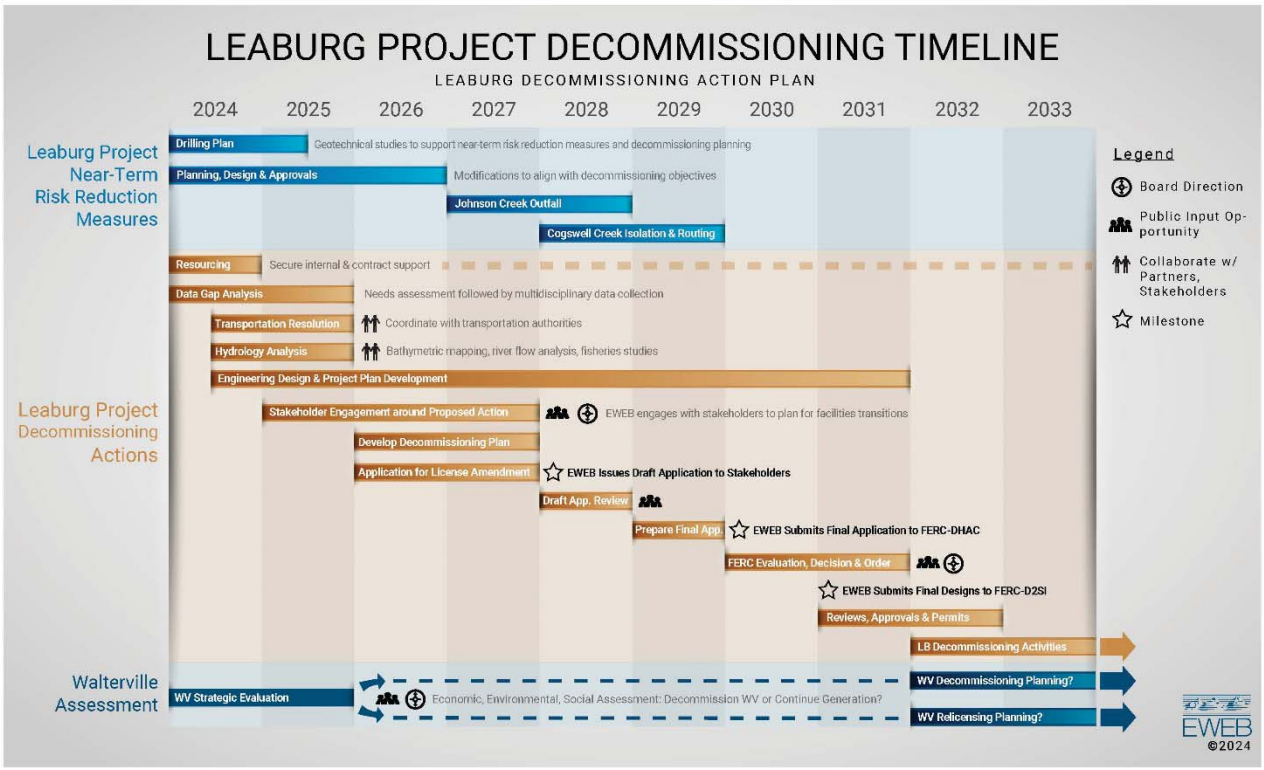
Despite these uncertainties, EWEB is able to present a high-level projection for the decommissioning schedule. Figure 1 lays out a preliminary timeline of the decommissioning process, along with the key interdependent activities. This timeline will need to be updated on a regular basis as new information becomes available and uncertainties are resolved.

8.1 Progress Reporting

EWEB staff currently submit updates on progress in the Strategic and Operational Quarterly Report, as well as through periodic Board updates. In addition to quarterly updates, staff expect to communicate progress to the Board via:

- Annual or Semi-annual presentations, one of which will be the annual Upriver Board Meeting
- Additional workshops and correspondence as needed to facilitate Board decisions
- Annual Capital Improvement Plan and O&M budget updates

Figure 1 – Decommissioning Timeline – Leaburg Hydroelectric Project



8.2 Board of Commissioner Involvement

Per Resolution 2302, the LDAP is to include mechanisms that will ensure ongoing Board oversight of the progress toward decommissioning as well as opportunities for Board direction at key decision points. Regular Board involvement and knowledgeable support will be important to the overall success of the decommissioning efforts and interdependent activities.

A key objective of the LDAP is to ensure that the Board of Commissioners is well-positioned to offer input, ask questions, and provide guidance at key decision points. Staff will seek Board input on issues including, but not limited to:

- Final version of the proposed action
- Walterville disposition at license expiration (relicense or surrender)
- Acceptance of the FERC Order amending the license, including terms and conditions
- Discretionary or voluntary measures that are not required as part of the FERC or regulatory processes
- Changes in key baseline assumptions
- Any unexpected, high-impact events
- High-level visions for the process

9 PARTICIPANT ENGAGEMENT

Clear and effective communication with stakeholders is vital to achieving the decommissioning of the Leaburg Development. Managing participant expectations will be key to productive working relationships, especially when stakeholders have various conflicting interests and motivations. Staff will strive to implement work in the spirit of EWEB's Community/Culture core value: "We value a culture of intentional actions and outcomes, continuous improvement, diverse perspectives, that is trustworthy, respectful, equitable, and inclusive to employees and community members. We are dedicated to our public service, professions, local governance, and commitment to serve our community honestly and with integrity."

In working toward the decommissioning of the Leaburg Development, EWEB will continue its commitment to transparency as a public utility, guiding our customer owners to the best, public, up-to-date information about the process, while also engaging with other affected parties and our agency partners with strategic outreach that will allow us to optimize the studies, assessments, and negotiations ahead.

EWEB will pursue the following communication-related objectives throughout the decommissioning process:

- Maintain customer trust and confidence in EWEB, including EWEB Commissioners, Executive Team, LDAP team members, Leaburg-Walterville Hydropower Operators, and other EWEB staff.

- Maintain customer support for the decision to decommission the facility, while continuing to provide clarity for customers and stakeholders who may not yet support the decision.
- Ensure stakeholder understanding of timelines, anticipated sequence of events, regulations, and opportunities for stakeholder involvement.
- Provide updates and EWEB perspectives to seek alignment with stakeholder agencies.
- Manage public safety during construction phases.
- Facilitate EWEB's solid working relationships with Project neighbors.
- Listen to stakeholders for pain points, challenges, and opportunities to mitigate impacts of decommissioning.
- Incorporate stakeholder feedback and opinions, where appropriate, to develop support and pride for the future decommissioned configuration of the facilities.
- Collaborate with multi-agency and public stakeholders to optimize the efficiency of implementation, serving EWEB's affordability core value: "*We value and respect our customer-owners' financial resources by making wise investments and controlling costs and rates*."

EWEB will strive to create a culture of transparency and trust with our stakeholder partners, agencies, members of the public, and within EWEB. Throughout the long road ahead, this communication plan will employ the principles of adaptive management and continuous improvement to ensure all stakeholder voices are heard through each stage of the process.

APPENDIX A. FEDERAL ENERGY REGULATORY COMMISSION AND THE LEABURG-WALTERVILLE HYDROELECTRIC PROJECT

The Federal Power Act[1] was enacted in 1935 and codified in 16 U.S.C. §§ 791 to 823(d). It established the regulation of hydroelectric power, and the wholesale transmission and trade of electric power. It also established the Federal Power Commission with the authority to regulate the development and operation of non-Federal hydroelectric generation. The Federal Power Act made it "*unlawful for any person, State, or municipality, for the purpose of developing electric power, to construct, operate, or maintain any dam, water conduit, reservoir, power house, or other works incidental thereto across, along, or in any of the navigable waters of the United States … except under and in accordance with the terms of a permit or valid existing right-of-way granted prior to June 10, 1920, or a license granted pursuant to this Act*."[2]

Federal Energy Regulatory Commission

Initially established as the Federal Power Commission, FERC is an independent regulatory authority under the U.S. Department of Energy. They also have regulatory authority over natural gas, and the interstate transmission of electricity, natural gas, and oil.

The Commission is comprised of five presidential appointees, one of which is the appointed chairman of the FERC. The Office of Energy Projects is one of 12 offices of the Commission. It is made up of five divisions. Three of these divisions are responsible for processing applications for hydropower licenses and exemptions, for ensuring compliance with terms and conditions of licenses and exemptions, and for ensuring the safety of water retaining features of hydropower projects (interstate natural gas pipelines and liquified natural gas terminals are also under their authority). The regulatory authority is detailed under 18 CFR §§ 1-399.

Division of Licensing

The FERC Division of Licensing is responsible for the review, evaluation, and management of applications for license, relicense, license surrender of constructed projects, and exemptions. They prepare National Environmental Policy Act (NEPA) documents (environmental assessments and environmental impact statements) and make recommendations to the Commission in response to applications, i.e., approval, approval with modifications, or denial, and recommend conditions for authorization. Oregon is in the Northwest Branch of the Division of Licensing.

Division of Hydropower Administration and Compliance

Once an authorization is issued by the Commission, the Division of Hydropower Administration and Compliance (DHAC) ensures compliance with license terms and conditions, and with Commission rules and regulations. They track and administer license requirements and

[1] 16 U.S.C. §§ 791 – 823g
[2] 16 U.S.C. 817(1)

conduct site inspections. DHAC also evaluates requests for license surrender and for license amendments. DHAC is made up of four branches: Land Resources, Engineering Resources, Environmental and Project Review, and Aquatic Resources.

Division of Dam Safety and Inspections

The FERC-D2SI develops and implements Commission policies, programs, and standards for dam safety, public safety, and hydropower security. They ensure that projects are inspected, and that the construction, operation, and maintenance of hydropower projects protects life, health, property, and the environment. The regulations pertinent to the safety of projects are detailed in 18 CFR Part 12. Five northwest states are overseen by the Portland Regional Office of the D2SI.

Leaburg-Walterville Hydroelectric Project (FERC License Project No. 2496)

Construction of the Leaburg Development began in 1928 and was completed in 1930. The Development consisted of the 450-foot-long Leaburg Dam, a 5-mile-long canal, and a 7,500 KVA power plant with provision for a second generator at a later date. Improvements were eventually made to the Leaburg Canal to provide additional flows up to 2,500 cubic feet per second (cfs) for the second unit, which was rated at 9,375 KVA. It was placed in service in January 1950. The initial project was constructed for a cost of $2,067,212[3]. Following purchase and installation of the second unit, the total cost for the facility was placed at $2,896,495 in 1963.

The Walterville Development of the Project pre-dates Leaburg by nearly 20 years. Construction of the Walterville Development began in 1909 and was completed in 1911. It consisted of a 4-mile-long canal carrying 600 cfs, and operating two Francis-type horizontal shaft turbines producing approx. 1,500 KVA. A third unit was added in 1924, increasing capacity to 3,050 KVA. In 1949, the facility underwent a significant upgrade. The canal was widened and deepened, and a new powerhouse was constructed. At completion, the canal was able to carry 2,575 cfs, and a single Kaplan unit, rated at 11,000 HP, could generate 9,430 KVA. By 1949, the Walterville development was completed at a cost of $1,885,482. A 65-acre pump storage pond, with a storage capacity of 345-acre-feet was constructed in 1951 and 1952 approximately 3 miles below the intake. This increased the dependable capability of the Walterville Plant to 8460 KVA for a three-hour period. As of December 31, 1963, the total cost of the Walterville facilities was placed at $2,194,741.

The Federal Power Act[4] was enacted in 1935 and codified in 16 U.S.C. §§ 791 to 823(d). It established the Federal Power Commission with the authority to regulate the development and operation of non-Federal hydroelectric generation. The Federal Power Act made it "*unlawful for any person, State, or municipality, for the purpose of developing electric power, to construct, operate, or maintain any dam, water conduit, reservoir, power house, or other works incidental*

[3] Eugene Water & Electric Board. 1964. Application to the Federal Power Commission to authorize the operation and maintenance of the Leaburg Hydroelectric Project. Exhibit N.

thereto across, along, or in any of the navigable waters of the United States … except under and in accordance with the terms of a permit or valid existing right-of-way granted prior to June 10, 1920, or a license granted pursuant to this Act."[5]

On April 25, 1962, the Federal Power Commission issued Opinion No. 357[6] which describes Commission and court decisions establishing the transportation of logs as a basis for concluding that certain waters were navigable waters of the United States. In a May 4, 1962 letter to the City of Eugene, the Federal Power Commission enclosed this opinion and related information advising that "*if you are operating and maintaining a water power development without a valid federal permit issued therefore prior to June 10, 1920, and without a license issued under the Federal Power Act, it is requested that you advise the Commission whether you propose to file application for license*."[7]

Citing the two developments on the lower McKenzie River, the Eugene Water & Electric Board stated, these projects "*are unlicensed in that no Federal land was involved and the river was not considered navigable at the time they were built. … It is our intention to file application for license for both of these projects*."[8] At that time, the Carmen-Smith Hydroelectric Project was under construction, and EWEB anticipated it would "take several months" to prepare the applications.

EWEB applied for the first Federal Power Commission license of the Leaburg Hydroelectric Project on November 17, 1964. The Federal Power Commission issued the license, Project No. 2496, on May 23, 1967, effective January 1, 1950, and terminating December 31, 1993. The license authorized the following: "*(1) a reinforced concrete and steel dam, approximately 450 feet long and 20 feet high, equipped with three 100- by 90-foot roller gates with sluiceway and intake gates partially diverting the McKenzie River; into (2) Leaburg canal which extends 5 miles; to (3) a small forebay; (4) two penstocks of reinforced concrete pipe 8 feet in diameter and 250 feet long; (5) Leaburg powerhouse of reinforced concrete which contains two generating units of 6,000 and 7,500 kilowatts capacity, respectively; (6) Leaburg substation containing six 2,500 kva 12/66 kv transformers, and (7) appurtenant facilities."*

EWEB applied for its first license for the Walterville Hydroelectric Project on March 22, 1965. The license was issued by the Federal Power Commission on May 23, 1967, Project No. 2510, effective January 1, 1949, and terminating on December 31, 1993. The license authorized the following: (1) a 4-mile-long cut and fill unlined canal (2575 cfs capacity, controlled by a headworks structure containing two 14- x 20-foot radial gate, terminating at the plant forebay, (2) a pump storage pond on the right bank at the canal, 3 miles below the headworks structure, with a capacity of 345 acre-feet and a surface area of 65 acres, filled by use of four 33,000 gpm

[6] United States of America Federal Power Commission. 1962. Opinion 357, Opinion and Order Issuing License (Major), issued April 25, 1962, to the Public Service Company of New Hampshire (Project No. 2288).
[7] Federal Power Commission. 1962. Letter to City of Eugene, May 4, 1962. Docket No. IT-5501.
[8] Eugene Water & Electric Board. 1962. Letter to Federal Power Commission, June 1, 1962.

(300 cfs total) pumps and drawn down through two 4- x 20-foot radial gates, (3) a forebay, forebay headworks containing a 20- x 22-foot radial gate controlling flow to the powerhouse through a 16.5- x 16.5- foot penstock 130 feet long, and a siphon bypass, (4) an automated powerhouse containing an 8000 kilowatt generating unit, (5) a 12/66 kv substation and 12 kv bus connected to the generator via an underground cable, and two taps to the Leaburg-Currin line, (6) and appurtenant facilities.

Prior to the expiration of the original license, on December 31, 1991, EWEB filed an application to the Federal Energy Regulatory Commission (Commission or FERC) for a new license authorizing the continued operation and maintenance of the 14.5-megawatt (MW) Leaburg Hydroelectric Project (P-2496) and the 8-MW Walterville Hydroelectric Project (P-2510). The application included increasing generating capacity by raising the level of Leaburg Lake, placing new dams at the Walterville diversion, replacing the turbine runners in both powerhouses, and by excavating the Walterville powerhouse tailrace. New mitigative measures were proposed, including a fish screen at the Walterville diversion and a fish ladder at Leaburg Dam. EWEB proposed to combine the two previously independently licensed developments into one licensed facility known as the Leaburg-Walterville Hydroelectric Project No. 2496.

FERC issued a Draft Environmental Impact Statement (EIS) in October 1995 to evaluate the probable impacts of EWEB's proposal and alternatives, as required under the National Environmental Policy Act (NEPA). Following receipt and consideration of comments from the U.S. Department of the Interior (Interior), the U.S. Department of Commerce (Commerce), the U.S. Environmental Protection Agency (EPA), the Oregon Department of Fish and Wildlife (ODFW), Oregon Department of Environmental Quality (ODEQ), McKenzie River Chamber of Commerce, McKenzie River Trust, Oregon Natural Resource Council (now Oregon Wild), American Rivers, and others, the Commission issued a final EIS in December 1996. They concluded that the continued operation and maintenance of the Project, as modified by agency and Commission staff recommendations, would result in minor adverse impacts on the environment.

On March 24, 1997, the Commission issued its Order Issuing New License[9] to EWEB, for a term of 40 years[10]. The license included approximately 65 terms and conditions (i.e., license articles). It did not include, however, certain conditions submitted by the Department of the Interior and Department of Commerce pursuant to Section 18 of the Federal Power Act (i.e., Fishway Prescriptions) and subsequently denied rehearing at the requests of these agencies. The Court of Appeals vacated the Commission's license and rehearing orders and remanded the proceeding to the Commission. In compliance with the court order, the Commission reinstated the license order, incorporated the terms of the Section 18 Fishway Prescriptions as conditions of the license through its Order on

[9] 78 FERC ¶ 62,207. Order Issuing New License. Issued March 24, 1997. Accession No. 19970331-0035.
[10] "… because this new license authorizes new development and capacity and moderate mitigative and enhancement measures, the license will have a term of 40 years." 78 FERC ¶ 62,207. Order Issuing New License. Issued March 24, 1997. Page 29.

Remand and Lifting Stays[11], Issued April 27, 2000. The 40-year term of the license became effective April 1, 2000[12].

Under the license, the Project consists of both the Leaburg Development and Walterville Development. Both developments operate on a base load, run-of-river basis. Under normal conditions, the Project can divert up to 2,500 cfs into the Leaburg Canal, and up to 2,577 into the Walterville Canal.

The Project boundary encompasses the hydroelectric facilities and all lands necessary for operation and maintenance, and other project purposes (e.g., public recreation, protection of environmental resources)[13]. The boundary encompasses approximately 692 acres. Of this area, approximately 64 acres are for the primary transmission lines.

[11] 91 FERC 61,111. Order on Remand and Lifting Stays. Issued April 27, 2000.
[12] 97 FERC 62,248, Order Amending License Articles 410, 416, 417, 418, 419, 420, and 421, Approving Construction Schedule (Article 403), and Deleting Ordering Paragraphs B through I, paragraph (A).
[13] 18 CFR § 4.41(h)(2)

APPENDIX B. NEAR-TERM RISK REDUCTION MEASURES

EWEB is working to identify, develop, and implement near-term risk reduction measures for potential failure modes (PFMs) that present the most risk while Leaburg Canal is out of service. Given that hydrological loading conditions are the PFMs of greatest concern while the canal is operating solely for stormwater conveyance, EWEB continues to prioritize risk reduction measures that provide the greatest reduction in intermittent hydrological loading on the canal embankments.

Following are a summary of planned risk reduction measures:

1. Increased low level outlet discharge capacity at the forebay:
   EWEB will remove the turbine from at least one power generating unit to allow for the passage of up to 1,000 cfs through the powerhouse.

2. Geotechnical Drilling Program:
   EWEB's implementation of the Drilling Program Plan will prioritize drilling locations where more urgent subsurface information is needed for near-term risk reduction efforts while also providing general subsurface information for decommissioning planning.

3. Conceptual Canal System Modifications:
   Johnson Creek Outfall: Upon completion of the Drilling Program Plan, EWEB will advance plans to modify the canal embankment for an outfall structure below Johnson Creek. The new outfall will eliminate the need for conveying stormwater flows through the lower reaches of the canal.

   Cogswell Creek Canal Plugs: Upon completion of the Drilling Program, EWEB will advance planning for the potential construction of canal plugs to isolate portions of the canal showing indications of internal erosion. Plugs will allow EWEB to route Cogswell Creek stormwater flows away from problem areas by directing flow to the wasteway gate at Luffman spillway.

APPENDIX C. REGULATORY ENVIRONMENT

National Environmental Policy Act

The National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. § 4321 et seq.) became effective on January 1, 1970, and requires that all Federal agencies consider environmental values alongside technical and economic considerations prior to undertaking any major Federal action. NEPA is a procedural law, which describes the process necessary for agencies to fulfill their responsibilities under the act. It does not mandate specific results or the selection of an environmentally preferable alternative, nor does it prohibit adverse environmental effects. NEPA does, however, require that agencies be informed of the environmental consequences of their decisions and the process they must follow before making any irreversible and irretrievable commitment of resources.

The NEPA also established the Council on Environmental Quality (CEQ) which oversees agency implementation of NEPA's procedural requirements, detailed under 40 CFR Parts 1500 – 1508. These implementing regulations were revised in 2020.

FERC will be the Federal agency with primary jurisdiction over the Leaburg decommissioning, whether via license amendment or surrender, and thus will lead implementation of the NEPA process. Many Federal agencies, including the FERC, have developed their own procedural regulations to supplement the NEPA regulations. The FERC procedural provisions are detailed in 18 CFR Part 380.

The level of NEPA review falls into one of the following three classifications:

Categorical exclusion: typically, does not have significant effects

Environmental assessment: is not likely to have significant effects OR the significance of the effects is unknown

Environmental impact statement: is likely to have significant effects

In determining whether effects are significant, agencies are to analyze the potentially affected environment appropriate to the specific action, setting (i.e., local, regional, national), scope, and resources (e.g., listed species and designated critical habitat).

Endangered Species Act

The ESA (16 U.S.C. 1531 et seq.) outlines the Federal policy for protecting and conserving threatened and endangered fish, wildlife, and plant species and the habitats on which they depend. The lead Federal agencies for implementing ESA are the USFWS and NMFS.

The law requires Federal agencies, in consultation with the USFWS and/or the NMFS, to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of designated critical habitat of such species. The law also prohibits any action that causes a "taking" of any listed species of endangered fish or wildlife. Likewise, import, export, interstate, and foreign

commerce of listed species are all generally prohibited. The FERC will be required to consult with the USFWS and the NMFS in accordance with Section 7(c) of the act.

National Historic Preservation Act

Section 106 of the NHPA (54 U.S.C. 306108) requires all Federal agencies to evaluate the impact of all Federally funded or permitted projects on historic properties or sites, and to consider the effects of their actions on any resource listed on, or eligible for listing on, the National Register of Historic Places. Federal agencies are to consult with the State Historic Preservation Officer (SHPO) and/or Tribal Historic Preservation Officer (THPO) and provide the Advisory Council on Historic Preservation (ACHP) with the opportunity to comment with respect to the undertaking before an agency's decision. Where adverse effects are identified, Federal agencies must take steps to avoid, minimize, and mitigate those effects.

Article 433 of our FERC license required EWEB file with the Commission for approval, within one year of license issuance, the following items (a) Leaburg dam documentation, (b) Historic Resource and Protection Enhancement Plan, and (c) recreation facility plans for the Goodpasture Bridge area to protect historic resources in the project area. The article also required that we consult with the National Park Service and the SHPO during the development of these documents.

Through these license compliance activities, it was determined that a portion of the development was eligible for the National Register of Historic Places, an official registration, administered by the National Park Service, of properties recognized for their significance in American history, architecture, archaeology, engineering, and culture. The Commission, ACHP, Oregon SHPO, and EWEB developed and executed a Memorandum of Agreement (MOA) which was subsequently incorporated into the FERC license. It required EWEB to complete a National Register of Historic Places Nomination Form for the Leaburg Hydroelectric Project Historic District to define the components of the district. It also required EWEB to prepare Historic American Engineering Record (HAER) documentation of Leaburg Dam, and to develop a Cultural Resources Management Plan (CRMP) to avoid or mitigate any effects of continued project operation on the historical integrity of the district, Goodpasture Bridge, and on any as yet unknown archaeological sites in the project area. The CRMP contains procedures for SHPO consultation.

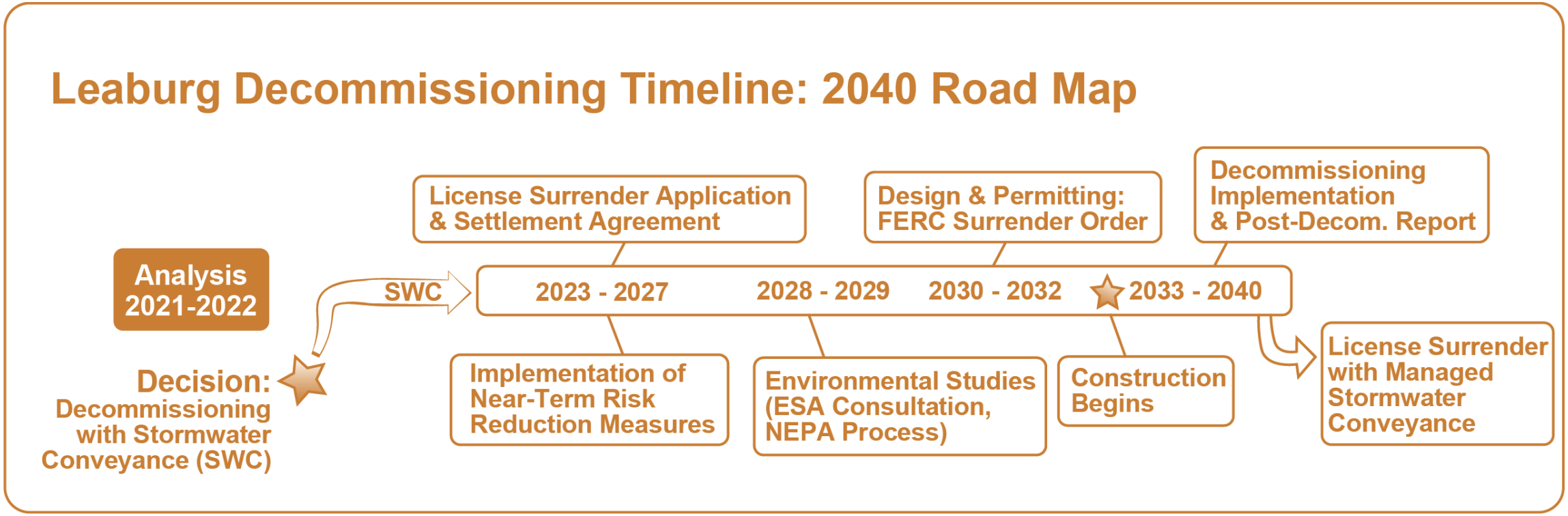
Clean Water Act Section 401 Water Quality Certification

Under Section 401 of the Clean Water Act (33 U.S.C. 1251 et seq.), Federal agencies may not issue a license or permit any discharge of pollutants into Waters of the U.S. unless the applicable State or authorized Tribe issues a certification that the action would meet water quality standards. The ODEQ is the implementing authority for issuing Water Quality Certifications in the State. Please note that ODEQ did not require a 401 Water Quality Certification for the Project during the last re-license period.

Leaburg Dam Road Access Analysis

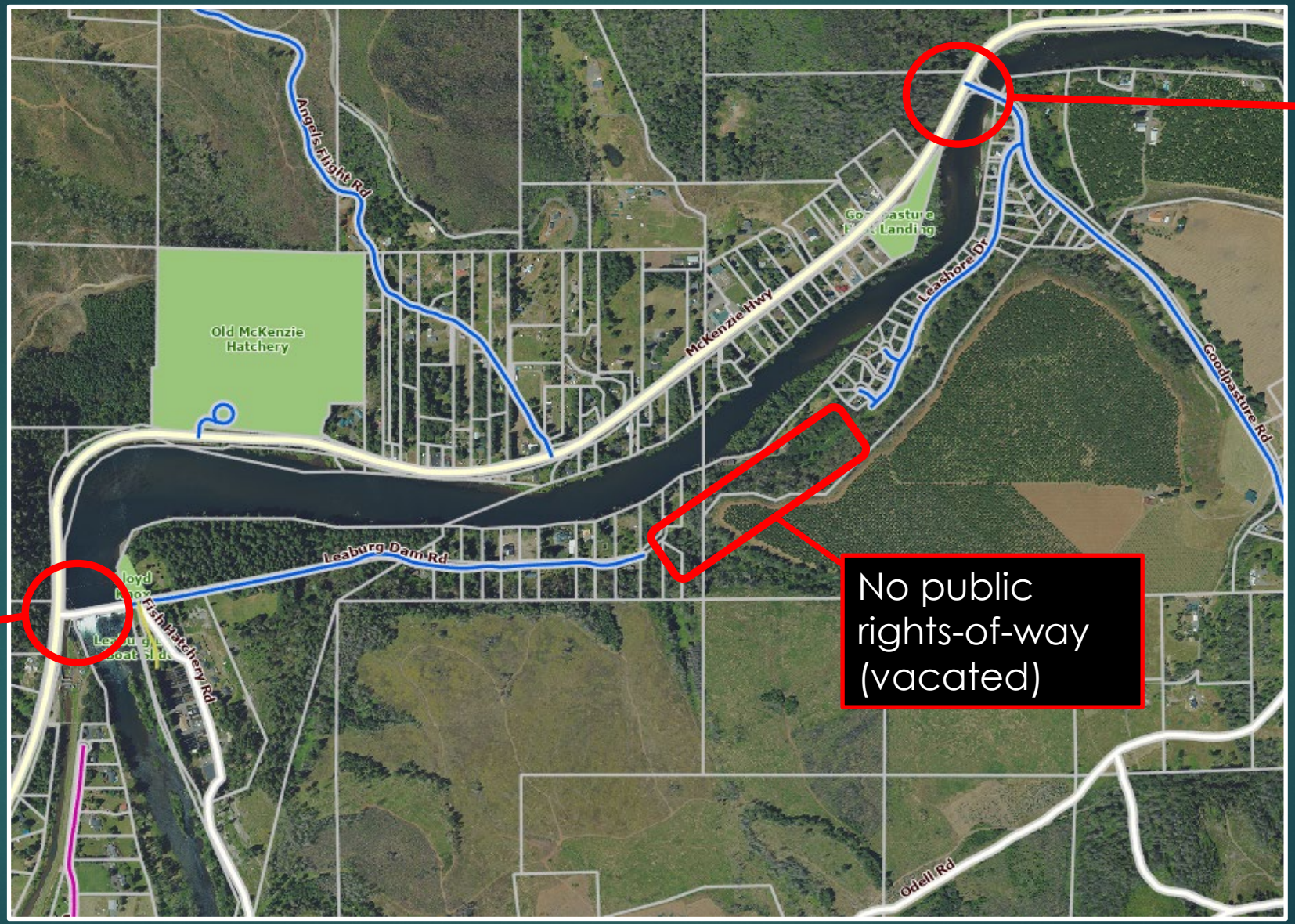
FEBRUARY 27, 2024, BOARD OF COUNTY COMMISSIONERS

Eugene Water and Electric Board (EWEB) Project: Decommission Leaburg Dam



Alternatives Analysis

- EWEB to perform alternatives analysis on transportation options
- **Now is time for Lane County to communicate alternatives we would like EWEB to evaluate**


Goodpasture Covered Bridge
Leaburg Dam Road Bridge
No public rights-of-way (vacated)
Old McKenzie Hatchery
Angels Flight Rd
McKenzie Hwy
Leaburg Dam Rd
Fish Hatchery Rd
Leashore Dr
Goodpasture Rd
Odell Rd
Transportation
Jurisdiction
Lane County
Eugene/Springfield
Other City
Federal/State
LAR
Private/Other
Operational Maintenance
Lane County
Eugene/Springfield
Other City
Federal/State
Other

Leaburg Dam: **Current Conditions**

- EWEB-owned bridge that provides sole access to multiple properties and to County road
- The bridge does not meet current standards providing only one lane of travel and is weight-restricted

Leaburg Dam: **Alternatives**

- EWEB may completely remove structure (including bridge); or
- EWEB may consider rehabilitating the bridge over the removed dam.

Leaburg Dam Rd. **Current Conditions**

- County road not built to standards
- Serves 16 residential addresses
- Public right-of-way ends

Leaburg Dam Rd. **Alternatives**

- EWEB proposes to connect Leaburg Dam Road to Leashore Drive.
  - This would require reestablishing right-of-way that would require acquisition / condemnation
  - Neighbors have expressed concern with increases/thru traffic
  - Road would need to be upgraded to carry more traffic
- Lane County would like EWEB to explore Evacuation Road and keep gates to prevent thru access

Goodpasture Bridge Existing Conditions

- One lane of travel
- Weight restricted
- Wooden

Goodpasture Bridge **Alternatives**

- Lane County needs to protect this bridge
- EWEB transportation alternatives should take this into consideration

Alternatives Analysis
Options for EWEB to Explore

1. Replacing Leaburg Dam Road Bridge
2. Upgrading Leaburg Dam Road Bridge
3. Limiting any reconnection of Leaburg Dam Road and Leashore Drive to emergency/evacuation purposes

Other considerations to communicate to EWEB?