



TUCANNON FLOODPLAIN MANAGEMENT PLAN

PUBLIC MEETING

October 2016

Overview

- W.T. Wooten Wildlife Area Overview
- Floodplain Management Plan Goals
- Recent Activities
 - Rainbow Lake Design
 - Other Analyses Completed
- Other Project Updates
- Public Involvement
- Questions

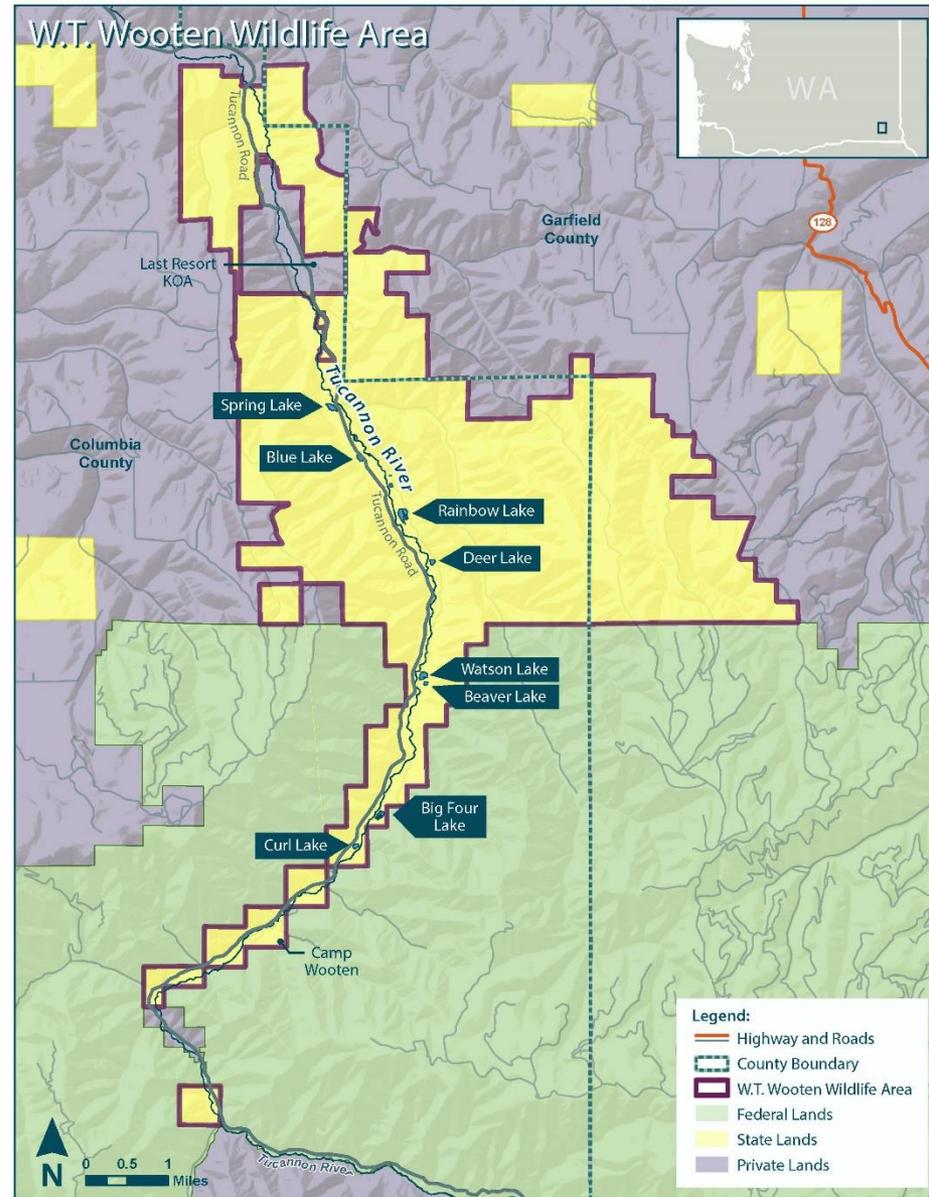


W.T. Wooten Wildlife Area

Overview

W.T. Wooten Wildlife Area

- Eight man-made lakes
- Trout fishing in the Tucannon River
- 11 WDFW campgrounds
- Wildlife viewing/
bird watching
- Hunting
- Hiking



W.T. Wooten Wildlife Area

Floodplain Management Plan Goals

Floodplain Management Plan (FMP)

Projects identified in the FMP focus on

- Tucannon Lakes – Enhance and improve the Tucannon Lakes
- Habitat Enhancements – Enhance habitat in the floodplain (including large wood (LW) projects)
- Powerline – Bury the powerline between the Tucannon Fish Hatchery and Camp Wooten
- Campgrounds – Relocate campgrounds out of the floodplain
- Outreach – Maintain and build public support for management of the wildlife areas



Tucannon Lakes and Floodplain Reconfiguration

Enhance Tucannon Lakes for improved fishing experience, floodplain function, and public safety

- Constructed between 1953 and 1955
- Popular fishing lakes
- All but two of the lakes constrict floodplain
- Six of the eight lakes are in violation of State Dam Safety Regulations
- Lakes retain sediment and are losing carrying capacity for trout fishery



Increasing Large Wood

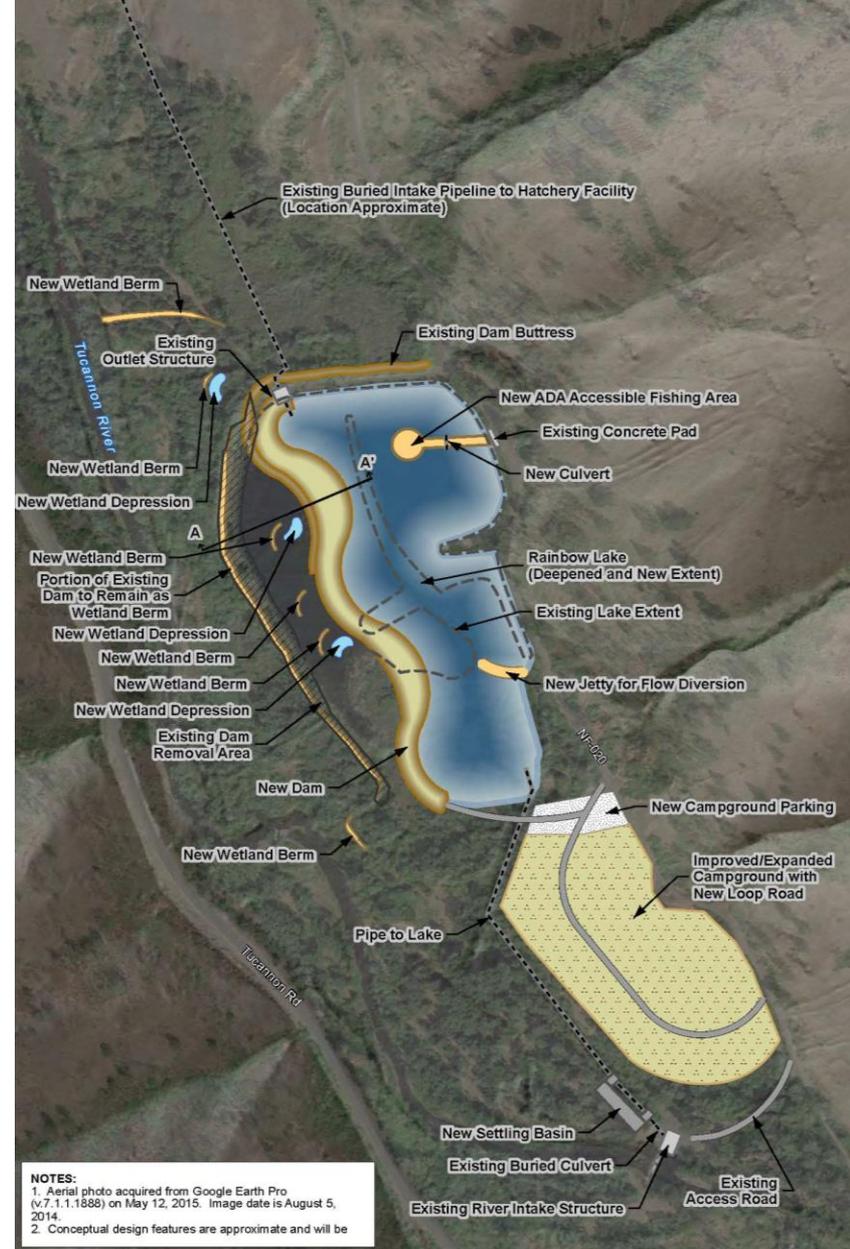
- LW is a critical component of streams, fish habitat, and stream function
- Lack of LW is a limiting factor for creation and maintenance of pools and providing fish cover and stream function, and is critical for salmon recovery



Rainbow Lake

Conceptual Plan

- Dredge and remove sediment
- Increase lake depth and volume
- Reduce water temperatures and improve water quality
- Increase stocking capacity and angler access
- Improve and expand day-use and campsite facilities
- Expand to the south (upstream of inflow)



Recent Activities

Completed

Recent Activities Completed

- October 2016 – 60% Designs Completed for Rainbow Lake
- September 2016 – Initial Permit Documents Submitted
- Spring 2016 Analyses Completed
 - Geotechnical Exploration and Analysis
 - Wetland Delineation and Assessment
 - Hydrologic and Hydraulic Analysis



100 Year Floodplain – Existing Conditions



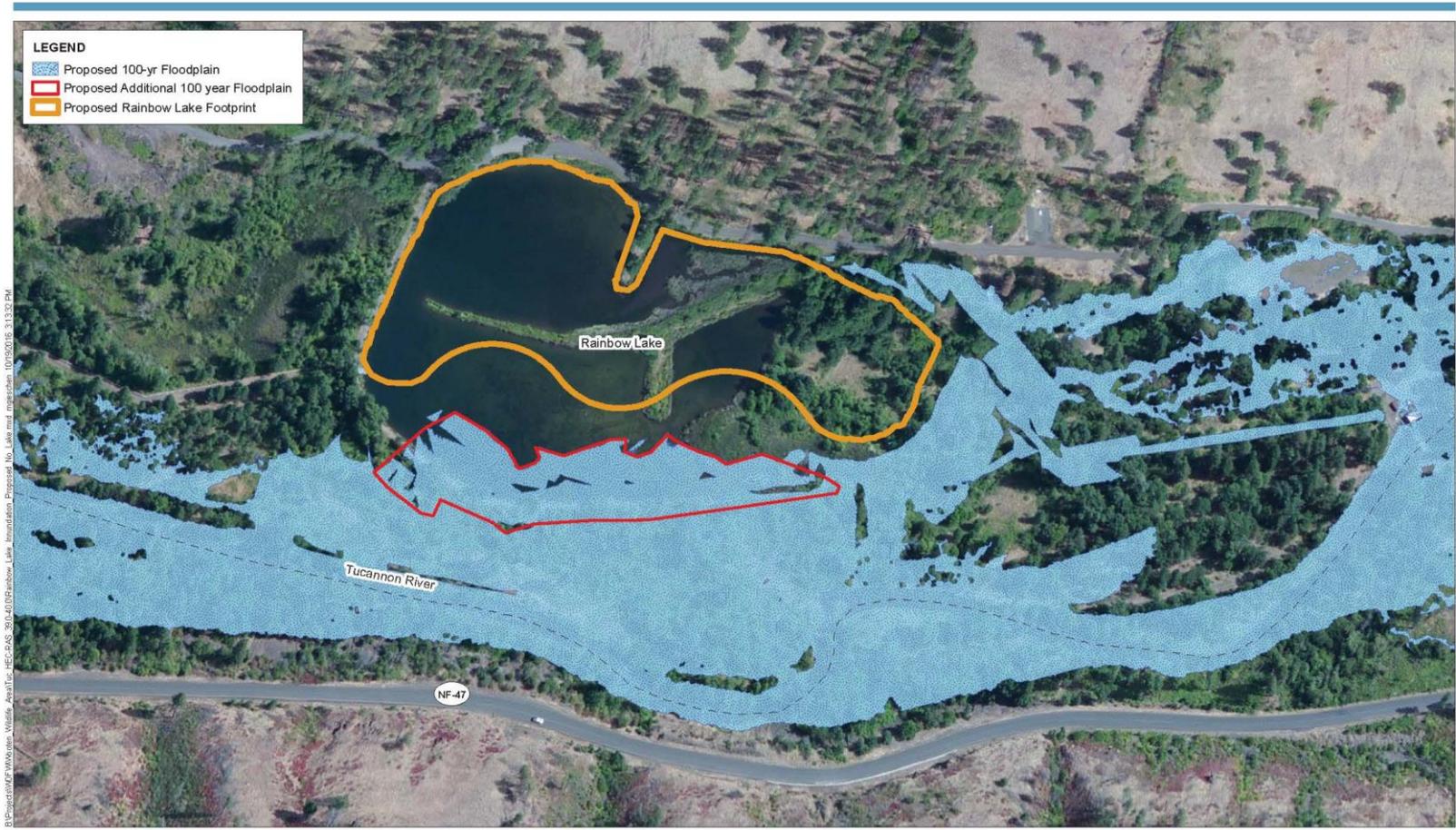
NOTES:
1. Flood Inundation Extents generated from Anchor QEA HEC-RAS model outputs for the Tucannon River.
2. HEC-RAS model topography developed using 2010 LIDAR



Figure 4-4
100-yr Flood Inundation Extents
Existing Conditions Rainbow Lake
Wooten Wildlife Area / WDFW



100 Year Floodplain – Proposed Conditions

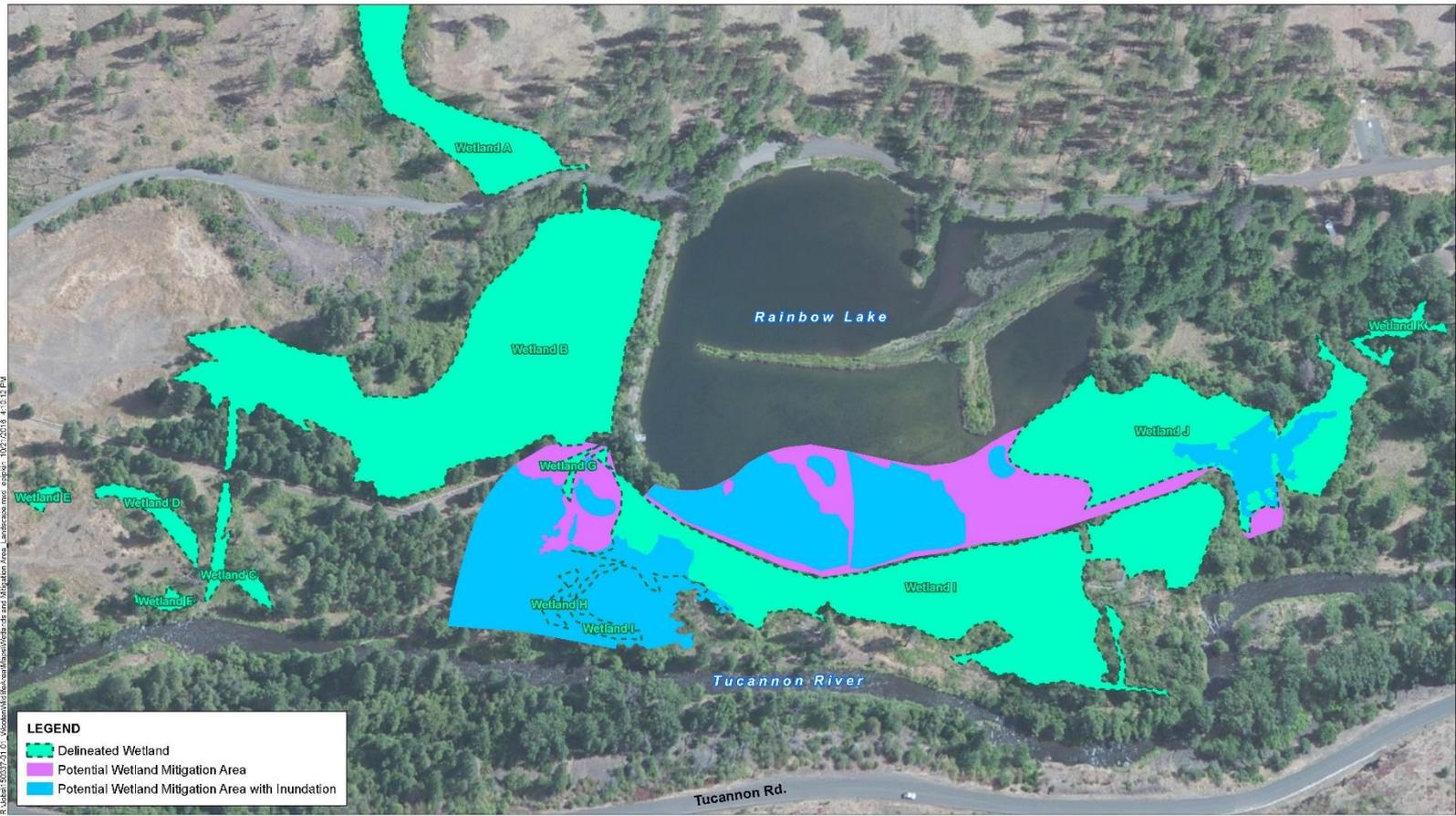


Current Activities – Rainbow Lake

- Wetland mitigation design
- Dam design refinement
- Dam safety analysis
- Refining and updating permitting documentation
- Coordinating with regulatory agencies



Wetland Mitigation Design



NOTES:
 1. Wetland delineation conducted by Anchor QEA, May 2016.
 2. Aerial photo provided by Esri (ArcGIS Online).

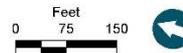
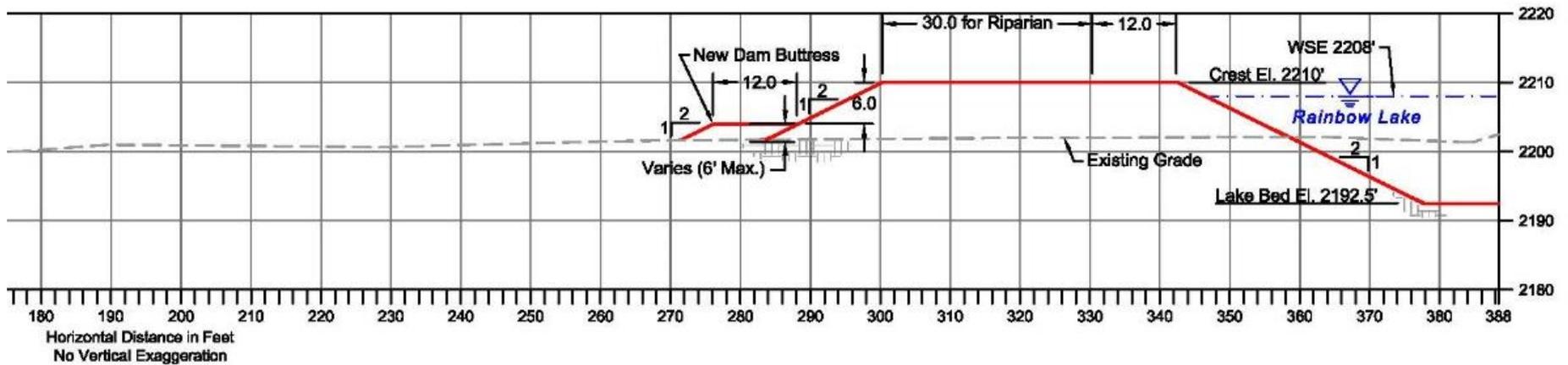
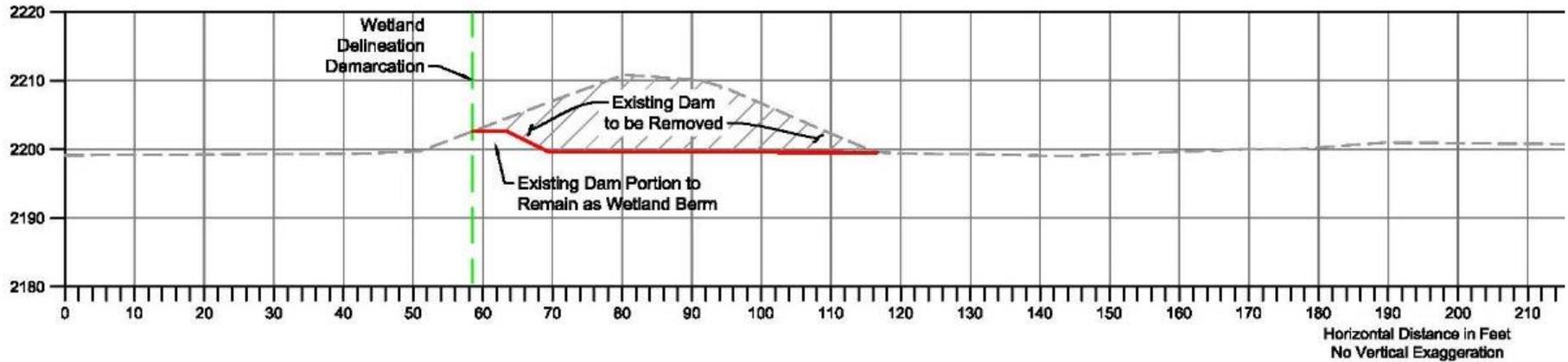


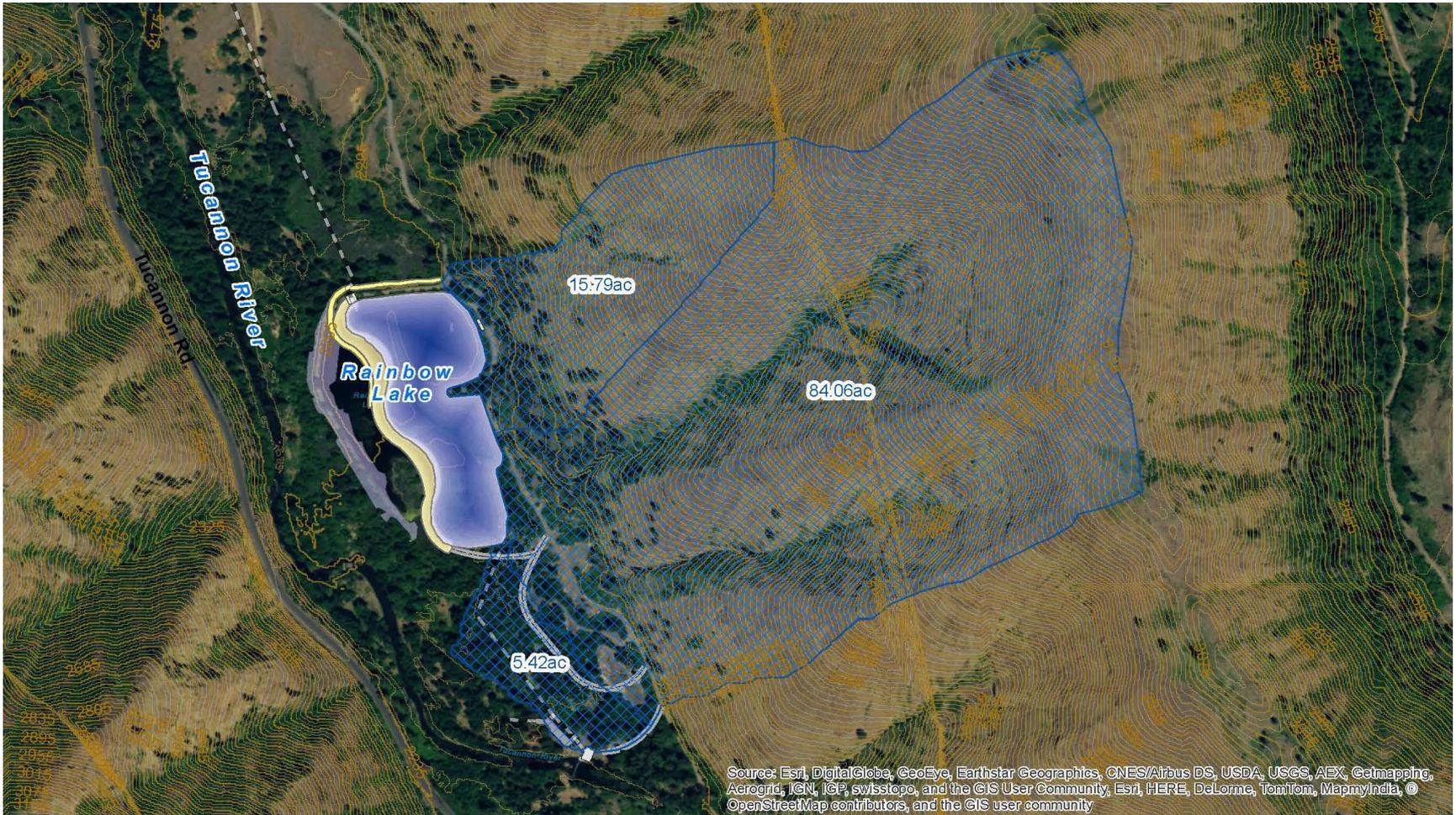
Figure 1
 Wetlands and Potential Mitigation Area
 Rainbow Lake Design
 WDFW



Dam Design Refinement



Dam Safety Analysis



Next Steps – Rainbow Lake

- Revise Wetland Mitigation Design
- Compile Dam Safety Submittal
- Design Recreational Use Improvements
- Plan Fishing Opportunities and Lake Closure for 2017 Construction
- Finalize Dam and Lake Improvements Design



Rainbow Lake – Likely Construction Timeline

2017

- Mobilization and Construction Preparation (May-June)
- Lake Dredging and Expansion to the South (July-September)

2018

- Mobilization and Construction Preparation (May-June)
- Dam Removal and Construction (July-August)
- Wetland Mitigation (August-September)



Temporary Recreation Impacts – Rainbow Lake

- Reduced stock plantings
- Fishing season truncated, end in June during construction
- Campground unavailable July through September during construction



Rainbow Lake: Schedule

- January 2017 – Final Site designs
- February 2017 – Submit Dam Safety Reports for Ecology approval
- March 2017 – Permits Acquired and Work Approved
- March 2017 – Bid documents and contractor selection
- May to September 2017 – Construction: Lake Dredging and Expansion
- May to September 2018 – Construction: Dam Relocation and Recreational Improvements
- September 2018 to 2028 – Wetland Mitigation Monitoring and Assessment



River Restoration Updates

River Restoration and Habitat Enhancements

LW restoration projects planned for 2017

- Tucannon River at Hartsock Unit
 - Helicopter- and ground-based equipment to place LW structures
- Tucannon River from Camp Wooten Bridge to Big 4 Lake
 - Helicopter-based heavy equipment to place LW structures



Public Involvement

Visit the Project Website

- Website and Contact Information
 - Email: http://wdfw.wa.gov/lands/wildlife_areas/wt_wooten/floodplain_management.php
 - Phone: 509-843-1530

The screenshot shows the Washington Department of Fish & Wildlife (WDFW) website. The header includes the WDFW logo and the text "WASHINGTON DEPARTMENT OF FISH & WILDLIFE" and "WDFW LANDS". Navigation tabs include Home, About WDFW, Conservation, Fishing, Hunting, Enforcement, Wildlife Viewing, Licensing & Permits, and Living with Wildlife. A search bar is located in the top right corner.

Wildlife Areas

W.T. Wooten Wildlife Area Floodplain Management Plan

The W.T. Wooten Floodplain Management Plan (FMP) was developed by the Washington Department of Fish and Wildlife (WDFW) as an integrated, cross-program effort to improve conditions within the Tucannon floodplain.

The FMP identified initiatives to improve ecological functions and recreational opportunities and addressed facility deficiencies for the eight man-made lakes (the Tucannon Lakes) and Tucannon River floodplain within the W.T. Wooten Wildlife Area.

- Site Map
- Fact Sheet

What's New?

WDFW has received \$2 million in funding for continued implementation of the FMP for the 2015 to 2017 biennium. Continued feasibility analysis and design development will occur through this biennium to further the following conceptual actions identified in the FMP. The reserve of the \$2 million allotted will be spent on dredging Rainbow Lake using the proposed new lake footprint:

- Developing site survey plans and geotechnical investigation plans for each of the Tucannon Lakes
- Preparing design evaluations and construction costs estimates
- Furthering the design of the Rainbow Lake Enhancement and Rehabilitation Project, which includes improvement of fish and wildlife habitat, water quality, storage capacity, and access for anglers. The project also includes improvement of dam safety and reduction of seepage
- Continuing design of large wood restoration projects
- Implementing a Public Involvement Work Plan and holding additional public meetings (see Upcoming Events on sidebar)

CONTACT INFORMATION

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For more information on Wildlife Areas, please contact the WDFW Wildlife Program.
Phone: 360-902-2515
E-mail: wildthing@dfw.wa.gov

Parking Information

A Discover Pass or Vehicle Access Pass is REQUIRED on ALL WDFW Lands

[Learn more](#)

Sign-up for email updates

For email updates, please contact Kari.dingman@dfw.wa.gov subject line "Wooten FMP Updates."

Upcoming Events

WDFW will periodically host public meetings to provide progress updates on implementation actions. Our first meetings of 2016 are scheduled from 4:30 to 6:30 p.m. on April 20 in Richland and April 21 in Dayton.

- **April 20, 2016**
4:30 to 6:30 p.m.
Richland Public Library
955 Northgate Drive
Richland, WA 99352
- **April 21, 2016**
4:30 to 6:30 p.m.
Dayton Best Western Inn
507 East Main Street
Dayton, WA 99328

Past Meeting Materials

April 7, 2015 Public Open Houses

- Public Meeting Summary
- Presentation

How to Keep Informed

- Sign up for email updates
 - Email: Kari.dingman@dfw.wa.gov
 - Subject line: "Wooten FMP Updates"
- Receive information update newsletters
- **Attend the next meeting! (dates TBD)**

**Spring 2017
Richland, WA**

**Spring 2017
Dayton, WA**



Questions?