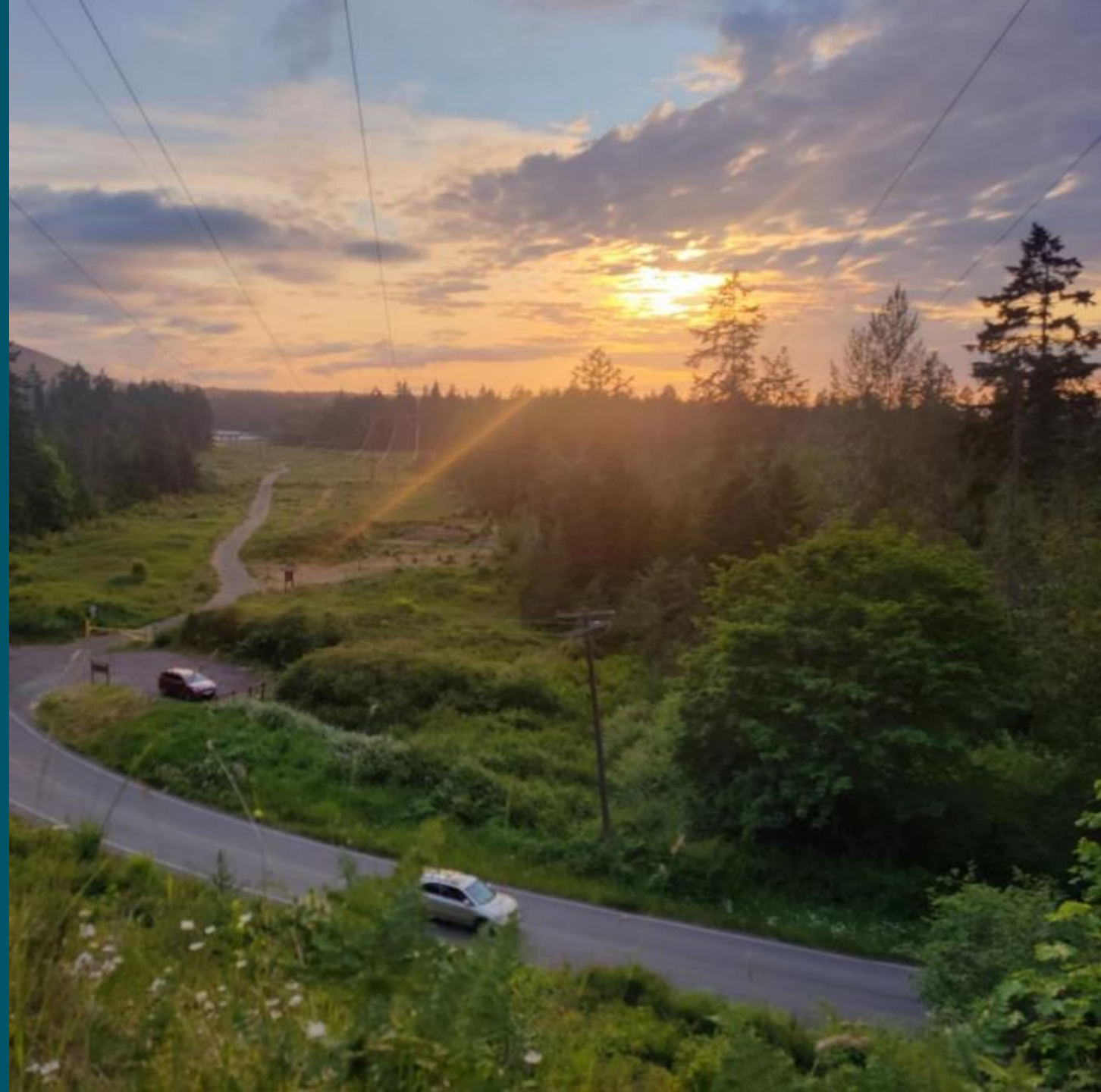
Dungeness Off-Channel Reservoir Project Update

Board of County Commissioners

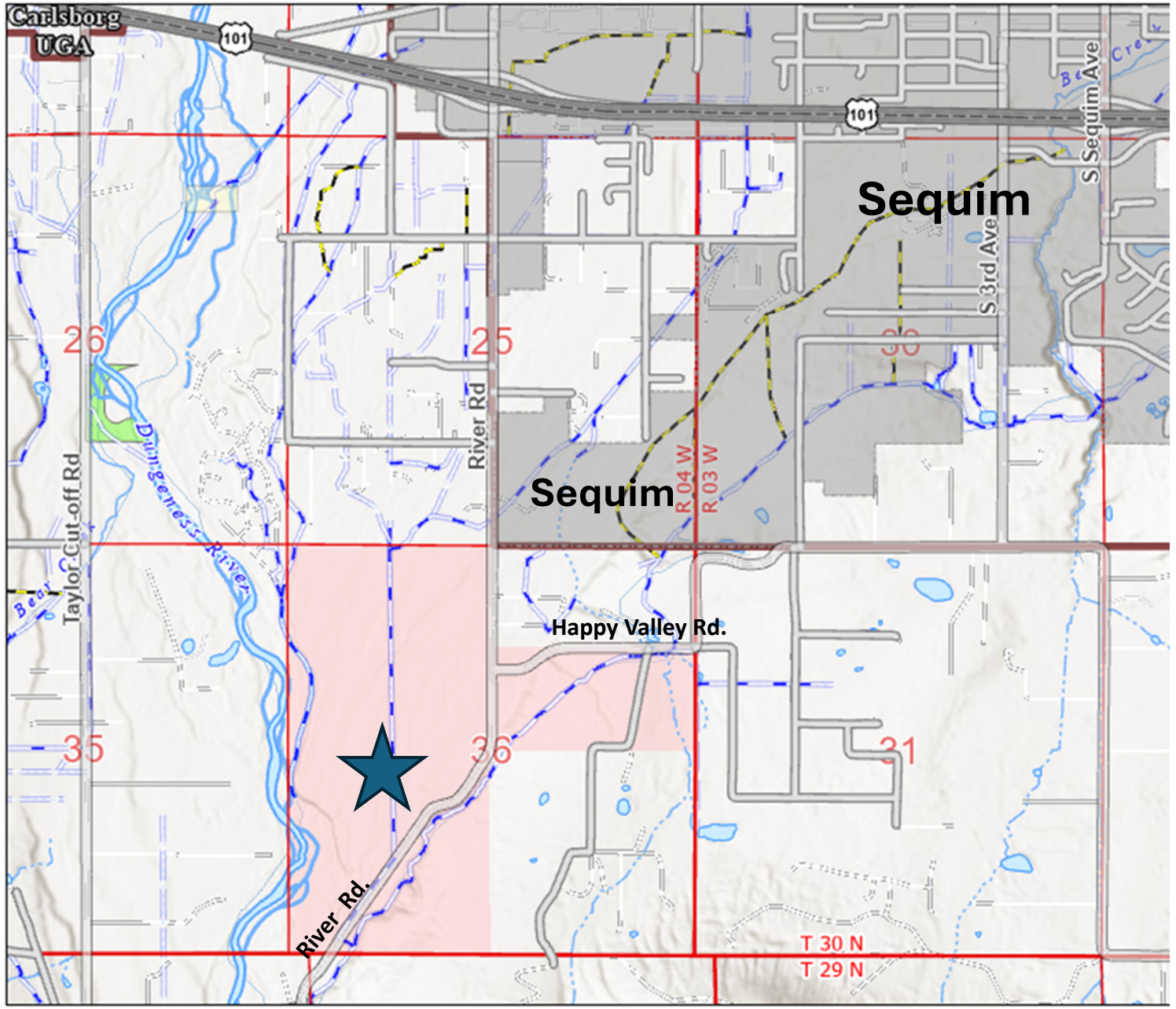
November 24, 2025



Vicinity Map

Oct. 2024: County acquisition of ~ 400 acres from state Dept. of Natural Resources

- $1,240,100 purchase paid for under state Ecology Streamflow Restoration Grant



Dungeness Off-Channel Reservoir (OCR) Project Status Summary

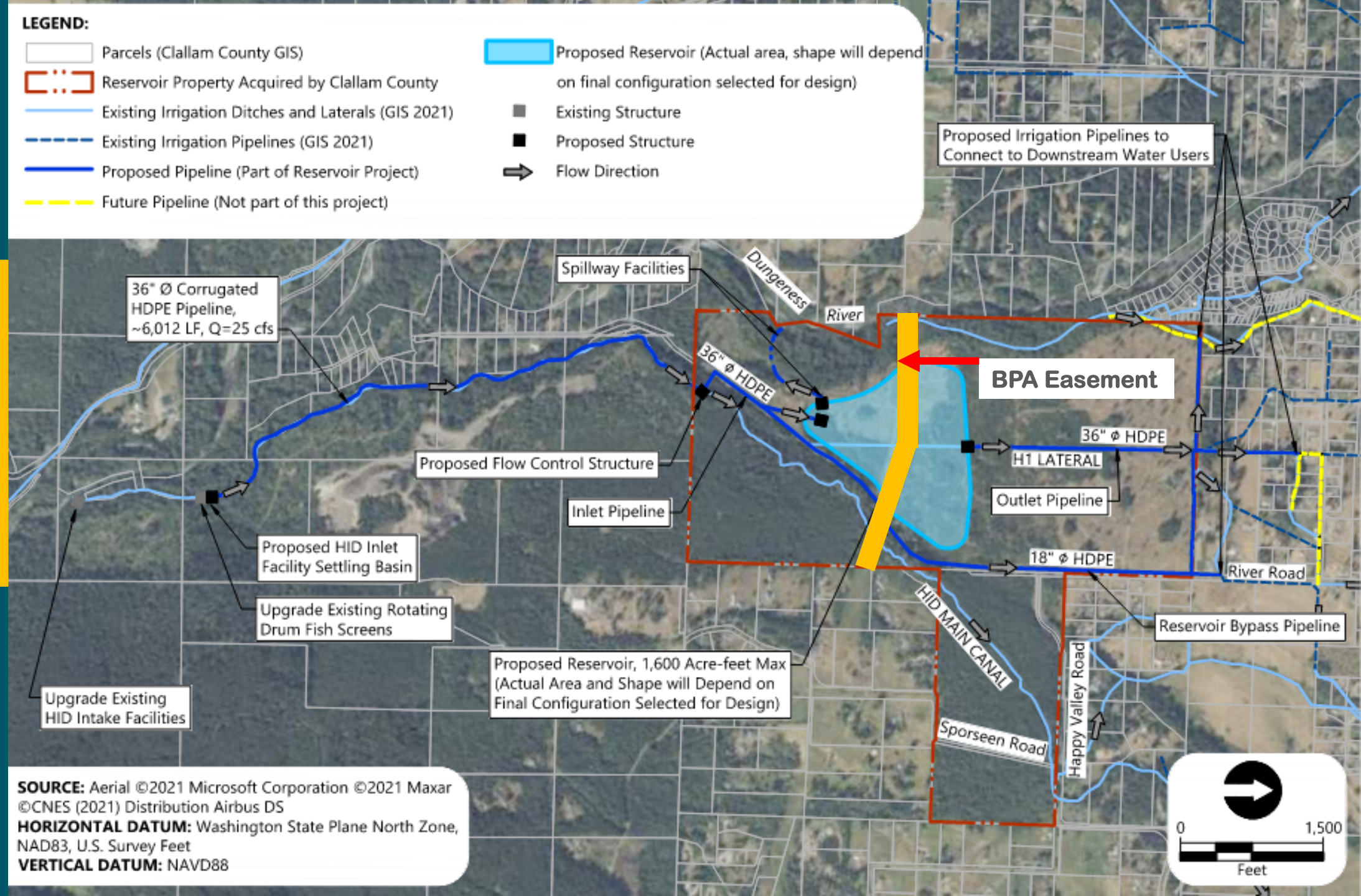
Active Project Phases:

- Upgradient Irrigation Infrastructure Improvements ***(In Preliminary Design Phase)***

- Dungeness OCR and Appurtenances ***(In Preliminary Design Phase)***
  - Additional funding needed to complete design
  - Funding to construct not yet secured

Project Overview Map

Current Project Area is Across over 2.6-miles!!!



Upstream Improvements

- Improvements to Highland Irrigation District headgate structure
- Installation of a settling basin
- Installation of ~6,000 feet of 36-inch pipeline in the upstream end of the Highland Irrigation District main canal
- Flow control structure
- Inlet pipeline of ~ 2,900 feet of Highland H1 Lateral to reservoir
- Improvements to Highland Irrigation District existing fish screens by WA. Dept. of Fish and Wildlife ***(Completed)***

Dungeness Off-Channel Reservoir
Selected Option E1 Configuration

Connected Dungeness OCR Projects
Not Currently Active or Funded

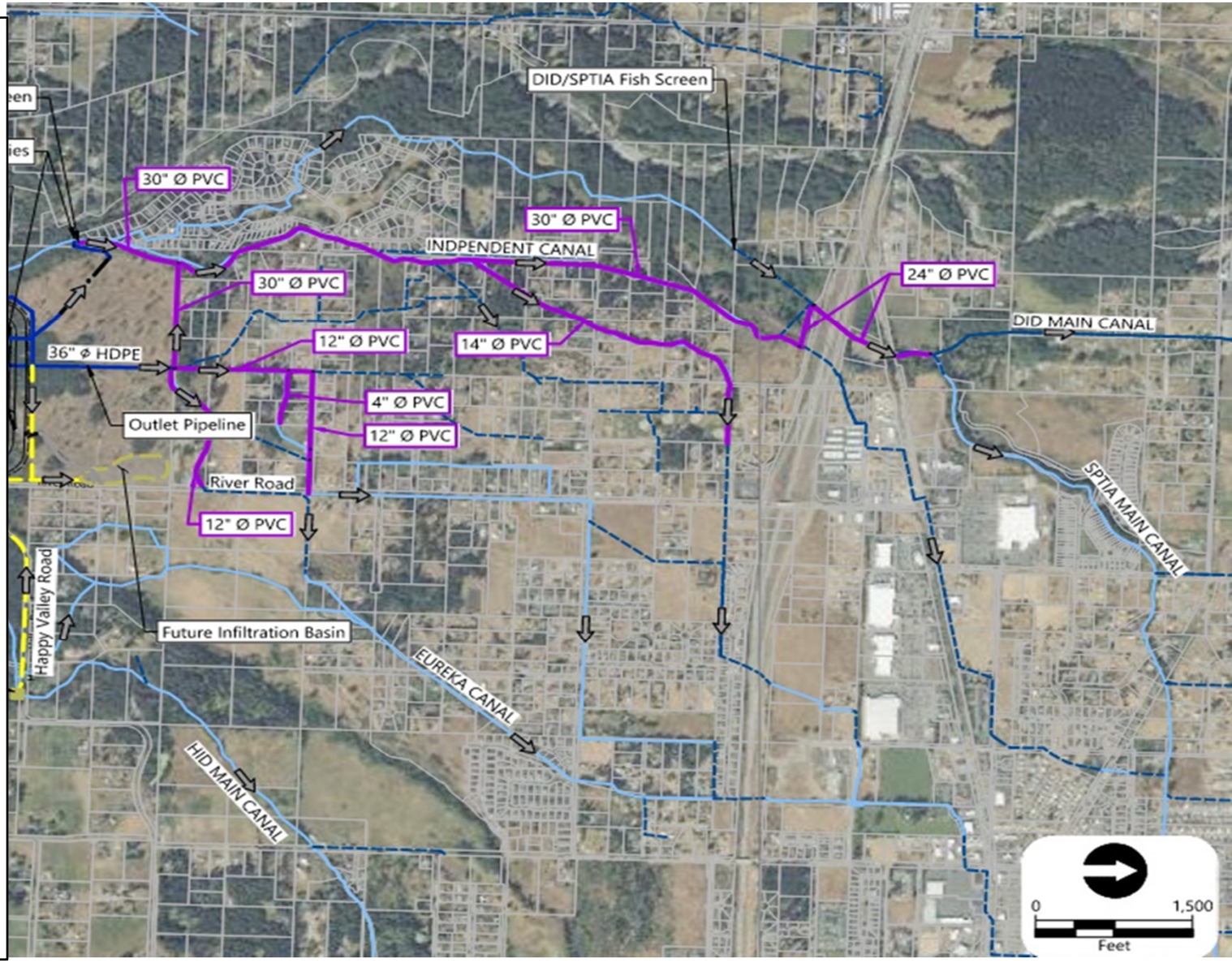
- Downgradient Irrigation Conveyance System
- Stormwater Capture and Aquifer Recharge Infiltration (SCARIF) Project
  - Funding for evaluation, design, and construction tied to County's FEMA Hazard Mitigation Grant Program (HMGP) application under pending review

Downgradient Off-Site Irrigation Conveyance Improvements

- Identified additional off-site irrigation conveyance improvements to fully deliver water stored in the Off-Channel Reservoir to irrigated downgradient properties.

- 2021: 30% Preliminary Design (grant funded) by Clallam Conservation District

- No Current Funding to complete design or construct



Downgradient Improvements

Task	Current Cost Estimate	Funding
Detailed Design & Permitting	~$514,000	No funding identified or applied for yet.
Construction	~ $5.3 million	No funding identified or applied for yet.

[1]Subject to change as design, environmental compliance, & permitting progresses.

Dungeness Off-Channel Reservoir (OCR) & Stormwater Capture and Aquifer Recharge Infiltration Facility (SCARIF) Projects

Stormwater Capture and Aquifer Recharge Infiltration Facility (SCARIF) Project

Task	Current Preliminary Cost Estimate[1]	Funding
Design	~$300K to $340	Funding request pending under FEMA Hazard Mitigation Grant Program (HMGP)
Construction	~ $1.7 to 2.4 million	Funding request pending under FEMA Hazard Mitigation Grant Program (HMGP)

[1]Subject to change as design, environmental compliance, & permitting progresses.

Design and Permitting Phase Scope, Budget, & Costs Update

FOR:

- Dungeness Off-Channel Reservoir (OCR)
- Upgradient Irrigation Infrastructure Improvements

2019 State Ecology Grant Status (November 2025)

Task	Grant Budget	Remaining (November 2025)	Status
Project Management	$385,877	$17,751	Ongoing
Property Appraisal Related	$75,000	$9,842	Completed
Design	$2,900,300	$594,232	In Progress—30% Design Reset
Permitting & Related Work	$156,727	$73,790	On Hold
Outreach, Coordination, & Water Rights	$334,950	$9,327	Ongoing—2-4 Work Group Meetings, Stakeholder Engagement, March Public Meeting?
Land Acquisition, Dump Site Cleanup, & Related Work	$1,765,000	$306,302	•Acquisition completed ($1,240,100) •Dump Site Clean-up Completed
Water Quality Monitoring	$70,000	$52,000.00	Sampling completed, Monitoring Results Report to come
Supplemental Cultural Resources Review	$5,000	$5,000	If Needed
TOTALS	**$5,692,854**	**$1,068,244**	

Projected Remaining Design Costs?

Design Component	Projected Remaining Design Costs1	Comments
Dungeness Off-Channel Reservoir (OCR)	~ $1.5 to 1.9 Million	Based on OCR Option E1 configuration
HID Headgate	~$200K	WDFW and Tribe request new fish screen at or near the point of diversion be added to project scope. **Not included in costs.**
HID Main Canal	~ $225k	
TOTALS	**~ $1.9 to $2.3 million**	• Funding adequate to complete design for upgradient improvements • **Need additional $900,000 to 1.4 million funding to complete OCR design.**

[1]Subject to change as design, environmental compliance, & permitting progresses.

Dungeness OCR Design and Permitting Schedule Update

	Targeted Completion	Funding Source
30% Preliminary Design Reset for OCR Option E1	Q4 2025 to Q1 2026	Adequate grant funding remaining to complete.
Remaining Geotechnical Site Investigations & Related Evaluation Work	**On Hold**	Current remaining grant funding is insufficient to cover all work needed to inform and complete design.
Permitting and Environmental Review (NEPA/SEPA) Compliance	**On Hold**	• On hold due to lack of concurrence on project fish benefits and impacts by Dungeness Reservoir Work Group (DRWG) • Adequate funding remains but will be insufficient if additional project environmental assessment is required or warranted.
Detailed and Final Design	**On Hold**	Current remaining funding is insufficient to complete design and all required related work (e.g., geotechnical)

Key Tasks targeted to Complete Prior to March 2026 Ecology Grant Expiration

- 30% Preliminary Design Reset for OCR Configuration E1
- Continue design on upgradient irrigation infrastructure improvements
- Water Quality Monitoring Results Report
- Continued Project Outreach/Coordination
  - 2 to 4 Dungeness Reservoir Work Group (DRWG) Meetings
  - Continued coordination with project partners, local, state, and federal agencies, and Jamestown S’ Klallam Tribe
- Potential March 2026 Public Meeting??? *(subject to change due to project status)*

Project Construction Phase Budget & Costs Update

Latest Construction Probable Costs and Funding

Project Component	Projected Costs1	Under Contract or Awarded Funding	Comments
Off-Channel Reservoir (OCR)	~ $36.6 million	~ $3.96 million ***(Awarded – Not Executed)***	•Execution of state grants currently contingent on OCR design & permitting completion. • ~ $30 million FEMA HMGP Grant Application Remains Under Review
HID Headgate, H1 Lateral, Settling Basin, & flow control	~$2.4 million + ?	~ $1.8 million ***(Under Contract)*** ~ $621K ***(Awarded - Not Executed)***	•Execution of state grants currently contingent on OCR design & permitting completion. •WDFW and Tribe request new fish screen at or near the point of diversion be added to project scope. **Not included in costs.**
HID Main Canal	~$2.5 million	~ $2.5 million ***(Pending Contract)***	Fully funded with contract approval by County.
TOTALS	**~ $41.5 million**	**~ $8.8 million**	

[1]Subject to change as design, environmental compliance, & permitting progresses.

Federal Emergency Management Agency (FEMA) Hazard Mitigation Grant Program (HMGP) Application Status

Dungeness River Off-Channel Reservoir (OCR) and Stormwater Capture and Aquifer Recharge Infiltration Facility (SCARIF) Projects

New Benefit-Cost-Analysis (BCA) Required

- The submitted BCA and related methodology that resulted in current funding consideration is no longer acceptable by FEMA.
- New BCA primary focus is on Aquifer Storage and Recovery (ASR)/drought mitigation for existing wells used for potable water.
- WA Emergency Management Division (EMD), a project funding partner, has retained services of a BCA consultant to assist.
- **County responsible for BCA development and costs.**

FEMA HMGP Grant Status – Cont'd

BCA Consultant Requests/Recommendations:

- Requesting County collect and evaluate specific data to inform the BCA. Examples:
  - Identify wells experiencing drought impacts that would benefit from aquifer recharge mitigation
  - Projections about when wells would start to run dry or otherwise require some kind of remediation to remain functional
  - Duration of lost or diminished well function
  - Costs associated with loss of well function (e.g., drilling deeper)
  - Calculations/data showing how project will mitigate loss or diminished well function
- Recommends work be done by a technical expert (e.g., hydrogeologist)

FEMA HMGP Grant Status – Cont'd

Draft BCA Study Framework

- Prepared by project consultant and consultation with hydrogeologist(s) with Sequim area groundwater model and other local data experience.
- Initial Cost Estimate: $25,000 to $40,000
- EMD consultant review indicates framework still not capturing all specific data needed
- County consultant conducting limited analysis of existing information to submit to BCA consultant for feedback on whether will address BCA data needs at lower costs.

FEMA HMGP Grant Status – Cont'd

Considerations:

- Current available data and analysis of that data may not be sufficient for a positive BCA result.
- Eligible pre-award work costs such as prior and any new BCA preparation work will only be reimbursed with positive BCA score, and Phase 1 FEMA grant award.
- A Phase 1 FEMA grant award would help address design and NEPA Compliance and will be used to inform consideration of a Phase 2 FEMA grant award for construction.

FEMA HMGP Grant Status – Cont'd

Additional Considerations:

- Current Period of Performance to Fully Complete Project (i.e., construct Dungeness OCR) is **May 2026**
  - EMD is relatively confident for two-year extension, but beyond two years is uncertain.
  - Consultant team projects approximately two years to construct the OCR
  - Prior to OCR construction County will need to:
    - Secure gap funding to finalize design
    - Complete SEPA/NEPA compliance
    - Secure required local, state, and federal permits
    - Secure ALL required funding for OCR construction, and
    - Complete a bid and award process.

More than a two-year extension will need to be requested and approved if approved for a Phase I FEMA Grant funding award.

Near-Term Actions Recommended:

1. **Consultant contract “no cost” time extension to March 2026 (expires end of 2025)**
   - Revisit additional extension based on project and grant funding status

Near-Term Actions Recommended:

2. **Request Ecology Approval of "no cost" One-Year Grant Time Extension (to March 2027) to support:**
   - Design and permitting of upgradient irrigation infrastructure improvements
   - Continue Project Outreach/Coordination
     - Dungeness Reservoir Work Group (DRWG) Meetings
     - Continued coordination with project partners, local, state, and federal agencies, and Jamestown S' Klallam Tribe
   - Public Outreach
   - Continue OCR design and supporting work (e.g., geotechnical) ***(Additional funding required to complete design and supporting work)***
   - Project management

Action Requiring Discussion/Direction:

1. **Should County fund preparation of new BCA and other continuing pre-award work in support of pending ~ $30 million FEMA grant application?**
   - Recommend revisit in Dec./Jan. following EMD response to County refined BCA data collection/analysis approach.
2. **Should the Public Works Dept. dedicate staff time to identify and apply for new grant funding to support project design and construction funding?**
   - Example: 2026 Ecology Streamflow Restoration Grant (New applications accepted between January 15 and March 17)

Action Requiring Discussion/Direction:

3. **Should County request Ecology approval of an additional reallocation of 2020 or 2022 awarded Streamflow Restoration construction grants for design funding gaps?**
   - Recommend consider prior to March 2026 Streamflow Restoration state grant deadline.
   - May not be approved given current project status
   - Would further reduce funding earmarked for construction
   - 2020 and 2022 awards may be at risk to claw back.

Action Requiring Discussion/Direction:

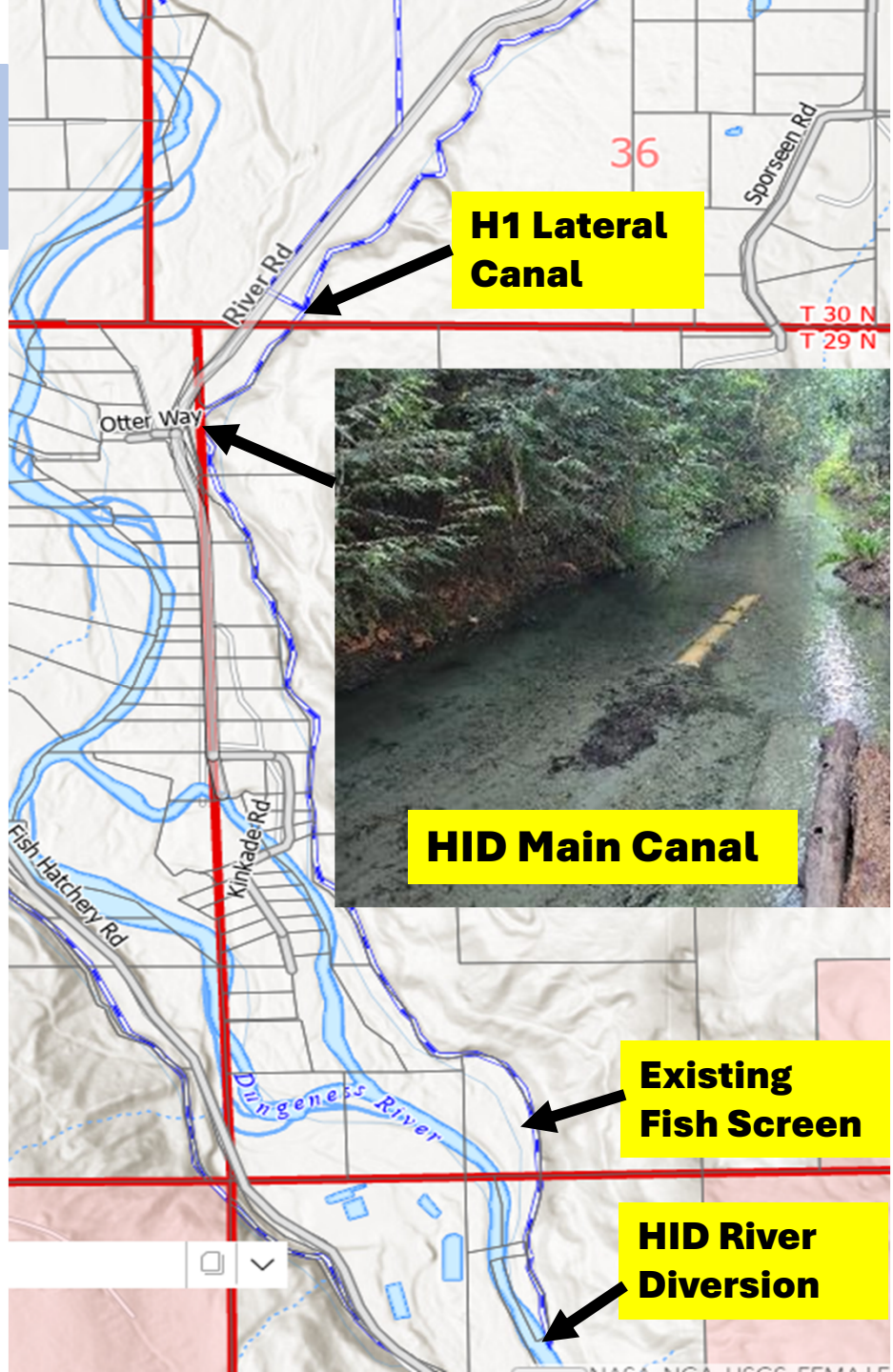
Other project actions to discuss in association with next two agenda items:

1) **Highland Irrigation District Main Canal Pipeline Project**
2) **Dungeness Intake/Headgate & Other Irrigation Infrastructure Improvement Projects on upgradient irrigation system projects.**

Highland Irrigation District (HID) Main Canal Pipeline Project

Highland Irrigation District (HID) Main Canal Pipeline Project

Description: Convert ~ 6,000 feet of HID Main Canal to pipeline between the existing fish screen facility and H1 Lateral Canal



Highland Irrigation Main Canal Project

Pipe approx. 6,000 feet of open canal that crosses steep slopes

Highland Main Canal Pipeline Project

Pending Federal Funding Award for Final Design & Construction

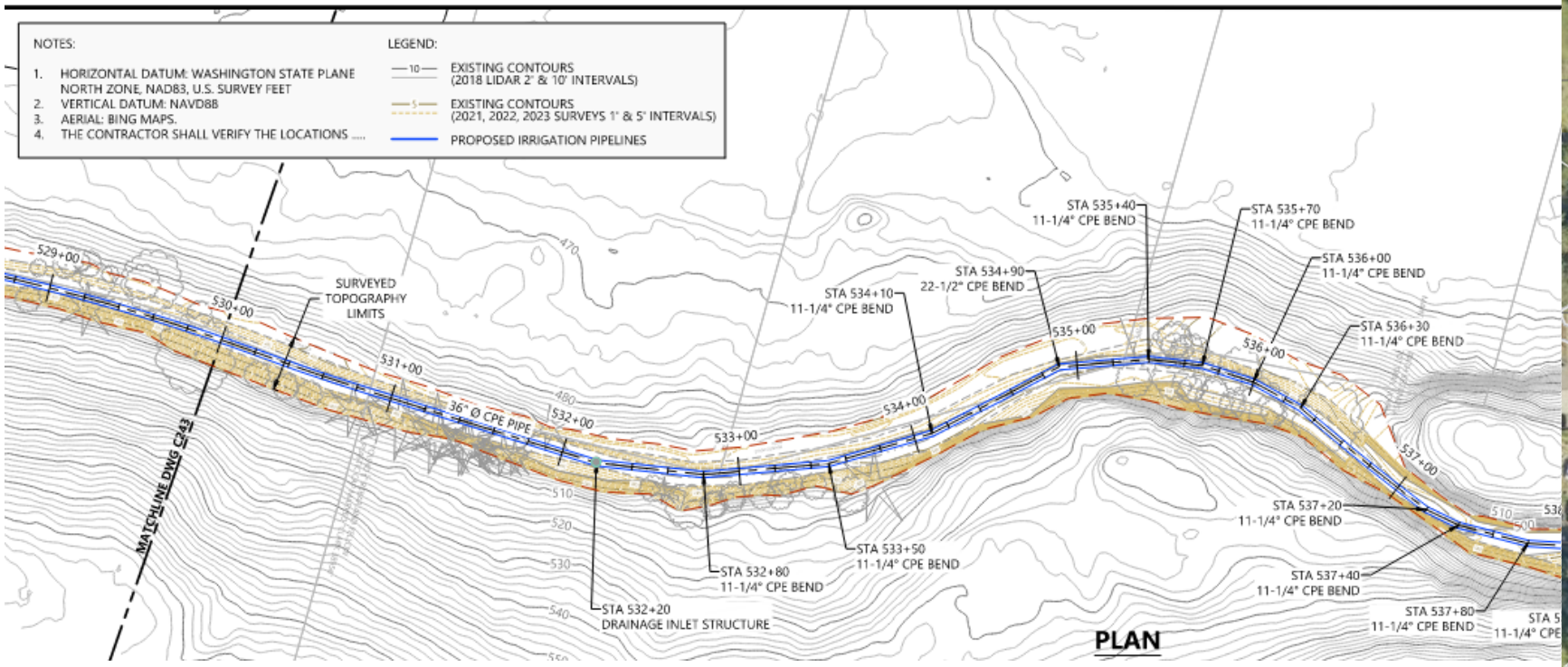
- $2.728 Million Federal Funding Award
  - Pending County Approval of Contract Agreement(s)
- 30% Preliminary Design funded by 2019 Ecology Streamflow Restoration Grant
- Projection to complete thru final design is ~ $225,000 and cost eligible to be covered under this federal award
- Use of this federal funding for design allows state funding to address other project design related costs

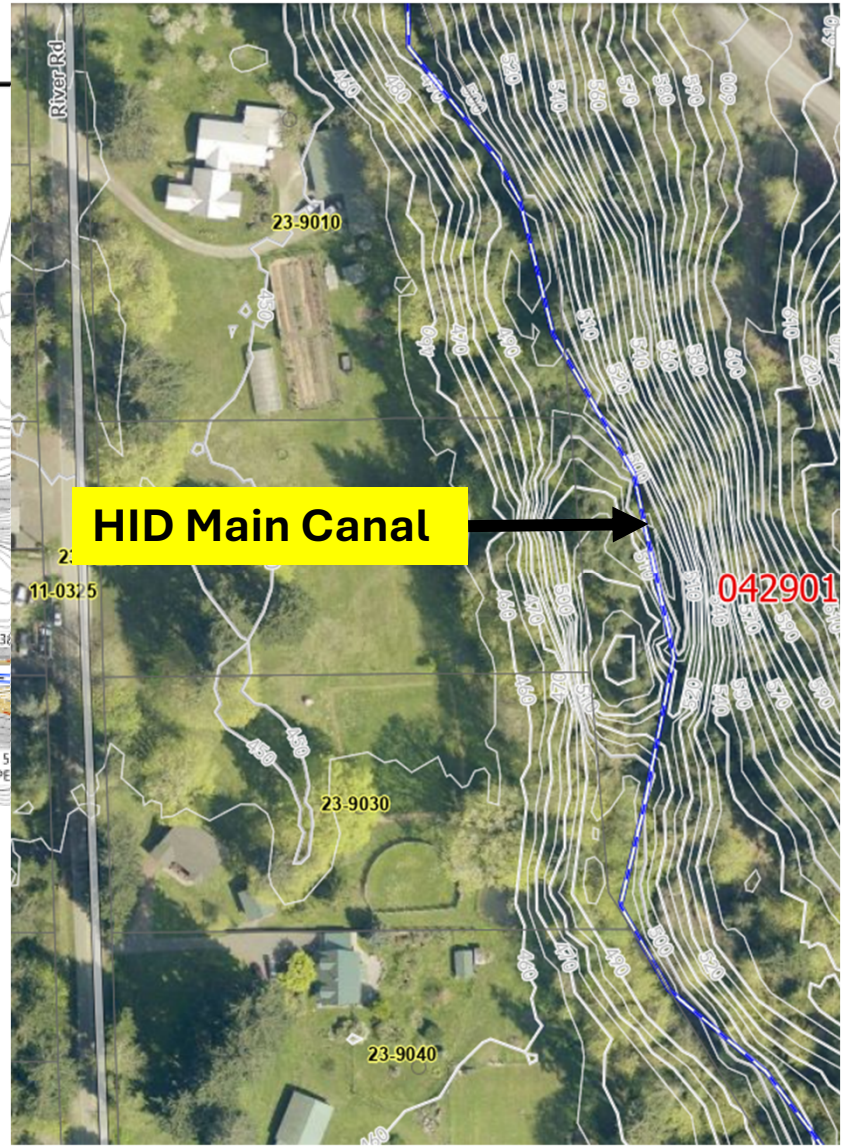
Highland Main Canal Pipeline Project
Objectives & Benefits

- Reduce flood risk of embankment failure.
- Reduce current operation & maintenance cost of an open canal and related embankment that crosses a steep forested slope.
- Some water efficiency (i.e., reduce loss) benefits
- Accommodate conveyance of increased diverted river flows (25 cfs) when water is legally available to fill the Dungeness Off-Channel Reservoir if constructed

The HID Main Canal Pipeline Project is supported by Highland Irrigation District and the Dungeness Reservoir Work Group (DRWG)

HID Main Canal Piping Project
NRCS Grant Award





The ~ 1.1-mile proposed HID Main Canal pipeline project crosses steep slopes with some sections above residential property.

USDA-NRCS Watershed Plan Agreement and Cooperative Grant Agreement Contract

- Obligation of the federal funds for the Highland Irrigation District (HID) Main Canal Pipeline Project requires County approval of:
  - USDA-NRCS HID Main Canal Pipeline Watershed Plan Agreement
  - USDA-NRCS Cooperative Grant Agreement Contract
- HID (co-sponsor) has signed the Watershed Plan Agreement.
  - HID through signing agreement agrees to be responsible for the operation, maintenance of the pipeline.
- Both agreements are under review by County Legal Counsel

Action Requiring Discussion/Direction:

Consider approval of USDA-NRCS:

1) **Watershed Plan Agreement**
2) **Notice of Grant and Agreement Award**

Dungeness Intake/Headgate & Other Irrigation Infrastructure Improvement Projects

Current Project Scope of Work:

- HID Dungeness Diversion Intake/Headgate Structure Improvements
- Install a settling basin downstream of the fish screen and before the planned HID Main Canal Piping Project
- Flow control structure improvements and automation
- Pipe ~ 2,900 feet of the open HID H1 lateral ditch from the HID Main Canal to the planned area of the Dungeness OCR.

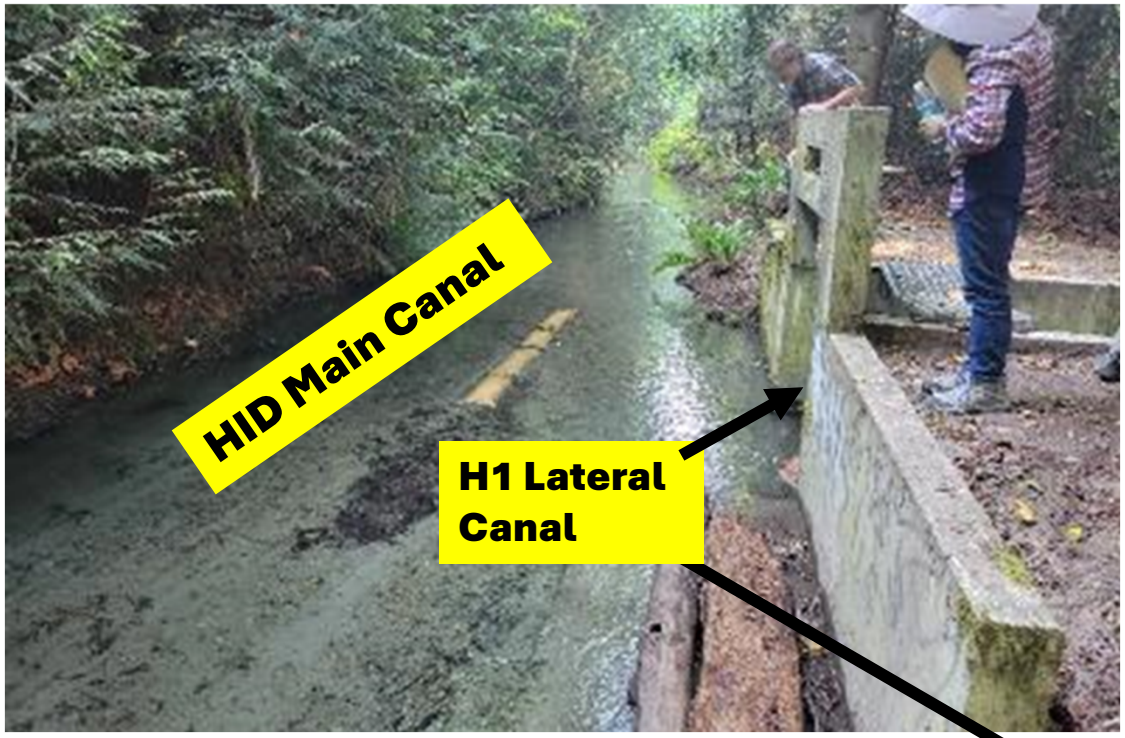
Dungeness River HID Diversion Intake

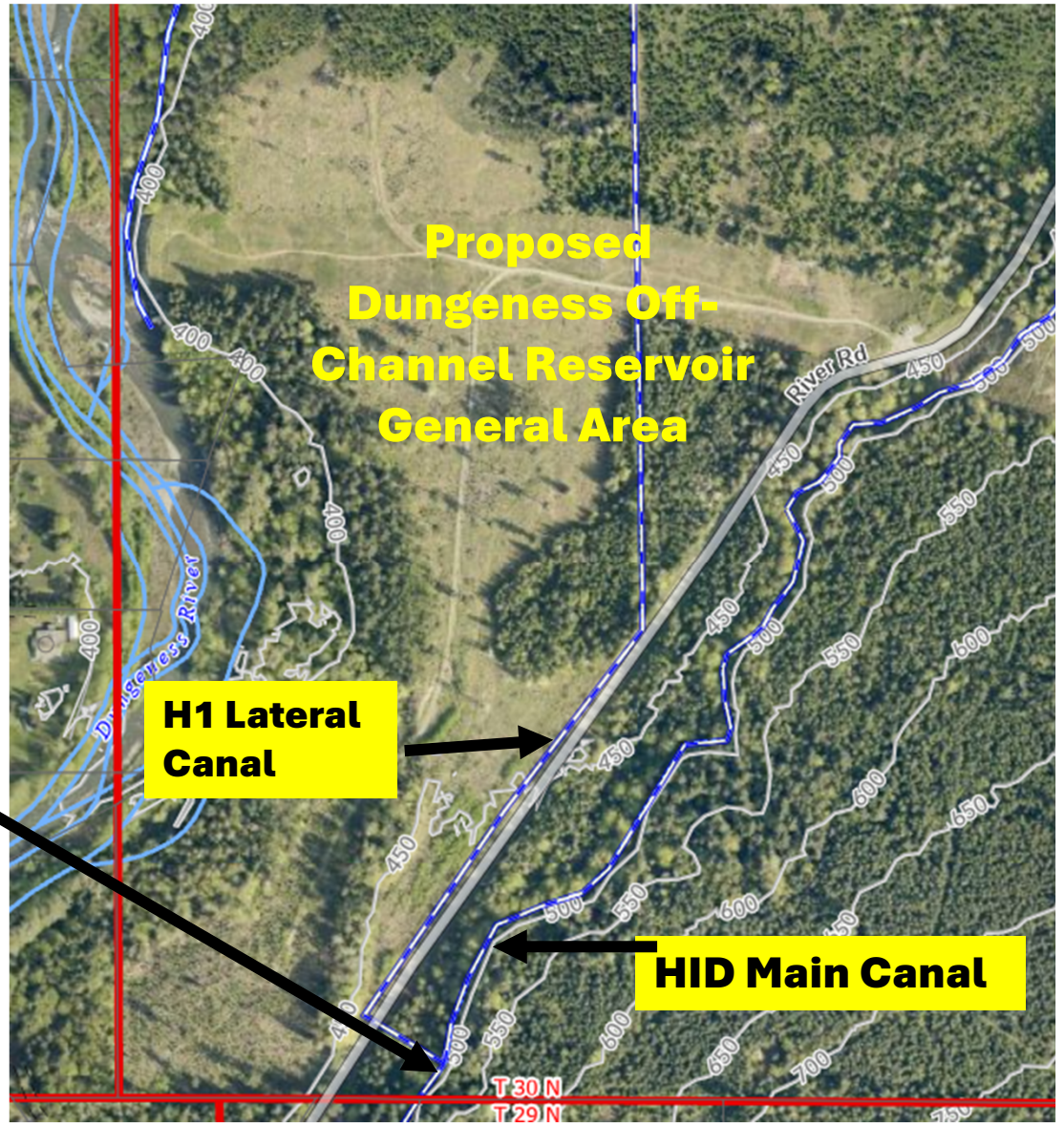
Existing Conditions

Front

Back

Highland Irrigation District – H1 Lateral





Project Component: Pipe ~ 2,900 feet of the open H1 lateral Canal

Project Funding

- 2019 Ecology Streamflow Restoration Grant ***(Design and Permitting Phase)***

- US Bureau of Reclamation (USBOR) WaterSMART Grant ***(Construction Phase)***
  - Estimated Project Cost = $2,434,622
    - Federal Share (WaterSMART grant) = $1,813,275 ***(Under Contract Aug. 2023)***
    - Non-Federal Share = $621,347
- 2020 Ecology Streamflow Restoration Grant ***(Construction Phase)***
  - Award = $2,275,699 ***(Not Under Contract)***
  - Part of planned funding package for Dungeness OCR and upgradient irrigation infrastructure construction projects.
  - Ecology previously indicated would not consider executing agreement ***"prior to"*** completion of Dungeness OCR final design and permitting deliverables under current 2019 Ecology Grant.
    - If not approved, would require securing alternative funding to cover non-federal share.

WaterSMART Grant Schedule: Construction Phase

Milestone – Task - Activity	Revised Start Date	Revised Completion Date
Complete Environmental & Cultural Resource Compliance	November 2022	January 2027
Construction Contract Bid & Award*	**January 2027**	**May 2027**
Construct Diversion Improvements	September 2027	November 2027
Construct Settling Basin	September 2027	April 2028
Construct Canal Flow Control Structure	September 2027	April 2028
Construct Ditch Piping	September 2027	April 2028

***Note: Meeting the May 2027 target for Construction Bid and Award will require completion of design and all permitting and environmental compliance by early-2027.**

30% Preliminary Design

- On Project Web Page: https://www.clallamcountywa.gov/1767/Dungeness-Off-Channel-Reservoir-Design
- 30% Design has been reviewed by the Dungeness Reservoir Work Group (DRWG)
- Comments Received from WA. Fish and Wildlife (WDFW) and Jamestown S’ Klallam Tribe (JSKT)
- Public Works and Consultant Team have discussed with and responded to WDFW and JSKT comments

Support of Preliminary Design

- Proposed project components (piping of canal, settling pond) downstream of the existing fish screen are supported by Highland Irrigation District (HID) and the Dungeness Reservoir Work Group (DRWG)
- Consultant team responded and recommended revisions to address WDFW and Tribal questions and concerns related to the preliminary design for the HID diversion intake facility and also between the intake facility and the existing fish screen.
  - Further follow-up response and discussion planned.

Request New Fish Screen Facility At or Near the Point of Diversion

REQUESTS:

- WA. Dept. of Fish and Wildlife and the Jamestown S' Klallam Tribe requests the County as part of the design and improvements to the upgradient irrigation improvement project(s) consider a new fish screen system at or near the point of diversion (POD).
  - POD screening system (i.e., attached to headgate/intake) preferred
  - If POD not feasible/desirable (e.g., environmental impacts) evaluate relocating fish screen close to the POD with a bypass system that delivers fish to the Dungeness River as quickly as possible.
- County conduct a "feasibility study"

Evaluate New Fish Screen Facility At or Near the Point of Diversion - Cont.

CONSIDERATIONS:

- It is likely a fish screen located at or near point of diversion (POD) is "feasible" from a design, environmental, and permitting standpoint.
- Current Funding and Scope of Work **does NOT include**:
  - Conducting a Feasibility Study for new fish screening facilities
  - Design of new fish screen facilities
  - Construction of new fish screen facilities and decommissioning of existing structures
- Existing fish screen facilities were assessed in coordination with WDFW for preparation of the County's 2021 WaterSMART grant application scope of work:
  - Existing screening facility meets technical standards to handle higher diverted flows.
  - Recommended improvements to existing fish screen were completed in 2024 by WDFW with other funding

New Fish Screen Not Required to Comply with State Standards:

"…WDFW has worked closely with the National Marine Fisheries Service (NMFS) guidelines for many years and, with this experience along with the best available science to us, believe point of diversion screens (PODS) best protect fish life. State standards don't require feasibility assessments or installation, but we want to stress the importance of keeping fish safe in diversion infrastructure, especially in this case as the infrastructure currently puts fish at risk of injury (even though the site is technically compliant). Since NMFS guidelines state preference for fish friendly designs, including PODS, there is a high likelihood that NMFS will also ask to see if the feasibility of a PODS has been explored."
(Nov. 12, 2025, email from WDFW Region 6 Area Habitat Biologist).

Potential Feasibility Study Framework

Presented at Dungeness Reservoir Work Group Oct. 31 Meeting

- **Potential Study Framework**
  - Identify up to three potential screening options/alternatives
  - Perform hydraulic and geomorphic analysis to inform feasibility
  - Perform cost analysis
  - Compare and contrast screening alternatives
  - Select a preferred alternative
- **Estimated Study Cost: $50-100K**
  - Actual costs would depend on the specific scope of work identified through consultation between County, WDFW, JSKT and Ecology.

Identified Fish Screen Options

Presented at Dungeness Reservoir Work Group Oct. 31 Meeting

OPTION A: ON-CHANNEL SCREEN FUTURE RETROFIT

- Design intake structure to accommodate future retrofit and attachment of fish screening infrastructure on front.
- Preferred option by WDFW & JSKT pending results of a feasibility study.
- **Additional Phase 1 Design Scope Estimate: $180-220K**

OPTION B: OFF-CHANNEL SCREEN FUTURE RETROFIT

- Design intake structure to accommodate future retrofit of an off-channel screening/bypass infrastructure behind intake.
- **Additional Phase 1 Design Scope Estimate: $60-80K**

OPTION C: DOWNSTREAM SCREEN FUTURE ADDITION:

- Design intake structure to accommodate future addition of a new separate fish screening structure and bypass pipe back to the river substantially closer to the diversion.
- Option C will not require major revisions to current preliminary design and has minimum impact on current available funding for design.
- **Additional Phase 1 Design Scope Estimate: $15-40K**

PHASE 2 CONSTRUCTION OF OPTIONS A-C ESTIMATE: $2 to 3 million + (Very Preliminary)

Topics of Discussion/Direction Needed

- **Should County request a scope of work amendment from Ecology to conduct a "feasibility study" for a new fish screen facility at or near point of diversion?**
  - Preliminary estimated costs $50 to 100K
- **Should Public Works Dept. dedicate staff time to identify and apply for new grant funding to complete design and construction of a new fish screen facility at or near the point of diversion?**
- **Should County proceed to request a contract execution of the 2020 Streamflow Restoration Grant award to fund planned non-federal share of project costs (~ $621,000)?**
  - If request, Ecology recommends County may also want to consider applying for new 2026 Streamflow Restoration Grant concurrently.
  - 2020 state grant award may be at risk to claw back.