Special Working Meeting Agenda PUD Board of Commissioners

Tuesday, December 6, 2022 10:00 AM 310 Four Corners Rd Port Townsend and per ZOOM



To join online go to: https://zoom.us/my/jeffcopud. Follow the instructions to login. Meetings will open 10 minutes before they begin. TOLL FREE CALL IN #: 833-548-0282, Meeting ID# 4359992575#. Use *6 to mute or unmute. *9 to raise a hand to request to begin speaking.

1. Call to Order Tuesday, December 6, 2022

With the adoption by the Washington State Legislature of ESHB 1329, providing for both virtual and in-person meetings to be held, JPUD will be offering both virtual on-line meetings as well as in-person meetings, unless advance notice is provided. In person attendance will be limited to provide sufficient space and masking is encouraged. Online participant audio will be muted upon entry. Please unmute at the appropriate time to speak. If you are calling in, use *6 to mute and unmute and*9 to raise a hand to request to speak.

2. Agenda Review

3. Executive Session per RCW 42.30.140 (4)(b) Union Negotiations Executive Session per RCW 42.30.110 (1) (i) To discuss with legal counsel potential litigation to which PUD is likely to result in an adverse legal or financial consequence to the PUD.

4. Jefferson County PUD History

3 - 23

History of PUD.pdf Ø

5. Lunch Break 12:00-1:00

6. Operations Update

24 - 36

Presentation PUD Operations Update for 2023.pdf

7. Engineering/Water Update

37 - 53

5 years Water Sewer new.pdf

8. Adjourn 3PM Tuesday, December 6, 2022

A Brief History of Public Utility District #1 of Jefferson County

12/6/2022

Overview

- How the PUDs Came To Be
- How We Started
- Water & Wastewater History
- Broadband Authority
- Power Authority

How Did PUDs Come To Be?

- In 1929, the Washington State Grange collected more than 60,000 signatures to send Initiative No. 1 to the Legislature, allowing rural communities to form their own publicly owned utilities.
- When the Legislature failed to act, the measure went to a statewide election, where it passed in 1930 with 54 percent of the vote. The new PUD law RCW 54- went into effect in 1931.
- The law authorized the establishment of public utility districts to "conserve the water and power resources of the State of Washington for the benefit of the people thereof, and to supply public utility service, including water and electricity for all uses."
- Bonneville Power Administration sold power cheap to PUDs with preference.
- Additional utility authorities added later:
 - 1. Wholesale broadband in 2000
 - 2. Renewable natural gas in 2015
 - 3. Renewable hydrogen in 2019
 - 4. Retail broadband in 2020

How old is JPUD?

- Resolution 16 A budget for Calendar Year 1942 for the amount of \$6,137.95 was passed in 1941 forty years before JPUD provided water service.
- Funds for these budgets were collected by tax levy.
- According to WPUDA, voters created Jefferson PUD in 1939.
- The utility was "idle" for over 40 years attempting to enter the power business by vote of the people before focusing on water service in the 1970s.
- In 1979, PUD was presented a citizen petition to form a local utility district (LUD) in Gardiner to provide water service.
- Gardiner LUD 1 began water service in 1981 starting the clock as an active water utility.
- The year 1981 is commonly the used as the start of the PUD as an active utility.

Improvements Made via Local Utility District (LUD) Process

- A local utility district is a financial mechanism in which owners of property pay their share of the cost of improvements via property assessments paid in annual increments.
- Initial construction costs are commonly paid for through issuance of a bond repaid through the assessments.
- Process is outlined within the Revised Code of Washington (RCW 54).
- A form of citizen self-financing.
- LUDs can be for water, sewer, or fiber.
- Funding for improvements include various state and federal grants and loans.

JPUD Systems/Projects Either Formed or Improved via LUD:

- 1) Gardiner (Water LUD 1)
- 2) South Hastings (Water LUD 3)
- 3) Ocean Grove (Sewer LUD 5)
- 4) Triton Cove (Water LUD 6)
- 5) Lazy C (Water LUD 8)
- 6) Bywater Bay Shine (Water LUD 11)
- 7) Bywater Bay (Water LUD 13)
- 8) Marrowstone Island (Water LUD 15)
- 9) Beckett Point (Sewer LUD 15)
- 10)Brinnon (Sewer LUD 16 PENDING)
- 11) Shine Plat (Water LUD 17)
- 12) Jackson Cove (Water LUD 18 PENDING)

Local Water Utility Planning (1997)

- PUD important participant in developing a county wide coordinated water system plan with other utilities and the county (CWSP 1997).
- CWSP is a detailed local and state management program and provides a process and strategy for the existing water utilities to define their role in a program consistent with county plans and policies.
- In the plan, PUD is the lone satellite management agency capable of assuming operations, management and ownership of another water system.
- Most water utilities in the county are required to be compliant with this and other county plans in order to have their water system plans approved by the state.
- Existing plan is over 25 years old and needs revision.

Acquisition of Tri-Area water system (2000).

- Exchange for Glen Cove system plus cash with the City of Port Townsend.
- JPUD water customer base went from about 700 to 3,500 making the PUD the second largest water utility in Jefferson County.
- Included Sparling wells 1 & 2, Kivley well, treatment facilities, real property, water lines and water rights.
- Glen Cove South, Olympic Mobile Village, Kala Point, LUD#3 later added to create the Quimper Water System (now approaching 3,800 active connections).
- Very large unused portion of the Sparling water rights allows for significant expansion of service in east Jefferson County into foreseeable future (20+ years).
- Water rights at Sparling wellfield may be the water side's greatest material asset.

Watershed Planning (1997 – 2010)

PUD was an active participant in local watershed planning regarding issues of water supply.

Numerous studies prior to passage of the Watershed Planning Act (RCW 90.82) in 1997, but bulk of work occurred afterwards, mostly funded through Ecology. Studies include, but not limited to:

- o Alternative storage options in Jefferson County (2002)
- o Permit exempt well demand in county (2008)
- o Aquifer storage and recovery (2005)
- o Deep well at HJ Carroll Park (2006)
- o USGS Chimacum Basin Groundwater Model (2006 2010)

Municipal Water Law (2003)

- Most significant WA state water law in decades.
- Still subject to regular legal challenges.
- Protects unused portions of rights held by municipalities from relinquishment for future planned usage. No more "use it or lose it".
- The "place of use" for municipal water rights is their service areas within their state approved plans.
- Utilities must promote quantifiable conservation efforts on both the supply (production) and demand (customer) side.
- Maintain or have a plan in place to limit distribution system leakage at 10% or less.
- Passage of law helped protect hundreds of acre-ft of water annually for future use in Jefferson County.

Marrowstone Island LUD 14 (2003 – 2008)

- Petition to extend existing water line from Fort Flagler State Park south was submitted to PUD board in 2003.
- Intent was to bring reliable, safe, potable water to people on private wells, many of which were experiencing seawater intrusion.
- Highly contentious, widely publicized, resulted in essentially a public vote against the improvements.
- "Conserve Water First" and "Want Water to Conserve" placards were everywhere on the island.
- The conflict made local, regional, and even national news (PT Leader, PDN, Seattle Times, KIRO TV, Miami Herald).
- Marrowstone Island (LUD#15) remains the largest water LUD in JPUD history and it wa just a water line extension.

WRIA 17 Water Management Rule (2005 – 2010)

- State law (WAC WAC 173-517) set locally specific limitations for how much water is available in the future in Water Resource Inventory Area 17 Quilcene Snow Creek.
- More water on paper than flowing in the rivers and streams.
- Instream flows (water rights) for rivers and streams and groundwater reservations for future use in basins with insteam flows were set to protect fish and (limited) future growth.
- Chimacum Creek basin is the most limited, in large part due to concerns about the PUD's unused water rights at the Sparling wellfield.
- Groundwater reservations were based on 1% of low stream flow on all streams (2005), then revised for Chimacum Creek at 1/10th of one percent or 1,940 gals/day total.
- JPUD has applied to access the groundwater reservations in the Big and Little Quilcene basins for additional water rights in Quilcene.

Quilcene Water System (2005)

- Numerous false starts (1994, 1998) after an underground storage tank leaked fuel contaminated private wells. County applied for water right in 1994. PUD and County led effort in 1998 that failed to get support.
- Initial issue was no water rights in hand to start a public system.
- Purchased and consolidated USFS system with old failing systems along US101 corridor.
- Ecology curtailed USFS right in transfer to PUD (2004) from 32 acre-ft to 13.
- USFS in the transfer reserved 7 acre feet for future use.
- Quilcene maxed out in number of state approved connections (40) in 2017.
- After recent plan approval (2022), there are approximately 15 connections available for new customers.
- Old 1994 county water right application was assigned to the PUD in 2019.
- PUD is actively working with Ecology toward a decision with a pump test and flow model.

Becket Point Large Onsite Septic System (2005 - 2007)

- Received LUD petition to provide sewer service to Beckett Point in 2005.
- Bond for project (\$1,900,000) issued in 2007, construction begins.
- Ancient human remains discovered, temporarily halting construction.
- After two-month delay, tribal consultation and cultural analysis, project resumed to completion without further delay.
- Project was a positive experience with the local tribes.

Kala Point Acquisition (2012)

- Last large private water system adjacent to Quimper water system to consolidate.
- Included aging ozone water treatment facilities (replaced with different type), four wells (only two in regular use), ample water rights and approximately 550 water customers.
- Significantly added to PUD's sewer service workload.
- Occurred back to back with the following acquisition...

Jefferson County Water District #3 – Coyle Water System (2012)

- SMA's take over failing systems this is what we do.
- System manager left the area, orphaned system. Board had physical fight at meeting.
- Community and DOH asked PUD to take over.
- Took it over while under a boil order.
- The system still leaks more than is used with a leakage rate over 50%.
- We added generator and telemetry.
- PUD is replacing inferior AC lines to remedy leakage problem.
- No fecal coliform positive tests since takeover in 2012.

Broadband Authority (2000)

- Wholesale authority started in 2000.
- Became a founding member of NoaNet.
- Feasibility study commissioned with grant to explore development of a network and wholesale service in district.
- Low market saturation predicted for JPUD in study.
- Study said pursuit of wholesale service not likely to break even for many years, if ever.
- No project resulted from the study, and it would take over a decade before a broadband project was completed for JPUD.

Broadband Technology Opportunities Program Grant Round 2 (2010 - 2013)

- Local interest groups met to plan to connect essential community services to a broadband network of fiber optics (north) and wireless (via radio towers) to the south.
- Recovery Act grant funds awarded to NoaNet for statewide broadband network deployment that included Jefferson PUD.
- Service connections primarily went to government, fire districts, police, medical facilities.
- Project was a foundational fiber network for JPUD at electric start up but was not designed to aid electric system. Grant and design occurred before electric service began.
- Both the fiber optic and (then) wireless networks aggregated at Otto Street (then Mobilisa).
- NoaNet operated and maintained network before we were ready to (2013 ????).
- Wireless backbone operation not economic due to cost of leases, few customers.

Power Authority in 1994?

Public Utility District No. 1 of Jefferson County v Washington State Department of Ecology (1994)

- Most significant effort to develop a large-scale power generation by JPUD.
- Proposed run of the river diversion through penstock on Dosewallips River (Elkhorn Canyon).
- Water right application for hydropower rejected by DOE appealed all the way to SCOTUS.
- Legal defense was funded by City of Tacoma.
- Ecology rejected application because the diversion would cause water temperatures downstream to increase, adversely impacting water quality for salmon.
- SCOTUS ruled in favor of the Department of Ecology forever tying water quality with water quantity in the allocation of future water rights and temperature being considered pollution.

Power Authority (2008 – present)

- PUD wanted to take over for Puget Power prior to becoming a water company???
- Citizen effort, primarily through Port Townsend activists, got PUD power authority on ballot and were largely responsible for its success in 2008.
- Vote distribution for PUD power authority came mostly from Port Townsend.
 Most of the rest of the county voted against it.
- Asset purchase agreement made with Puget Sound Energy transferring ownership
 of local electric infrastructure to JPUD in 2010.
- Jefferson PUD became an active electrical utility April 1, 2013.

Acknowledgements

These accomplishments, large and small, were not possible without the efforts of many commissioners, staff, consultants and citizens wanting to make their community better.

Apologies to all for not noting the many names of these people essential for our success as an organization in the past and in the present.

Consider this history a mere glimpse of what this organization can do and will do in the future.

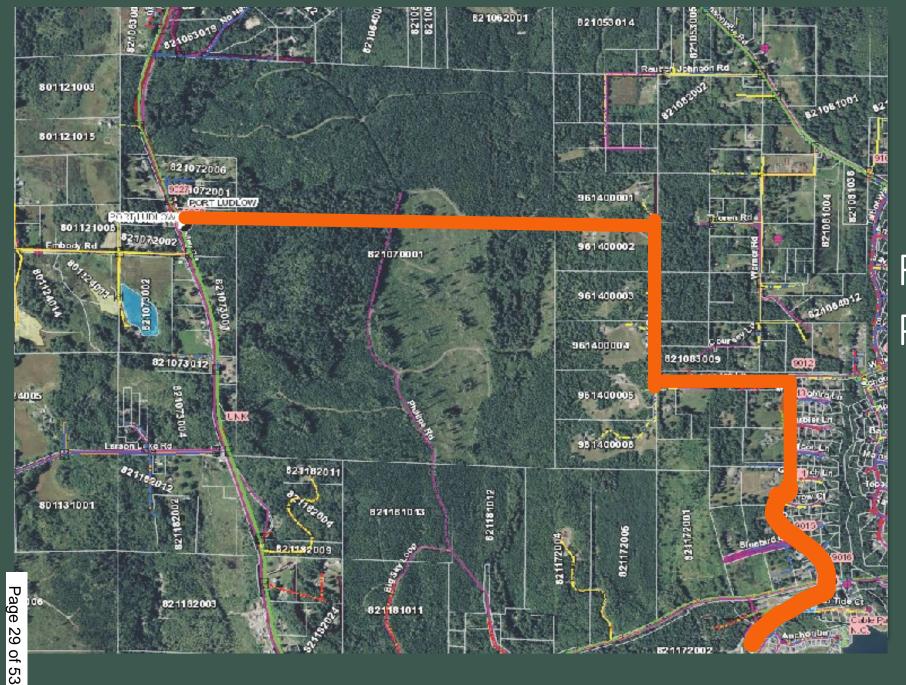




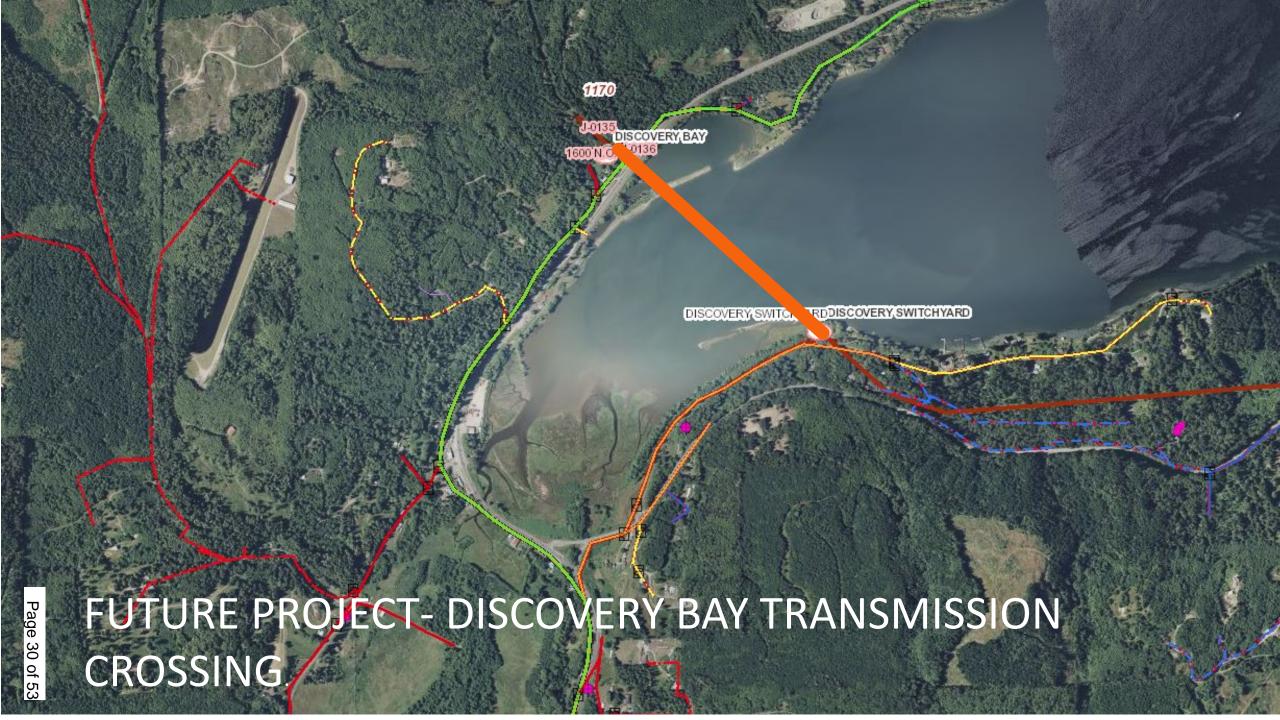






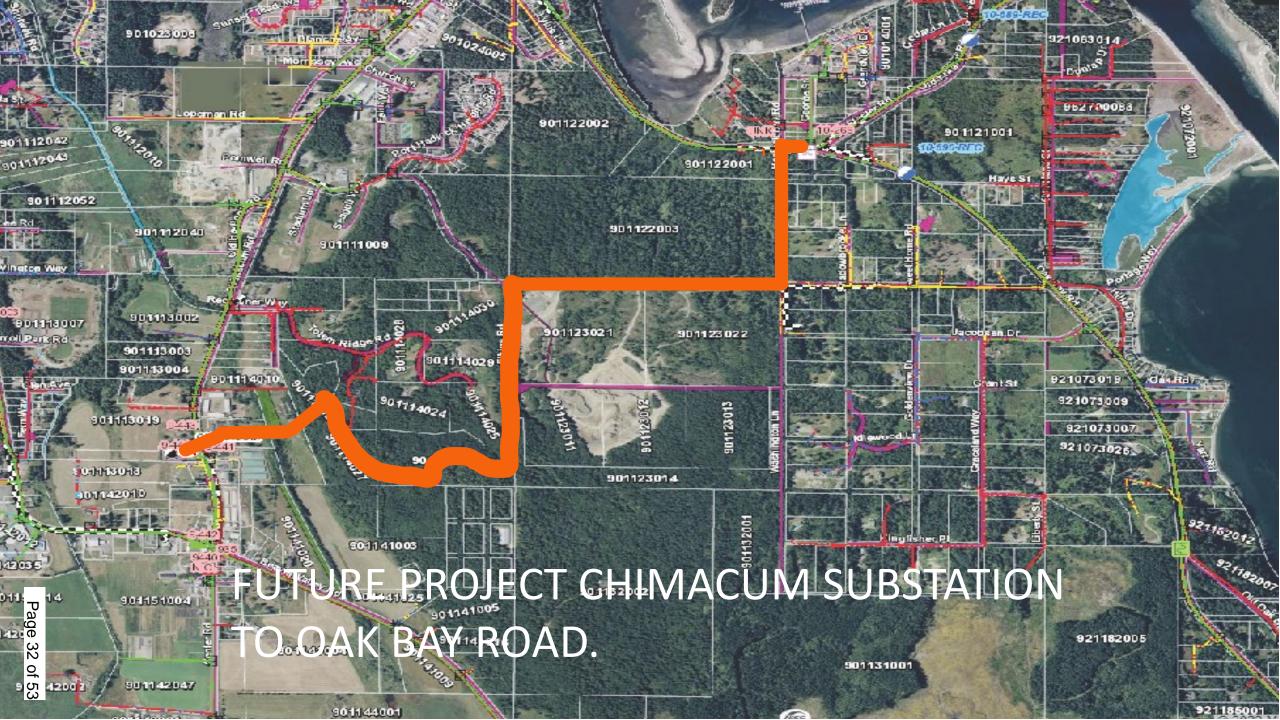


FUTURE PROJECT-PORT LUDLOW.



FUTURE PROJECT-HELICOPTER TREE TRIMMING











Water, Sewer and Engineering

BOC Retreat December 6, 2022

Presented by: Samantha Harper, P.E., Engineering Director



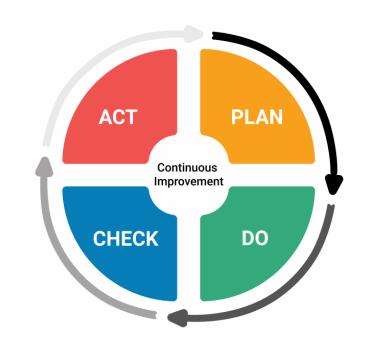
Engineering, Sewer and Water Department Outline

- Water Capital Improvement Projects
- Consolidation Projects
- Source Projects
- Projects Under Construction
- Other Projects
- Wastewater/Septic
- Electrical Engineering



Capital Projects

- Long term planning
- Cost estimating
- Funding





Sparling Treatment Plant Upgrade Project

- Replace aging water treatment plant
- Applied for Department of Health Drinking Water State Revolving Funds
- Project total cost estimate: \$5,342,200



Attachment A - Sparling Treatment Plant Upgrade Project Conceptual Site Plan 2022 DOH DWSRF Construction Loan

Old treatment plant to be removed and new water operation office to be constructed.



Phase 2 – Coyle Water Line Replacement



Attachment A - Phase 2 Coyle Water Main Replacement Project Conceptual Site Plan 2022 DOH DWSRF Construction Loan

- Replacement of approx. 6,600-ft of 4-inch AC existing water main with new 6-inch water main
- Applied for Department of Health Drinking Water State Revolving Funds
- Project total cost estimate: \$1,135,686



Gardiner Well Pump and Motor Replacement

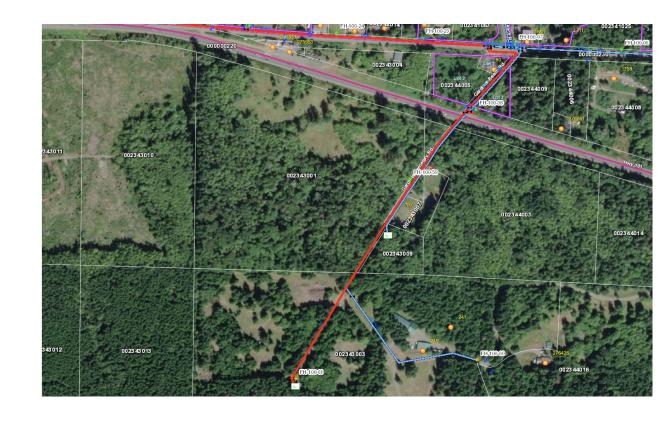
- Replacement of Aging pump, motor and controls
- Work scheduled for 2023
- Status:
 - Preparing bid package





Gardiner Booster Pump Replacement and Upgrade

- Replacement of existing aging booster pump and provide a second pump.
- Total Project Cost: approx. \$260,000





Bywater Bay Water Line Extension Shine Rd. to Paradise Bay Rd.

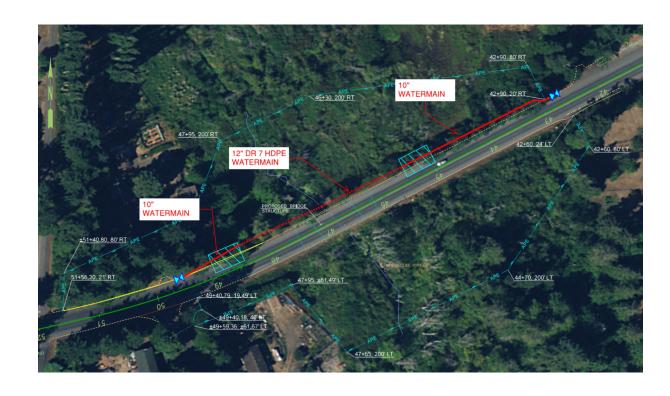


- Install a water main loop between Shine Rd. and Paradise Bay Rd. for system pressure and fire flow improvement
- Applied for Public Works Board Funds and did not received funds.
- Project cost estimate: approx. \$885,000



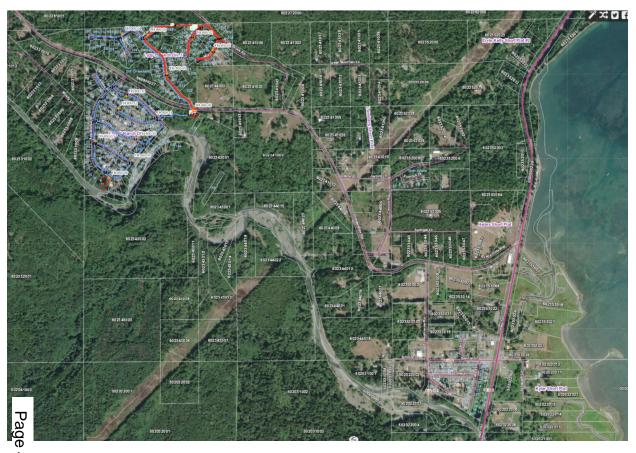
WSDOT Culvert Replacement Project – Chimacum Creek

- Replacement of existing water main for WDOT Culvert Project
 - Bore under Chimacum Creek
 - Tie-into existing water main outside of WSDOT work zone
- Status:
 - WSDOT may start in 2024?????





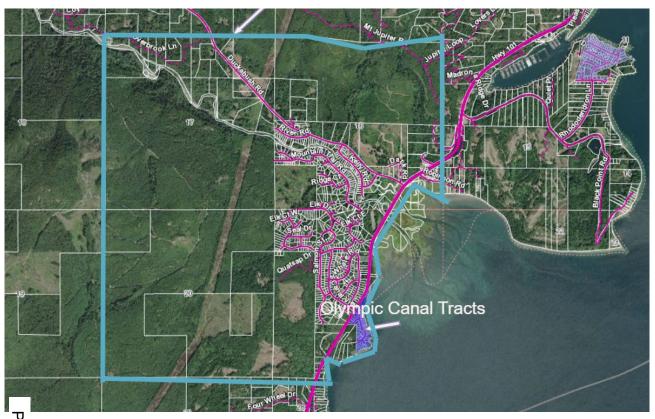
Downtown Brinnon Consolidation Study



- Received Department of Health Consolidation Study Grant
 - \$50,000
- Consolidation to start in 2023
- HDR Inc. engineering firm conducting the study with PUD staff



Olympic Canal Tracts Consolidation Study



- Consolidation study scheduled for 2023
- Study for Olympic Canal Tracts
 Division 1



Jackson Cove Local Utility District

- Received Local Utility
 Development (LUD) petition on
 August 24, 2022
- Next steps:
 - Contact petitioner on next steps and information needs
 - Certify petition PUD
 - Start LUD process PUD





Source Projects

Quilcene Second Source

- Awarded Pump Test and Predicative Groundwater Model to PGG
- Status:
 - signing contracts

Reynold's Well – Bywater Bay

- Status:
 - PUD needs to scope the project:
 - Use of the existing well;

OR

Finding another source site



Water Projects Currently Under Construction or within the next 0-3 months

- Quilcene Water Tank
 - PWB loan
- Snow Creek Wellhouse
 - PUD capital funds
- Hunt Rd. Water Line Extension
 - PUD capital funds
- Shine Plat LUD
 - DOH DWSRF and LUD
- Phase 1 Coyle Water Line Replacement
 - PUD capital funds



Other Projects

- Water Systems database
 - Connection Tracking
 - Water Archiving
- Assets
 - Mapping
 - Financial Forecasting
 - Tracking
- New customer one-stop service (water, septic, electric, broadband quotes and packets)
- Education Based Water Program
- Partnership with Jefferson County on water and wastewater
 - planning and permitting



Wastewater and Septic

- Wastewater and LOSS System Plan
- Master Large On-site Septic
 Agreement with all PUD owned facilities
- Port Hadlock Sewer System



Electrical Engineering

- GIS Mapping Improvements
- Mobile Staking
- Electrical Guidance Packet

