

Special Meeting Agenda
PUD Board of Commissioners
Project Work Update and Executive Session

Friday, October 18, 2024 11:00 AM
310 Four Corners Rd. and per ZOOM
Port Townsend, WA 98368
and online via 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

JPUD will be offering both virtual on-line meetings as well as in-person meetings, unless advance notice is provided. 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. Roll Call

Establishment of Quorum by confirming attendance of commissioners present.

3. Agenda Review

Recommended Action: Approve a Motion to adopt agenda as presented

4. Presentation - PUD Project Plan Work Update

2 - 25

[Long-Range Planning presentation Oct 18.pdf](#) 

5. Executive Session per RCW 42.30.110 (1) (g) to review the performance of a public employee

6. Adjourn

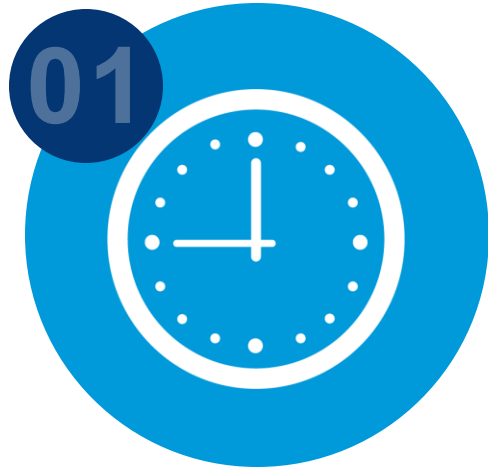
Long-Range Planning

A detailed look at timelines relating to our 2025 project schedule and 4-year workplan.

Kevin Streett, General Manager

310 Four Corners Rd, Port Townsend, WA | July 30, 2024

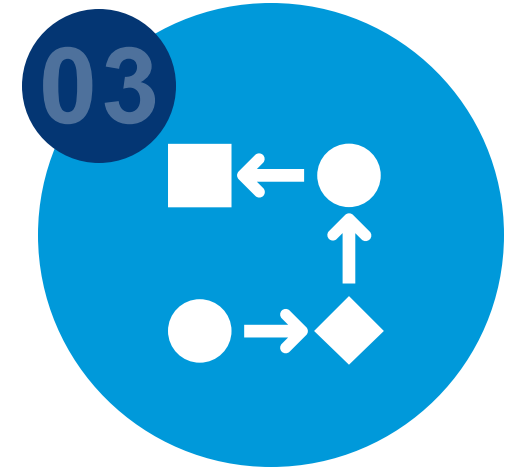
Today we will cover:



Timelines



**Understanding
Funding**



Priority Setting

A utility worker wearing a hard hat and safety vest is positioned in a white bucket, working on a wooden utility pole. The worker is holding a tool and looking towards the camera. The background is a clear blue sky with some power lines visible. The overall scene is a low-angle shot looking up at the worker and the pole.

A Primer

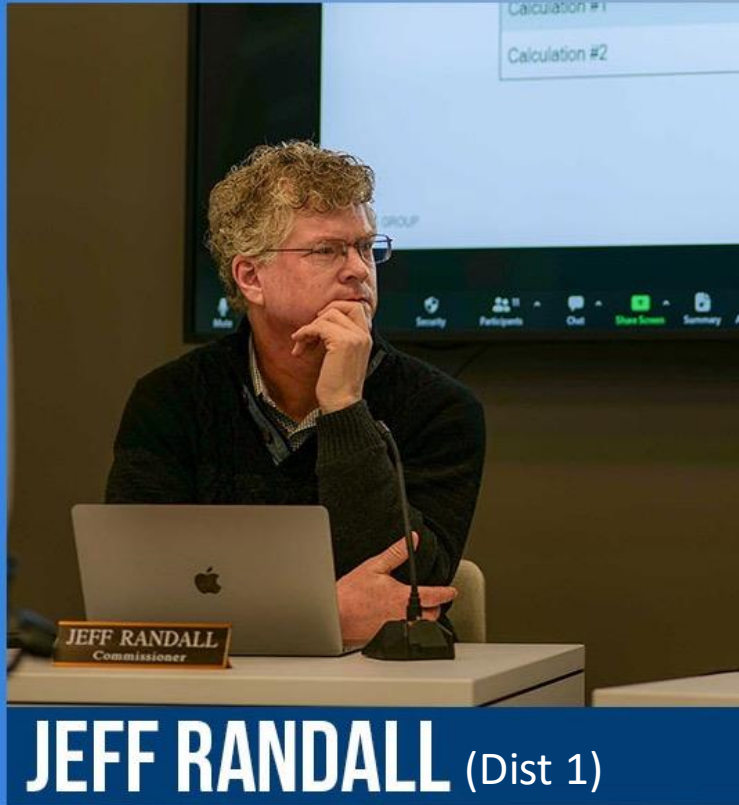
Planning is key to success. Utility projects and project success are measured in months and years. Setting and hitting key timeline objectives is the key to long-range planning.

Connecting our Community

Our Commission

Jefferson PUD is guided by three publicly-elected officials who direct based upon the **Strategic Plan**. Commissioners are advised by staff, outside professionals, and our customer-owners to guide the utility forward.

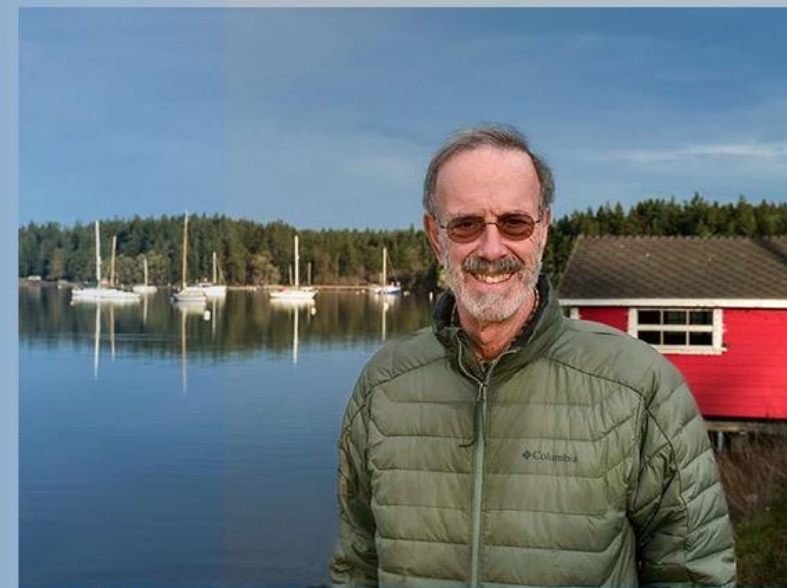
Connecting our Community



JEFF RANDALL (Dist 1)



DAN TOEPPER (Dist 3)



KEN COLLINS (Dist 2)

UNDERSTANDING TIMELINES

PUD staff work on large-scale projects across all **service offerings**

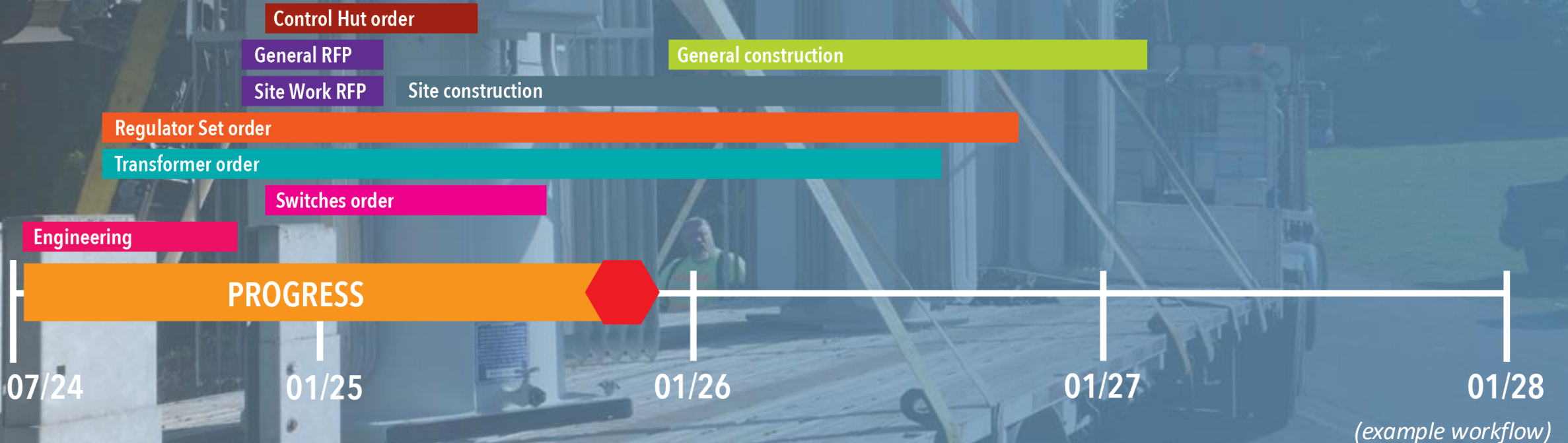
Projects often present multiple funding sources, equipment lead time, contractor availability, easement and permitting requirements, and fixed completion dates.

Decision timing is critical. Waiting months to make decisions on large-scale projects only delays timelines and future actions.

WORKFLOW NOTE:

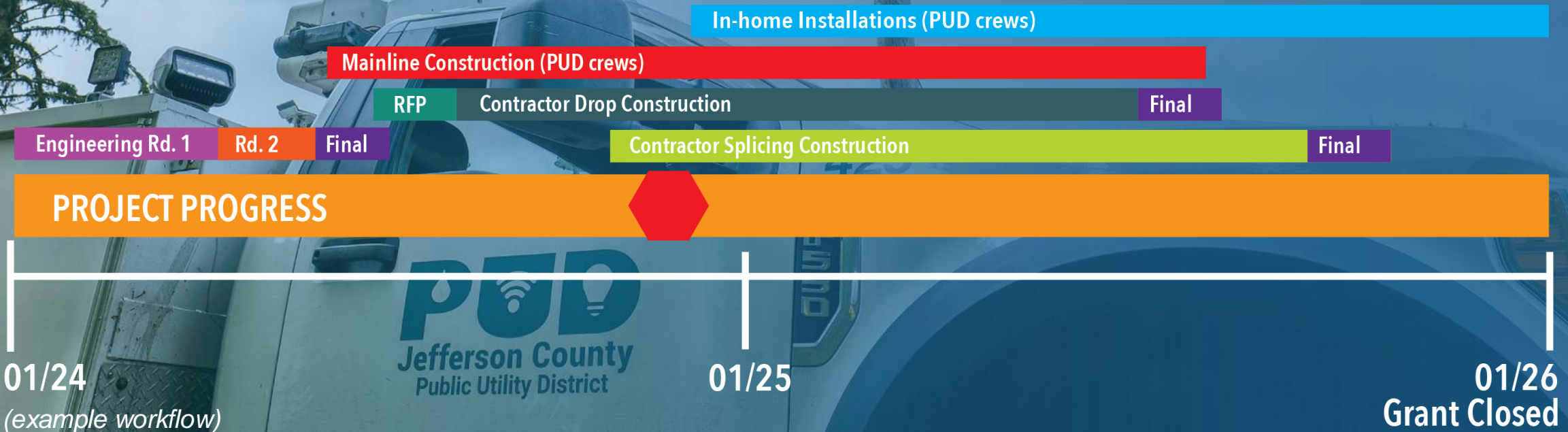
Substations

On average, a substation takes 4 years to complete (sometime longer) from inception to engineering, breaking ground to final connection.



Grant Timelines

Grants provide an essential funding source for everything from broadband construction to water system replacement. **Grants often feature set end dates for projects.**



UNDERSTANDING FUNDING

Large-scale projects often require complex funding sources based upon feasibility studies or board-approved work plans.

Infrastructure Project

RATES

GRANTS

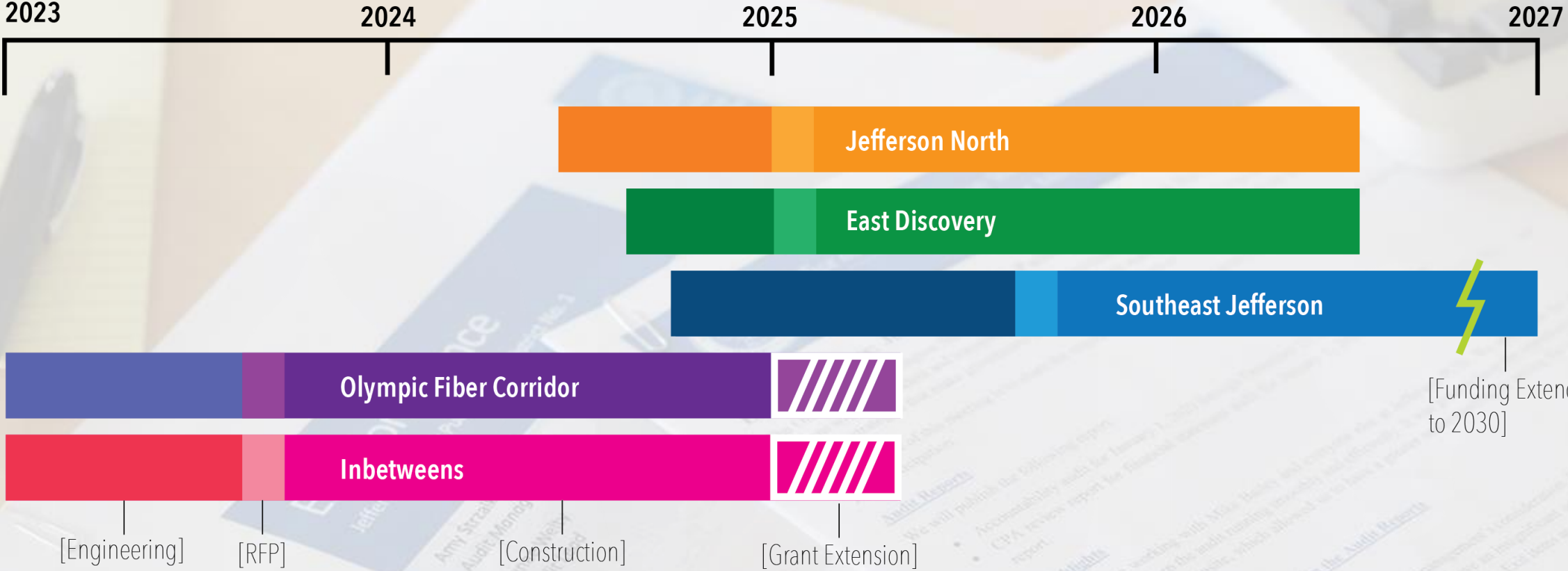
FINANCING

WORKFLOW NOTE:

Funding approval decisions are critical. Grant, loan, or appropriation timelines for approval often take months if not years to finalize.

Funding Sources

Grants : Not guaranteed. Grant models vary, often requiring out-of-pocket, upfront cost before reimbursement. Funding availability and end dates are part of the contract.



Funding Sources

RUS Loan Process:

Requires an electric project to be part of the approved 4-year work plan.

- The PUD has 3 months left to go on our work plan.
- Formal approval of the work plan takes ~1 year in Washington DC.

Loan in ACTION:

Funding Providers:

Public Works Board
Construction Loan &
Jefferson County
infrastructure grant

Quilcene Water System

Total project cost: \$3.1M
Out-of-Pocket Cost: ~\$1M
Number of customers: 40

RESP Loans: Rural Energy Saving Programs provide energy efficiency loans from the USDA Rural Development. 3-year process!

WA State Loan:

Utilities can apply for project-specific loans from the state. Most often loans are used for water projects such as the Quilcene Water System, Coyle Water System, and Shine Plat. Low interest can also apply for broadband, such as the PT Business Fiber zone.

Funding Sources

Appropriations: Funding provided by federal or state agencies for particular programs as written into the agency budget.



Example:

- The PUD is working with the US Navy to design a dedicated undersea feed to the Indian Island Naval Mag (pictured)

Bond Market:

Revenue Bonds or General Bonds

Understanding Priorities

Electric :

2025 Calendar Year

Mill Rd (PT) Substation	\$3M	Move Poles for Easement	\$60k
Chimacum Feeders	\$2M	Pole-Mount Transformers	\$50k
Quilcene Sub	\$1.5M	Pad-mount Transformers	\$50k
Port Ludlow Sub	\$1.5M	Fencing	\$50k
Port Ludlow Sub Feeders	\$1M	Easement & Right-of-Way	\$45k
OH-to-UG Olele Point Rd	\$625k	115kV Insulator Replace	\$45k
Irondale Bay #2 Feeders	\$450k	3-Phase Dist Reclosers	\$40k
UG Line Extensions	\$400k	Security & Street Lights	\$20k
OH-to-UG Conversions	\$350k	Meters	\$15k
Aging Conductors	\$200k		
SCADA Equipment Replace	\$200k		
OH Line Extensions	\$175k		
New Subdivisions	\$150k		
SCADA Master Stations	\$100k		
Pole Replacement	\$100k		
Wildlife Protection	\$75k		
		Total	
			\$12,725,000

4-YEAR POWER WORK PLAN

Item Number	Description	2025	2026	2027	2028	Total
100 - New Line Construction						
101	Construct underground distribution line extensions and service runs to serve new customers; single-phase & three-phase. Approximately 50 per year; approximately 3 miles annually.	\$400,000	\$350,000	\$340,000	\$340,000	\$1,430,000
102	Construct overhead distribution line extensions and service lines to serve new customers; single-phase & three-phase. 30 per year; approximately 2 miles annually.	\$174,000	\$135,000	\$135,000	\$135,000	\$580,000
103	Construction for new subdivisions. Approx. 1 per year.	\$150,000	\$150,000	\$150,000	\$ –	\$450,000
New Line Construction Annual Totals		\$750,000	\$635,000	\$625,000	\$475,000	\$2,460,000
200 - New Distribution Main-Line Construction						
201	Underground feeders out of Irondale Bay #2.	\$450,000	\$200,000	\$ –	\$ –	\$650,000
202	New feeder(s) out of Port Ludlow Substation - Engineering & construction.	\$1,000,000	\$1,500,000	\$3,000,000	\$ –	\$5,500,000
203	Feeder(s) interconnection to new substation - Engineering & construction.	\$ –	\$2,000,000	\$1,000,000	\$1,000,000	\$4,000,000
204	New feeder(s) out of Chimacum Substation - Engineering & construction.	\$2,000,000	\$1,700,000	\$2,000,000	\$ –	\$5,700,000
New Distribution Main-Line Construction		\$3,450,000	\$5,400,000	\$6,000,000	\$1,000,000	\$2,460,000

4-YEAR POWER WORK PLAN

Item Number	Description	2025	2026	2027	2028	Total
300 - Conversion						
301	Convert single-phase to three-phase	\$ –	\$ –	\$200,000	\$150,000	\$350,000
302	Convert single-phase overhead distribution to underground along Olele Point Road.	\$625,000	\$40,000	\$ –	\$ –	\$665,000
303	Construct overhead distribution to underground (general budget).	\$350,000	\$250,000	\$350,000	\$380,000	\$1,330,000
304	Culvert replacement (State requirement)	\$ –	\$200,000	\$200,000	\$200,000	\$600,000
Conversion Annual Totals		\$975,000	\$490,000	\$750,000	\$730,000	\$2,945,000
400 - New Substations						
401	New substation (Mill Road). Engineering & construction.	\$3,000,000	\$4,000,000	\$4,960,600	\$ –	\$11,960,000
New Substations Annual Totals		\$3,000,000	\$4,000,000	\$4,960,000	\$1,000,000	\$11,960,000

4-YEAR POWER WORK PLAN

Item Number	Description	2025	2026	2027	2028	Total
500 - Substation Changes						
501	Hastings Substation. Replace aging substation 15kV regulators, bypass switches, and controls.	\$ -	\$500,000	\$ -	\$ -	\$500,000
502	Irondale Substation. Replace aging substation 15kV regulators, bypass switches, and controls. Install new regulator rack.	\$ -	\$ -	\$500,000	\$ -	\$500,000
503	New substation transformer (spare)	\$ -	\$ -	\$1,700,000	\$ -	\$1,700,000
504	Quilcene Substation. Engineering & construction.	\$1,500,000	\$9,700,000	\$ -	\$ -	\$11,200,000
505	Port Ludlow Substation. Engineering & construction.	\$1,500,000	\$2,000,000	\$7,800,000	\$ -	\$11,300,000
Substation Changes Annual Totals		\$3,000,000	\$12,200,000	\$10,000,000	\$ -	\$25,200,000
600 - Misc. Distribution Equipment						
600.400-1	Marrowstone Island regulator bank.	\$ -	\$150,000	\$ -	\$ -	\$150,000
601-1	Install new pole-mount transformers to serve new customers. 10 per year.	\$50,000	\$50,000	\$50,000	\$50,000	\$200,000
601-2	Install new pad-mount transformers to serve new customers. 10 per year.	\$50,000	\$50,000	\$50,000	\$50,000	\$200,000
601-3	Transformer replacement of aging units.	\$25,000	\$25,000	\$25,000	\$25,000	\$100,000

4-YEAR POWER WORK PLAN

Item Number	Description	2025	2026	2027	2028	Total
600 - Misc. Distribution Equipment, continued						
602-1	Install new three-phase distribution-line reclosers.	\$40,000	\$40,000	\$40,000	\$40,000	\$160,000
603-1	Install new line regulators.	\$ –	\$150,000	\$ –	\$150,000	\$300,000
603-2	Regulator replacement of aging units.	\$ –	\$ –	\$150,000	\$ –	\$150,000
604	Pole replacement. 20 per year.	\$100,000	\$100,000	\$100,000	\$100,000	\$400,000
605	Replacing aging conductors.	\$200,000	\$175,000	\$150,500	\$354,500	\$880,000
606	Wildlife protection.	\$75,000	\$25,000	\$25,000	\$25,000	\$150,000
Misc. Distribution Equipment Annual Totals		\$540,000	\$615,000	\$590,500	\$794,500	\$2,540,000
700 - Other Distribution Items						
700.004	SCADA Field equipment.	\$200,000	\$100,000	\$100,000	\$100,000	\$500,000
700.005	SCADA Master stations(s).	\$100,000	\$100,000	\$100,000	\$100,000	\$400,000
701	Security and street lighting.	\$20,000	\$20,000	\$10,000	\$20,000	\$70,000



4-YEAR POWER WORK PLAN

Item Number	Description	2025	2026	2027	2028	Total
700 - Other Distribution Items, continued						
702	Meters.	\$15,000	\$10,000	\$10,000	\$10,000	\$45,000
Misc. Distribution Equipment Annual Totals		\$35,000	\$30,000	\$20,000	\$30,000	\$115,000
1000 - Transmission Line and Station Changes						
1001	Move transmission poles for easements.	\$60,000	\$ -	\$60,000	\$160,000	\$280,000
1002	Irondale Substation. Transmission relays replacement (new)	\$ -	\$100,000	\$80,000	\$ -	\$180,000
1003	115kV Insulator replacement. 10 poles per year.	\$45,000	\$45,000	\$45,000	\$45,000	\$180,000
Transmission Line and Station Changes Annual Totals		\$105,000	\$145,000	\$185,000	\$205,000	\$640,000
1100 - Other Transmission Items						
1101	Easements and right-of-way.	\$45,000	\$25,000	\$ -	\$80,000	\$150,000
Transmission Line and Station Changes Annual Totals		\$45,000	\$25,000	\$ -	\$80,000	\$150,000
1200 - Communications						
1201	Fiber line extensions.	\$ -	\$ -	\$ -	\$ -	\$ -
Communications Annual Totals		\$ -	\$ -	\$ -	\$ -	\$ -



4-YEAR POWER WORK PLAN

Item Number	Description	2025	2026	2027	2028	Total
1300 - Headquarters Facilities						
1301	Fuel tanks.	\$ -	\$ 205,000	\$100,000	\$ -	\$305,000
1302	Fencing.	\$50,000	\$ -	\$25,000	\$100,000	\$175,000
1303	Laydown yard expansion and building.	\$500,000	\$2,000,000	\$1,500,000	\$ -	\$4,000,000
Headquarters Facilities Annual Totals		\$550,000	\$2,205,000	\$ 1,625,000	\$100,000	\$4,480,000
Annual Totals						
2025 - 2028 Plan of Service Annual Cost		\$12,425,000	\$25,745,000	\$24,756,100	\$3,414,500	\$66,340,600

Priorities

Broadband :

2025 Calendar Year

Fiber	\$9,655,334
Engineering	\$1,699,975
Drops	\$1,527,980
Contingency	\$1,018,357
ONT's	\$771,247
Core PON	\$210,134
Huts/Building	\$163,506
Consulting	\$125,529

Estimate Includes

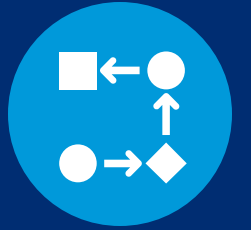
*Contractor Bids
Fiber Reel & Equipment Costs*

Total

\$15,172,062

The 2025 Broadband budget spans multiple buildout areas as some projects near completion and others begin. Each area features unique funding mechanisms requiring organization across multiple departments including customer service (billing), operations, communications, and finance.

Priorities



Water :

2025 Calendar Year

Coyle Main Replacement	\$2.6M
Quimper Upsizing	\$383,382
Bywater Main Looping	\$183,002
Pipeline Replacement	\$175,683
Coyle Dist Replacement	\$146,402
Seismic Retrofitting for tanks	\$14,641
Wastewater Capital Work	\$13,800
Snow Creek Power	\$8,784
Replace ATEC Media Filter	\$7,320
Valve Retrofit of ATEC	\$7,320
SCADA Upgrades	\$7,320
Tank Inspection	\$7,320
Tank Cleaning/Painting	\$7,320
Well Cleaning	\$7,320

Total

\$3,647,551

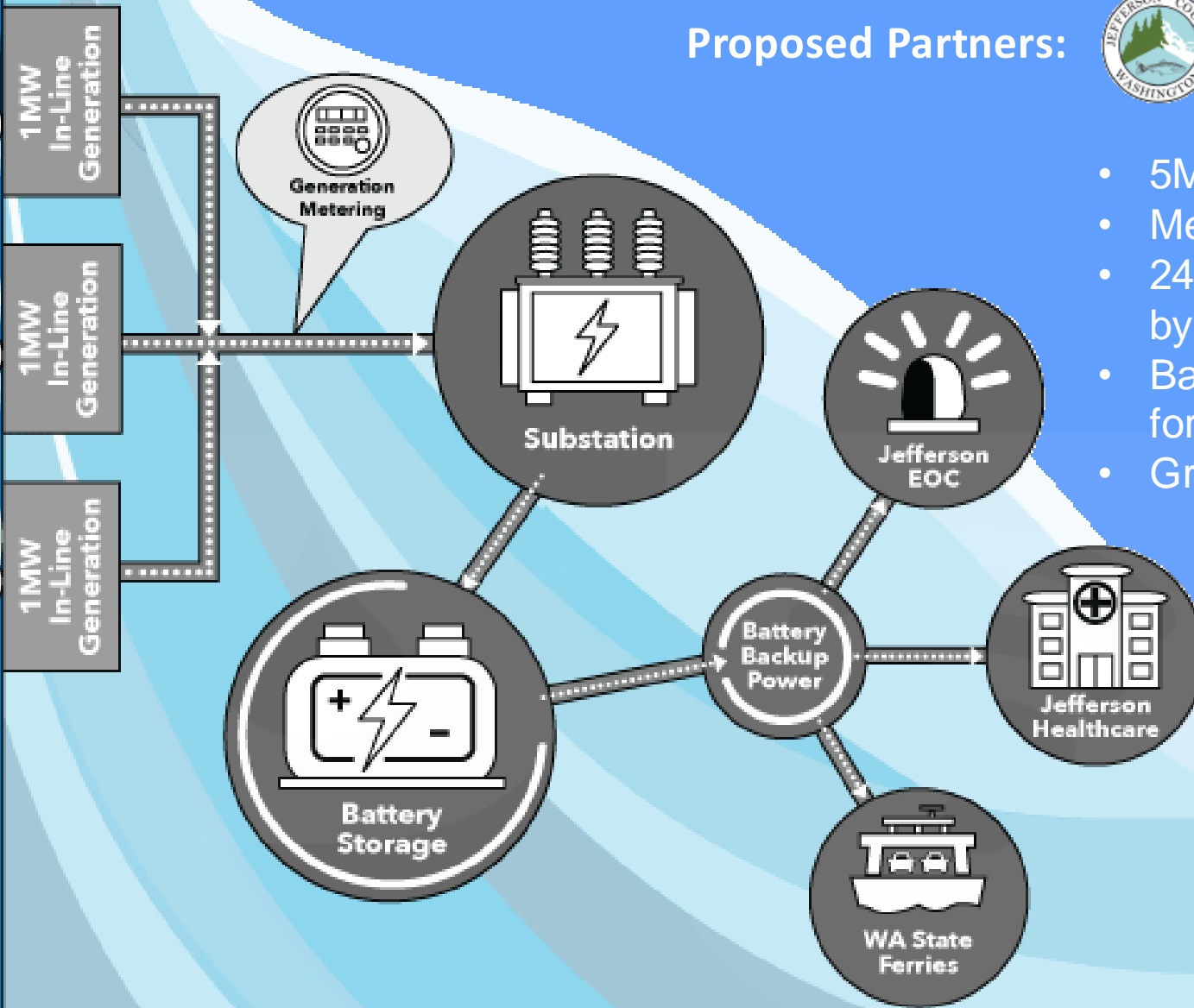
WATER System Plan

In 2022, the PUD approved a 10-year work plan for our water division. The work plan, and expansion of the plan, help the utility and funding agencies identify projects for capital improvement.

	Total Cost (2018 dollars)	Financing Source	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031 and Beyond
Bywater Bay													
Source / Pumping / Treatment													
B-P-1 Well #1 Portable Generator	\$20,000	Rates		\$20,000									
B-P-2 Well #1 Emergency Power Connections	\$6,000	Rates		\$6,000									
B-P-3 Replacement Fire Pump	\$25,000	Rates							\$25,000				
B-P-4 Shine Well Pump Replacement	\$35,000	Rates	\$35,000										
B-P-5 Booster pump on Shine Road and Harbor View Dr.	\$31,000	Rates	\$31,000										
Distribution													
B-D-1 Shine Plat LUD Distribution Piping Replacement	\$400,000	LUD	\$200,000	\$200,000									
B-D-2 Water main looping from Paradise Bay Road to Shine Rd, under SR-104	\$125,000	Rates					\$125,000						
Gardiner													
Source / Pumping / Treatment													
G-P-1 Gardiner Well Portable Generator	\$25,000	Rates			\$25,000								
G-P-2 Gardiner Well Emergency Power Connections	\$6,000	Rates			\$6,000								
G-P-3 Replacement Well Pump and Upgrade Controls	\$80,000	Rates		\$80,000									
Distribution													
G-D-1 Pipe Looping - East End	\$65,000	Developer											\$65,000
G-D-2 Pipe Looping - West End	\$100,000	Developer											\$100,000
Coyle													
Source / Pumping / Treatment													
C-P-1 Fire Pump	\$50,000	Rates			\$50,000								
Distribution													
C-D-1 Transmission Line Replacement	\$55,000	Rates	\$55,000										
C-D-2 Distribution Piping Replacement	\$1,000,000	Rates					\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$400,000
Quimper (R)													
Source / Pumping / Treatment													
R-P-1 Addition of fire pump to Ocean Grove BPS	\$95,000	Rates				\$95,000							
R-P-2 New domestic demand BPS	\$40,000	Rates						\$40,000					
R-P-3 New domestic demand BPS	\$40,000	Rates						\$40,000					
R-P-4 New 4-inch pipe (1,500 LF) and new domestic demand BPS	\$175,000	Rates							\$175,000				
R-P-5 New 6-inch pipe (760 LF) and new domestic demand BPS	\$130,000	Rates									\$130,000		
R-P-6 Sparging II Treatment Building Air Compressor	\$5,000	Rates		\$5,000									
R-P-7 Phase II Treatment Upgrades	\$50,000	Rates		\$50,000									
Storage													
R-S-1 New Glen Cove Storage Tank	\$4,650,000	Rates/Loans								\$2,325,000	\$2,325,000		
Distribution													
R-D-1 New PRV station	\$80,000	Rates						\$80,000					
R-D-2 Reconfiguring pressure zones at Beckett Point using existing piping and valves	\$2,000	Rates		\$2,000									
R-D-4 Upsizing 8-inch to 12-inch (3,700 LF) to support higher flows from new Glen Cove Storage Tank	\$289,000	Rates									\$289,000		
R-D-5 Upsizing 6-inch to 10-inch (7,300 LF)	\$569,000	Rates				\$569,000							
R-D-6 Reconfiguring pressure zones along Cape George Rd and Huntington St using existing piping and valves	\$2,000	Rates		\$2,000									
R-D-7 Upsizing 4-inch to 8-inch (380 LF), Center Rd near Beaver Valley Rd	\$28,000	Rates		\$28,000									
R-D-8 Upsizing 2-inch to 6-inch (840 LF) and new 6-inch (2,520 LF) to make pipe loop	\$270,000	Rates					\$270,000						
R-D-9 Upsizing 4-inch to 6-inch (1,200 LF)	\$94,000	Rates					\$94,000						
R-D-10 Upsizing 6-inch to 8-inch (2,300 LF)	\$179,000	Rates						\$179,000					
R-D-11 New 6-inch pipe (350 LF) to make pipe loop	\$27,000	Rates							\$27,000				
R-D-12 New 6-inch pipe (30 LF) to make pipe loop	\$5,000	Rates								\$5,000			
R-D-13 Upsizing 8-inch to 12-inch (12,000 LF)	\$936,000	Developer											\$936,000
Lazy C													
Source / Pumping / Treatment													
L-P-1 Emergency Well Upgrades (Well 1 or 2 chlorination tank, shed)	\$22,000	Rates	\$22,000										
Triton Cove													
Source / Pumping / Treatment													
T-P-1 Well #2 Portable Generator	\$20,000	Rates				\$20,000							
T-P-2 Well #2 Emergency Power Connections	\$6,000	Rates				\$6,000							
T-P-3 Williams Addition Wellhouse	\$10,000	Rates	\$10,000										
Snow Creek													
Source / Pumping / Treatment													
S-P-1 Well Emergency Power Connections	\$6,000	Rates					\$6,000						
S-P-2 Wellhouse Replacement	\$179,500	Rates	\$179,500										
Mats View Terrace													
Source / Pumping / Treatment													
M-P-1 Well BPS Emergency Power Connections	\$6,000	Rates		\$6,000									
Quilcene													
Source / Pumping / Treatment													
Q-P-1 Source 2 Development	\$5,000	Rates		\$5,000									TBD
Q-P-2 New larger pump at USFS well	\$15,000	Rates		\$15,000									
Q-P-3 Quilcene Well Emergency Power Connections	\$6,000	Rates				\$6,000							
Storage													
Q-S-1 New Quilcene Storage Tank	\$2,460,000	Rates/Grants	\$460,000	\$2,000,000									
Other													
Q-O-1 SCADA Replacement - Triton Cove, Lazy C, Quilcene	\$15,000	Rates	\$15,000										
her PUD-Wide Projects													
O-1 Pipeline Replacement - Coyle and Others	\$1,135,000	Rates	\$55,000	\$120,000	\$120,000	\$120,000	\$120,000	\$120,000	\$120,000	\$120,000	\$120,000	\$120,000	
O-2 WSDOT culvert coordination projects	\$160,000	Rates	\$160,000										
O-3 Well Rehabilitation (cleaning)	\$50,000	Rates	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
O-4 Replacement Well Drilling	\$180,000	Rates				\$60,000					\$60,000	\$60,000	
O-5 Booster Pump Replacement (with VFD)	\$40,000	Rates			\$20,000					\$20,000			
O-6 Tank Cleaning/Painting	\$50,000	Rates	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
O-7 Tank Inspection	\$50,000	Rates	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
O-8 Seismic Retrofitting of Tanks	\$100,000	Rates	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
O-9 SCADA Upgrades	\$50,000	Rates	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
O-10 Retrofit Valves on ATEC Media Filter Systems	\$50,000	Rates	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
O-11 Replacement of ATEC Media Filters	\$50,000	Rates	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
O-12 Decommissioning of Various Wells	\$20,000	Rates	\$20,000										
O-13 Fire Hydrant Replacement	\$7,000	Rates	\$7,000										
O-14 New Water Installations	\$50,000	Rates	\$50,000										
TOTAL	\$14,431,500		\$1,359,500	\$2,509,000	\$317,000	\$910,000	\$661,000	\$474,000	\$504,000	\$2,807,000	\$3,069,000	\$320,000	\$1,501,000

Hydro Generation :

Proposed Partners:



- 5MW total power generation (3 generators)
- Metered at generation site
- 24" diversion line from PT pipeline with bypass
- Battery storage at Dana Roberts substation for electric ferry capacity
- Gravity-fed system

Est cost: ~\$28M

Project Goals:

- Provide backup power for emergencies
- Carbon-free energy
- Reliable source of energy
- Tier 1 vs 2 rate

How we get there



Teamwork and the ability to move projects forward according to varying timelines are key.

Our workforce and internal communication will be key. Pairing staff with ownership of an appropriate project is essential.

Outsourcing of projects will be necessary, and providing our staff with the necessary tools to oversee contractors will be key.

Connecting our Community

Questions?



Jefferson County
Public Utility District

Connecting our Community