Project Title

Clallam County Small-Scale Advanced Metering Infrastructure (AMI) Project

Applicant

PUD No. 1 of Clallam County (Clallam PUD)
104 Hooker Rd
Sequim, WA 98382-9239

Project Manager

Bowen Kendrick
Water and Wastewater Systems Manager
Phone: 360-565-3459
Email: bkendrick@clallampud.net

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Executive Summary

June 28, 2024
PUD No. 1 of Clallam County (Clallam PUD)
Sequim, Clallam County, Washington

Category A applicant Clallam PUD will implement the Clallam County Small Scale Advanced Metering Infrastructure (AMI) Project to install 440 AMI-equipped water meters on the geographically remote North Olympic Peninsula. The project involves conducting a preliminary service installation condition assessment survey, creating a geolocation mapping dashboard of meter installations, procuring AMI system components, deploying 440 AMI meters, and integrating new AMI units with the existing electrical AMI mesh network. The project will improve water resource management, increase operational efficiency, enhance customer service while supporting regional water conservation goals. The project aligns with objectives identified in the Washington State Water Use Efficiency Program, Clallam County's Elwha-Dungeness Watershed Plan, Clallam PUD's Water System Plan, and Clallam PUD's Capital Improvement Plan. By providing real-time water use data and proactive leak notifications, the project will help to advance regional climate resilience by conserving water and reducing vulnerability to drought. The project will directly benefit disadvantaged rural communities. The 18-month project is expected begin in March 2025 with an estimated completion date of August 2026. The proposed project is not located on a Federal facility.

Project Location

The Clallam PUD Small-Scale AMI Project will upgrade water meters in the Carlsborg Water System and in the Monroe/LUD 2 portion of the Port Angeles Water System. Both water systems are located in Clallam County, Washington State. The service area boundary of the Carlsborg Water System is approximately 1 mile west of the City of Sequim urban growth area and falls within Township 30 North, Range 4 West, Sections 10, 14, 15, 22 and 23. The Monroe/LUD 2 portion of the Port Angeles Composite Water System is immediately south of the City of Port Angeles urban growth area and falls within Township 30 North, 6 West, Sections 13 and 24. Maps of both water system service area boundaries are attached as Exhibits A and B.

Technical Project Description

The project will install the first 440 AMI units (endpoints) in Clallam County enabling integration with an existing electric AMI data collection mesh communication network and laying groundwork necessary for full deployment of AMI meters across Clallam PUD's remaining service areas in a large-scale project in subsequent years.

Existing Clallam PUD water meters are traditional positive displacement meters with a combination of direct read and radio read registers. The project will conduct a condition assessment survey in the first few months of the project in order to determine the most efficient deployment option for each service location. Following the condition assessment, we will install new meters with AMI endpoints or retrofit existing meters with AMI endpoints.

The preliminary service installation condition survey will include the following assessments:

- Water meter/electric meter proximity;
- Meter box condition;
- Meter box location/accessibility;
- Service installation condition;
- Service installation conformance with typical AMI specifications;
- Installation images;
- Geolocation.

Based on the assessment results, we will create a geolocation mapping dashboard of the AMI meters that will guide the deployment process. The project team will also utilize survey results to identify AMI technology and long lead time materials required for deployment at each service location. Materials and technology determinations will include the following:

- Replace box/lids as needed;
- Replace meter setters as needed;
- Install new brass meter with integral register transmitter; or
- Install new brass meter with pit module transmitter; or
- Reuse existing brass meter with AMI register swap; or
- Reuse existing brass meter with pit module nicor connector.

AMI components and materials, including meters, AMI endpoints, and network infrastructure, will be procured based on the condition assessment results and technology determinations. AMI endpoints will either be included in new meter units or retrofitted to existing meters, depending on the condition and compatibility of the existing meter.

Once installed, the AMI endpoints will connect to an existing AMI data collection mesh communication network and data management system enabling remote meter reading, real-time monitoring, and two-way communication between the meter endpoints and the utility. The AMI system will be integrated with Clallam PUD's customer information, GIS, and data management systems to enable automated monitoring of water usage in precise detail. The AMI endpoints

will transmit data directly to the data collection mesh communication network at regular intervals enabling Clallam PUD to monitor water usage more frequently while proactively identifying leaks to improve system efficiency.

Site impacts will be minimal and restricted to each individual meter location. At some locations, minor excavation with hand tools may be necessary. At these locations existing meter boxes will be removed as needed to enable retrofits or new AMI meter sets. Excavation at these locations will be limited to a 5 ft. X 5 ft. area around the existing water meter box with a maximum depth of 3 ft. No significant construction impacts are anticipated.

Evaluation Criteria

Evaluation Criteria A. Project Benefits

Public water systems on the Olympic Peninsula get their water supply from a combination of surface waterways like rivers and groundwater aquifers which are hydraulically connected to surface water. The Olympic Peninsula experiences frequent droughts and water supply challenges, with climate change exacerbating these issues through reduced snowpack and longer dry seasons. According to the National Oceanic and Atmospheric Administration's (NOAA) Drought Monitor, at the time of application, 35.7% of Clallam County faces D1 – moderate drought conditions, with an additional 16% of the county at D0 – abnormally dry conditions. Moreover, from January – May 2024 precipitation was down 3.03 inches from normal (https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?fips_53009).

During drought conditions, water usage restrictions are placed on Clallam PUD customers. Low surface water flows associated with drought also pose challenges to fish, Tribal communities and agricultural irrigators. Several migrating salmonid fish species are native to the rivers and streams which connect the watersheds of the Olympic Mountains to the Pacific Ocean and Puget Sound. Tribal communities rely on their treaty rights to taking fish at usual and accustomed grounds for commercial, ceremonial and subsistence uses. Low flow provisions associated with irrigation water rights have historically caused irrigators to curtail or cease operations during critical stages of the crop season.

The proposed small-scale project will directly benefit the CEJST-designated disadvantaged community of Carlsborg composed of two CEJST designated disadvantaged census tracts (53009001700 and 53009001600) that rank in the 67th and 70th percentile for low income respectively. The project will also directly benefit the Monroe neighborhood in east Port Angeles (census tract 530009001400). The project will lay the foundation necessary for a large-scale AMI meter deployment across service areas within Clallam County that will impact several additional CEJST-designated disadvantaged communities.

Benefits to Clallam PUD's Water Delivery System

The AMI Water Meter Installation Project will provide benefits to Clallam PUD's water supply delivery system and customers. The project will result in 1) more efficient water resource management, 2) enhanced customer satisfaction, and 3) improved operational efficiency.

1. Water Resource Management

   The proposed AMI system will provide tools to better manage water supply challenges effectively and efficiently making the system more adaptive to drought conditions. Real-time usage trend data will enable Clallam PUD to maximize seasonal water sources and make better data-informed decisions regarding use of ground water versus surface water. The data produced by the AMI meters will ultimately result in both reduced groundwater withdrawals and surface water withdrawals. Geographic water usage trends will also be leveraged for targeted conservation campaigns that result in increased water supply. Conserved water resulting from the project will remain in source watersheds benefitting stream flows and aquatic habitat while enhancing the reliability, resiliency, and sustainable future of Clallam PUD’s water supply.

2. Enhanced Customer Satisfaction

   The project will increase customer engagement and enhance customer service by delivering significant benefits to Clallam PUD customers. The project will enable customers to engage with usage data to enhance customer awareness of consumption volume and usage trends. The system’s proactive leak detection capabilities will enable swift service in response to leaks and other problems ultimately resulting in reduced utility bill costs. Integrating the AMI meters with existing electric AMI meters will align water consumption dates with electric billing enabling statements with equal billing periods, reductions in estimated billings, and more stable rates. Increased water conservation and efficiency resulting from the project may also result in fewer restrictions being placed on customers in drought conditions.

   The proactive leak notification program has the potential to save .85 acre feet per year in billed water following the completion of the small-scale project. Once the AMI system has been fully deployed at a larger scale in subsequent years, the savings on billed water will increase to 9.85 acre feet per year, which is equivalent to about 1% of Clallam PUD’s total billed water in 2023 and about .8% of total produced water in 2023. These estimates of water savings are based on the 2023 study by the Alliance for Water Efficiency: Smart Practices to Save Water, An Evaluation of AMI-enabled Proactive Leak Notification Programs. This study features leak notification case studies, impact evaluation, and a literature review.

3. Improved Operational Efficiency

   AMI routine monitoring and notifications will enable Clallam PUD to quickly identify and respond to leaks, breaks, and other issues in the distribution system that will reduce

water losses. AMI data will enable real-time reconciliation of produced water vs. sold water leading to increased system efficiency. AMI meters can be read remotely and in a fraction of the time it takes to read a conventional meter, which will save significant time and labor costs currently allocated to meter reading expenses. The comprehensive water service mapping/GIS will also facilitate more accurate water demand forecasting and infrastructure planning. These improvements will significantly increase Clallam PUD's operational efficiency.

The consequences of not making the AMI meter upgrades are ongoing inefficiencies in water supply management and operations that undermine regional water conservation and climate resilience.

Broader Benefits

As explained in detail above, the Olympic Peninsula faces increasing drought conditions due to reductions in snowpack and precipitation resulting from climate change. Droughts and reduced water supply make disadvantaged rural and tribal communities across Clallam County particularly vulnerable. Drought conditions also negatively impact water availability and quality necessary for productive farms, ranches, and grazing lands resulting in negative direct and indirect impacts to the region's agricultural industry.

The project will help address drought vulnerability by providing tools to monitor and manage water use in real-time. The AMI meter system will enable Clallam PUD to manage water supply with far greater efficiency while reducing demands on limited surface and groundwater supplies. Conserved water will benefit stream flows and drought resiliency across the region. Enhanced efficiency and conservation will help to mitigate drought conditions by improving water supply reliability at the sub-basin scale, in particular, by strengthening the availability and reliability of the municipal water supply. Improved sub-basin reliability and strengthened surface water supply will indirectly benefit other water users across the region.

In addition, the project will increase collaboration and information sharing among water managers in the region. The robust and timely AMI data will address current gaps in data-informed decision making by providing valuable insights into water consumption patterns and trends. Clallam PUD will share this data with other water managers and stakeholders to support regional water planning and conservation efforts. Moreover, better data will enhance reporting to the Washington State Department of Health (letter of support included as an attachment to this proposal) and the Washington State Department of Ecology related to the Washington State Administrative Code policy (WAC 246-290-810) on Water Use Efficiency.

While the project will not directly impact multiple sectors and economies, it will accomplish a critical first step in deploying AMI meters at scale across the county. Once the long-term goal of full deployment is realized by 2028, the project will directly benefit the agricultural sector and support local food systems in a region where agriculture is a key driver of tourism and the economy. Moreover, enhancing stream flows will benefit fish populations and recreational fisheries that are vital to the region's tourism economy. These environmental benefits include

enhancing the habitats of threatened and endangered salmon populations that are both culturally and economically significant.

While not directly linked, the project will complement other water conservation and drought resiliency efforts underway in the region, including on-farm efficiency projects funded through NRCS programs.

Evaluation Criteria B. Planning Efforts Supporting the Project

The project is aligned with and supported by several key organizational, regional, and state planning documents and efforts described below. Each plan identified includes a discussion of the plan description and objectives, plan development, and support for the project.

1. **Clallam PUD Capital Improvement Plan (CIP)** – Updated in 2022, the ten-year PUD Water System Capital Improvement Plan (CIP) delineates priority engineering and construction project priorities in Clallam PUD's water service areas across Clallam County, including the two neighborhoods served by the proposed project. The CIP is developed with input from Clallam PUD staff, the Clallam PUD Board of Commissioners, and community stakeholders providing input at community meetings and public Commissioner meetings. The purpose of the CIP is to identify and prioritize capital projects needed to maintain and improve the Clallam PUD managed water systems. The plan notes the water system's aging meter infrastructure and identifies service installation condition assessment and meter replacement upgrades as key objectives by 2028 to improve water system efficiency. Given the project's significant impacts on water supply management, customer service, and operational efficiency, the project is highly ranked as an institutional priority compared with other potential CIP projects.

2. **PUD Water Use Efficiency (WUE) Program/Water System Plan** – Initially developed by Clallam PUD staff, with input from regional water system stakeholders, and approved by the Clallam PUD Board of Commissioners in 2008, the WUE Program directly responds to the Municipal Water Law passed by the Washington State legislature in 2003, with the purpose of establishing Clallam PUD's water conservation goals, measures, and reporting requirements. The plan's goals are designed to meet the standards set forth by the WUE rule (described in number 4 below). Each year an annual performance report is completed showing progress and/or changes to the WUE goals. A key WUE Program goal directly related to the project is reducing annual water consumption by a minimum of 1% per equivalent residential unit within six years. The WUE Program encompasses the Clallam PUD service region covering most of Clallam County, including the two neighborhoods served by the proposed project.

3. **Elwha-Dungeness Watershed Plan** – Providing a framework for locally-based watershed planning and resource management, this plan was produced in 2005 by

Clallam County, City of Port Angeles, Jamestown S'Klallam Tribe, Lower Elwha Klallam Tribe, and the Agnew Irrigation District, with input from each government's community constituents, including Clallam County PUD. The plan continues to guide regional watershed planning decisions. It addresses Water Resource Inventory Area (WRIA) 18, stretching from Sequim Bay, just east of the Dungeness River, in the east, to the Elwha River, in the west. Parts of WRIA 17 are also incorporated under an interlocal agreement encompassing Sequim Bay and the drainages feeding it (the westernmost portion of WRIA 17). The proposed project aligns directly with section 3.1.7 (B3): *Clallam County and all WRIA 18 purveyors, including cities, the PUD, and small water systems, should develop conservation plans implementing best available designs and technology, using current practices and meeting the goals and standards set forth in this sectio*n. The project also directly advances objective 3.1.7 (G): *Regularly implement leak detection using approaches defined in approved Comprehensive Water System Plans. Where such plans are not in place, identify target pipelines and ditches and establish an ongoing leak detection program.*

4. **Washington State Department of Health (DOH) Water Use Efficiency Program (WAC 246-290-810)** – Implemented in 2008 with the goal of improving statewide water use efficiency, the plan mandates an array of water use efficiency and reporting requirements for all utilities in Washington State. In addition to reducing annual water consumption, the plan specifically requires consumer education on WUE practices, estimated water savings, and evaluating and minimizing leakage in the water distribution system, which are directly addressed by the proposed project. The DOH has provided a letter of support for this project.

Evaluation Criteria C. Implementation and Results

Clallam PUD has the expertise and capacity needed to succeed in implementing the proposed small-scale AMI project upon entering into a financial assistance agreement. The PUD has developed a detailed implementation plan and schedule (see table below), has the necessary permissions and access to all pre-existing deployment sites, and has preliminarily assessed environmental and cultural resource compliance requirements anticipating little to no environmental and cultural impacts. The project is categorically exempt from threshold determination and environmental impact statement requirements under the Washington State Environmental Policy Act pursuant to WAC 197-11-800(23)(b).

<u>Project Implementation Plan and Schedule</u>

The detailed implementation plan and project schedule in the table below provides adequate time for each stage of work and accounts for potential delays or challenges. Clallam PUD will utilize its experienced project management staff to oversee the project ensuring all project

objectives are met on time and within budget. The 18-month project will be implemented March 2025 through August 2026.

Preparation Phase I: Assessment, Mapping, and Procurement March 2025 – February 2026			
Major Task	**Duration**	**Milestone**	**Milestone Completed by**
Field assessment and Geolocation Mapping Dashboard preparation	March 2025-May 2025	Completion of mobile assessment survey template and GIS Mapping Dashboard	May 30, 2025
Conduct service condition assessment survey	June 2025 – August 2025	Assessment survey completed	August 30, 2025
Identify materials and equipment needed based on assessment	June 2025 – Sept 2025	Materials list created	September 15, 2025
Procure AMI system materials	Sept 2025 – Jan 2026	Materials procured	January 30, 2026
Post-survey corrective action service orders	Oct 2025 – Feb 2026	Corrective service orders completed	February 28, 2026
Deployment Phase II: Installation and Integration of AMI system February 2026 – August 2026			
Major Task	**Duration**	**Milestone**	**Milestone Completed by**
AMI Deployment	Feb 2026 – July 2026	440 AMI units installed	July 30, 2026
AMI Integration	Feb 2026 – August 2026	AMI system integration with electric AMI system completed	August 31, 2026

Reasonable Costs

The project budget and budget narrative provide a detailed explanation of project costs. The budget is based on vendor quotes and Clallam PUD's experience with similar projects. The budget narrative provides a clear justification for each cost and demonstrates that the costs are reasonable and necessary for the successful implementation of the project.

Environmental and Cultural Resource Compliance

Clallam PUD has contacted Sean Hess, Regional Archaeologist in the Columbia-Pacific office of the United States Bureau of Reclamation, to discuss potential environmental and cultural resource compliance requirements for the project. Based on preliminary discussions, Clallam PUD anticipates that the project will qualify for a Categorical Exclusion under NEPA, as the work will occur 100% within existing meter boxes on previously disturbed ground.

Clallam PUD will coordinate with Reclamation to complete any necessary environmental and cultural resource compliance activities prior to beginning work. Staff time to support these activities is included in the project budget. Contractor support is not anticipated for environmental and cultural resource compliance, as impacts are expected to be minimal to non-existent.

Permits and Approvals

The proposed project will require minimal permits and approvals, as the work will occur within existing meter boxes and will not disturb new ground. Clallam PUD will obtain any necessary construction permits from local jurisdictions prior to beginning work. The timeframe for obtaining these permits is typically less than 30 days.

Access and Easements

Clallam PUD has full access and permission to perform work at all meter locations included in the project. All meter locations are within public rights-of-way or utility easements that Clallam PUD may legally access without restriction. No new easements or access permissions are required for the project.

Engineering and Design

Clallam PUD has performed preliminary engineering and design work to support the proposed project. This includes identifying technical specification options for the AMI system

components, determining meter locations and installation requirements, and developing a phased implementation plan.

The project is currently at a 30% design level. Additional engineering and design work will be performed prior to deployment to finalize meter configurations, installation details, and IT integration requirements. Clallam PUD's Water Department staff will perform this work in-house.

Evaluation Criteria D. Nexus with Reclamation Project or Activity

The project does not directly align with a Reclamation project or activity.

Evaluation Criteria E. Presidential and Department of the Interior Priorities

A description of the project's alignment with the Presidential and Department of the Interior Priorities follows below.

Sub-criterion E1. Climate Change

The project will deploy AMI meters to make water supply management more transparent and efficient. In doing so, the project will strengthen water supply sustainability to increase regional resilience to climate change, making the region less vulnerable to the effects of drought. A stronger and more efficiently managed water supply will help the region to prepare and recover from the impacts of climate change.

Sub-criterion E2. Disadvantaged or Underserved Communities

The proposed small-scale project will directly benefit the CEJST-designated disadvantaged community of Carlsborg composed of two CEJST designated disadvantaged census tracts (53009001700 and 53009001600) that rank in the 67th and 70th percentile for low income respectively. The project will also directly benefit the Monroe neighborhood in east Port Angeles (census tract 530009001400). In addition to increasing water supply reliability and efficiency in these target communities, the project will lay the foundation necessary for a longer-term, large-scale AMI meter deployment across Clallam County.

While the small-scale project would not deliver direct economic growth benefits, it will accomplish a critical first step in deploying AMI water meters at scale across the county. Through conservation of water resources, the project will mitigate the impact of

municipal water supply on stream flows, benefiting fish populations and recreational fisheries that are vital to the region's tourism economy. These environmental benefits include enhancing the habitats of threatened and endangered salmon populations that are both culturally and economically significant.

Sub-criterion E3. Tribal Benefits

While the proposed project does not directly impact the region's five Tribal nations, through conservation of water resources, the project will mitigate the impact of municipal water supply on stream flows, benefitting fish populations which are an essential part of Tribal treaty rights to taking fish at usual and accustomed grounds for commercial, ceremonial and subsistence uses.

D.2.2.3. Budget Narrative

Budget narrative submitted as a separate attachment.

D.2.2.4. Environmental and Resource Compliance

Clallam PUD has contacted Sean Hess, who is the Regional Archaeologist in the Columbia-Pacific office of the United States Bureau of Reclamation, to discuss potential environmental and cultural resource compliance requirements for the project. Based on preliminary discussions, Clallam PUD anticipates that the project will qualify for a Categorical Exclusion under NEPA, as the work will occur 100% within a limited (5'x 5') area around existing meter boxes on previously disturbed ground.

Clallam PUD will coordinate with Reclamation to complete any necessary environmental and cultural resource compliance activities prior to beginning work. Staff time to support these activities is included in the project budget. Contractor support is not anticipated for environmental and cultural resource compliance, as impacts are expected to be minimal to non-existent.

D.2.2.5. Required Permits or Approvals

The proposed project will require minimal permits and approvals, as the work will occur within existing meter box locations and will not disturb new ground. Clallam PUD will obtain any necessary construction permits from local jurisdictions prior to beginning work. The timeframe for obtaining these permits is typically less than 30 days.

D.2.2.6. Overlap or Duplication of Effort Statement

The proposed project does not overlap with or duplicate any other Washington State or federally-funded Clallam PUD projects.

D.2.2.7. Conflict of Interest Disclosure Statement

Clallam PUD has assessed the project for potential conflicts of interest and has determined there are no potential conflicts of interest.

D.2.2.8. Uniform Auditing Reporting Statement

The project request is $100,000 and not subject to uniform auditing reporting requirements.

D.2.2.9. Certification Regarding Lobbying

Clallam PUD certifies that it does not engage in lobbying activities.

D.2.2.10. Disclosure of Lobbying Activities

Not applicable.

D.2.2.11. Letters of Support

Letters of support from Clallam County Board of Commissioners and Washington Department of Health are included in the appendix attached to this proposal.

D.2.2.12. Letter of Partnership (Category B)

Not applicable.

D.2.2.13. Official Resolution

An official resolution from the Clallam PUD Board of Commissioners will be provided if grant funds are awarded.

D.2.2.14. Letters of Funding Commitment

Not applicable.

Strait of Juan de Fuca

Port Angeles

Olympic National Park

MONROE/LUD 2 WATER SYSTEM

PORT ANGELES INTERTIE

140 PRV (NC)

235 PRV (NC)

240 PRV

030 PRV

040 PRV

KONIG PRV (BI-DIRECTIONAL)

230 PRV (NC)

BLUFFS WELL, CONTACT CHAMBER & BPS

BLUFFS PRV

BOBCAT HOLLOW WELL, EQ TANK & BPS

OLD OLYMPIC WELL, EQ TANK & BPS

GEHRKE PRV

201 PRV (OPEN)

194 PRV (OPEN)

240 PRV (OPEN)

PEABODY HEIGHTS RESERVOIR

GOLF COURSE ROAD (LUD #3 LOWER) BPS

GALES ADDITION RESERVOIR & MONROE (LUD #2) BPS

280 PRV

140 PRV

KEY ROAD PRV (NC)

MT PLEASANT ESTATES BPS

PORT ANGELES INTERTIE

410 PRV

518 PRV (NC)

DEER PARK RESERVOIR

607 PRV

540 PRV (NC)

550 PRV

DEER PARK BPS #1

540 PRV

CITY OF PORT ANGELES

720 PRV

TAMARACK ROAD RESERVOIR (LUD #3 UPPER) & BPS

MONROE ROAD (LUD #2) RESERVOIR

KEY ROAD RESERVOIR (LUD #3 LOWER) & BPS

DEER PARK BPS #2

750 PRV

898 PRV

DEER PARK BPS #3

940 PRV

HARBOR HEIGHTS BPS

LUD #1 WTP

DIVERSION DAM

TOWNSHIP LINE RESERVOIR & WELLS #1 & #2

Legend

- Reservoir/Contact Chamber
- Booster Pump Station (BPS)
- Port Angeles Composite Intertie
- Well
- Pressure Reducing Valve (PRV)
- LUD #1 Treatment Plant (WTP)
- Diversion Dam
- City of Port Angeles Morse Creek Hydroelectric Plant
- Fire Hydrant
- Existing Retail Service Area
- Urban Growth Area (UGA)
- Olympic National Park
- Creek
- Railroad

Water Main (Diameter Indicated in Inches):

- <4" SP
- 4" AC
- 6" AC
- 8" AC
- 10" AC
- <4" PVC
- 6" PVC
- 8" PVC
- 10" PVC
- 12" PVC
- 16" PVC
- 8" HDPE
- 10" DI
- 20" City Main (Approximate Location)

Pressure Zone:

- Bluffs Pressure Zone 7
- Fairview Pressure Zone 1
- Fairview Pressure Zone 2
- Fairview Pressure Zone 3
- Fairview Pressure Zone 4
- Fairview Pressure Zone 5
- Fairview Pressure Zone 6
- Gales Addition Pressure Zone 1
- Gales Addition Pressure Zone 2
- Gales Addition Pressure Zone 3
- Gales Addition Pressure Zone 4
- Gales LUD #2 Pressure Zone 5
- Gales Lower LUD #3 Pressure Zone 6
- Gales Upper LUD #3 Pressure Zone 7

N

0 3,000

Scale in Feet

CLALLAM COUNTY PUD — Bringing Energy To Life™

FIGURE 4-1

EXHIBIT 1A

PORT ANGELES COMPOSITE WATER SYSTEM

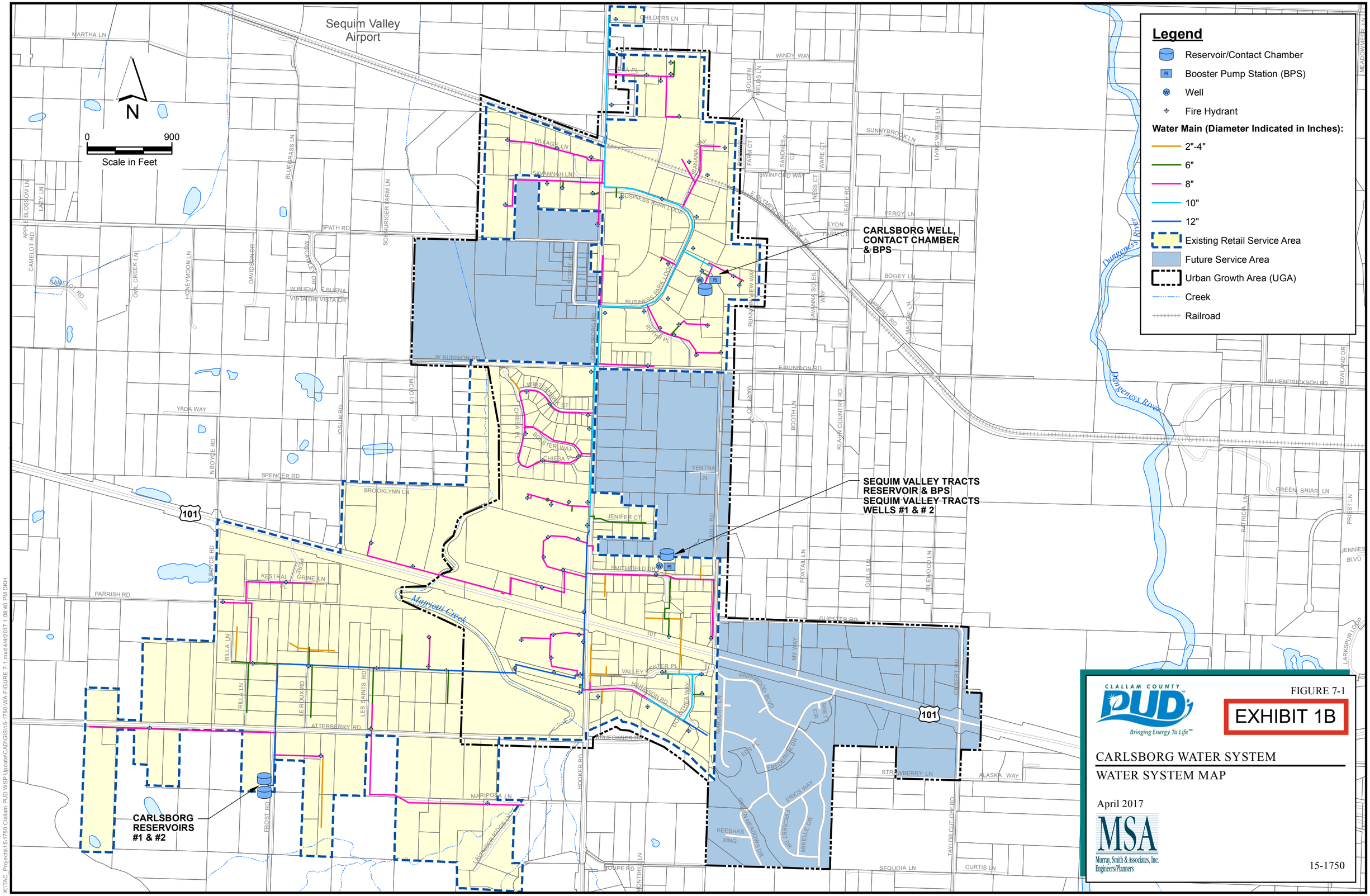
WATER SYSTEM MAP

April 2017

MSA Murray, Smith & Associates, Inc. Engineers/Planners

15-1750

K:\TAC_Projects\15\1750 Clallam PUD WSP Update\CAD\GIS\15-1750-WA-FIGURE 4-1.mxd 4/4/2017 11:24:11 AM DKH



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STATE OF WASHINGTON
DEPARTMENT OF HEALTH
SOUTHWEST DRINKING WATER REGIONAL OPERATIONS
111 Israel Road Southeast • PO Box 47823 • Olympia, Washington 98504-7823
Tel: (360) 236-3030 • Fax: (360) 236-3029 • TDD/TTY 711

June 21, 2024

Nickie McCann
Bureau of Reclamation
Water Resources and Planning Office
Mail Code: 86-63000
Post Office Box 25007
Denver, Colorado 80225-0007

Subject: Clallam County PUD No. 1, Owner #002087, Letter of Support for AMI (Advanced Metering Infrastructure) Metering Conversion, Phase 1

Dear Nickie McCann:

We are writing in support of the Small-Scale Water Efficiency Project grant application by Public Utility District (PUD) No. 1 of Clallam County, titled AMI (Advanced Metering Infrastructure) Metering Conversion, Phase 1.

The PUD provides potable water service to approximately 5100 residential, commercial, industrial, and institutional connections within Washington's Water Resource Inventory Areas (WRIA) 18 and 19. The water resources in these areas also support several salmonid species and allow for irrigated agriculture, which play an important role in Clallam County culture, history, and economy. With competing demands and limited resources in the area, water resource management and water conservation are vital elements of the region's sustainable future.

This project is aimed at improving the PUD's water resource management and water conservation programs through the deployment of AMI. This will improve and enhance the resolution of the PUD's distribution system efficiency data, provide real time customer side leak detection alerts, and allow customers to become more engaged in the PUD's strategic initiatives related to water conservation.

At the Department of Health, Office of Drinking Water we recognize the various demands on water and that water is becoming more limited as evidenced by Washington State's April 16 drought declaration. We promote water use efficiency programs and compliance with our Water Use Efficiency Rule (located within Chapter 246-290 of the Washington Administrative Code). Through these programs, we strive to ensure a safe and reliable supply of drinking water to meet current and future needs.

Our organization is happy to support the PUD's application for the AMI Metering Conversion, Phase 1 project.

Sincerely,

Sarah Spotts, P.E.
Regional Engineer, Office of Drinking Water

Benjamin M. Majors
Regional Planner, Office of Drinking Water

cc: Regina N. Grimm, P.E., Assistant Regional Manager, Office of Drinking Water
Abbey Kindall, Clallam County Health & Humans Services

Board of Clallam County Commissioners

223 East 4th Street, Suite 4
Port Angeles, WA 98362-3015
360.417.2233 Fax: 360.417.2493
Email: commissioners@clallamcountywa.gov

July 2, 2024

Bureau of Reclamation
Water Resources and Planning Office
Attn: Nickie McCann
Mail Code: 86-63000
P.O. Box 25007
Denver, Co 80225-0007

RE: Support for the PUD No. 1 of Clallam County Small Scale Water Efficiency Project: AMI Metering Conversion, Phase 1

Dear Nickie:

Clallam County is writing in support of the Small-Scale Water Efficiency Project grant application by PUD No. 1 of Clallam County, titled "AMI Metering Conversion, Phase 1." This project is aimed at improving the District's water resource management and water conservation programs through the deployment of Advanced Metering Infrastructure (AMI). AMI deployment will enhance the resolution of the District's distribution system efficiency data, provide real time customer side leak detection alerts and gain customers better opportunity to become engaged in the District's strategic initiatives related to water conservation.

The District provides potable water service to 5100 residential, commercial, industrial and institutional connections within Washington's Water Resource Inventory Areas 18 and 19. Water resources in this region support several species of salmonid species including chinook, coho, chum, pink, sockeye, steelhead and cutthroat trout. Irrigated agriculture plays an important role in the culture, history and economy of Clallam County. Population is climbing steadily in rural western Washington State as more people from around the country move to the area for the clean air, beautiful views and natural resources. For each of these reasons, water resource management and water conservation are vital elements of Clallam County's sustainable future.

This project supports four of the District's Strategic Objectives: Practice Environmental Responsibility, Ensure Reliable Supply, Manage Resource Portfolios and Enhance Customer Partnership. Clallam County is happy to support these objectives and the District's AMI Metering Conversion, Phase 1 project.

Sincerely,

BOARD OF CLALLAM COUNTY COMMISSIONERS

Mike French, Chair

Excused
Randy Johnson

Mark Ozias

Budget Narrative
Clallam County Small-Scale Advanced Metering Infrastructure (AMI) Project
PUD No. 1 of Clallam County

Total Project Budget - $218,692

- Total Grant Request - $100,000
- Clallam PUD Cost Share @ 54.3% - $118,692

A. Total Personnel - $76,897

Wages - $55,116

Project Manager @ .05 FTE (104 hours x $68.57/hr) - $7,131

Provides general project oversight ensuring all project objectives are met on time and within budget. Ensures timely and complete reporting on grant objectives and compliance with contract terms and conditions.

Project Supervisor @ .10 FTE (208 hours x $46.83/hr) - $9,741

Manages day-to-day project activities ensuring timely completion of condition assessment survey, procurement, and deployment activities.

Project Helper @ .13 FTE (265 hours x $41.04/hr) - $10,876

Assists project supervisor and foreman in carrying out major project activities including assessment survey and AMI meter deployment.

Foreman @ .03 FTE (62 hours x $54.32/hr) - $3,368

Assists Project Supervisor with coordinating, scheduling and leading field activities ensuring timely completion of condition assessment survey, procurement, and deployment.

Temporary Technician* @ .46 FTE (960 hours x $25/hr) - $24,000

Responsible for condition assessment activities and supporting the development of the geolocation dashboard.

**Position does not receive benefits*

SUBTOTAL WAGES - $55,116

Fringe Benefits - $21,781

Calculated at 70% of all benefitted positions ($33,116). Fringe benefits at Clallam PUD are calculated at 70% of base rate salary and include state PERS retirement, 401a, healthcare, employer covered taxes, short & long-term disability and PTO.

TOTAL WAGES AND BENEFITS - $76,897

B. Contractual Services - $3,264

Costs to cover tech and software services for the Endpoint units include:

- Landis+Gyr Endpoint Tech Services Contract - $3,000
- Software Support for Endpoints (440 x .60) - $264

C. Equipment- $130,515

Costs to cover installation of 440 AMI Endpoint units (capitalized as equipment in general ledger) include:

- 440 Endpoints @ $275 - $121,000
- Misc. Installation Materials - $2,000
- 45 meter replacement boxes @ $167 per unit - $7,515

D. Indirect Costs @ 10% MDTC - $8,016

The federal de minimis rate of 10% of modified total direct costs (MTDC) of $80,161 is used as follows: "All direct salaries and wages, applicable fringe benefits, materials and supplies, services, travel, and up to the first $25,000 of each subaward (regardless of the period of performance of the subawards under the award.) MTDC excludes equipment, capital expenditures, charges for patient care, rental costs, tuition remission, scholarships and fellowships, participant support costs and the portion of each subaward in excess of $25,000.