

AGENDA
CENTRAL WASHINGTON POWER AGENCY ANNUAL MEETING
December 12, 2023
10:00 a.m.

GRANT COUNTY PUBLIC UTILITY DISTRICT
30 C Street SW – Commission Meeting Room
Ephrata, Washington

- 1) Introductions
- 2) Old Business
 - Motion approving December 1, 2022 minutes
- 3) New Business
 - Motion appointing President
 - Motion appointing Vice-President/Secretary
 - Other
- 4) Future Meetings
- 5) Adjourn

Fish, Wildlife and Water Quality Department Update

Grant PUD Commission Meeting December 12, 2023

Operate Responsibly by Attaining Environmental, Cultural Resource and Regulatory Compliance



Powering our way of life.

Department Purpose & Goal

The Fish and Wildlife Department uses technology, innovation, strategic thinking, good stakeholder relations and skilled negotiations to ensure we are achieving compliance with our Natural Resources regulatory requirements in a safe, cost efficient and biologically sound manner while helping to maintain the long-term financial health of the District.



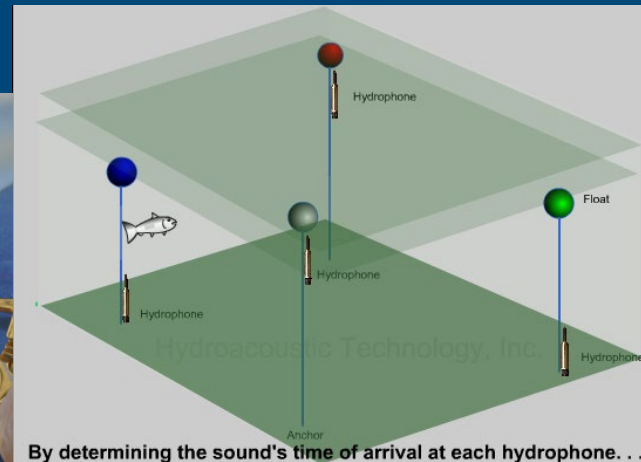
2023 Safety Culture

- ❖ 1 Recordable Incident to date.
- ❖ Job Site Briefs = 223 (Through 11/30/2023).
- ❖ Job Site Reviews = 77 (Currently at ~34.5%).
 - Goal = 25%
- ❖ Safety Meeting Attendance (2022) = 97%.
- ❖ Safety Meeting Attendance Jan. – Aug 30, 2023 = 100%.
- ❖ Training Status Completion (2022) = 99%.
- ❖ Training Status Completion Jan. – Nov 30, 2023 = 99%.



Juvenile Salmonid Survival Evaluations (2025-2027)

- ❖ Study Plan approved by PRCC on November 28, 2023.
- ❖ 1- year Check-ins for Yearling Chinook, juvenile steelhead, and juvenile sockeye.
- ❖ 3 consecutive years required for Summer Subyearling Chinook.
- ❖ Substantial Risk if standard not achieved for each species.
 - ✓ Financial (retests, NNI contributions, increased hatchery production and/or other mitigation requests).
 - ✓ Operational (Increased spill, turbine and bypass operations, structural modifications, etc.).
- ❖ Suite of Contracts need to be developed and approved in 2024.
 - ✓ Professional Services for Contractor to install equipment, collect, analyze and report on data.
 - ✓ Professional Services for statistical analysis and review of data.
 - ✓ Interlocal Agreement with Chelan PUD for fish collection.
 - ✓ Contract for helicopter services for fish releases.
 - ✓ Acoustic Tags, Receivers, etc.



PR Hatchery Siphon Intake

- ❖ Constructed in the 1960's (~1963).
- ❖ Flow (~100 cfs) is through a fabricated steel bell-mouthed section connected to a 54" diameter reinforced concrete conveyance pipe that runs over the dam embankment to the hatchery.
- ❖ Used in conjunction with the existing well field to achieve/maintain water temperature regimes for adult holding, spawning, incubation, rearing and release of Fall Chinook.
- ❖ Back-up water supply to the Priest Rapids Hatchery well field.
- ❖ Current Status
 - ✓ Concept Study Updated June 2023.
 - Site visit with permitting agency (WDFW) – August 8, 2023.
 - Pre-permitting meetings (NOAA, WDFW & USFWS) – November 2, 2023.
 - Pre-permitting meeting with USCOE coming up.
 - Anticipated permit package submittal in Dec 2023.
 - ✓ Anticipated Completion Date – 2027.



Carlton Acclimation Facility

❖ Methow River migrating away from existing water intake structure. During extremely cold snaps typically in late February/early March the facility can be left with no to very little river water for fish acclimation. Channel migration away from the intake structure continues to occur.

❖ Current Status

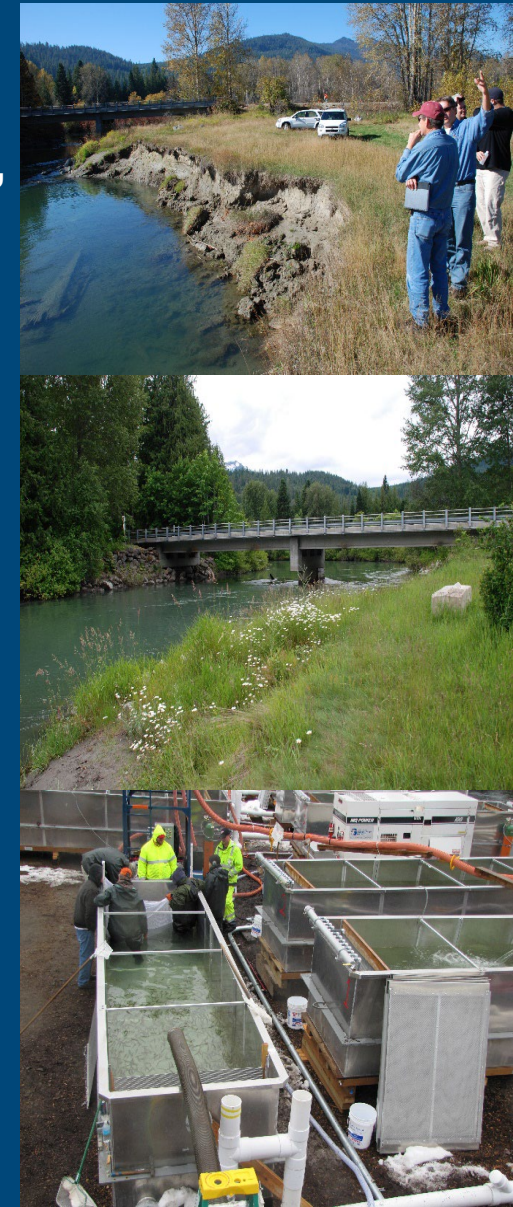
- ✓ Phase 1: (Production & Domestic Well)
 - Irrigation Technology and Control, Inc.
 - Successfully Completed

- ✓ Phase 2: (Infrastructure Needs)
 - Contract Develop Planning Stags – December 2023



White River Spring Chinook Program

- ❖ The White River spring Chinook are listed as endangered under ESA.
- ❖ The 2008 NOAA Biological Opinion (BiOp) for the Priest Rapids Project required Grant PUD to develop the necessary facilities to collect adult chinook, spawn, incubate, rear, and release 150,000 juvenile spring Chinook into the White River annually.
- ❖ In 2006, Grant PUD purchased an 18-acre parcel along White River to build the necessary facilities to meet the requirements identified in the 2008 NOAA BiOp.
- ❖ Resistance by local stakeholders, Chelan County permitting requirements and lack on consensus among required stakeholders resulted in the development of a Statement of Agreement (SOA) which deferred a decision on facility development.
- ❖ **Components of SOA**
 - ✓ Conduct annual monitoring and evaluation activities in White River (2020-2026).
 - ✓ Expand Nason Creek Acclimation Facility (NCAF) to accommodate up to 275,000 smolts.
 - ✓ All Wenatchee spring Chinook mitigation will be met at the NCAF.
 - ✓ **Independent scientific review panel – Staff currently mapping out process.**
 - ✓ By 2026 PRCC-Hatchery Subcommittee will determine if White River program should be restarted.
- ❖ Potential future financial, O&M, and capital risk.



Aquatic Invasive Species Control and Prevention Plan (Zebra & Quagga Mussels)

➤ Implemented and Reported on Annually

- ✓ Education (signage at Project boat launches)
- ✓ Sampling artificial substrate at strategically placed locations
- ✓ Plankton tow nets for larval mussels
- ✓ Environmental DNA (eDNA)
- ✓ Visual shoreline monitoring
- ✓ Rapid Response Plan and Coordination with regional stakeholders



Hatchery Tours – Q1 2024

Chief Joesph, Omak Creek Acclimation, Carlton Acclimation Facility, Methow and Wells Hatcheries

- ❖ Okanagan Spring and Summer Chinook
- ❖ Okanagan Steelhead
- ❖ Methow Summer Chinook
- ❖ Methow Spring Chinook

Chief Joesph Hatchery



Carlton Acclimation Facility



Methow Hatchery



Omak Creek Acclimation



Wells Hatchery



Orange & Blue U

The Program Process

Note: This program demands approximately 200 hours of your time over the 12 month period.



- Over 360 hours total (almost double 200 hour original estimate)
- Fantastic cross-District team
- Invaluable personal, leadership & industry experiences



Leading Grant

Orange & Blue U

2023 cohort



Molly Hill

Mechanical Engineer- Power Production

TJ Hossele

Electrician - Facilities

Mindy Klingenberg

Change Manager- OCM

Casey Raab

Power System Electrician- Power Delivery

Willamette University

5-year strategic plan

Grant County PUD

Presented By:

Molly Hill

TJ Hossele

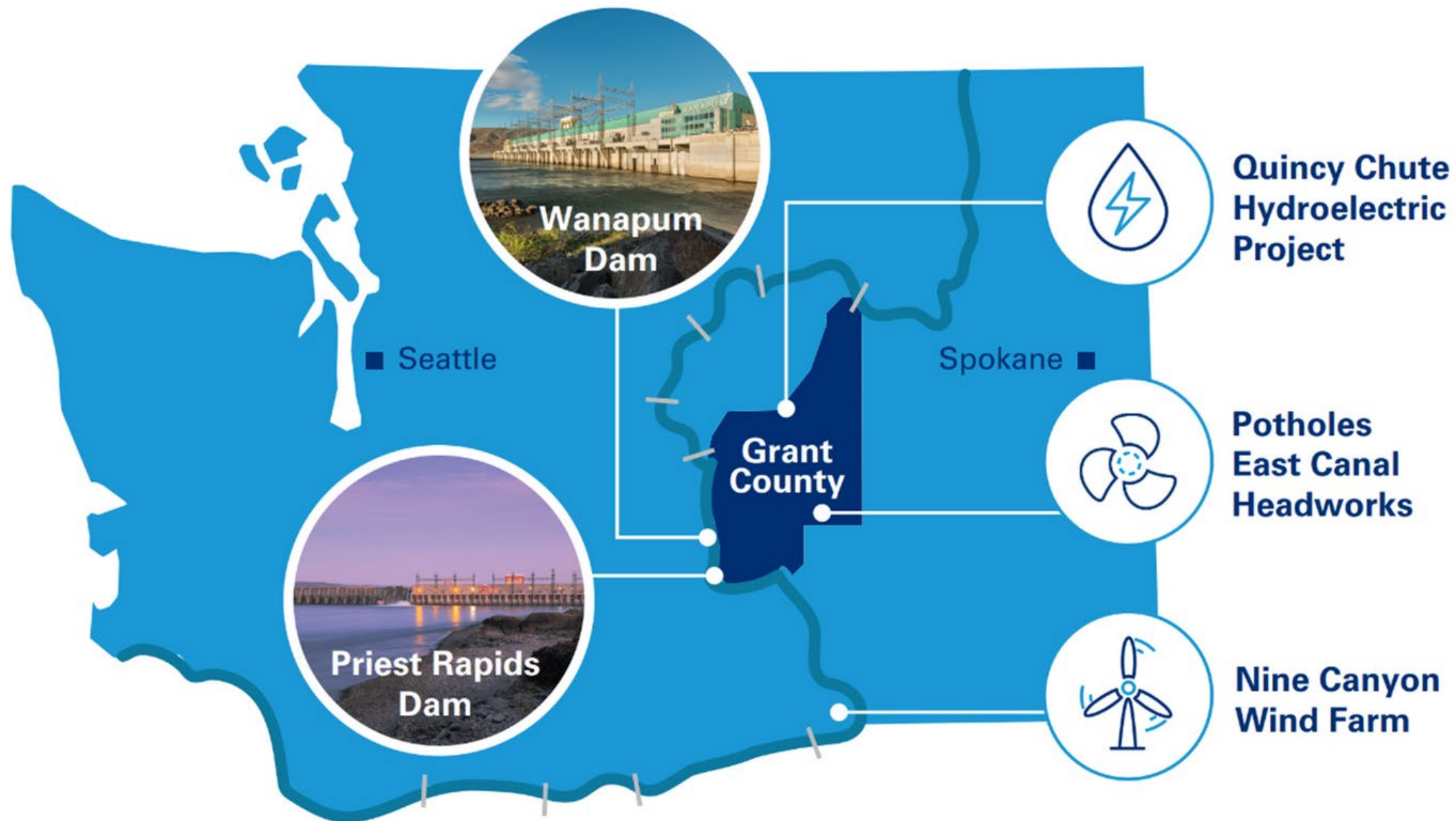
Mindy Klingenberg

Casey Raab



Powering our way of life.

Mission & Vision



Mission

To safely, efficiently and reliably provide electric power and fiber optic broadband services to our customers.

Vision

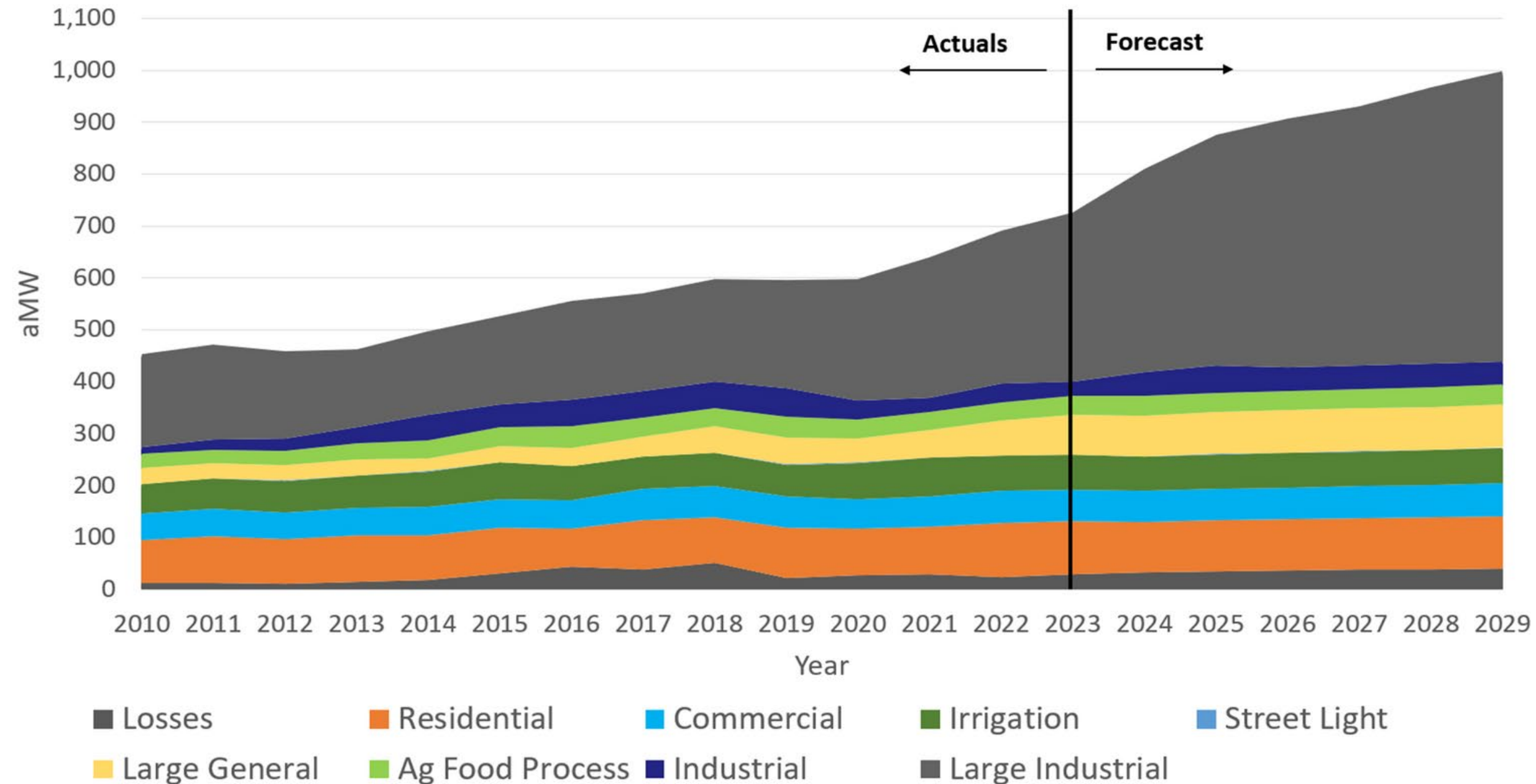
EXCELLENCE IN SERVICE AND LEADERSHIP

We continually ask how we can improve service quality, reliability and stewardship of our resources in the most cost-effective manner.

Key Assumptions

- Diverse customers
- Load growth
- Regulatory requirements
- Low rates
- Aging infrastructure

Actuals and Forecast aMW



16.11¢
per kWh*

UNITED STATES

10.96¢
per kWh*

WASHINGTON

5.80¢
per kWh*

GRANT PUD

STRENGTHS

- **Low rates**
- **High reliability**
- Solid financial performance
- Advantageous resources
- Highly skilled workforce

WEAKNESSES

- **Aging infrastructure**
- **Not leveraging technology solutions**
- **Inconsistent/lack of processes**
- Aging workforce

OPPORTUNITIES

- **Ability to make large capital investments**
- **Customer Engagement**
- Process improvement
- Ability to grow
- Personnel development

THREATS

- **Regulations**
- **Lack of energy resource diversity**
- Acquiring/retaining skilled resources
- Permitting



Strategic Goals



Achieve and maintain a zero-incident workplace



Design and sustain an engaging & fulfilling Grant PUD culture



Provide outstanding service to our customers

1 Enhance and elevate communication and engagement for all customers



Provide long-term low rates

2 Creating better reliability through visibility and control of our distribution assets

3 Forward thinking ideas



Maintain a strong financial position

4 Standardization of capital budget process



Operate responsibly by attaining environmental, cultural resource and regulatory compliance

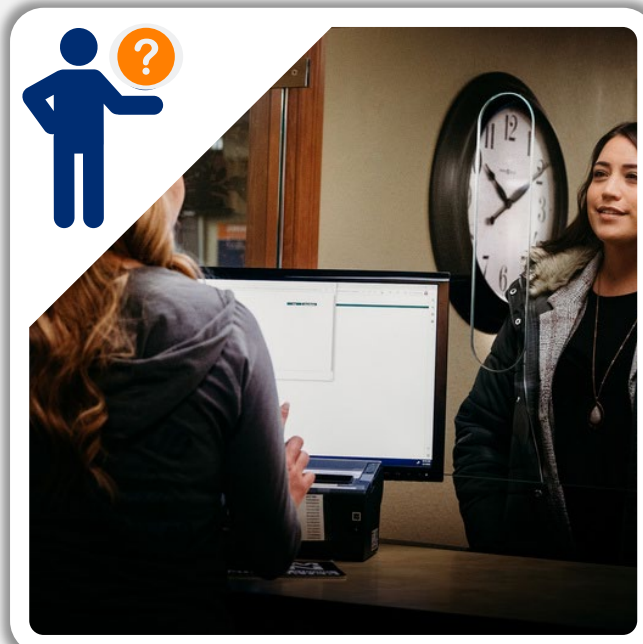


Completion and maintenance of a sustainable wholesale fiber optic network



Strategy 1 - Enhance and elevate communication and engagement for all customers

Provide outstanding service to our customers



Do we know our customers?

Touchpoints and feedback are essential



Our customers are heard

Outreach to address customer needs



Improved customer portal

Customer satisfaction score



Provide long-term
low rates

Strategy 2 - Creating better reliability through visibility and control of our distribution assets



Advanced Metering Infrastructure
(AMI) data leveraging

Finalize Supervisory Control and Data
Acquisition (SCADA) installation



Power Quality Management

Visibility & protection of assets



Gain capacity due to Power Quality
Correction

Limit outage duration/ frequency and
corrective maintenance



Strategy 3 - Forward thinking ideas

Provide long-term
low rates



Grid diversity and potential
partnerships with industrials

Optional rate structure

Demand response



Compliant with future energy
regulations

Gain capacity



Project phases are completed on
schedule and within budget

Time of use rates properly vetted and
implemented

Quantify demand response efforts



Strategy 4 - Process standardization of capital budget process

Maintain a strong financial position



Total replacement of existing financial tools

District implementation of Maximo

Consistent project prioritization



Visibility and accuracy for forecast and actual costs

Clarity on project prioritization

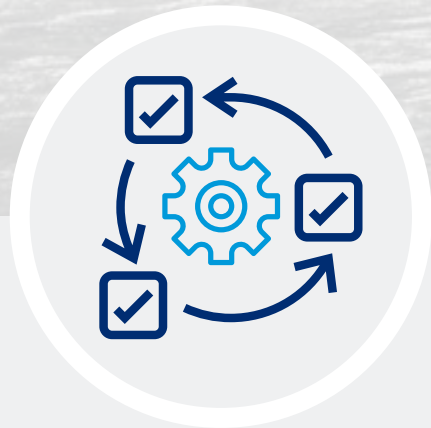
Auxiliary benefits



Increase in “Consolidated Return on Net Assets”

Increased efficiency of monthly budget updates

Operational Impacts



System

- Refined processes for customers and company
- Grid operation
- Capital upgrades



Tools

- Technology implementation
- Utilizing tools to enhance service
- Infrastructure and asset base



People

- Dedicated workforce and resources
- Leadership support
- Structured project prioritization

Customer Impacts



S a f e t y

- Safety improvements
- More decision-making on when to invest



Sustainability

- Customer feedback
- Mindset shift with knowledge and understanding



Visibility

- Customer access to information
- Short/long -term capital spending
- Energy efficient partnership



Capacity

- Grid reliability
- More capacity
- Proactive approach of programs and incentives

People Impacts



Stakeholders

- Effective training from vendors
- Power Purchasing Agreements



Organization

- Procedural expectations
- Work prioritization
- Organizational Change Management involvement
- Executive support & follow through



Employee

- Culture shift - Customer first
Proactive Mindset
- Skill-based training of workforce
- Less frustration with new processes

Financial Impacts



Cost Assumptions

- \$22 Million - Capital
- \$1.8 Million - O&M
- 5% interest expense on debt



Benefits

- Efficiency gains
- Avoided cost of other software licenses
- Increased power supply
- Avoided O&M, safety incidences and forced outage costs



Rate Impact

0.8%

Project Risks

1

Visibility causes increases to capital expenditures that exceed budget values

- • Re-evaluate project prioritization
- Defer projects based on new criteria

2

Load growth in Grant County does not continue increasing as projected

- • Remove the demand response contracts
- Sell our excess power on the wholesale market
- Find creative solutions to attract customers

3

Data interception by unauthorized users

- Work with vendor to implement stronger security measures

REVIEW

➤ Low rates

➤ Opportunities

➤ Visibility

➤ Innovation



Provide outstanding service to our customers

1 Enhance and elevate communication and engagement for all customers



Provide long-term low rates

2 Creating better reliability through visibility and control of our distribution assets

3 Forward thinking ideas



Maintain a strong financial position

4 Standardization of capital budget process



Grant PUD Cultural Resources 2023 Q3 Business Report

Grant PUD Commission Meeting
– December 12, 2023

Department Purpose and Goal

- The Cultural Resources Department is tasked with ensuring compliance with FERC regulatory requirements related to cultural resources. These include historic and prehistoric sites and Traditional Cultural Places important to the Wanapum, Yakama and CCT people. A secondary goal is to help foster the relationship between the District and the Wanapum, all in alignment with Grant PUD's safety, financial, and compliance goals.



Q2/3 Business Review

- **Regulatory Compliance**
 - Compliance Violations = 0
 - NCRRP Reviews = 18
 - FERC orders/notices = 0
 - Summary/Listing of filings=0
- **Safety Metrics**
 - Incidents = 0
 - Close calls = 0
 - JSRs = 19
 - Safety meeting attendance = 96%



Q3/4 Business Activities

Compliance: Archaeology/River Patrol

- Q4 stakeholder meeting was held on 11/29, focus was on year end reporting and archaeological site damage assessment for site 45GR02094 just north of Crescent Bar Island
- Archaeology Staff are on track to complete year end compliance reports on schedule in Q4.
- Crab Creek Fencing Project was completed in October.
- Continuing to support Wanapum concerns and cultural resources compliance efforts for the Priest Rapids Right Bank Project. These include MOA, TCP and Wanapum Village safety concerns for revegetation of the construction area and travel through the Martinez Road corridor.



Q3/4 Business forecast

Compliance: Wanapum Interface Office Activities

- PR anchor project – bi-weekly consultation and coordination meetings are ongoing.
- PRREIP – Implementation of MOA stipulations are ongoing.
- Hanford Reach National Monument - Tribal Co-Stewardship discussions are occurring at the highest policy level between Tribes and Federal Agencies (DOI, DOE, USFWS, YN, CTUIR, NPT, and Wanapum)
- Development of a Sacred Sites Policy at DOI/DOE with Tribes was rescheduled to February/March due to the potential government shut down.
- Continued cultural resource working group participation with BPA, PNSO USFWS, Dept of Energy, and USACE to protect Wanapum interest through ongoing maintenance work and proposed new undertakings



Q3/4 Business Activities

Traditional Program: Wanapum Heritage Center:

Wanapum Heritage Center is open to general public Thursday through Monday; Tuesdays and Wednesdays are dedicated to local school Districts.

- Grant County fair: this year marked the final year for the current WNADU
- Wanapum student helpers (high school age) have just completed another season of work. They created 3 separate Wanapum outfits that will be utilized for future displays, at the Fair and during Native American Heritage Month.
- Tule mat house project is ongoing, 2023 included inspections of the current tule inventory and site visits for gathering this coming summer. It is anticipated that there will be a 2025 installation of the Wanapum tule mat house.
- Work on the Wanapum library and gift shop continues. Library book accessions continue to make great progress with material ready for borrowing.



Q3/4 Business Activities

Traditional Program: Wanapum Heritage Center

Wanapum Heritage Center includes 595 Accessioned Collections

- We have completed inventories for 429 collections, 166 inventories continue to be processed

Collection types include ethnographic, archaeological, archival, art, and natural history, including:

- 1356 boxes of archaeological material, 20,346 individually cataloged objects
- 12,026 archival photographs
- 3399 individually cataloged archival materials (representing a minimum of 13,473 pages)

In 2023 there were 51 collection use/access requests, including:

- 10 WHC or staff requests and 15 Federal/State Agency/Tribal requests
- 10 University/Museum requests
- 6 General information requests



Q3/4 Business Review

Major Projects: Traditional program

- In 2024 Wanapum will create two new canoes and conduct maintenance on the two existing canoes.
- Tule mat lodge project will be initiated in 2024 with a likely completion in 2025



2023 Q3/4 Forecast

Use of Allocated Resources



Staffing –

- No changes

Services –

- Renewed contracts with the Yakama and CCT to support monitoring and ongoing work



2023 Q2/3 Forecast

- Questions?



Traditional Program

- Wildlife monitoring of the Priest Rapids Right Bank Project

Community Engagement Activity Report

Commission Presentation
December 2023

Chuck Allen, *Supervisor, Public Affairs*

Annette Lovitt, *Community Engagement, Public Affairs*

Rosalie Black, *Marketing, Public Affairs*







Powering our way of life.

External Affairs and Communications Structure & Personnel



Chuck Allen
Senior Manager

Public Affairs

 <p>Christine Pratt <i>Public Information Officer</i></p>	 <p>Annette Lovitt <i>Community Engagement</i></p>
 <p>Rosalie Black <i>Marketing</i></p>	 <p>Raquel Urbina <i>Communication Specialist</i></p>

**Government/
Regulatory Affairs**





Ryan Holterhoff
Senior Policy Analyst



Cindy McClure
Administrative Assistant

**Information Governance
Compliance**

 <p>Beverly Peterson <i>Records Officer</i></p>
 <p>Michelle Clark <i>Records Officer</i></p>
 <p>Angie Albertson <i>Records Compliance Specialist</i></p>
 <p>Jessie Allemand <i>Policy Administrator</i></p>

Agenda

Community Outreach

- '23 Festivals & Fairs
- Fair Time!
- Pay it Forward

Educational Outreach

- NCESD
- Riverfest

Marketing

- APPA
- Social Media

2024

- Community Benefits Program

01

Community Outreach

'23 Fairs & Festivals

Grand Coulee
Colorama

Coulee City
Coulee City Roundup

Ephrata
Sage 'n Sun
Car Show
Trick or Treat
Bells on Basin

Quincy
Farmer Consumer Awareness



George
Fourth of July festival

Moses Lake
Ag Parade
ML Chamber of Commerce

County wide
Grant County Fair
Moravida festival

Desert Aire
Desert Aire Charity Golf

Grant County Fair – 2023 Hydro is Green



Pay it Forward

George Elementary – Bites2Go

Pioneer Elementary School – Bites2Go

More in 2024!



02

Educational Outreach

North Central Educational Service District

Classroom presence



- Electrical safety, conservation and hydrological cycle education
- Kindergarten through Fifth grade
- Contract in renewal phase



Tri-Cities Riverfest

Sharing the hydropower message with our Northwest partners.





03 Marketing

Grant PUD wins APPA People's Choice Award



Video link: <https://www.facebook.com/GrantCountyPUD/videos/426697992947566>

Big 3 in 2023 – 509RIVER

External Affairs Big 3 Goal

509River.org

Visitors: 664

Pages viewed: 2,500

*Engagement is high

Goal: Continue to build awareness & bring more visitors to the website

Social Media Impact

Reach ⓘ

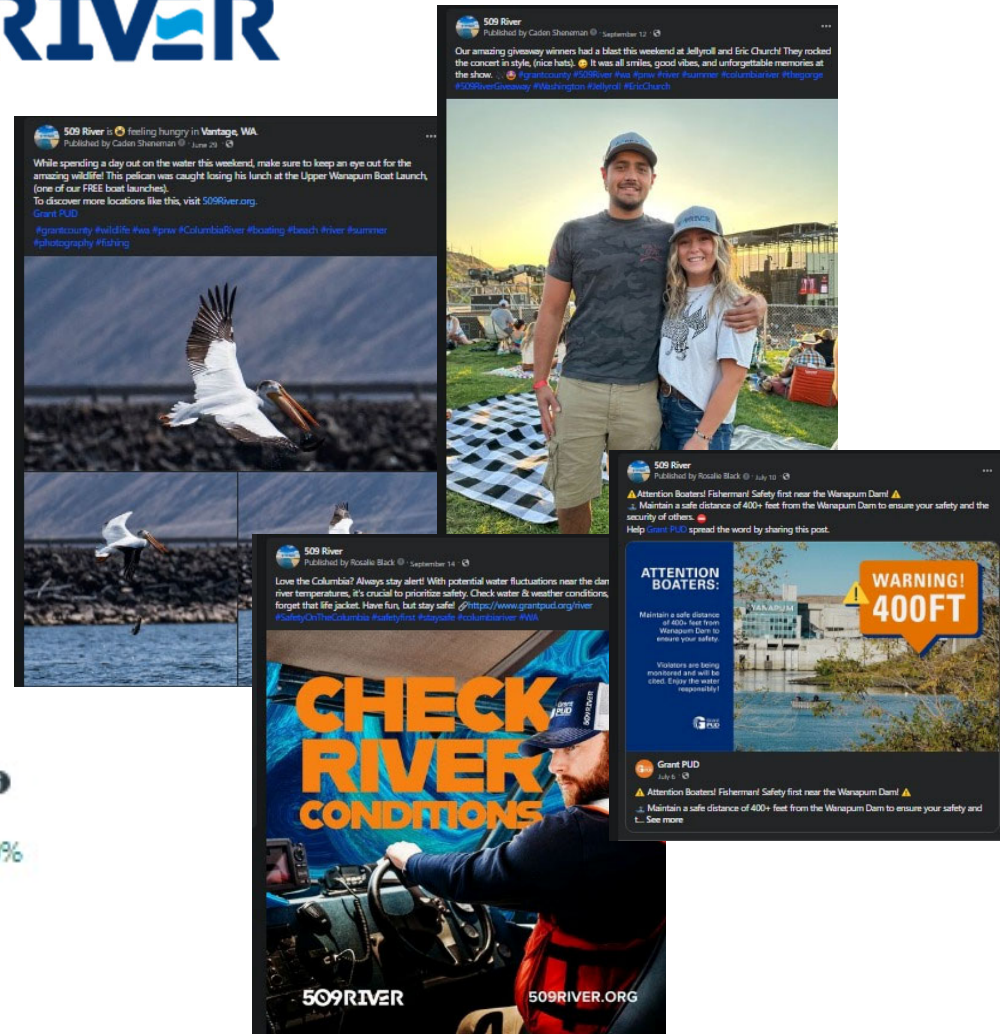
Compare your reach from this period to the previous one.

Facebook reach ⓘ

14,598 ↑ 100%

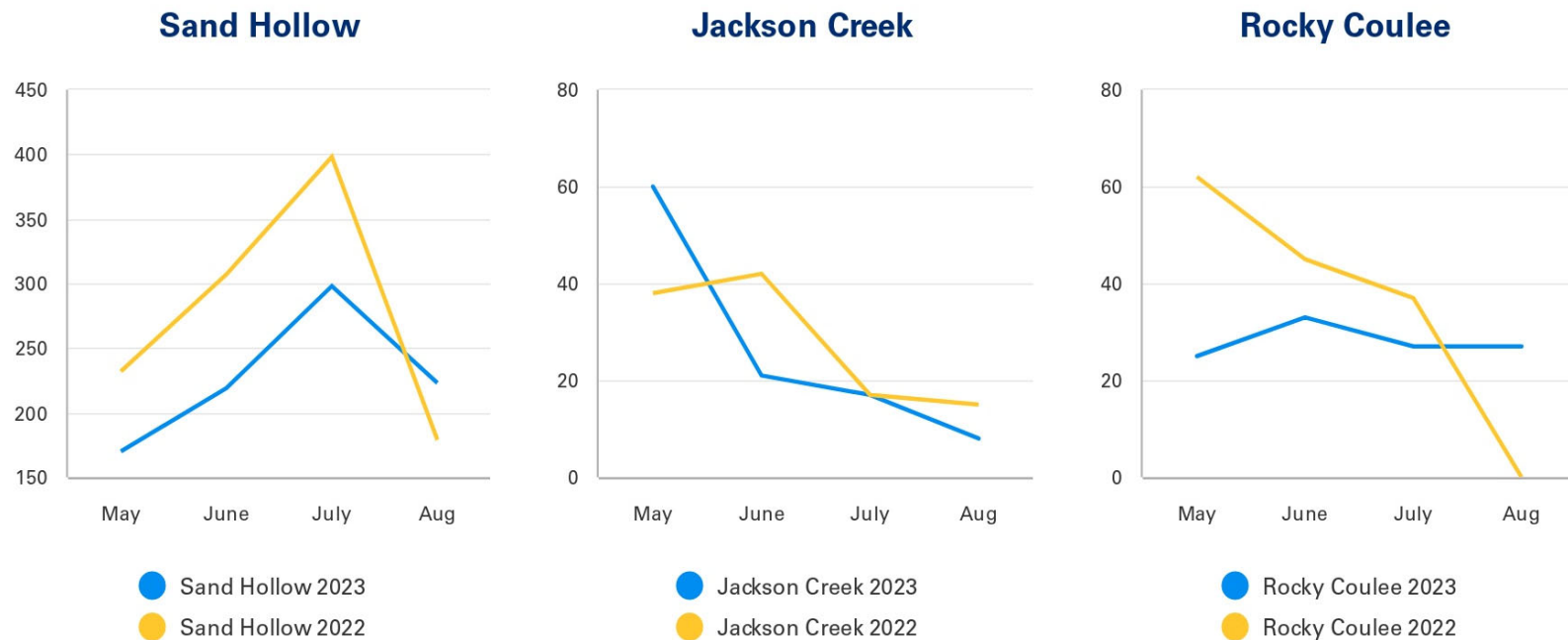
Instagram reach ⓘ

2,096 ↑ 100%



Big 3 in 2023 – 509RIVER

External Affairs Big 3 Goal: 509 River Impact



- In Aug we see a 25% lift for camping at Sand Hollow
- We will be intensifying our promotional efforts for Rocky Coulee and Jackson Creek in Q1 and Q2 in hopes to enhance visibility and attract a greater number of visitors for camping

Social Media Gains + Goals

Facebook Visits: 96,258

+68% from 2022

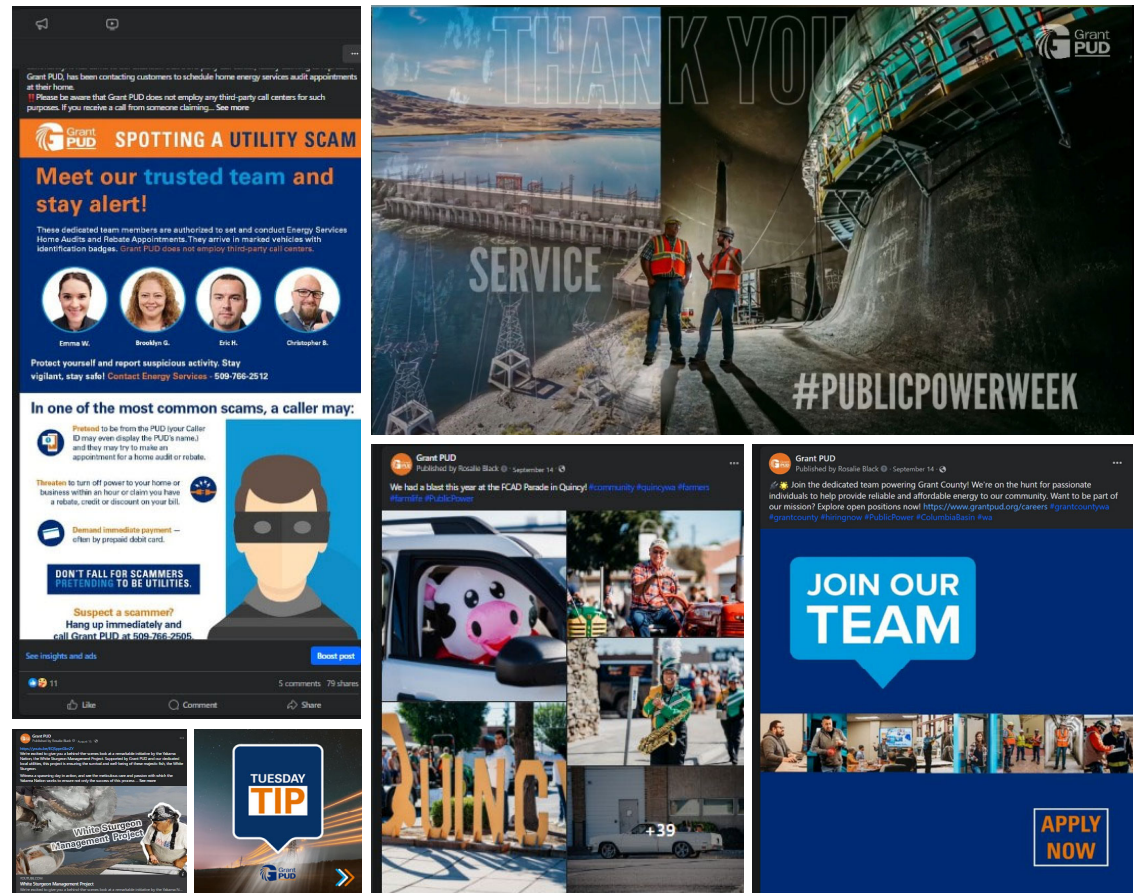
Facebook Reels/Video plays: 38,756

+2,814% from 2022

+1,117 New followers from videos posted in 2023

Social Media Goals for 2024 based on lessons learned from 2023:

- Boost engagement on posts
- Promote Energy Services benefits, and develop an intentional marketing campaign that increases awareness



04

2024 Community Outreach

Community Benefit Program

Caring for our Communities through Active Engagement: 2024 will see Grant PUD more fully engaged with our community, reaching out to those customers who need us the most.





Powering our way of life.

MEMORANDUM

November 24, 2023

TO: Richard Wallen, General Manager/Chief Executive Officer

VIA: Bonnie Overfield, Chief Financial Officer/Treasurer
Angelina Johnson, Senior Manager of Treasury and FP/Deputy Treasurer *Angelina Johnson*

FROM: Amy Thompson, Senior Financial Analyst *Amy Thompson*

SUBJECT: 2023 November Debt Transaction Summary

Purpose: To summarize the Electric System (ES) Transaction Activity and Closing

Discussion: On November 30, 2023, the District will close the refunding of the 2020-S with the new series, 2023-V. The original bond was issued as a 3-year Soft Put bond with a December 1, 2023, Mandatory Tender Date, at which time the interest rate would increase from 2.00% to 8.00%.

During the original analysis and presentation to the Commission (Resolution 9031), District staff estimated potential savings of \$6.560M of interest and cost of issuance (Exhibit A).

Justification: Pre-market conditions indicated the refunding would be successful in meeting Resolution 9031's thresholds.

- Principal amount of the Bonds (in the aggregate) to not exceed \$55,000,000
 - Final: \$44,845,000
- Maximum True Interest Cost (in the aggregate) to not exceed 6.0%
 - Final: 4.136236%
- Final Maturity of the Bonds to be no later than January 1, 2044 (a 20-year term structure)
 - Final: 1/1/2044 (Fixed-rate 20 year series with a 10 year call option)

Financial Considerations (Progression):

11/9/2023 Pre-market conditions estimated by the Underwriter indicated a total of \$72,462,239 total Debt Service Cost to the District.

- Spreads ranged from 380 basis points (bps) to 22 bps.
 - Exhibit A contains the Proposed Pre-Marketing Spreads.
 - Estimation of the Underwriter's market valuation if the District priced the Bonds 11/9/2023
 - Exhibit B

11/9/2023 The District's Financial Advisor (FA), PFM Financial Advisors, negotiated with the Underwriter on the District's behalf to reduce the Pre-Marketing Spreads to a reduced total of \$71,544,035 total Debt Service Cost to the District.

- Debt Service reduction of \$918,204 prior to going to market
 - Estimation of the Underwriter's market valuation with the FA's negotiation if the District priced the Bonds 11/9/2023
 - Exhibit C

11/14/2023 Consumer Price Index (CPI) report from October 2023 (1 month lag) remained unchanged, indicating a favorable market position for the District leading to the pricing date of 11/14/2023.

11/15/2023 The District's Bonds were oversubscribed (more orders were entered than available Bonds to sell) by over 2x for the entire Bond series. 18 Investors ordered \$186,740,000 worth of Bonds (Par was \$44,950,000). Oversubscription ranged from 2.52x to 6.64x indicating the District would be able to further negotiate the spreads in favor of the District's ratepayers. Final negotiations with the FA, Underwriter, and District Representatives resulted in a favorable Debt Service Cost to the District.

- Final Debt Service Cost: \$71,377,833.
 - Debt Service reduction to the District from the Proposed Pre-Marketing Spreads to the Final:
 - \$1,084,406
 - Exhibit D

Final Debt Service Reduction from estimates 9/7/2023 to Final Pricing 11/15/2023:

- \$7,444,483.67
 - Debt Service Reduction favorable to the District by \$884,483.67
 - Exhibit E

Bond Purchase Agreement/Contract Specifics: All Resolution 9031 requirements were met.

Legal Review: Original approval with memorandum for Resolution 9031.

Exhibit A

Multiplier 4			
5-year		10-year	
Principal	\$ 47,070,000	Principal	\$ 48,270,000
Interest	\$ 7,688,100	Interest	\$ 23,742,317
Total Debt Service	\$ 54,758,100	Total Debt Service	\$ 72,012,317
Cost of Issuance	\$ 250,000	Cost of Issuance	\$ 250,000
5-year Cost Estimate	\$ 55,008,100		<u>\$ 72,262,317</u>
5-year Debt Interest	\$ 7,688,100		
Cost of Issuance	\$ 250,000		
	<u>\$ 7,938,100</u>		
Multiplied * 4	\$ 31,752,400	20-year	\$ 72,262,317
Add Principal	\$ 47,070,000	5-year rolled 4 times	<u>\$ 78,822,400</u>
	<u>\$ 78,822,400</u>	Debt Service Reduction	<u>\$ 6,560,083</u>
		Choosing 20 year	

Original Estimation of Potential Debt Service Reduction

Exhibit B

Maturity	Proposed Pre-marketing Spreads (Pre-marketing + 20 bps)				
	Coupon	BVAL	Spreads	Yield	Debt Service
1/1/2024	5.00%	0.00%	380 bps	3.80%	\$1,495,989
1/1/2025	5.00%	3.31%	22 bps	3.53%	\$3,551,000
1/1/2026	5.00%	3.24%	25 bps	3.49%	\$3,549,000
1/1/2027	5.00%	3.12%	30 bps	3.42%	\$3,548,750
1/1/2028	5.00%	3.06%	35 bps	3.41%	\$3,550,000
1/1/2029	5.00%	3.04%	38 bps	3.42%	\$3,547,500
1/1/2030	5.00%	3.05%	40 bps	3.45%	\$3,546,250
1/1/2031	5.00%	3.04%	45 bps	3.49%	\$3,546,000
1/1/2032	5.00%	3.06%	45 bps	3.51%	\$3,546,500
1/1/2033	5.00%	3.09%	45 bps	3.54%	\$3,547,500
1/1/2034	5.00%	3.14%	45 bps	3.59%	\$3,548,750
1/1/2035	5.00%	3.23%	48 bps	3.71%	\$3,550,000
1/1/2036	5.00%	3.35%	50 bps	3.85%	\$3,546,000
1/1/2037	5.00%	3.49%	52 bps	4.01%	\$3,546,750
1/1/2038	5.00%	3.60%	55 bps	4.15%	\$3,546,750
1/1/2039	5.00%	3.66%	55 bps	4.21%	\$3,550,750
1/1/2040	5.00%	3.71%	55 bps	4.26%	\$3,548,250
1/1/2041	5.00%	3.76%	55 bps	4.31%	\$3,549,250
1/1/2042	5.00%	3.81%	55 bps	4.36%	\$3,548,250
1/1/2043	5.00%	3.85%	55 bps	4.40%	\$3,550,000
1/1/2044	5.00%	3.88%	55 bps	4.43%	\$3,549,000
Total					\$72,462,239

Exhibit C

Maturity	Pre-marketing Spreads				
	Coupon	BVAL	Spreads	Yield	Debt Service
1/1/2024	5.00%	0.00%	360 bps	3.60%	\$1,493,535
1/1/2025	5.00%	3.31%	2 bps	3.33%	\$3,502,500
1/1/2026	5.00%	3.24%	5 bps	3.29%	\$3,501,500
1/1/2027	5.00%	3.12%	10 bps	3.22%	\$3,502,250
1/1/2028	5.00%	3.06%	15 bps	3.21%	\$3,504,500
1/1/2029	5.00%	3.04%	18 bps	3.22%	\$3,503,000
1/1/2030	5.00%	3.05%	20 bps	3.25%	\$3,502,750
1/1/2031	5.00%	3.04%	25 bps	3.29%	\$3,503,500
1/1/2032	5.00%	3.06%	25 bps	3.31%	\$3,500,000
1/1/2033	5.00%	3.09%	25 bps	3.34%	\$3,502,250
1/1/2034	5.00%	3.14%	25 bps	3.39%	\$3,504,750
1/1/2035	5.00%	3.23%	28 bps	3.51%	\$3,502,250
1/1/2036	5.00%	3.35%	30 bps	3.65%	\$3,504,750
1/1/2037	5.00%	3.49%	32 bps	3.81%	\$3,501,750
1/1/2038	5.00%	3.60%	35 bps	3.95%	\$3,503,250
1/1/2039	5.00%	3.66%	35 bps	4.01%	\$3,503,750
1/1/2040	5.00%	3.71%	35 bps	4.06%	\$3,503,000
1/1/2041	5.00%	3.76%	35 bps	4.11%	\$3,500,750
1/1/2042	5.00%	3.81%	35 bps	4.16%	\$3,501,750
1/1/2043	5.00%	3.85%	35 bps	4.20%	\$3,500,500
1/1/2044	5.00%	3.88%	35 bps	4.23%	\$3,501,750
Total					\$71,544,035

Exhibit D

Maturity	Final Spreads				
	Coupon	BVAL	Spreads	Yield	Debt Service
1/1/2024	5.00%	0.00%	344 bps	3.44%	\$1,493,083
1/1/2025	5.00%	3.31%	-2 bps	3.29%	\$3,492,250
1/1/2026	5.00%	3.24%	0 bps	3.24%	\$3,496,500
1/1/2027	5.00%	3.12%	6 bps	3.18%	\$3,492,250
1/1/2028	5.00%	3.06%	10 bps	3.16%	\$3,494,750
1/1/2029	5.00%	3.04%	15 bps	3.19%	\$3,493,500
1/1/2030	5.00%	3.05%	17 bps	3.22%	\$3,493,500
1/1/2031	5.00%	3.04%	23 bps	3.27%	\$3,494,500
1/1/2032	5.00%	3.06%	22 bps	3.28%	\$3,496,250
1/1/2033	5.00%	3.09%	22 bps	3.31%	\$3,493,500
1/1/2034	5.00%	3.14%	21 bps	3.35%	\$3,496,250
1/1/2035	5.00%	3.23%	22 bps	3.45%	\$3,494,000
1/1/2036	5.00%	3.35%	23 bps	3.58%	\$3,491,750
1/1/2037	5.00%	3.49%	25 bps	3.74%	\$3,494,250
1/1/2038	5.00%	3.60%	27 bps	3.87%	\$3,496,000
1/1/2039	5.00%	3.66%	31 bps	3.97%	\$3,491,750
1/1/2040	5.00%	3.71%	33 bps	4.04%	\$3,491,500
1/1/2041	5.00%	3.76%	33 bps	4.09%	\$3,494,750
1/1/2042	5.00%	3.81%	33 bps	4.14%	\$3,496,000
1/1/2043	5.00%	3.85%	33 bps	4.18%	\$3,495,000
1/1/2044	5.00%	3.88%	33 bps	4.21%	\$3,496,500
Total					\$71,377,833

Exhibit E

Original Debt Service Reduction choosing 20 year vs 5 year	\$ 6,560,000.00			
Initial 20-year debt service 9/7/2023	\$ 72,262,316.67	vs Original Memo Amount	Savings if Marketed	
Pre-Market Conditions 11/9/2023	\$ 72,462,239.00	\$ (199,922.33)	\$6,360,077.67	
Pre-Marketing Spread Negotiation 11/9/2023	\$ 71,544,035.00	\$ 718,281.67	\$7,278,281.67	
Final Pricing 11/15/2023	\$ 71,377,833.00	\$ 884,483.67	\$7,444,483.67	Final Debt Service Reduction
Increase in District Debt Service Reduction (Favorable)			\$884,483.67	