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**Safety Report**

**September 2021**



Date	Injury	Description	Cause(s)	Prevention
8/16/21	Back Strain	An employee strained his lower back at the RCWSE yard getting out of the pickup truck while carrying a box. He exited onto gravel concrete type footing. He thought the condition of his lower back would get better, but it was worse by the time he got back to the MLWSE. The employee later went to Occupational Medicine for evaluation and care.	Uneven Walking, working surface	Situational awareness
8/26/21	Shoulder Strain	While in water rescue training pulling a dummy into the boat, an employee had a sharp pain in his left shoulder.	Overexertion	Under evaluation
8/31/21	Head/neck	An employee ran into on a 550 electrical cord which was temporarily zip tied to the ceiling. A hard hat was worn but caused employees head/neck to be jammed. The connector cover plate was pointed down which hung lower than the rest of the items on the ceiling. After hitting head, the cord was rotated so the cover plate was not hanging down.	Overhead Obstruction	Job plan considerations

# Injuries Reported



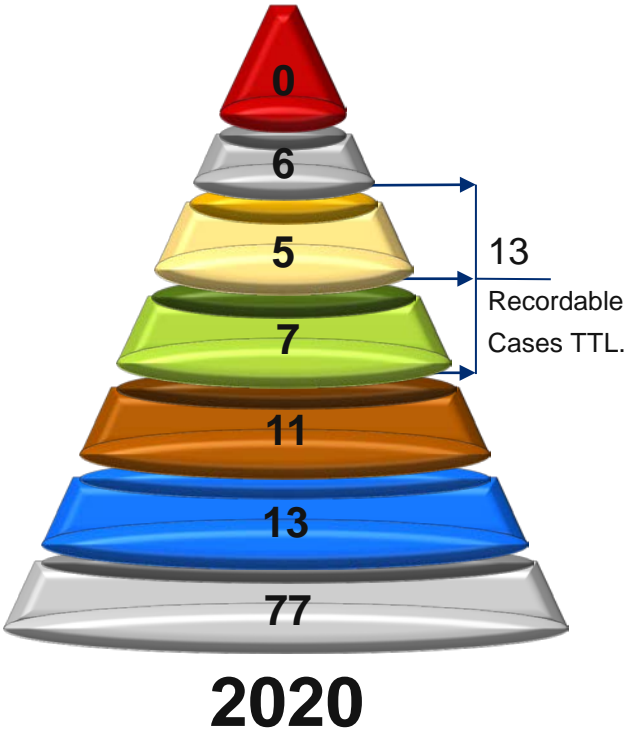
2020	Month	YTD
Total Incidents Reported	3	17
Recordable Case(s)	0	3
Restricted Duty Case(s)	1	3
Lost Workday Case(s)	0	1

# Monthly and Year to Date



# 2021 incidents Year to Date Summary

## Employee Safety



Date	Vehicle	Driver's Account:	Prevention
8/2/21	T504	Incident involved a building *No other information was provided in this report*	??
8/3/21	PT52	Incident involved a stump while backing Trailer PT52 with Boat PT51 attached, kicker motor and rear end of trailer struck a small stump that was hidden by several dead sagebrush branches piled over it. The employee was driving alone in the vehicle, so did not have a spotter. A 360 walkaround was completed. Upon completion the walkaround the employee noticed a small pile of dead sage where it was needed to back up to, since the area was tight, and had no other route available to take. Believing that it was just some dead sage he proceeded to back up striking the hidden stump not recognized during walkaround.	More detailed evaluation of surroundings
8/24/21	T115	Smelled and saw diesel fuel on the gravel, shutdown.	Little detail to make a determination

# Vehicle Incidents



Date	Location	Description
8/4/21	ESC	Transportation received a phone call from a Grant PUD employee having an issue with an electric brake trailer they were pulling with a district pickup. They said the brakes on the trailer were locking up every time they applied the brakes on the pickup. The employee was asked what the gain was set at on the electric brake controller. The employee was not familiar with the break gain, walked through the adjustment and the issue was resolved.
8/18/21	Moses Lake	While excavating for a new line, the crew encountered a previously unidentified Transite conduit encased in reinforced concrete. Stopped work, called Safety, and then HazWaste. Safety and HazWaste responded and collected the asbestos debris for proper disposal. Samples will be analyzed, and location will be documented for future reference.
8/20/21	PRRA	A report was received of a potential blue-green algae exposure on the Columbia River near Desert Aire and along the southern end of the Priest Rapids Recreation Area (PRRA). The information we have is that a dog passed away from blue-green algae toxin after swimming in the water along the Priest Rapids Trail that runs along Desert Aire. Out of abundance of caution, we are closing the PRRA swim area, and a public message was issued.

# Close Calls



Date	Location	Description
8/31/21	Wanapum	Steel cover on roadway is loose and will not set flush. The cover is hitting the equipment in the hole and could pop out if ran over just right.



# Close Calls



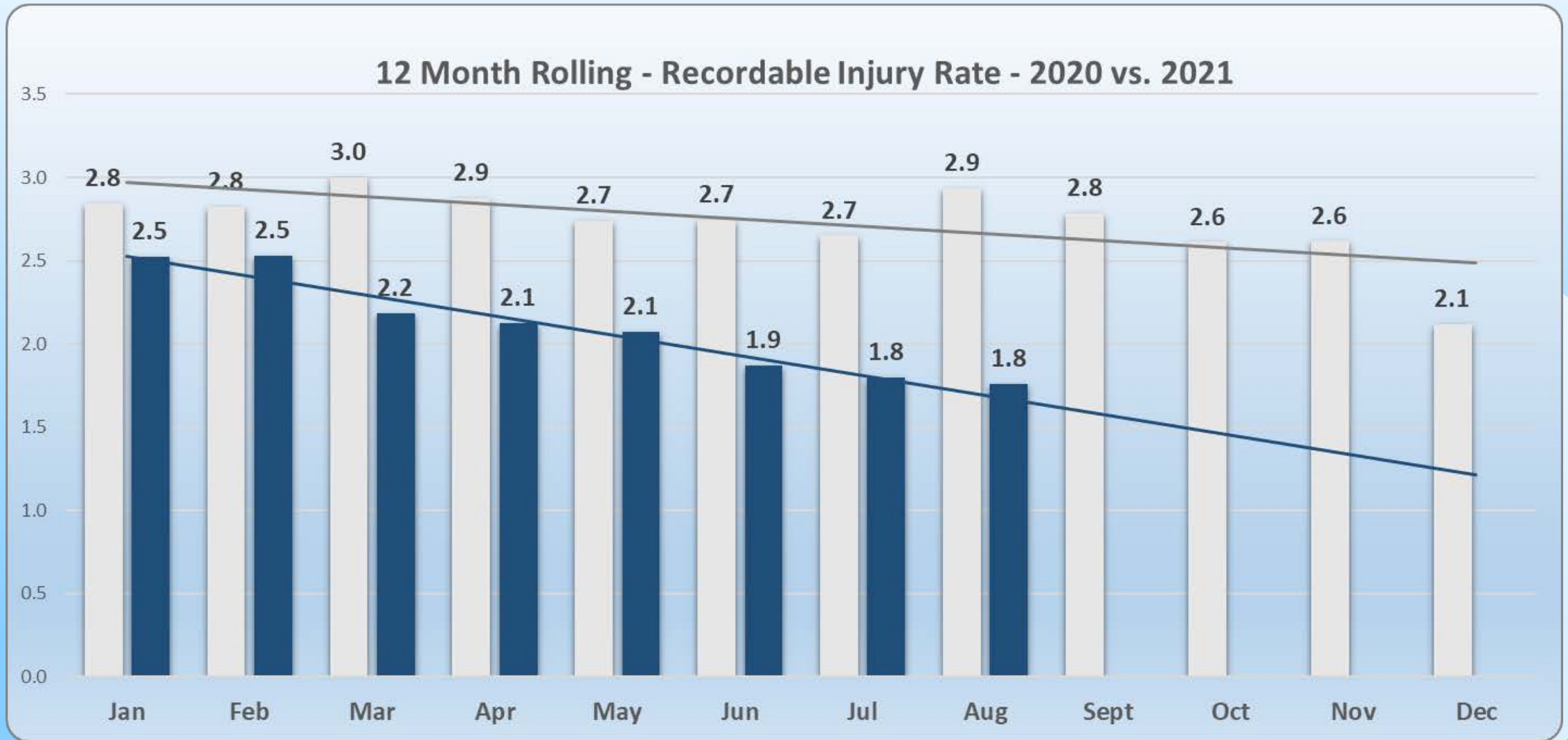
Date	Location	Description
8/18/21	Rocky Coulee	A Contract Security Officer fell asleep while driving near Rocky Coulee during a routine patrol. The officer is newly employed. At approximately 0451 DSOC was notified by the Officer that he was involved in an accident and the patrol vehicle had rolled down a hill.
8/19/21	Hartline	Two NSC employees were traveling in a 1 ton on Hwy 17 to get to the job site in Hartline. Coming up to the dry falls junction they hit a small deer. There was no damage to the vehicle. The employees attempted to swerved to avoid the collision with the deer but was unsuccessful.

# Contractor Close Calls, Injuries & Incidents



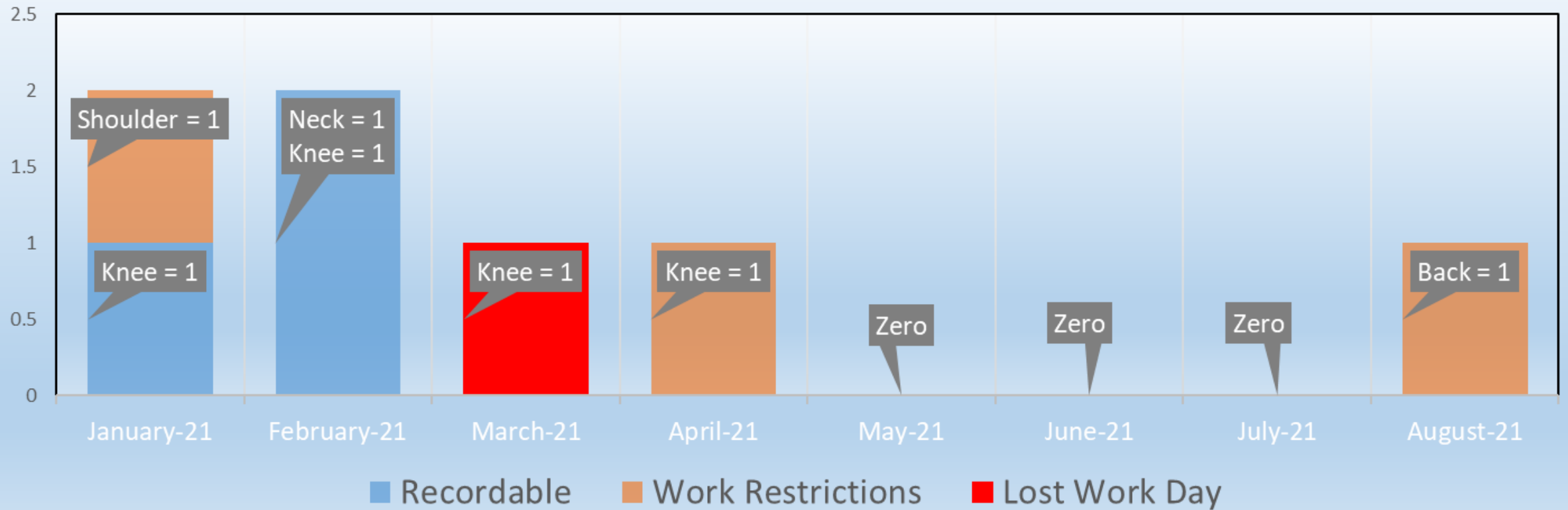


# Leading & Lagging Indicators



# Leading & Lagging Indicators

## 2021- RECORDABLE INJURIES BY MONTH



# Leading & Lagging Indicators

## Recordable Injury Rate



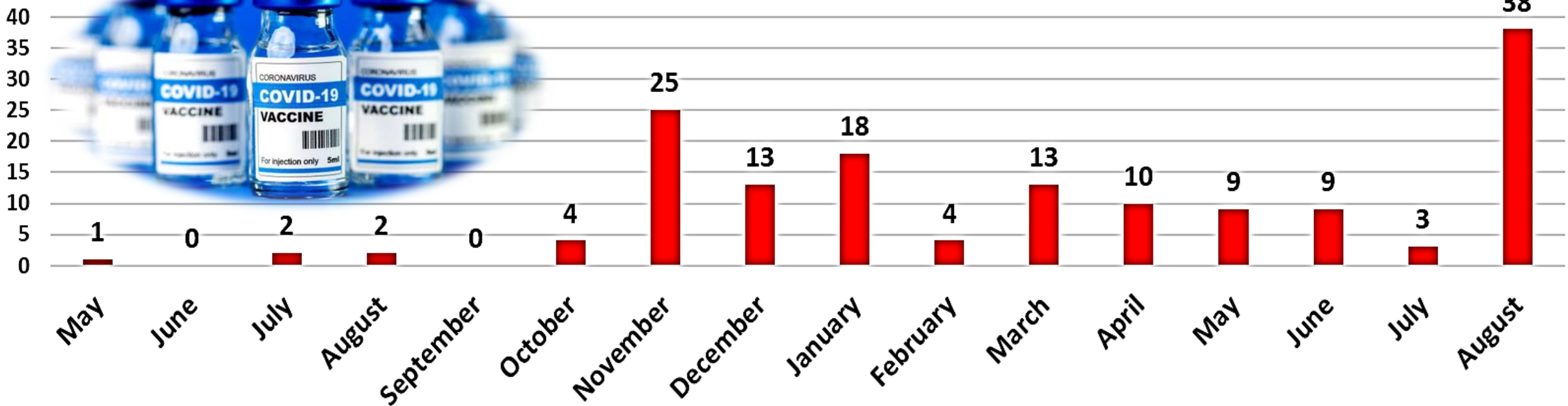
## Jobsite Reviews Conducted



## Safety Meeting Attendance



## Positive COVID-19 Cases By Month (as of 8/31/21)



**38** A record thirty-eight COVID-19 cases were reported during the month of August.



# Safety Action Item Critical Success Factors

## Incident Reporting (Date of Entry into System vs Date of Distribution Systemwide)

- Number of Close Calls in **August** = 9
- Number of Close Calls sent Next day after being entered into the system = 5



## Number of Open Action Items over 60 days old

As of <b>July</b> 2021	As of <b>August</b> 2021
Year 2017 = 7	Year 2017 = ?
Year 2018 = 9	Year 2018 = ?
Year 2019 = 17	Year 2019 = ?
Year 2020 = 6	Year 2020 = ?
Year 2021 = 10	Year 2021 = ?
Month Total = <b>49</b>	Month Total = <b>36</b>

**Net - August 2021 - 13**



# Incident Reporting for August 2021

(Date of Incident vs. Date of Entry into System)

## Injuries

- Total Number of Injuries = **5**
- Total Number of Injuries Which Date of Incident and Date Entered into System Match = **4**

## Mobile

- Total Number of Mobile Incidents = **9**
- Total Number of Mobile Incidents that Date of Incident and Date Entered into system match = **6**



# Thank You!



Powering our way of life.



# Safety QBR by Operating Unit v4 Aug2021

[View in Power BI](#) ↗

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9/9/2021 4:10:46 PM UTC

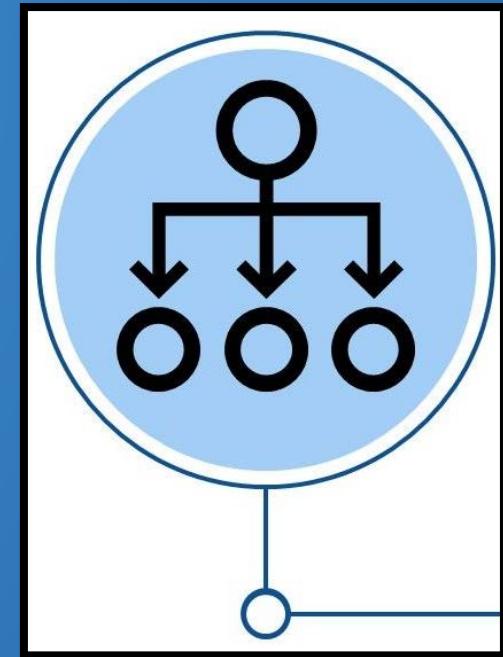
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# Safety Department internal staffing realignment

The Safety Department has recognized a need and opportunity to refine, develop, and increase support for Industrial Hygiene and Contractor Safety management. To support this effort the following internal reorganization has recently occurred to utilize our strengths.

- John Price, dedicated to Industrial Hygiene, supports safety, relocated to WMC
- Nichole Bortle, dedicated to Priest Rapids Dam, relocated to PR
- Mike Miland, dedicated to Wanapum Dam, no relocation
- Jordan Rang, dedicated to contract labor projects outside of Power Production. Relocated to Ephrata Annex
- Ron Roth, develop department contractor safety management protocols and structure. Mentor Jordan Rang. Support safety team as needed. No relocation
- RJ Fronsman, dedicated to Power Delivery, no relocation



# Realignment Anticipated Benefits

## Industrial Hygiene

- Industrial Hygiene will help ensure compliance with WAC regulations for worker exposures to asbestos, lead, silica, hexavalent chromium, and other chemicals of concern.
- Assistance for Supervisors and Project Managers to ensure buildings and projects are evaluated for hazardous materials, as required by various WAC regulations.
- Serve as the collection point and maintain a database for all hazardous materials information related to facilities, work areas, and workers exposures throughout the PUD
- Support Safety, Project Managers, and District Representatives



# Realignment Anticipated Benefits (cont....)



## Contractor Safety Management

- Effective alignment and engagement with contractors and District Representatives
- Risk reduction - injuries and delayed project timeline(s)
- Improved communication and expectations between District and Contractors
- Collaboration with PM/DR regarding contractor safety protocols
- Improved field presence
- Greater understanding of contractors' strengths and weaknesses

# Safety Related Program and Policy Review

## Annual Review

To ensure compliance, the Safety Department is performing an annual review of a subset of our programs housed in PolicyTech.

- Lead Compliance Program
- Elevate Work Platform Program
- Overhead and Gantry Crane Program
- Agency Inspections Protocol
- Asbestos Program
- Persona; Protective Equipment Program
- Others...



# COVID-19 Update

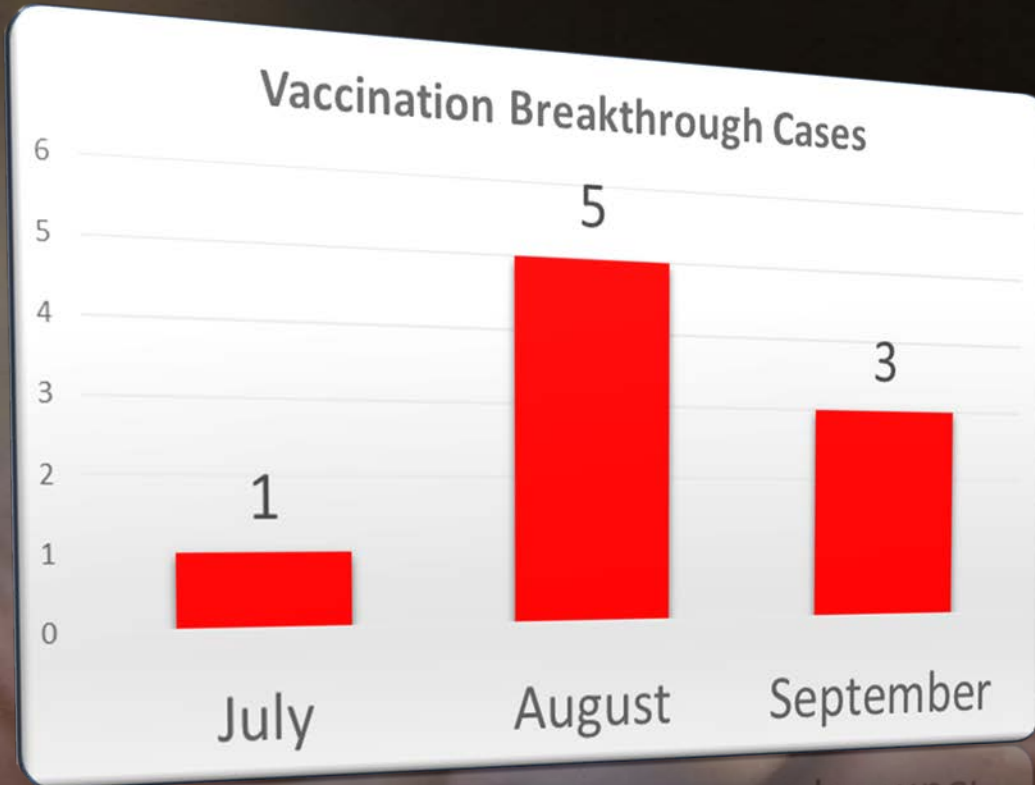
The Safety Department continues to manage the COVID Hotline, Contact Tracing, Antigen testing program, and support COVID-19 vaccination efforts.

This team has done an outstanding job of balancing the immediate COVID-19 related needs for employees and perform non-COVID-19 related day to day tasks and support for the District.

## Contact Tracing Status (YTD)

- 426 Quarantine/Isolation cases *(as of 9/22)*
- 139 COVID-19 Positive Cases *(as of 9/22)*





**Vaccination  
Breakthrough  
Rate = 2.2%**

## Vaccines

- 411 (55% of 754) employees reported receiving at least 1 vaccine dose (as of 9/10/21).
- 409 (54%) are fully vaccinated.



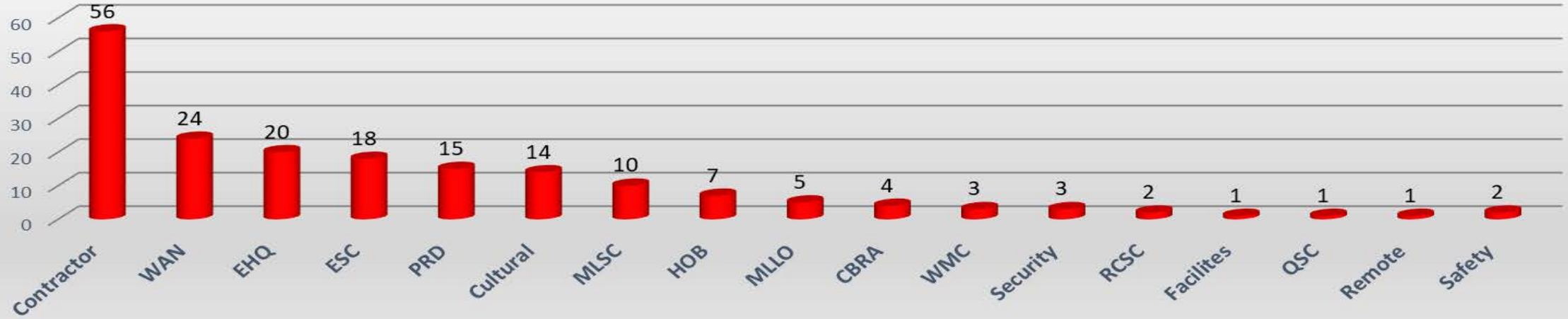
# The Benefit of an Antigen Testing Program

Our testing program has identified

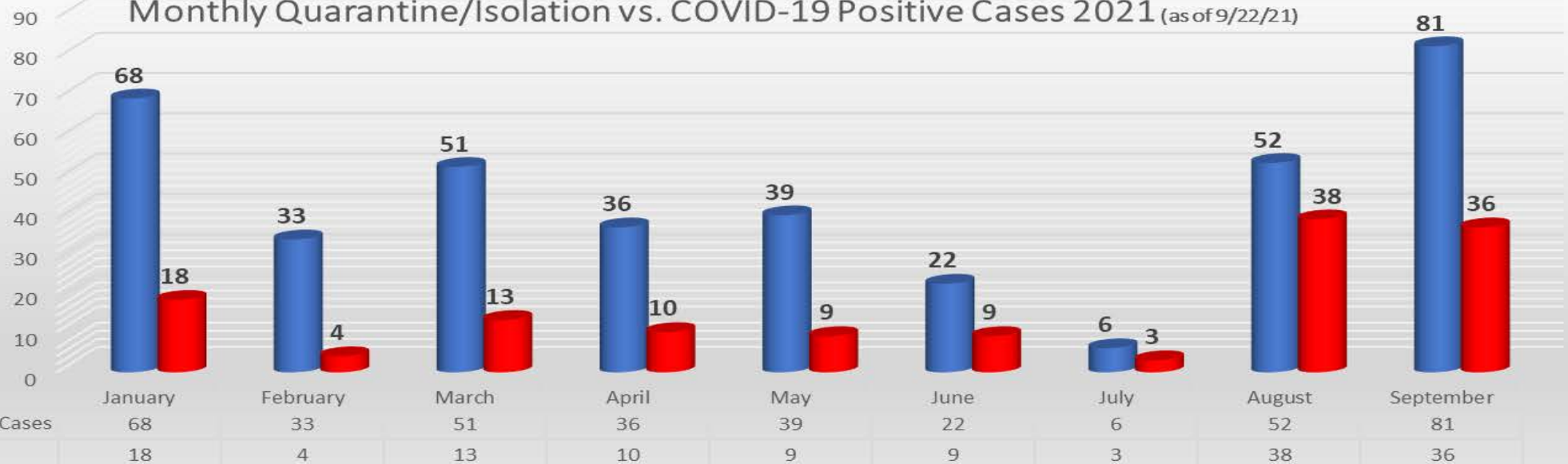
**twenty-six(26)** COVID-19  
positive cases since inception.



Total Positive Case Count by Work Location (as of 9/22/21)

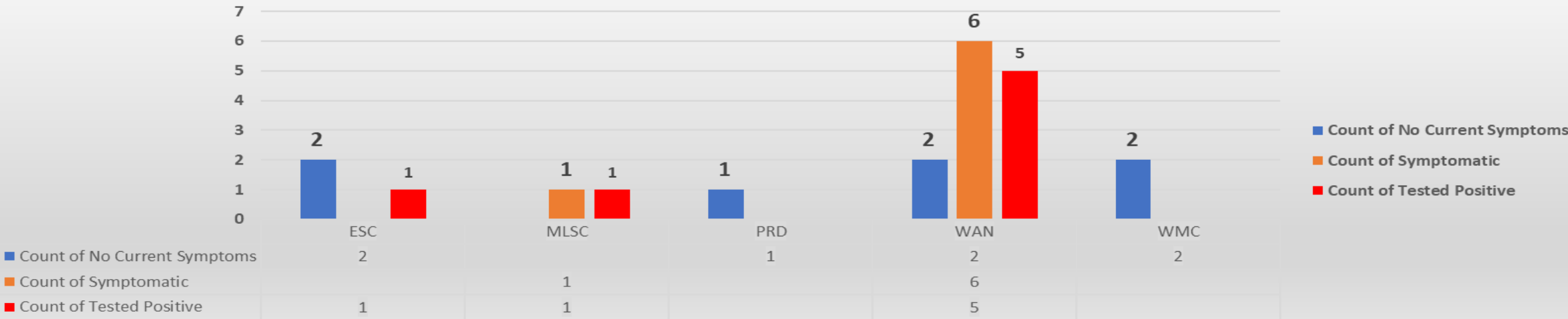


Monthly Quarantine/Isolation vs. COVID-19 Positive Cases 2021 (as of 9/22/21)

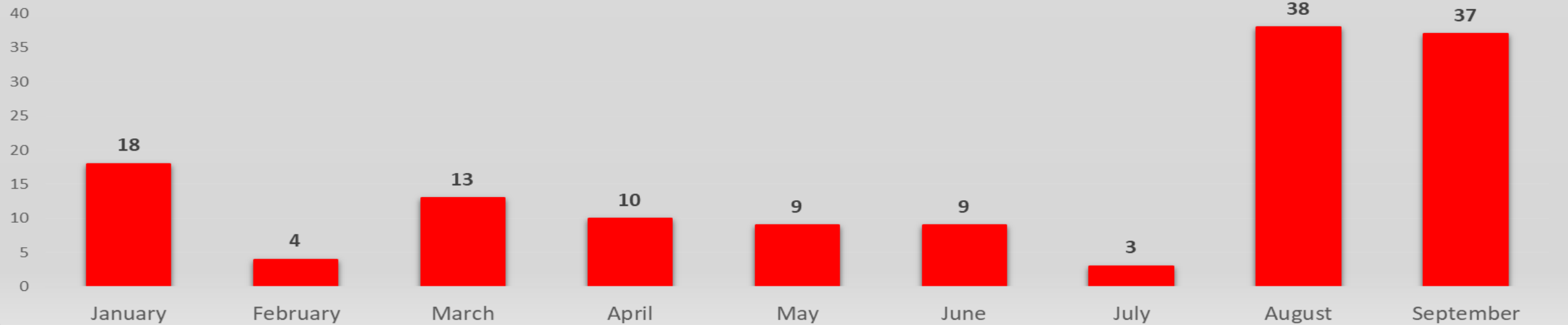




**Union - Case Location and Status (as of 9/22/21)**



**Positive COVID-19 Cases By Month - 2021 (as of 9/22/2021)**



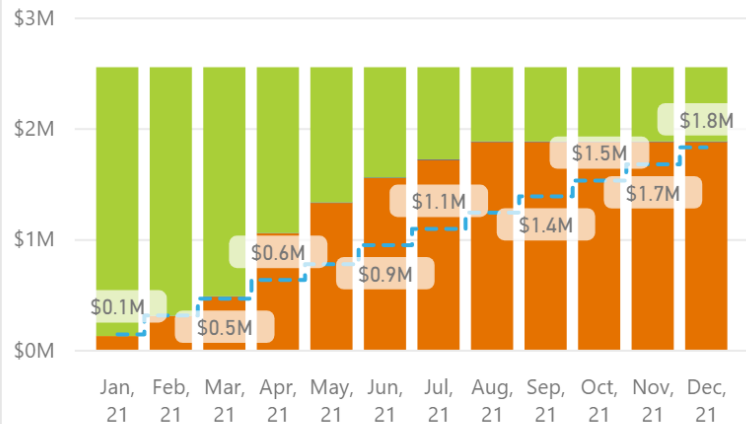


Operating Unit

EE - Safety and Industrial Training

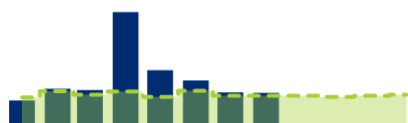
### Capital Labor & Net Actuals YTD Vs. Year-End-Projections

● Net Actuals ● Capital Labor ● YEP Remaining ● Budget YTD



### Gross Actuals Vs. Budget

\$1.9M +51.9%



### Capital Labor Actuals Vs. Budget

\$4,785 -88.6%



### Net Actuals Vs. Budget

\$1.9M +56.8%



### O&M Budget vs Actuals (Including Cap Labor)

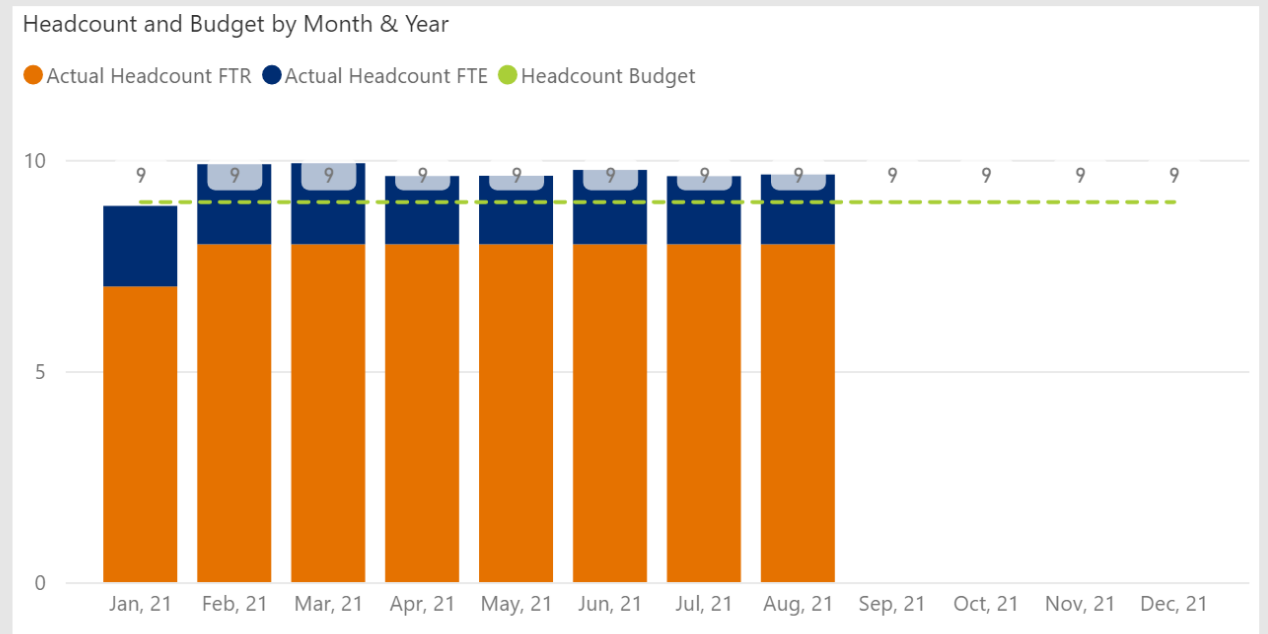
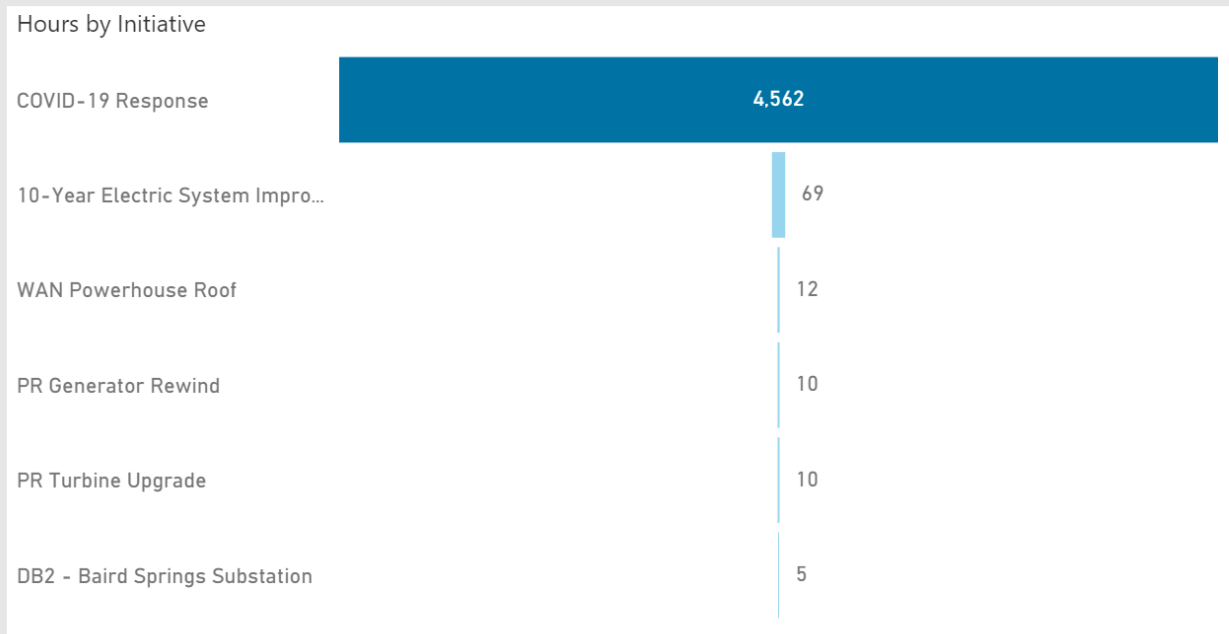
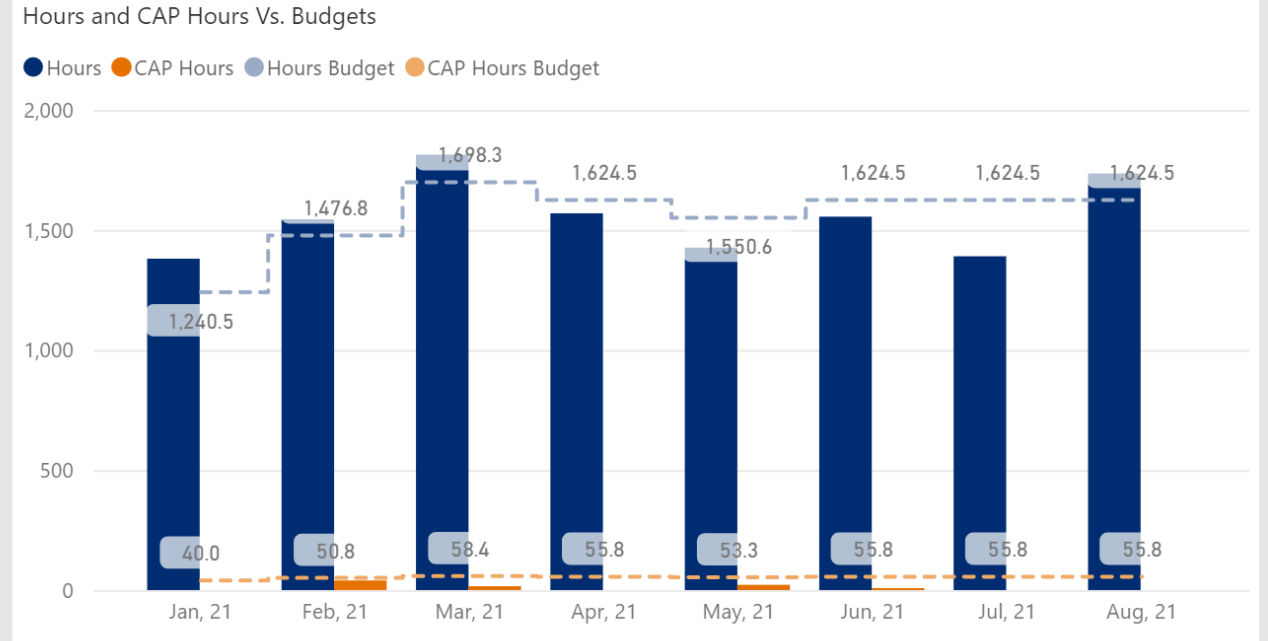
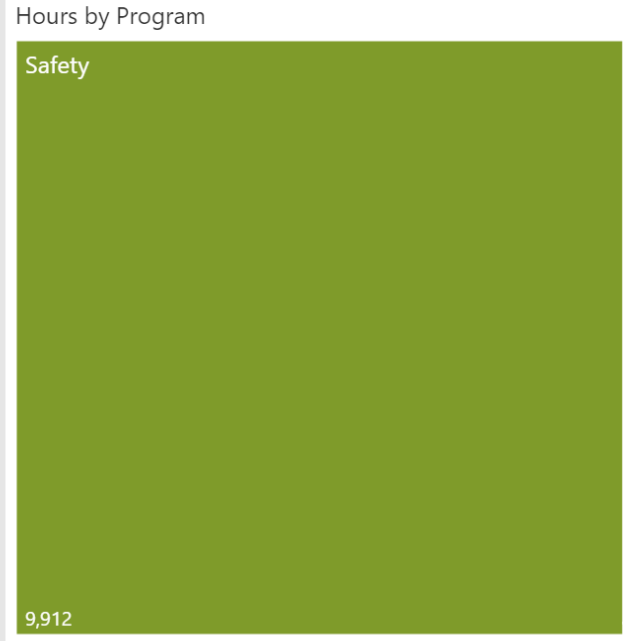
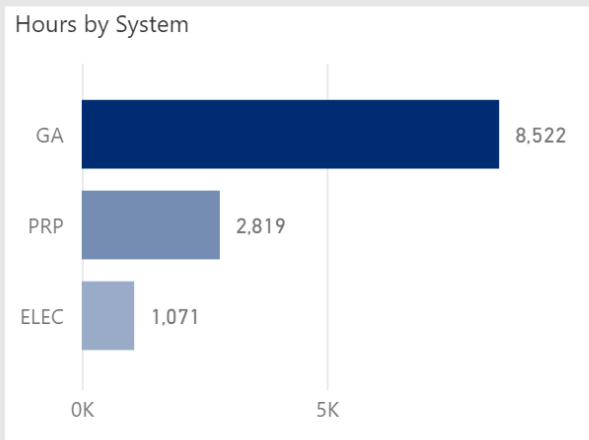
Cost Category Type/Cost Category	Budgeted	Actuals	Budget Var	Budget Var %	Consumed %
<b>Labor</b>	<b>\$951,008</b>	<b>\$921,137</b>	<b>-\$29,871</b>	<b>-3.1%</b>	<b>96.9%</b>
Salaries & Wages	\$603,017	\$574,138	-\$28,880	-4.8%	95.2%
Benefits	\$338,717	\$325,832	-\$12,885	-3.8%	96.2%
Other Labor	\$9,274	\$4,520	-\$4,753	-51.3%	48.7%
Overtime		\$16,647			
<b>Purchased Services</b>	<b>\$176,333</b>	<b>\$688,462</b>	<b>\$512,128</b>	<b>290.4%</b>	<b>390.4%</b>
<b>Operating Materials &amp; Equipment</b>	<b>\$93,364</b>	<b>\$236,421</b>	<b>\$143,057</b>	<b>153.2%</b>	<b>253.2%</b>
<b>G&amp;A</b>	<b>\$17,400</b>	<b>\$28,798</b>	<b>\$11,398</b>	<b>65.5%</b>	<b>165.5%</b>
<b>IT</b>		<b>\$5,437</b>			
<b>Total</b>	<b>\$1,238,105</b>	<b>\$1,880,254</b>	<b>\$642,149</b>	<b>51.9%</b>	<b>151.9%</b>

- Capital Labor is a subset of the Labor above

- Net Actuals vs Budget = Gross Actuals minus Capital Labor

Operating Unit

EE - Safety and Industrial Training



# 2022 BUDGET PRESENTATION

OUR PLAN FOR DELIVERING VALUE TO OUR CUSTOMERS

DRAFT



Powering our way of life.

# Topics Covered



Budget Initiatives &  
Process



Strategic Initiatives



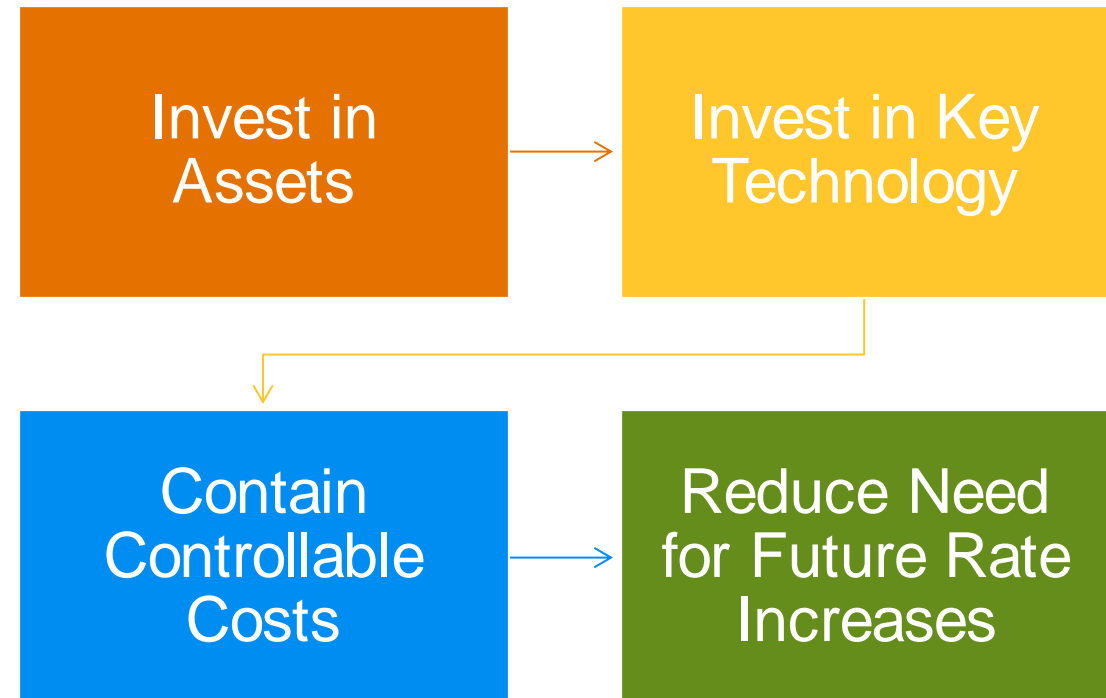
Summary of Results



Appendices

# Keys for the Budget & Planning Process

1. Provide value for current and future Grant PUD customers
2. Maintain the utility's financial health



01

# Major Budget Initiatives & Budget Process



# Major Budget Initiatives & Process

## 2022 Budget aligned with customers' top priorities:

- Provide reliable electric power with few outages.
- Good customer service.
- Provide real-time information and communication on energy, use and outages.
- Keeping electricity prices as low as possible.

Source: 2019 Customer Satisfaction Survey



# Major Budget Initiatives & Process

## Major 2022 Budget Initiatives:

1. Grant PUD's financial position
2. Expansion of data optimization – continuation of a multi-year process
  - Inclusion of “Asset-Type”
3. Expansion of detailed project data for the 2022 Capital Plan
  - Monthly granularity and “Cost Category-Type”
4. Introduction of the “Business Case” process to identify Strategic Initiatives
5. Detailed budget data available for review

# Major Budget Initiatives & Process

## 2022 Budget Process:

### 1. Round 1 – Business Unit Focus

- Bottom-up input from all business units (BU) for O&M and Labor
- Need for business cases identified
- CXO review with BUs (2 day process)
- Initial screening of business cases by FP&A and review with CXOs

### 2. Round 2 – Strategic Focus

- Establish Capital spending expectation
- Refinement of O&M and Labor with BUs
- CXO evaluation/selection of the most valuable / highest priority business cases

### 3. Round 3 – Commission and Public Review

- Commission review and public outreach
- Budget adoption

# Major Budget Initiatives & Process

## 2022 Budget Timeline:

Task	PARTICIPANTS	START	END	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>PLANNING</b>		<b>1/22/21</b>	<b>5/31/21</b>												
Pre Kick-Off Meeting	CXOs, FP&A	1/22/21	5/27/21												
Kick-Off Meeting	BU SMEs, BU Mgrs, CXOs, FP&A	5/28/21	5/28/21												
Distribution of Info and Materials	BU SMEs, BU Mgrs, CXOs, FP&A	5/28/21	5/28/21												
<b>ROUND 1</b>		<b>6/1/21</b>	<b>7/29/21</b>												
BUs prepare O&M and Labor Plans, Biz Cases	BU SMEs, BU Mgrs, FP&A	6/1/21	6/29/21												
Office Hours, Four 2-hr sessions	BU SMEs, BU Mgrs, FP&A	6/10/21	6/29/21												
Collect/Process of O&M, Labor and Biz Cases	BU SMEs, BU Mgrs, FP&A	6/29/21	7/12/21												
CXOs and BUs review and edit processed info	CXOs, BU Mgrs, BU SMEs	7/13/21	7/21/21												
Collect/Process Non-Op Rev/Exp/Inputs, Fin Fx and CXO docs	Acctg, Trsry, Rates, Risk, WS, FP&A	6/8/21	7/27/21												
Round 1 CXO meetings -> Finalize Round 1	CXOs, Sr Mgrs, FP&A, EPPM	7/28/21	7/29/21												
<b>ROUND 2</b>		<b>7/30/21</b>	<b>9/7/21</b>												
Distribution of Info and Materials	FP&A	7/30/21	7/30/21												
BUs refine O&M and Labor Plans, Business Cases	BU SMEs, BU Mgrs, FP&A	7/30/21	8/17/21												
Capital Project Processing and Review	CXOs, BU Mgrs, EPPM	8/1/21	8/25/21												
Collect/Process of O&M, Labor, Biz Cases, Fin Fx, CXO docs	BU SMEs, BU Mgrs, FP&A	8/17/21	8/31/21												
Round 2 CXO Meetings -> Finalize Round 2	CXOs, Sr Mgrs, FP&A, EPPM	9/1/21	9/7/21												
<b>ROUND 3</b>		<b>9/8/21</b>	<b>12/17/21</b>												
Prepare and Review Materials for Commission/Public Review	FP&A, CXOs, Commission	9/8/21	10/11/21												
Public Meetings	Commission, CXOs, FP&A	10/12/21	10/14/21												
Budget Adopted	Commission	11/9/21	11/9/21												
Budget Upload to ODS	Acctg, FP&A	11/9/21	12/17/21												

02

## Strategic Initiatives Overview



# Strategic Initiatives Overview:

## Hydro Generation Management

**Organization:** Wanapum Dam, Priest Rapids Dam and Wanapum Maintenance Center reporting to Senior Manager of Hydro Generation.

**Defined:** Hydro Generation is responsible for safely, efficiently and reliably generating power with Grant PUD's 4 hydro generation projects.

**Vision:**

Every employee understands how the work they do to generate power contributes to providing customer value and are motivated to improve on that value while keeping risks to an acceptable level.

**Results:**

Increased hydro generation profit

- $(\text{Total hydro gen revenue}) / (\text{Total hydro gen O\&M} + \text{labor} + \text{new capital})$
- $(\text{Total hydro gen revenue}) / (\text{Total hydro gen O\&M} \ \& \ \text{labor} \ \& \ \text{debt service costs})$

Reduced safety, compliance and operational risk, working toward an optimized profit/risk profile

# Strategic Initiatives Overview:

## Asset Management

**Organization:** Power Delivery Asset Management, Power Production Asset Management

**Defined:** Asset Management is the coordinated activity of the organization to realize the most value from our assets.

**Vision:** Grant PUD will clearly understand how asset activities (Install, inspect, maintain, refurbish, replace, dispose) impact our corporate objectives.

### **Results:**

- Better asset data for increased confidence in **decision making**.
- **Ability to measure** the results of asset decisions and demonstrate the outcome.
- Ensuring **value for our customers** today and for the next generation.

# Strategic Initiatives Overview:

## Long Range Resource Planning

**Organization:** Long range resource planning will be placed in the Wholesale Marketing and Supply team and will work closely with Risk, Financial Planning and Analysis, Power Production and Power Delivery.

**Defined:** Long range resource planning will focus on longer term (3–10 years) decisions on load and resource balancing. This is an area in the past that has not been a large priority at Grant due to the amount of resources from the Priest Rapids Project. This has changed as Grant PUD's load has grown over the past 15 years.

The latest Integrated Resource Plan indicated that Grant PUD will need seasonal capacity by as early as 2026, and yearly capacity and energy by 2028. Long range resource planning will focus on the evaluation of future alternatives including new generation build(s), Power Purchasing Agreements (PPA), demand side response, and distributed generation to meet this need.

**Vision:**

Lead the development of better planning and analysis on long range load and resource balancing.

**Results:**

Improved assessment of Grant PUD's future capacity and energy requirements.

Improved planning strategy to inform the acquisition of power resources that deliver customer value through long term reliable service, and competitive, stable, and predictable pricing.

# Strategic Initiatives Overview:

## Enterprise Technology (2022)

**Organization:** Software Engineering & Architecture, Network Engineering & Telecom, Service Desk, Platform Operations, Enterprise Applications

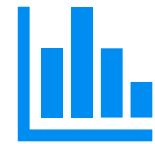
### Key 2022 Results & Starts:

- **GEN2** Go-Live. 2-year effort to modernize our Electric Distribution and Fiber system design and as-built tracking environment with world-class ESRI Geographic Information System (GIS) based tools for the office and field. Enables engineering and field workers to access the designs in real-time and provide markup in the field.
- **EMS** Kick-off. 2-year effort to replace our Energy Management System (EMS). A new EMS will support planned changes in the District's operating paradigms and open the opportunities to utilize more standardized core functions of an EMS system including Automatic Generation Control (AGC).
- **Mobile Workforce Management** Go-Live. 9-month effort to deploy best in class mobile tools for coordinating and tracking field service work in Power Delivery with full integration between Customer Service and Power Delivery Crews for real-time assignment and update on field activities.
- **Technology Infrastructure Modernization** Go-Live for Hyper-converged Data Center Infrastructure, Optical Backbone Core, Cyber Infrastructure, Business Ethernet Network and related tools for monitoring/alerting/configuration management. Provides a high performance, scalable, reliable and cost-efficient environment for the foreseeable future.
- **Finance & Supply Chain Modernization** Kick-off. This will be a multi-year effort to replace our Microsoft Great Plains legacy finance solution and add Inventory/Warehouse/Supply Chain management.



03

## Summary of Results



# Total expenses for 2022 (before offsets)

All figures in Millions		2019 Actual	2020 Actual	2021 Budget	2021 YEP	2022 Budget
Operations & Maintenance – Total:		\$126.4	\$134.7	\$143.6	\$154.6	\$156.9
	Electric System O&M – Total:	\$52.2	\$55.7	\$59.4	\$64.1	\$66.9
	Electric System O&M – Direct:	*	*	\$22.4	\$22.2	\$23.9
	Electric System O&M – Labor:	*	*	\$37.0	\$41.9	\$43.1
	Priest Rapids Project O&M – Total:	\$74.2	\$79.0	\$84.1	\$90.5	\$89.9
	PRP O&M – Direct:	*	*	\$39.5	\$39.4	\$40.0
	PRP O&M – Labor:	*	*	\$44.6	\$51.1	\$50.0
Taxes:		\$17.9	\$17.7	\$18.1	\$19.3	\$19.5

\*Historical breakout not available

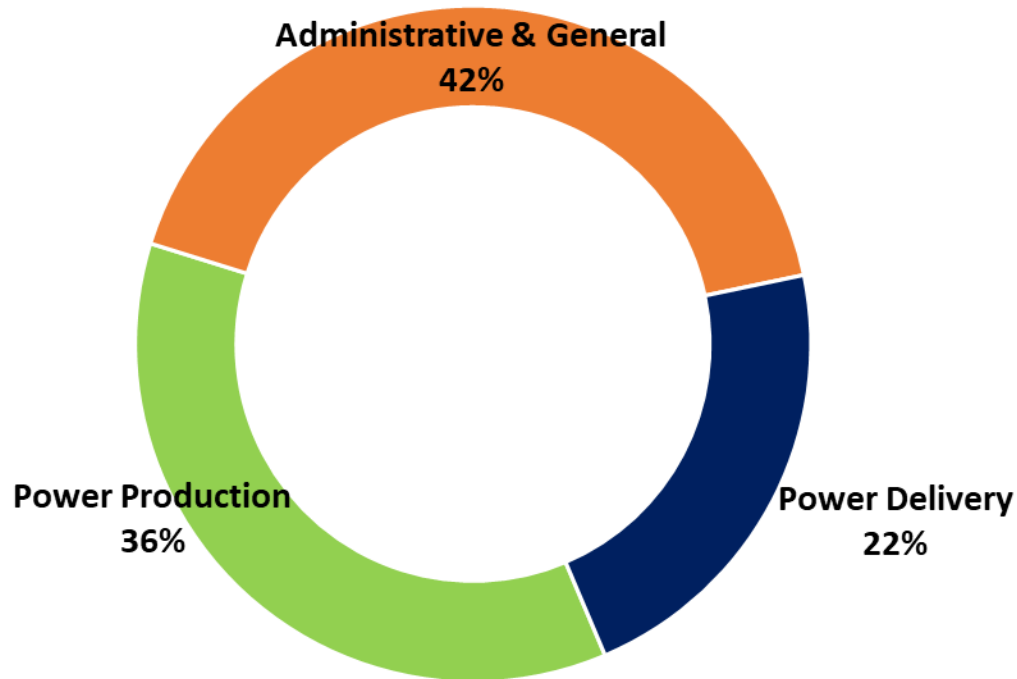
# Total expenses for 2022 (before offsets) – Cont.

All figures in Millions	2019 Actual	2020 Actual	2021 Budget	2021 YEP	2022 Budget
Capital – Total:	\$123.7	\$122.5	\$143.3	\$139.6	\$145.4
Electric System Capital – Total:	\$57.2	\$74.4	\$73.7	\$88.2	\$90.1
Electric System Capital – Direct:	*	*	\$60.7	\$78.8	\$78.6
Electric System Capital – Labor:	*	*	\$13.0	\$9.4	\$11.5
Priest Rapids Project Capital – Total:	\$66.5	\$48.1	\$69.7	\$51.4	\$55.3
PRP Capital – Direct:	*	*	\$52.4	\$41.3	\$42.0
PRP Capital – Labor:	*	*	\$17.2	\$10.1	\$13.4
Debt Service (net of rebates):	\$87.8	\$72.9	\$75.6	\$74.5	\$75.7
<b>TOTAL EXPENSES (before offsets):</b>	<b>\$356.9</b>	<b>\$356.9</b>	<b>\$380.6</b>	<b>\$387.9</b>	<b>\$397.5</b>

\*Historical  
breakout not  
available

# Operations and Maintenance Expense

2022 O&M by Functional Organization

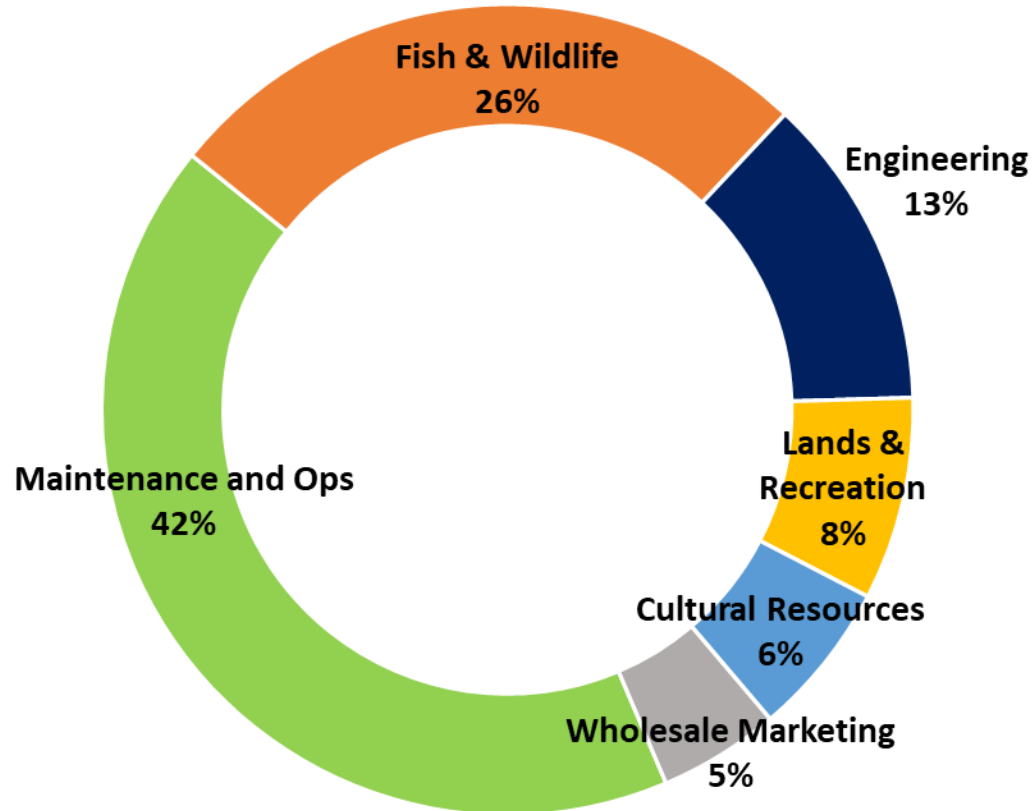


Cost Type	2022
Labor	\$93.1
Purchased Services	\$34.5
General & Administration	\$10.5
Operating Materials and Equipment	\$7.7
Information Technology	\$6.0
Risk	\$3.0
Transportation	\$2.2
<b>Total</b>	<b>\$156.9</b>

*All figures in millions; non-operational adjustment allocations estimated  
Purchased Services includes utilities*

- Operations and maintenance (O&M) expense includes both labor and operating expenses, net of labor to capital.
- Total 2022 O&M of \$156.9M can be reviewed programmatically in three categories.

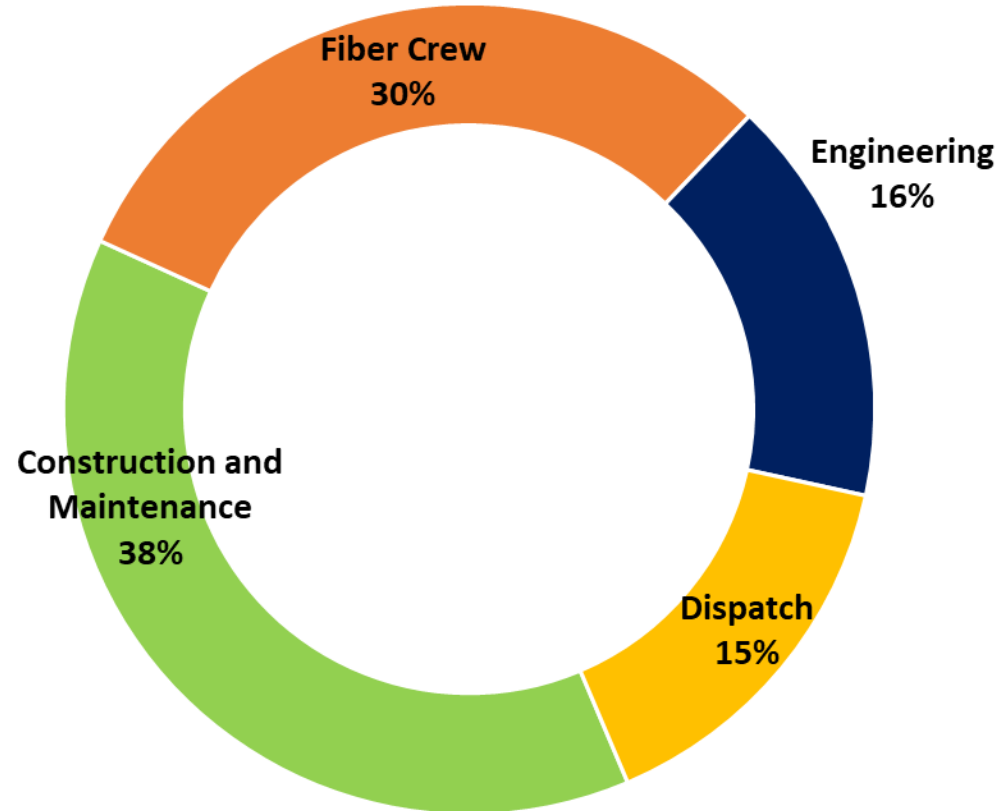
# 2022 Power Production O&M



Cost Type	2022
Labor	\$32.1
Purchased Services	\$15.5
General & Administration	\$6.2
Operating Materials and Equipment	\$2.6
Information Technology	\$0.1
Risk	\$0.0
Transportation	\$0.1
<b>Total</b>	<b>\$56.6</b>

*All figures in millions; non-operational adjustment allocations estimated  
Purchased Services includes utilities*

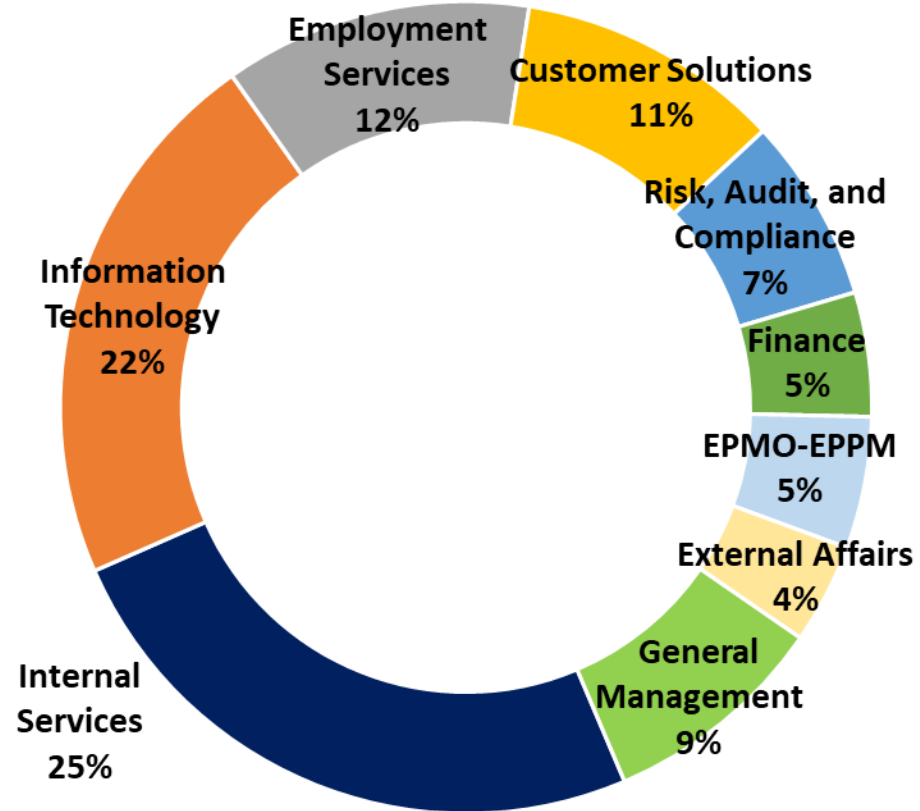
# 2022 Power Delivery O&M



Cost Type	2022
Labor	\$26.6
Purchased Services	\$3.5
General & Administration	\$0.5
Operating Materials and Equipment	\$3.7
Information Technology	\$0.1
Risk	\$0.0
Transportation	\$0.0
<b>Total</b>	<b>\$34.3</b>

*All figures in millions; non-operational adjustment allocations estimated  
Purchased Services includes utilities*

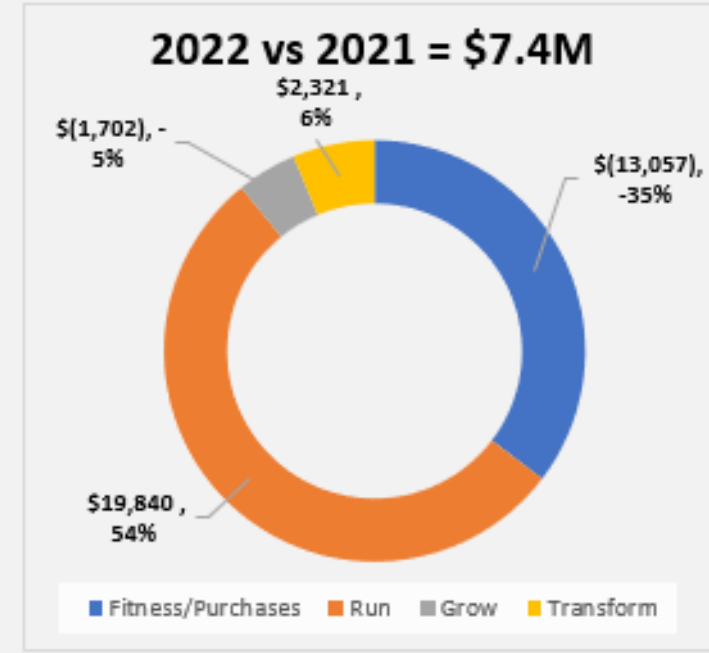
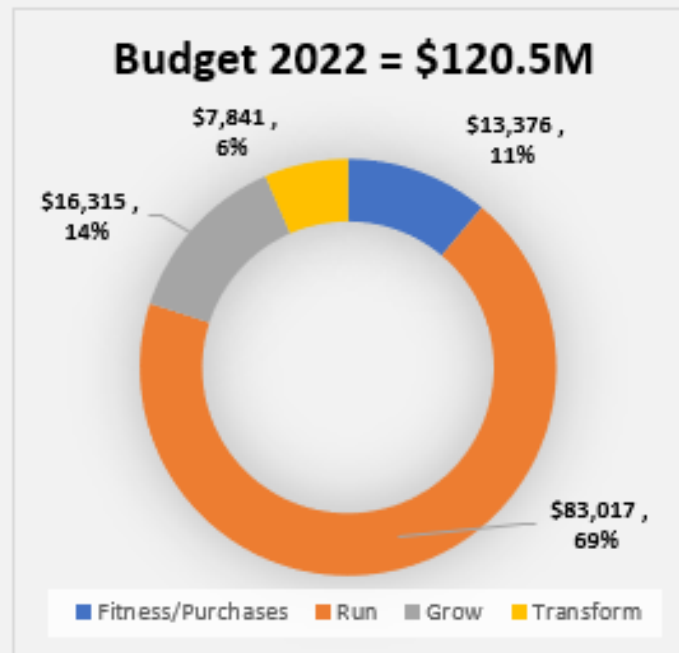
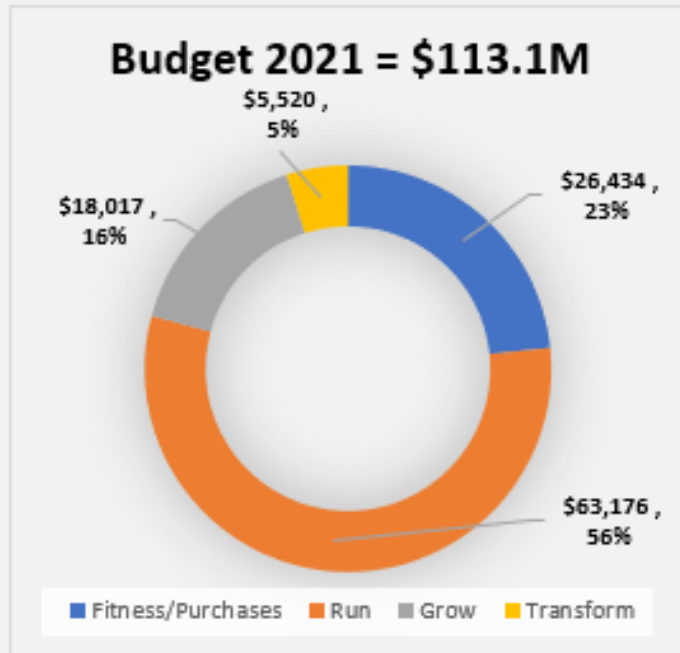
# 2022 Administrative & General O&M



Cost Type	2022
Labor	\$34.5
Purchased Services	\$15.6
General & Administration	\$3.8
Operating Materials and Equipment	\$1.4
Information Technology	\$5.8
Risk	\$3.0
Transportation	\$2.0
<b>Total</b>	<b>\$66.1</b>

*All figures in millions; non-operational adjustment allocations estimated  
Purchased Services includes utilities*

# 2022 Consolidated Capital Plan



Note: Costs exclude Internal Labor

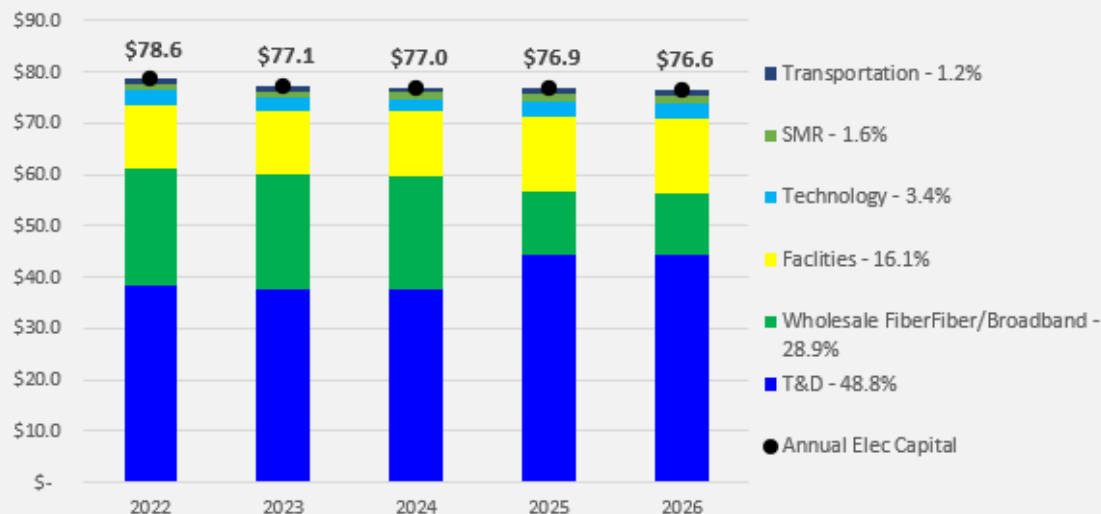
## \$121 Million in 2022

- RUN + Fitness/Purchases (Operate & Maintain): Power Production = \$31.0M (32%) , Power Delivery = \$28.8M (30%), IS/Facilities = \$16.1M (17%), Enterprise Technology = \$1.7M (3%), Fiber/Other = \$18.7M (19%)
- GROW (Enhance & Expand): Power Production = \$4.5M (28%), Power Delivery = \$4.8M (30%), IS/Facilities = \$2.6M (16%), Enterprise Technology = \$0.3M (2%), Fiber/Other = \$4.0 (24%)
- TRANSFORM (Innovate & Drive): Power Production = \$1.3M (16%), Power Delivery = \$6.5M (83%), IS/Facilities = \$0 (0%), Enterprise Technology = \$0 (0%), Fiber/Other = \$0 (0%)

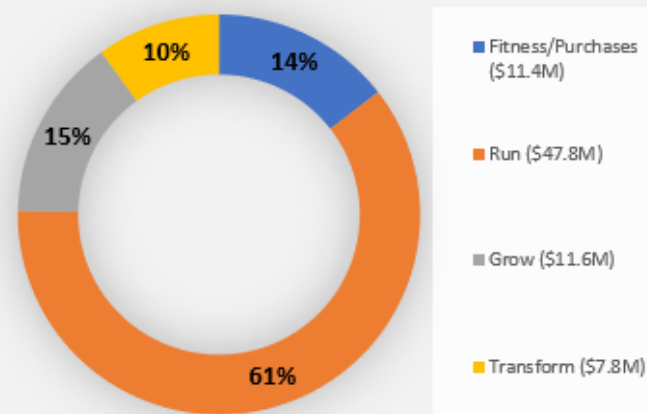


# 2022 Electric System Capital Plan

Expected ELEC Capital (2022 Dollars, \$M)



Electric System Budget 2022 = \$78.6M



## Fiber System

- Included in the Electric system capital plan

## Fiber Expansion Project

- 2022-2024 = +\$40.0M

## Broadband Customer Connects

- 2022-2026 = +\$25.4M

## Electric System Expansion

- Retail growth is significant in Grant County
- To meet this growth, there are:
  - 2 large system expansions: Design Build 2 (DB2) and the Quincy Transmission Expansion Project (QTEP), and
  - 2 customer engagement functions, Large Power Solutions (LPS) and Transmission Interconnections (IQ)

### Electric System Capital Plan Characteristics

#### Concentration of Projects %

- In 2022, 10 projects represent +70% of expected spend of \$79M.

- From 2022-2026, the "Notable" 5 projects represent 22% of expected spend of \$386M.

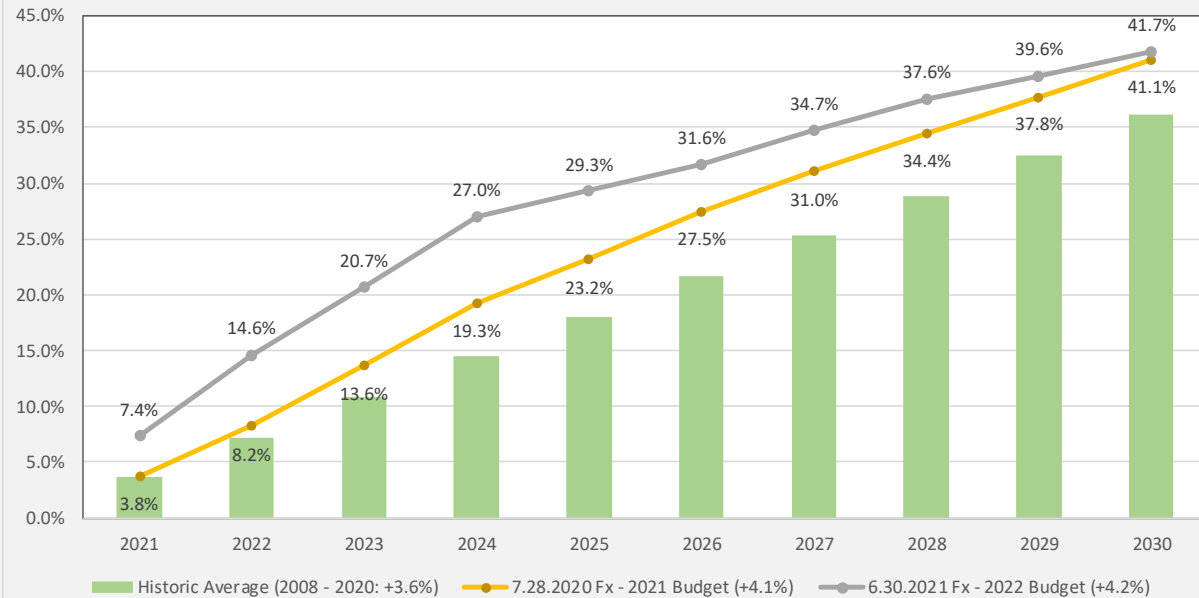
#### Notable Forecasted Projects

- 1- QTEP WAN MT View 230kV Line: 2022-2026 = \$33.6M
  - 2- QTEP Monument Hill: 2022-2026 = \$15.6M
  - 3- Distribution Feeder Lines: 2022-2026 = \$13.6M
  - 4- QTEP Segment COL RF LAR 230 kV: 2022-2026 = \$12.7M
  - 5- Customer Line Extensions: 2022-2026 = \$10.5M
- DB2: 2022-2026 = \$18.8M [Project Dollars = \$34.0M]  
 QTEP: 2022-2026 = \$77.3M [Project Dollars = \$111.4M]  
 LPS: 2022-2026 = \$5.8M [Project Dollars = \$37.3M]  
 IQ: 2022-2026 = \$13.9M [Project Dollars = \$69.7M]

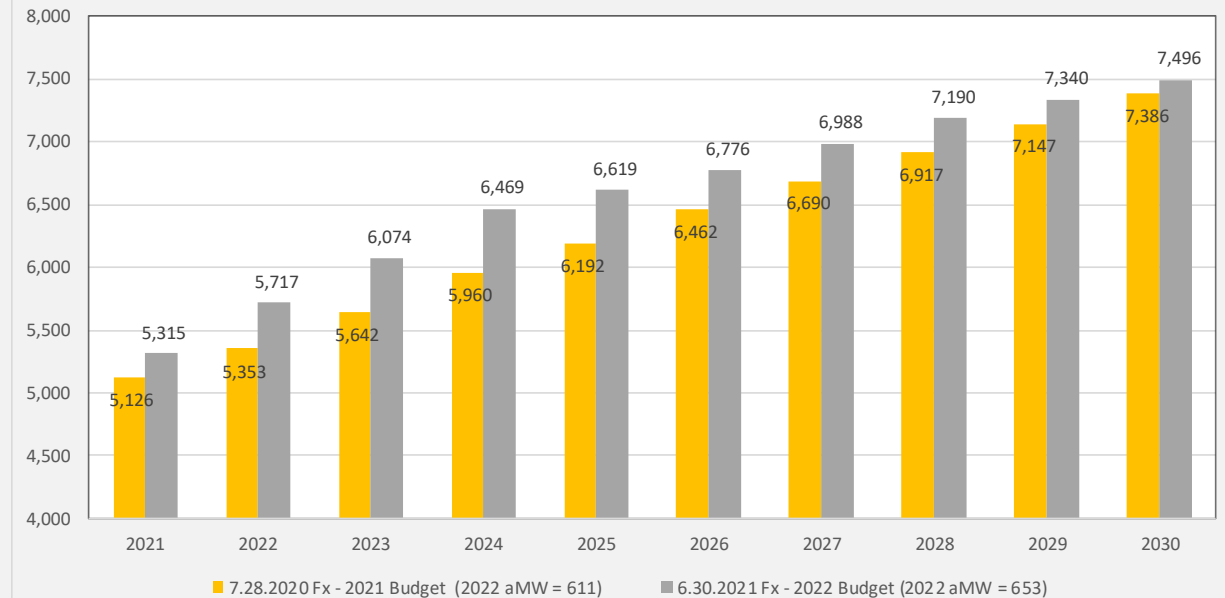
Note: Costs exclude Internal Labor

# 2022 Electric System Capital Plan – Load Growth

2022 Retail Sales Forecast - Growth Rate %



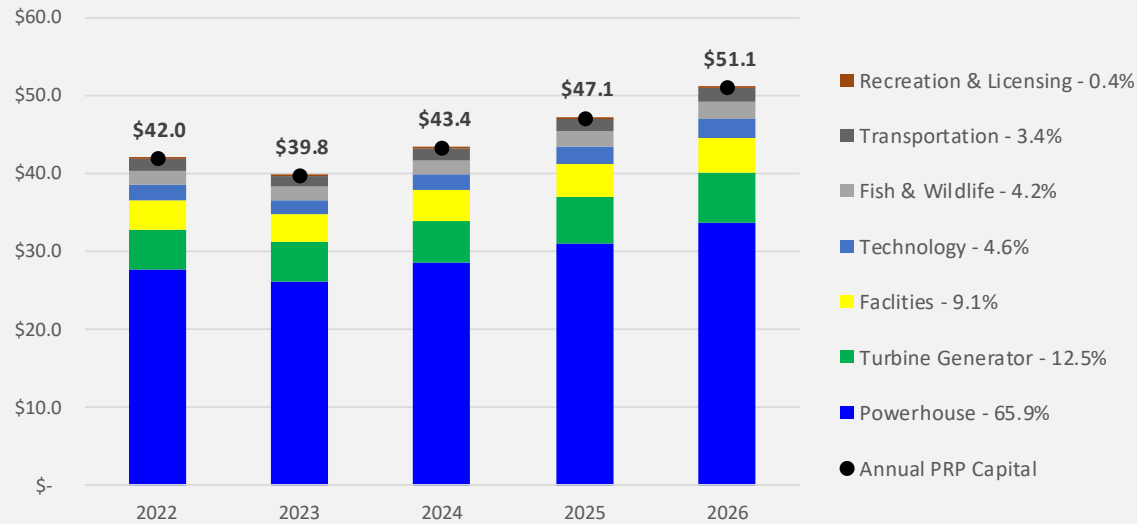
2022 Retail Sales Forecast - GWh



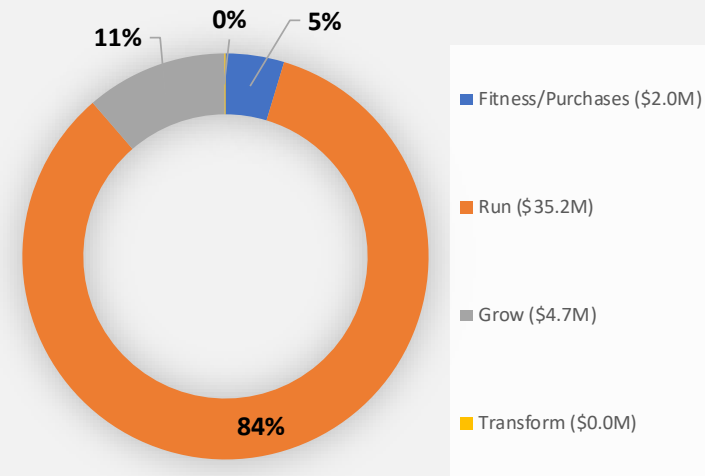
- Forecast over Forecast, for the current year through 2030, load growth rates increase by 0.8%
  - The 2022 growth outpaces the previous forecast by 6.4%
  - By 2030 growth rates nearly intercept at ~+40%
    - 2022 Fx = 4.2% annual growth vs 2021 Fx = 4.1% annual growth
- Expected load growth continues to outpace the historical rate of 3.6%
  - The increasing growth rate is associated with new large customers

# 2022 Priest Rapids System Capital Plan

Expected PRP Capital (2022 Dollars, \$M)



PRP System Budget 2022 = \$42.0M



## Capital allocation between systems

- For most of the recent history, the PRP system has dominated the allocation of capital work.
- This will be reversed for the foreseeable future.

## Performance since Q1 2020

- The combination of high project concentration and pandemic's supply-chain impacts have been a drag on project delivery.
- Both the PR Turbine & Generator and the PR Embankment work was delayed in 2020

### Priest Rapids Project System Capital Plan Characteristics

#### Concentration of Projects %

- In 2022, 5 projects represent +90% of expected spend of \$42M.
- From 2022-2026, the "Notable" 5 projects represent 70% of expected spend of \$223M.

#### Notable Forecasted Projects

- 1- PR Turbine Upgrade: 2022-2026 = \$76.2M
- 2- PR Embankment Improvements: 2022-2026 = \$51.9M
- 3- PR Generator Rewind: 2022-2026 = \$16.9M
- 4- PRP Station & Substation Replace: 2022-2026 = \$6.3M
- 5- Carlton Accl Facility Wells: 2022-2026 = \$2.9M

Note: Costs exclude Internal Labor

# Expense Offsets for 2022 Budget

1. Contributions in Aid of Construction.....(\$8.3M)  
(Money paid by customers to build infrastructure)
2. Sales to Power Purchasers at Cost.....(\$22.3M)  
(As required by our Federal License)
3. Net Power (expenses minus revenue).....(\$81.5M)  
(Net of market power purchases and sells)
4. Conservation Loans.....(\$0.1M)  
(Money paid back from low-interest  
conservation loans to customers)
5. Total Offsets .....(\$112.3M)
6. **Total Expenses after Offsets.....\$285.3M**

# Preliminary Budget Summary – Total Expenditures

<i>Exhibit A - Summary of Budget Items</i>		Budget	Forecast					
<i>\$'s in thousands</i>		2021	2021	2022	2023	2024	2025	2026
<b>TOTAL O&amp;M</b>		143,552	154,585	156,871	162,184	167,123	171,905	178,225
<b>TAXES</b>		18,098	19,318	19,531	20,032	20,832	21,224	21,619
<b>ELECTRIC CAPITAL</b>		73,676	88,177	90,096	89,174	89,363	89,794	89,894
<b>PRP CAPITAL</b>		69,657	51,380	55,348	53,604	57,536	61,625	65,930
<b>DEBT SERVICE (net of rebates)</b>		75,574	74,458	75,689	72,423	74,202	77,357	81,453
<b>TOTAL EXPENDITURES</b>		<b>380,556</b>	<b>387,918</b>	<b>397,535</b>	<b>397,417</b>	<b>409,056</b>	<b>421,905</b>	<b>437,121</b>
<b>Expenditure offsets for deduction</b>								
Contributions in Aid of Construction		(6,478)	(8,918)	(8,295)	(9,480)	(7,910)	(7,128)	(7,133)
Sales to Power Purchasers at Cost		(17,777)	(23,157)	(22,308)	(14,002)	(14,162)	(14,336)	(14,952)
Net Power (+ Expense, - Revenue)		(77,757)	(86,327)	(81,533)	(80,332)	(73,269)	(59,269)	(51,277)
Conservation Loans		(125)	(125)	(125)	(125)	(125)	(125)	(125)
<b>TOTAL EXPENDITURE OFFSETS</b>		<b>(102,137)</b>	<b>(118,527)</b>	<b>(112,261)</b>	<b>(103,939)</b>	<b>(95,466)</b>	<b>(80,858)</b>	<b>(73,487)</b>
<b>TOTAL BUDGETED EXPENDITURES</b>		<b>278,419</b>	<b>269,391</b>	<b>285,274</b>	<b>293,478</b>	<b>313,590</b>	<b>341,048</b>	<b>363,634</b>

# Preliminary Budget Summary – Net Position

\*\*Annual Rate  
Adjustments  
set at 0.1%  
beginning 2022

<i>Exhibit B - \$'s in thousands</i>		Budget	Forecast	→				
<b>CONSOLIDATED OPERATIONAL PERFORMANCE</b>		<b>2021</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>
Sales to Power Purchasers at Cost		17,777	23,157	22,308	14,002	14,162	14,336	14,952
Retail Energy Sales **		211,798	227,289	236,077	249,014	261,286	267,251	273,092
Net Power (Net Wholesale+Other Power Revenue)		77,757	86,327	81,533	80,332	73,269	59,269	51,277
Fiber Optic Network Sales		10,400	10,950	11,150	11,350	11,550	11,750	11,950
Other Revenues		1,453	1,057	2,354	2,354	2,354	2,354	2,354
Operating Expenses		(143,552)	(154,585)	(156,871)	(162,184)	(167,123)	(171,905)	(178,225)
Taxes		(18,098)	(19,318)	(19,531)	(20,032)	(20,832)	(21,224)	(21,619)
<b>Net Operating Income(Loss) Before Depreciation</b>		<b>157,535</b>	<b>174,877</b>	<b>177,021</b>	<b>174,836</b>	<b>174,666</b>	<b>161,831</b>	<b>153,781</b>
Depreciation and amortization		(76,092)	(75,857)	(75,086)	(77,259)	(79,705)	(82,551)	(86,454)
<b>Net Operating Income (Loss)</b>		<b>81,443</b>	<b>99,020</b>	<b>101,935</b>	<b>97,577</b>	<b>94,961</b>	<b>79,280</b>	<b>67,326</b>
<b>Other Revenues (Expenses)</b>								
Interest, debt and other income		(40,239)	(38,721)	(34,019)	(33,640)	(31,900)	(31,518)	(33,512)
CIAC		6,478	8,918	8,295	9,480	7,910	7,128	7,133
<b>Change in Net Position</b>		<b>47,682</b>	<b>69,216</b>	<b>76,211</b>	<b>73,417</b>	<b>70,971</b>	<b>54,890</b>	<b>40,948</b>

# Preliminary Budget Summary – Key Metrics

	Target	Budget 2021	Forecast 2021	2022	2023	2024	2025	2026
<b>NET INCOME</b>		47,682	69,216	76,211	73,417	70,971	54,890	40,948
<b>LIQUIDITY (measured at year end)</b>								
Elect System Liquidity (Rev + R&C)	<b>\$105 MM</b>	109,858	112,593	114,503	116,886	119,870	123,460	127,161
Excess Liquidity		102,660	48,923	25,459	387	149	179	207
Days Cash On Hand	<b>&gt; 250</b>	412	324	344	284	280	280	278
<b>LEVERAGE</b>								
Consolidated DSC	<b>&gt;1.8x</b>	2.10	2.37	2.40	2.36	2.44	2.23	2.05
Consolidated Debt/Plant Ratio	<b>≤ 60%</b>	52%	49.8%	46.9%	45.0%	44.4%	44.6%	45%
<b>PROFITABILITY</b>								
Consolidated Return on Net Assets	<b>&gt;4%</b>	2.0%	3.0%	3.2%	3.0%	2.9%	2.2%	1.6%
Retail Operating Ratio	<b>≤ 100%</b>	116%	111%	108%	108%	106%	107%	109%

# 04

## Appendix A - Scenarios

*Events that could have a significant impact on budget*



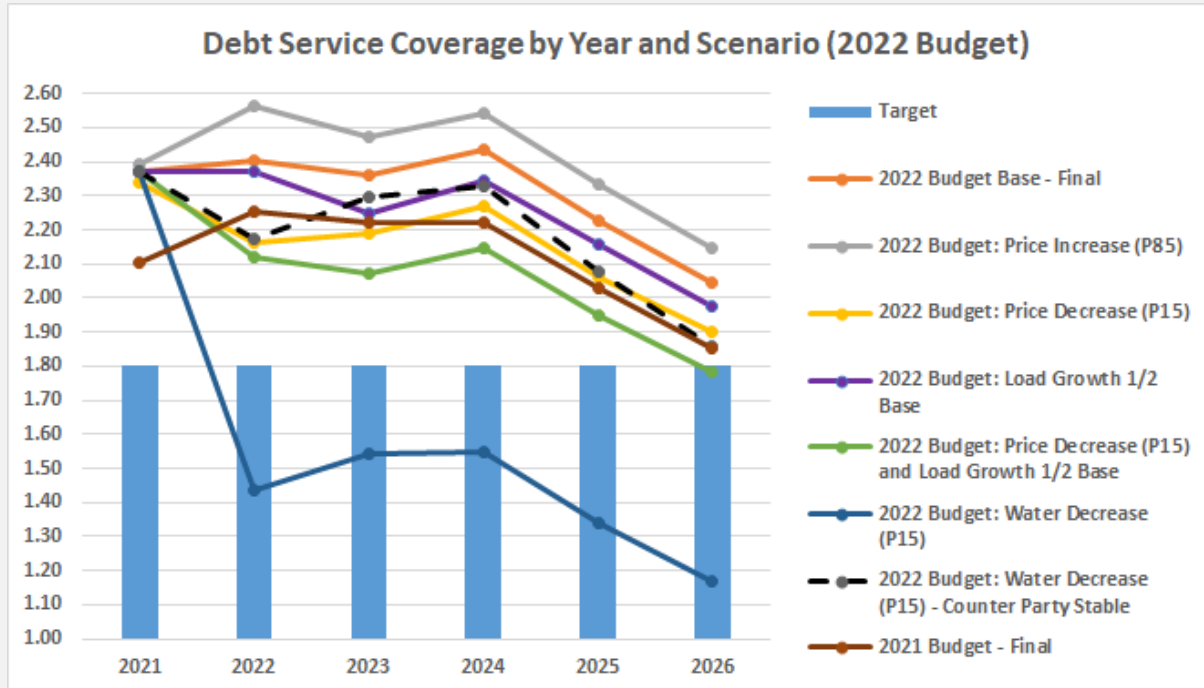


# Operational Scenario Descriptions

6 Scenarios – provide metrics impact for movement in volatile parts of Grant PUD operations

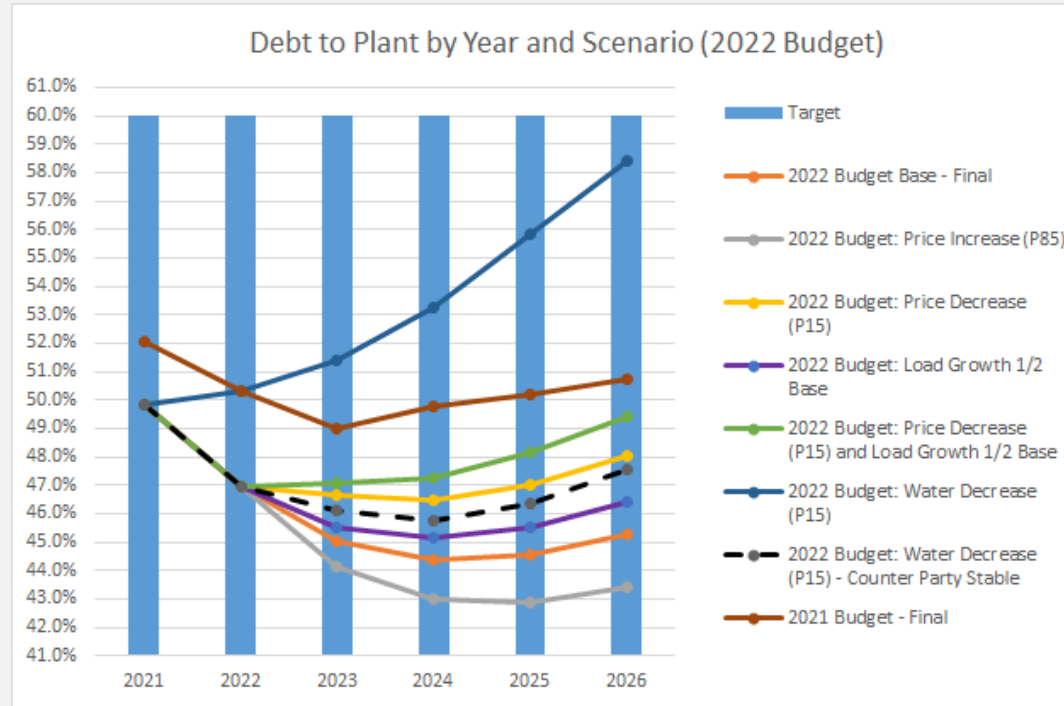
- Scenarios that provide insight on Grant PUD's exposure to wholesale prices, that is selling and buying from the market when Grant's resources don't match load needs.
  - High wholesale prices (P85, prices only higher 15% of time)
  - Low wholesales prices (P15, prices only lower 15% of time)
- Scenarios that show how Grant PUD's financial metrics respond when load growth (electricity sales to retail customers) slows down from expected growth.
  - Low load growth at  $\frac{1}{2}$  growth rate of base forecast
  - Low load growth ( $\frac{1}{2}$  Base) combined with low wholesale prices (P15)
- Scenarios that provide the impact of changing water conditions on the Columbia River
  - Low water (P15, water flow at dams only lower 15% of the time) Isolated
  - Low water and Counter Party Stable

# Operational Scenarios – Comparison to Base Budget



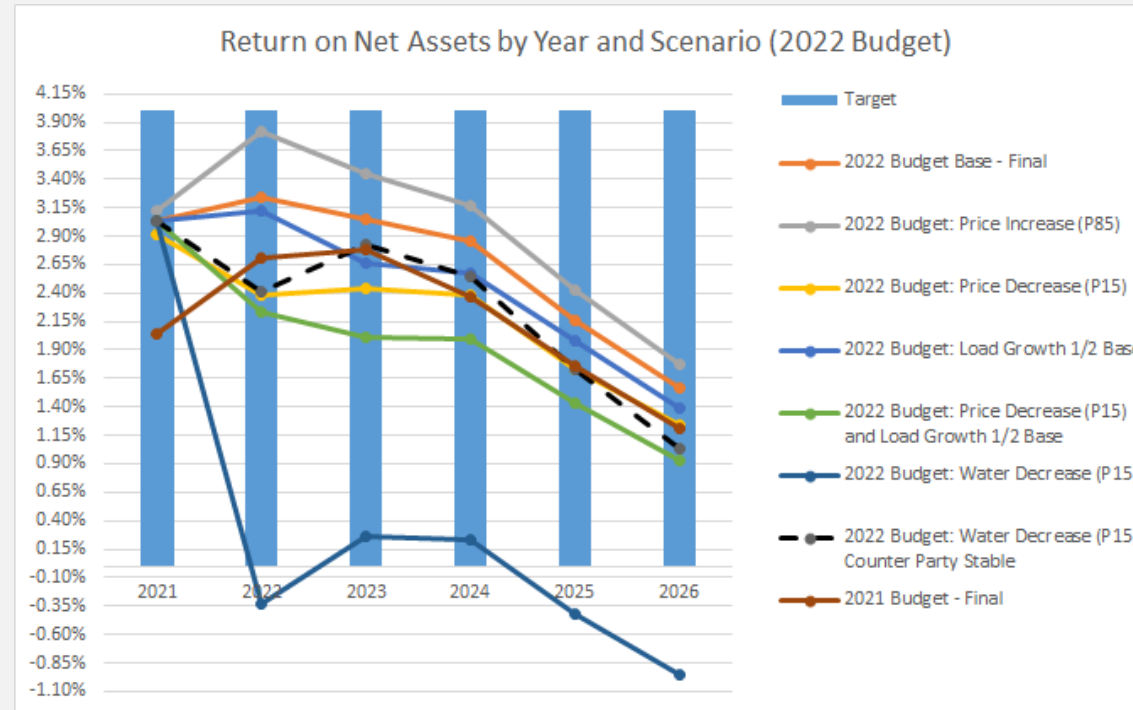
Debt Service Coverage (DSC)	2021	2022	2023	2024	2025	2026
<b>Target</b>	1.80	1.80	1.80	1.80	1.80	1.80
<b>2022 Budget Base - Final</b>	2.37	2.40	2.36	2.44	2.23	2.05
<b>2022 Budget: Price Increase (P85)</b>	2.39	2.56	2.47	2.54	2.33	2.15
<b>2022 Budget: Price Decrease (P15)</b>	2.34	2.16	2.19	2.27	2.06	1.90
<b>2022 Budget: Load Growth 1/2 Base</b>	2.37	2.37	2.25	2.34	2.16	1.97
<b>2022 Budget: Price Decrease (P15) and Load Growth 1/2 Base</b>	2.37	2.12	2.07	2.15	1.95	1.78
<b>2022 Budget: Water Decrease (P15)</b>	2.37	1.43	1.54	1.55	1.34	1.17
<b>2022 Budget: Water Decrease (P15) - Counter Party Stable</b>	2.37	2.17	2.30	2.33	2.08	1.86
<b>2021 Budget - Final</b>	2.10	2.25	2.22	2.22	2.03	1.86

# Operational Scenarios – Comparison to Base Budget



Debt to Net Plant	2021	2022	2023	2024	2025	2026
<b>Target</b>	<b>60.0%</b>	<b>60.0%</b>	<b>60.0%</b>	<b>60.0%</b>	<b>60.0%</b>	<b>60.0%</b>
<b>2022 Budget Base - Final</b>	49.8%	46.9%	45.0%	44.4%	44.6%	45.3%
<b>2022 Budget: Price Increase (P85)</b>	49.8%	46.9%	44.1%	43.0%	42.9%	43.4%
<b>2022 Budget: Price Decrease (P15)</b>	49.8%	46.9%	46.6%	46.5%	47.0%	48.0%
<b>2022 Budget: Load Growth 1/2 Base</b>	49.8%	46.9%	45.5%	45.2%	45.5%	46.4%
<b>2022 Budget: Price Decrease (P15) and Load Growth 1/2 Base</b>	49.8%	46.9%	47.1%	47.3%	48.1%	49.4%
<b>2022 Budget: Water Decrease (P15)</b>	49.8%	50.3%	51.4%	53.3%	55.8%	58.4%
<b>2022 Budget: Water Decrease (P15) - Counter Party Stable</b>	49.8%	46.9%	46.1%	45.7%	46.3%	47.6%
<b>2021 Budget - Final</b>	52.0%	50.3%	49.0%	49.8%	50.2%	50.7%

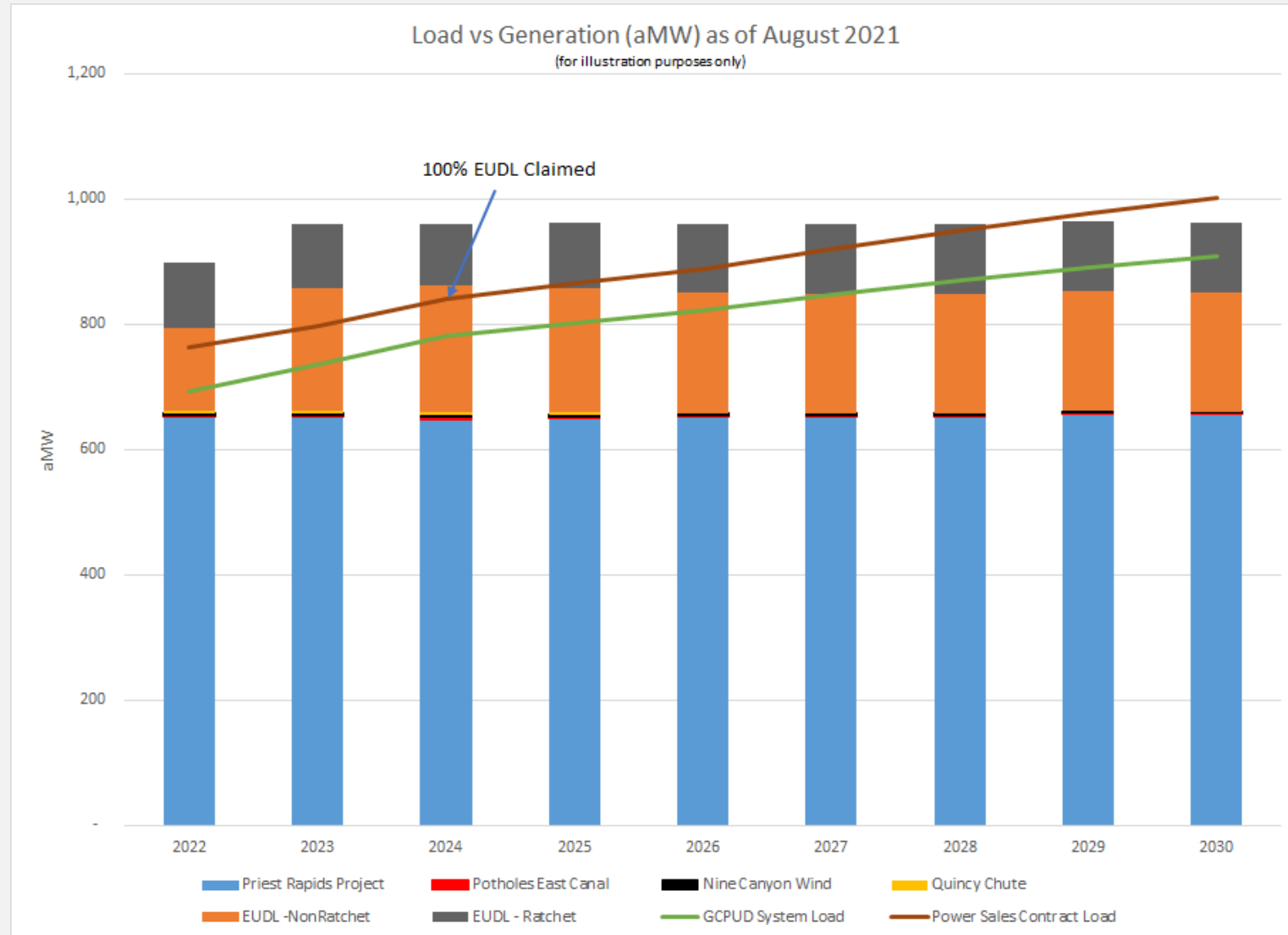
# Operational Scenarios – Comparison to Base Budget



Return on Net Assets (RONA)	2021	2022	2023	2024	2025	2026
<b>Target</b>	<b>4.00%</b>	<b>4.00%</b>	<b>4.00%</b>	<b>4.00%</b>	<b>4.00%</b>	<b>4.00%</b>
<b>2022 Budget Base - Final</b>	<b>3.04%</b>	<b>3.25%</b>	<b>3.04%</b>	<b>2.86%</b>	<b>2.15%</b>	<b>1.56%</b>
<b>2022 Budget: Price Increase (P85)</b>	<b>3.12%</b>	<b>3.82%</b>	<b>3.45%</b>	<b>3.17%</b>	<b>2.42%</b>	<b>1.77%</b>
<b>2022 Budget: Price Decrease (P15)</b>	<b>2.92%</b>	<b>2.38%</b>	<b>2.44%</b>	<b>2.38%</b>	<b>1.73%</b>	<b>1.24%</b>
<b>2022 Budget: Load Growth 1/2 Base</b>	<b>3.04%</b>	<b>3.13%</b>	<b>2.66%</b>	<b>2.58%</b>	<b>1.98%</b>	<b>1.39%</b>
<b>2022 Budget: Price Decrease (P15) and Load Growth 1/2 Base</b>	<b>3.04%</b>	<b>2.23%</b>	<b>2.02%</b>	<b>2.00%</b>	<b>1.43%</b>	<b>0.92%</b>
<b>2022 Budget: Water Decrease (P15)</b>	<b>3.04%</b>	<b>-0.34%</b>	<b>0.26%</b>	<b>0.23%</b>	<b>-0.42%</b>	<b>-0.96%</b>
<b>2022 Budget: Water Decrease (P15) - Counter Party Stable</b>	<b>3.04%</b>	<b>2.41%</b>	<b>2.83%</b>	<b>2.54%</b>	<b>1.73%</b>	<b>1.03%</b>
<b>2021 Budget - Final</b>	<b>2.04%</b>	<b>2.70%</b>	<b>2.78%</b>	<b>2.37%</b>	<b>1.76%</b>	<b>1.21%</b>

# Operational Scenarios – Priest Rapids Remaining Availability Load Growth

- Grant's total rights (physical and financial) to the project are exhausted in 2024
- Grant County retail customers' loads won't surpass expected project capabilities until after 2030



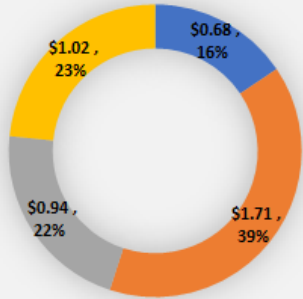
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## Appendix B – Capital Plan Details

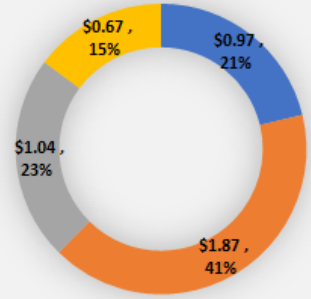


# 2022 Capital Plan – Technology

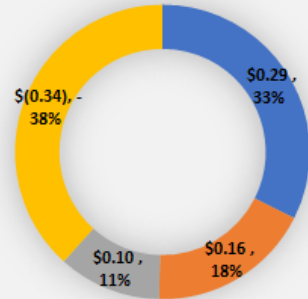
Budget 2021\* = \$4.34M



Budget 2022\* = \$4.55M



2022 vs 2021 = \$0.21M



## Technology Capital Plan Characteristics

### Work Type Breakdown

- Transform work declines relative to 2021 estimates (-\$0.3M), while Operational (+\$0.45M) and Grow (+\$0.1M) work drives the overall increase

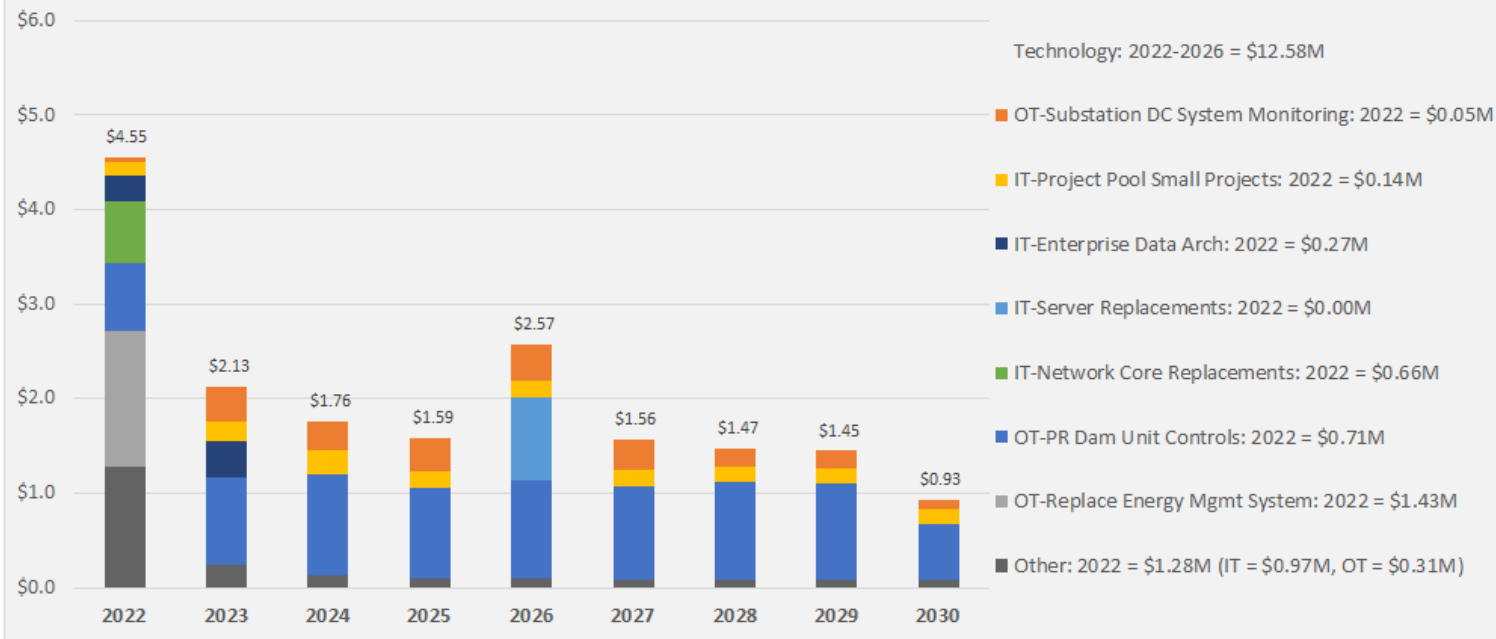
### Concentration Projects %

- In 2022, 5 projects represent +75% of expected spend of \$4.3M.  
 - From 2022-2026, the "Notable" 5 projects represent +75% of expected spend of \$12.6M.

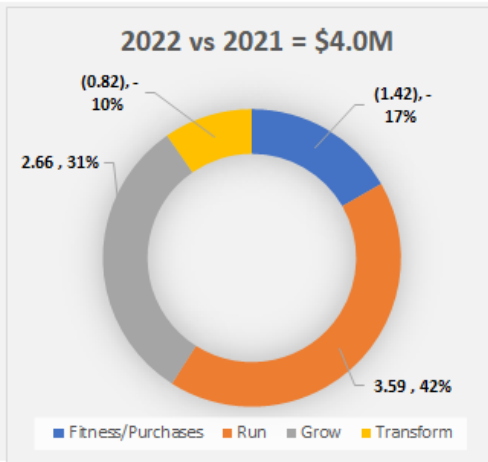
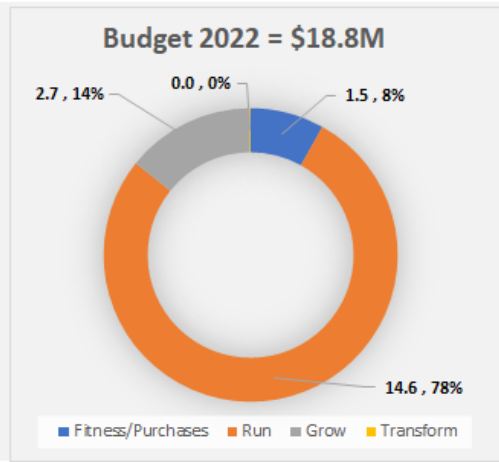
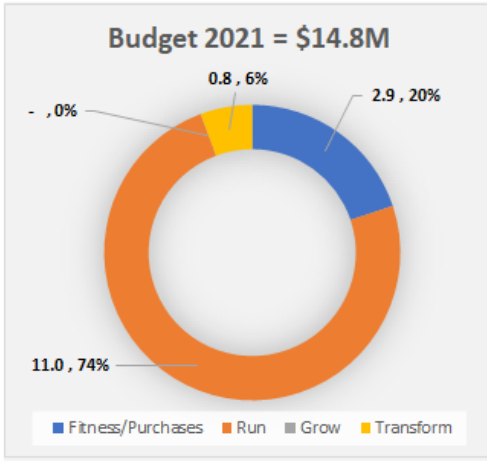
### Notable Forecasted Projects

- 1- OT-PR Dam Unit Controls: 2022-2026 = \$4.70M
  - 2- OT-Substation DC System Monitoring: 2022-2026 = \$1.44M
  - 3- OT-Replace Energy Mgmt System: 2022-2026 = \$1.43M
  - 4- IT-Project Pool Small Projects: 2022-2026 = \$0.98M
  - 5- IT-Server Replacements: 2022-2026 = \$0.89M
- Supply Chain/CFS: 2022-2026 = \$0.1M [Project Dollars = \$10.7M]

\* Run/Grow/Transform estimated for 2021 \$s 2022 OT \$s



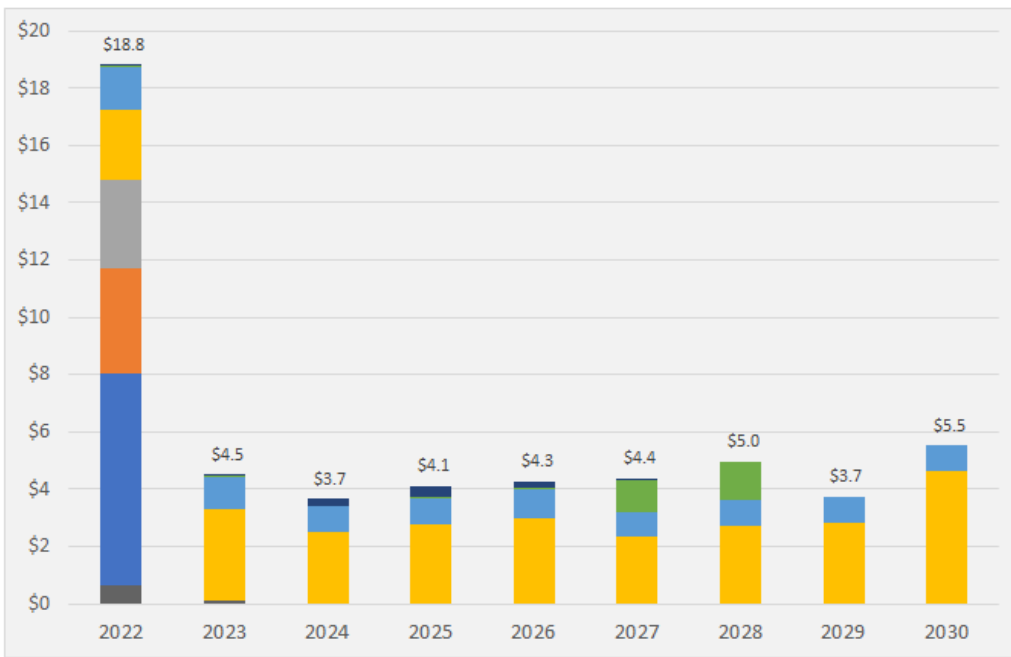
# 2022 Capital Plan – Internal-Services/Facilities



## IS/Facilities Capital Plan Characteristics

**Work Type Breakdown**

- Significant increase in Run/Grow of +\$6.3M offset with some reductions in Fitness/Purchases & Transform of -\$2.2M



- IS/Facilities: 2022-2026 = \$35.4M
- PD Central Service Center: 2022 = \$0.0M
  - District Facilities Master Pl: 2022 = \$0.1M
  - Facility Capital Improvement Pool: 2022 = \$1.5M
  - Fleet Replacement Program: 2022 = \$2.4M
  - MLSC Facility Improvements: 2022 = \$3.1M
  - EHQ Remodel Reconfiguration Plan: 2022 = \$3.7M
  - ESC Facility Improvements: 2022 = \$7.4M
  - Other: 2022 = \$0.6M

**Concentration of Projects %**

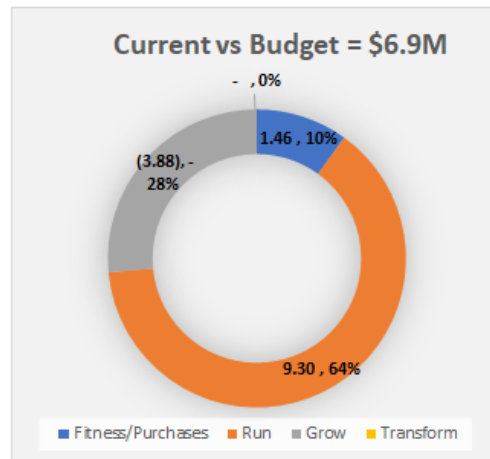
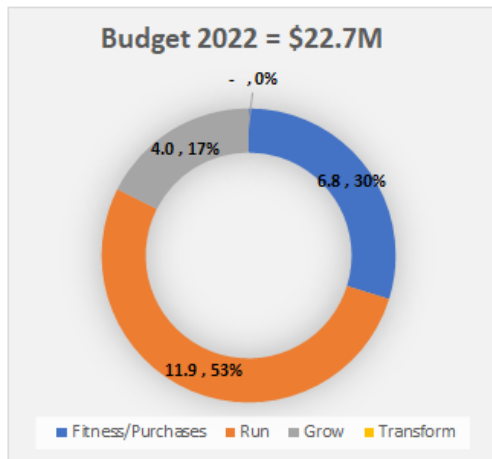
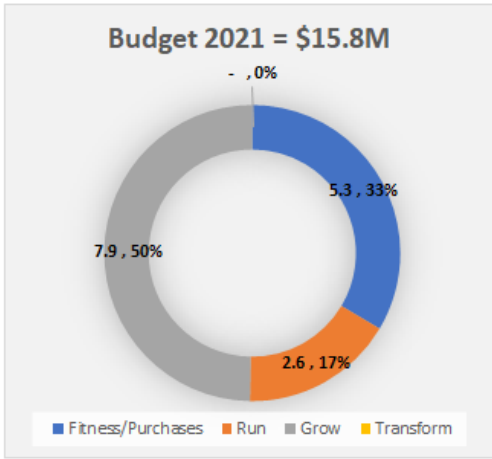
- In 2022, 3 projects represent +70% of expected spend of \$19M.

- From 2022-2026, the "Notable" 5 projects represent +80% of expected spend of \$100M.

- Notable Forecasted Projects**
- 1- Fleet Replacement Program: 2022-2026 = \$13.9M
  - 2- ESC Facility Improvements: 2022-2026 = \$7.4M
  - 3- Facility Capital Improvement Pool: 2022-2026 = \$5.4M
  - 4- EHQ Remodel Reconfiguration Plan: 2022-2026 = \$3.7M
  - 5- MLSC Facility Improvements: 2022-2026 = \$3.1M
- MLSC: 2022-2026 = \$3.1M [Project Dollars = \$5.5M]  
 ESC: 2022-2026 = \$7.4M [Project Dollars = \$14.5M]  
 EHQ: 2022-2026 = \$3.7M [Project Dollars = \$5.8M]  
 PD: 2022-2026 = \$0.9M [Project Dollars = \$112.0M]



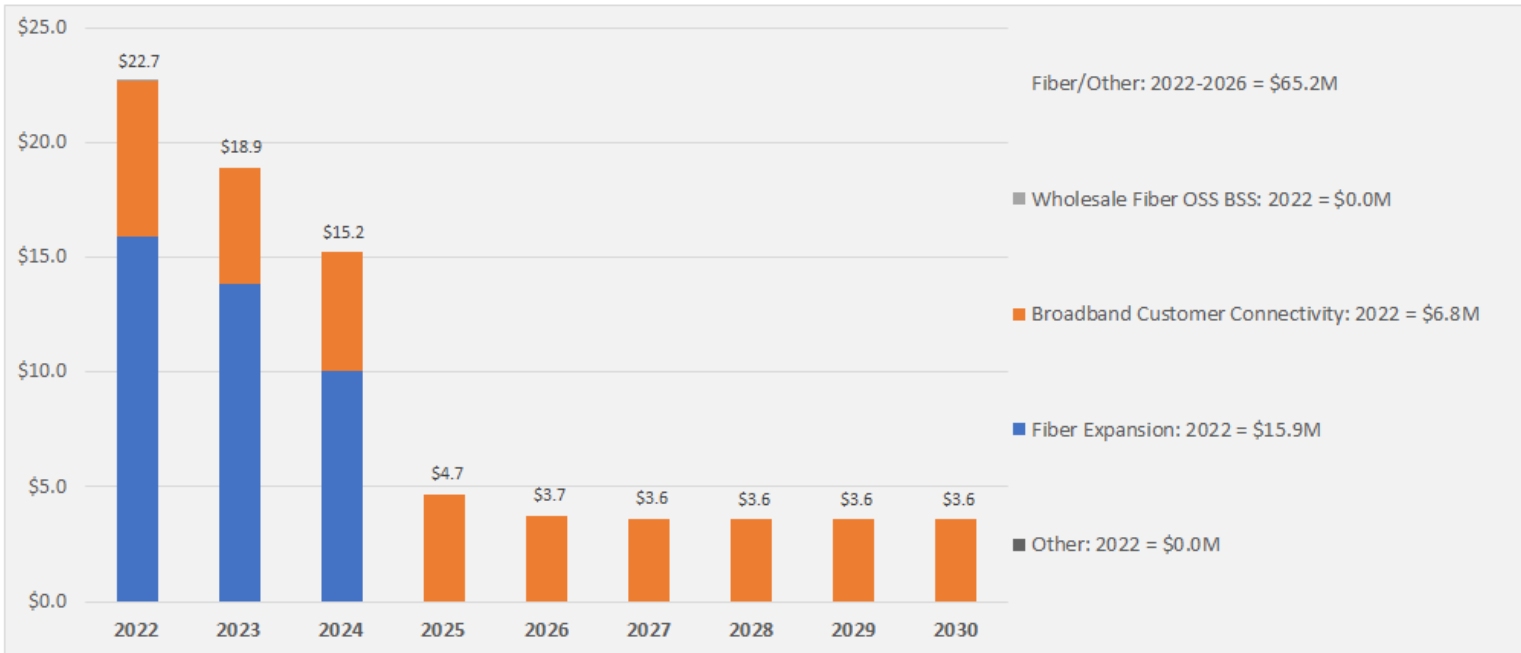
# 2022 Capital Plan – Fiber / Other



## Fiber/Other Capital Plan Characteristics

**Work Type Breakdown**

- Operational work (Run + Fitness/Purchase at +\$10.8M) work drives the +\$7M increase between 2022 and 2021



**Concentration Projects %**

- In 2022, Fiber Expansion represents +70% of expected spend of \$22.7M.
- From 2022-2026, Fiber Expansion represents +60% of expected spend of \$65M.

**Notable Forecasted Projects**

- 1- Fiber Expansion: 2022-2026 = \$39.8k
- 2- Broadband Customer Connectivity: 2022-2026 = \$25.4k
- 3- Wholesale Fiber OSS BSS: 2022-2026 = \$0.0k



**Powering our way of life.**

# State of Security

Q3 2021 Review

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Powering our way of life.

# Details of Q3 Security Review

- Security Contract
- Incidents
- Seasonal Security
- Security Risk Assessment
- Quarterly Business Review
- Genetec Project Status





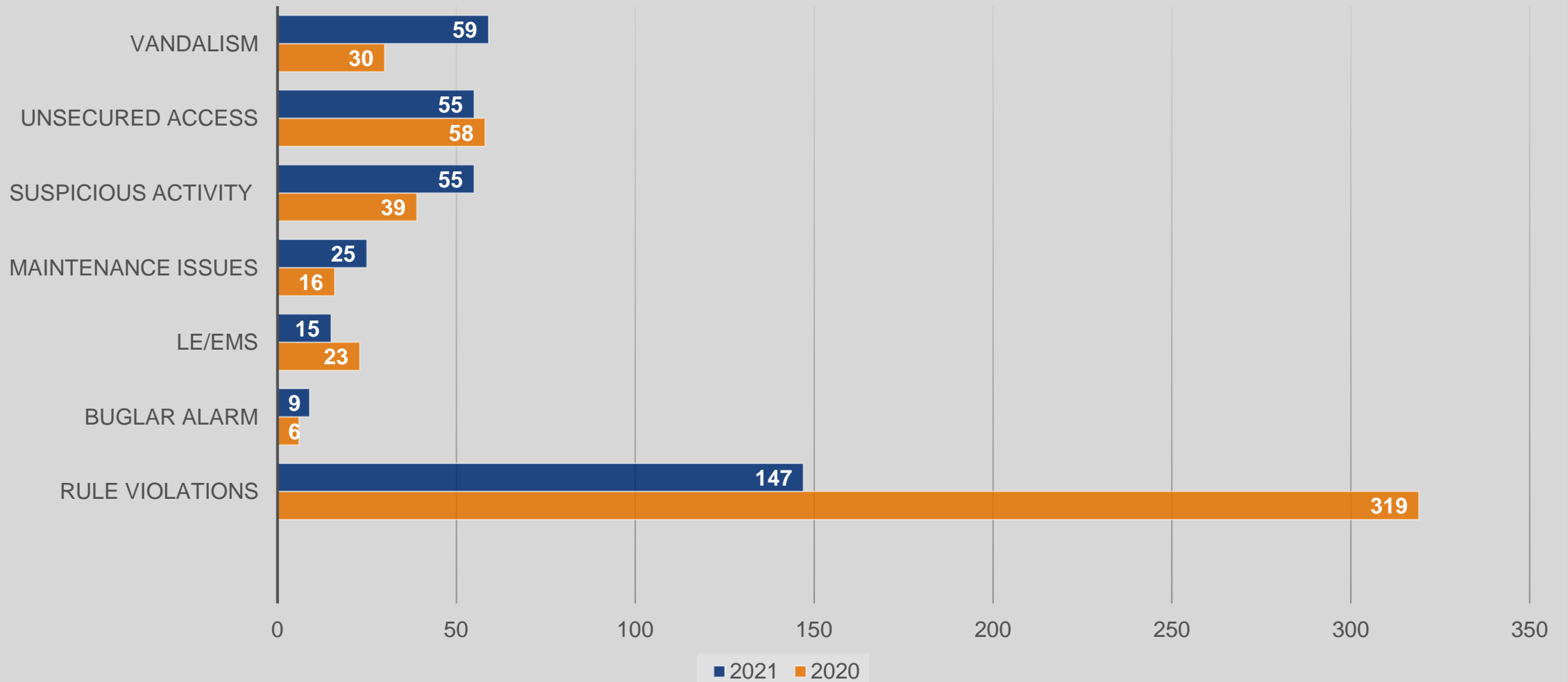
# Star Protection Agency

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- **Added Grant PUD vehicle decal on all vehicles**
- **Q3 Highlights:**
  - Staffing Changes- New Account Manager, Troy Donahue.
  - An abundance of applications leads to a very small list of interviews.
- **Training:**
  - All staff were formally training in the following:
    - De-escalation
    - Driver Safety
- **In progress:**
  - Post Orders
  - Training
  - Safety Procedures

# Year-to-Date Reportable Incidents

## 2021 vs. 2020 Year-to-Date Reportable Incidents



# Seasonal Recreation Security

An assessment was conducted and we determined the need to increase our security presence and measures at the recreation sites for the 2021 season.

In addition to Grant PUD Security team, we have added our security contractor and dedicated hours with the Grant County Sheriff's Office.

As of now we are reaching record high numbers for camping reservations and seeing an increase of activity at all our recreation sites.



## SECURITY





# Vantage Boat Launch





# Crescent Bar

**Rattlesnake Cove 2021**



**Rattlesnake Cove 2018**



# Physical Security Risk Assessment



**Gannett  
Fleming**

## SCOPE OF SERVICE

Discovery – Assessment – Findings/Ratings/Recommendations for Improvement – A Written Contingency & Mitigation Plan – Risk Policies – Defined Controls -- Delivered in Formal Review with Leadership

### Project Milestones



Pre-Site Visit Data Collection



On-Site Assessments

Completion Date: 2/23/21



Data Review and Analysis

Completion Date: 3/5/21



Final Reports and Presentation

Completion Date: 3/12/21

5<sup>th</sup> Milestone- Risk Criticality and Consequence

7/30/21

6<sup>th</sup> Milestone- Short and Long-Term Mitigation Roadmap

12/31/2021

# Security QBR by Department v4 Aug2021

[View in Power BI](#) ↗

Last data refresh:  
9/9/2021 3:49:39 PM UTC

Downloaded at:  
9/9/2021 4:46:13 PM UTC

Operating Unit

Department

FD - Internal Services

FD3 - IS Security

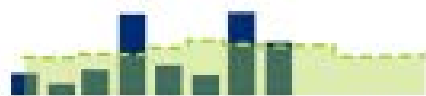
### Capital Labor & Net Actuals YTD Vs. Year-End-Projections

● Net Actuals ● Capital Labor ● YEP Yearly Total Remaining ● Budget YTD



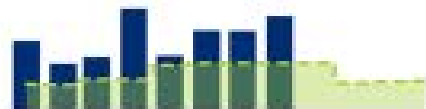
### Gross Actuals Vs. Budget

\$1.6M -9.1%



### Capital Labor Actuals Vs. Budget

\$55.3K +96.3%



### Net Actuals Vs. Budget

\$1.6M -10.8%



### Budget vs Actuals (Including Cap Labor)

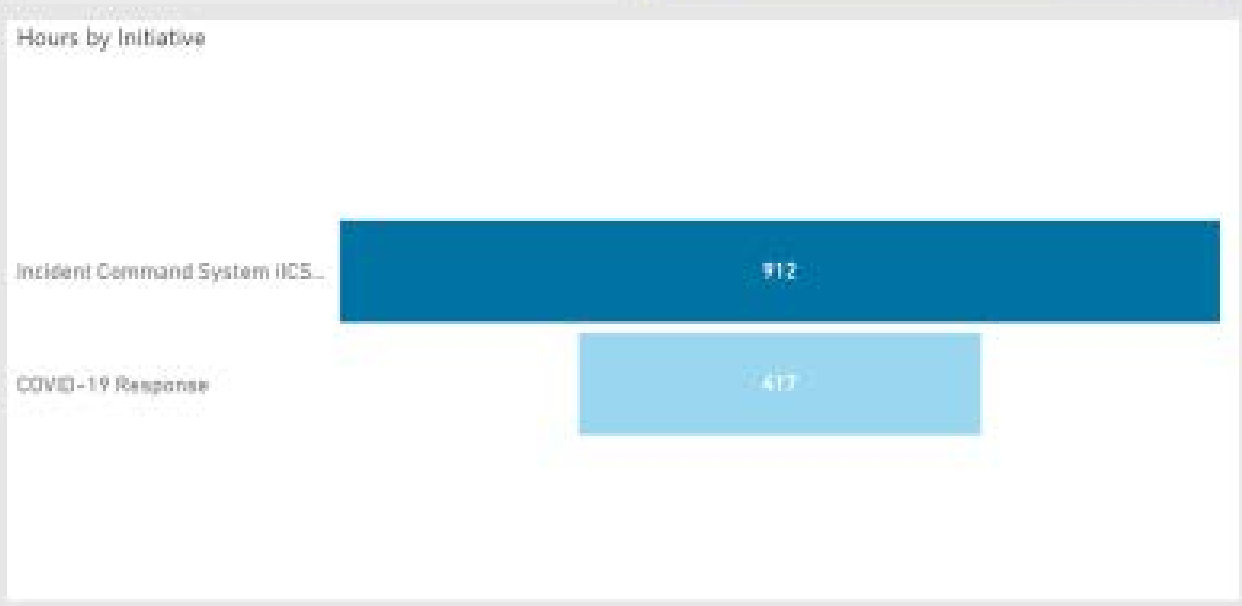
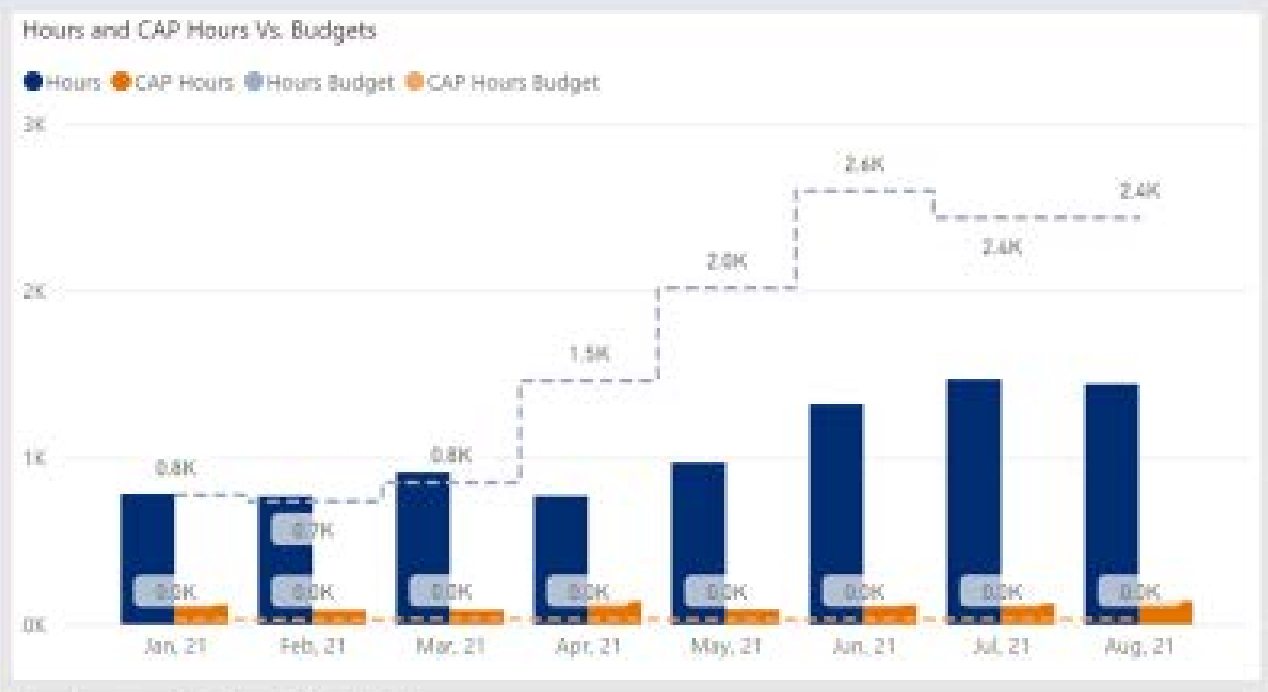
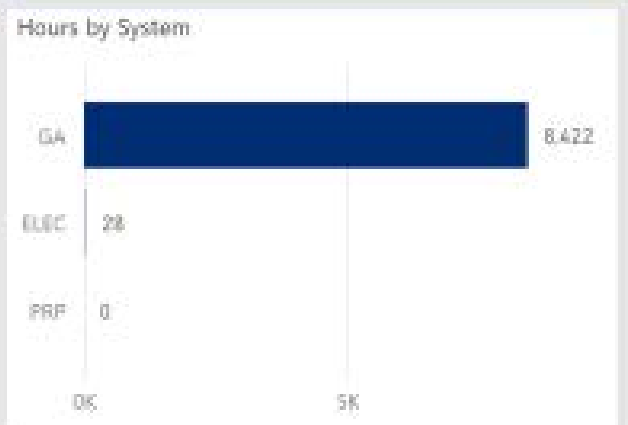
Cost Category Type/Cost Category	Budgeted	Actuals	Budget Var	Budget Var %	Consumed %
<input type="checkbox"/> Purchased Services	\$993,369	\$985,964	-\$7,405	-0.7%	99.3%
<input type="checkbox"/> Labor	\$729,894	\$622,940	-\$106,954	-14.7%	85.3%
Salaries & Wages	\$448,675	\$396,603	-\$52,072	-11.6%	88.4%
Benefits	\$264,429	\$222,830	-\$41,599	-15.7%	84.3%
Overtime	\$12,000				
Other Labor	\$4,790	\$3,507	-\$1,283	-26.8%	73.2%
<input type="checkbox"/> Operating Materials & Equipment	\$75,335	\$29,690	-\$45,644	-60.6%	39.4%
<input type="checkbox"/> G&A	\$5,600	\$2,345	-\$3,255	-58.1%	41.9%
<input type="checkbox"/> Utilities	\$1,200				
<input type="checkbox"/> IT		\$115			
<b>Total</b>	<b>\$1,805,398</b>	<b>\$1,641,054</b>	<b>-\$164,344</b>	<b>-9.1%</b>	<b>90.9%</b>

- Capital Labor is a subset of the Labor above

- Net Actuals vs Budget = Gross Actuals minus Capital Labor

Operational Unit  
 FD - Internal Services

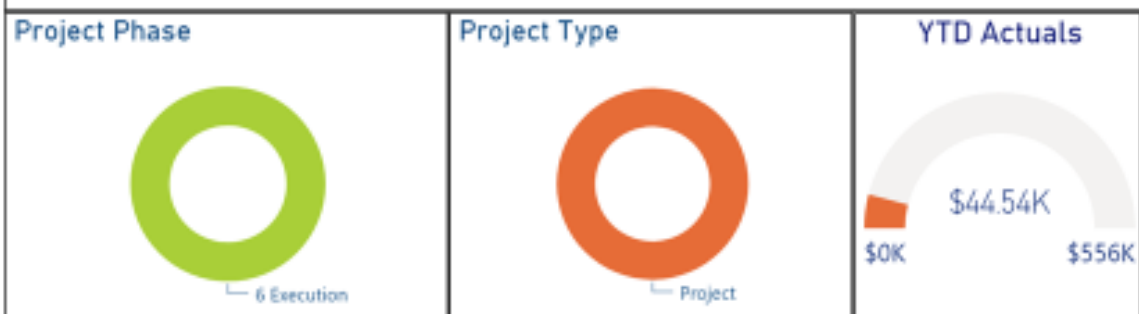
Department  
 FD3 - IS Security



# Capital Budget Versus Actuals

FD3 - IS Security QBR Year-to-Date July 31, 2021

Initiative ID	Name	CY Scope	CY Schedule	CY Price	CY Variance	TP Scope	TP Schedule	TP Price	TP Variance
IN036	Physical Access System Control Modernization.xlsm	▲ \$51,927	▲ \$77,891	○ \$0	◆ \$129,818	▲ \$77,891	▲ \$51,927	○ \$0	◆ \$129,818
<b>Total</b>		<b>\$51,927</b>	<b>\$77,891</b>	<b>\$0</b>	<b>\$129,818</b>	<b>\$77,891</b>	<b>\$51,927</b>	<b>\$0</b>	<b>\$129,818</b>



Initiative ID	Name	CY Budget	CY Approved Spend	CY Actuals	BOY Fx	CY YEP
IN036	Physical Access System Control Modernization.xlsm	\$0	\$556,224	\$44,541.81	\$641,500	\$686,041.81
<b>Total</b>		<b>\$0</b>	<b>\$556,224</b>	<b>\$44,541.81</b>	<b>\$641,500</b>	<b>\$686,041.81</b>

# Genetec Project Update

Year	Milestones/Deployment	Target Dates	Actual Date	Notes
2019	Coulee City	Dec-18	1/11/19	Site is 100% complete including CO.
	Royal City	February 4 – 8, 2019	2/22/19	Site is 100% complete. CO Warehouse CR install on punch list scheduled to complete 9/8 week.
	Ephrata Annex	March 4 - 8, 2019	3/8/19	100% complete.
	Quincy Local Office	March 18 – 22, 2019	3/22/19	100% complete.
	Moses Lake Local Office	April 8 – 12, 2019	4/26/19	100% complete.
	Wanapum Maintenance Center	April 15 – May 2019	6/14/19	100% complete.
	Moses Lake Service Center	Jul-19	10/11/19	100% complete.
	HOB	June 10 – 21, 2019	7/12/19	100% complete.
2020	Heritage Center	Aug-19	11/12/19	Original scope is 100% complete. Change order scope scheduled 8/
	Ephrata Service Center	Jul-19	5/22/20	Original scope is 100% complete.
	Ephrata HQ	Oct-19	July 2020.	100% complete.
	Quincy Chute	Nov. 2019	Sep-20	100% complete.
	Potholes East Canal	Nov. 2019	Sep-20	100% complete.
2021	Wanapum Switchyard (WSY)	Sep-20	Nov-20	All access controls & gate complete. (3) Cameras replacement must wait until WD Control Center is completed.
	Priest Rapids Maint Buildings	Dec-20	Feb-2021	Site installation delayed due to sequestration and pursuant resource constraint.
	CIP PACS Compliance Policies & Procedure	4/1/2021 – Oct-2021	9/29/2021	CIP PACS Policies and Procedure audit/certification by GDS completed in August. Team is resolving punch list required for Dispatch go-live on week of 10/4.
	Ephrata Dispatch	Dec-2021 – Oct -2021	10/6/2021	Cross functional team is resolving punch list required for Dispatch go-live.
	MLSC Dispatch	Dec-2021 – Aug-2021	10/4/2021	Cross functional team is resolving punch list required for Dispatch go-live.
	Wanapum Dam	Mar-2021 – Jun-2021	Jun-21	Existing cameras can be viewed in Genetec. New camera installation is in progress.
	Priest Rapids Dam	Mar-2021 – Aug-2021	Aug-21	All access controls installation completed. Existing cameras can be viewed in Genetec. New cameras will be installed by Electronic Technicians following completion of WD camera install.
	Project close	Jun-2021 – Oct-2021		NOTE: This project is heavily dependent on hardware equipment for security, doors, latches, cables, and Network devices. COVID related delays will affect the timeline. To mitigate the

## Accomplishments:

- Priest Rapids Dam installation completed.
- WSY CIP-14 Thermal/IR camera installation complete. Analytics need to be programmed.
- CIP PACS policies and procedure audit completed by GDS and Risk & Compliance department. Punch list created and IT cross functional teams prioritized tasks required for CIP PACS go-live. 90% of tasks are complete. Remaining tasks will be completed by 9/15 for GDS review/approval.
- MLBDC & EDC infrastructure are ready for Go-live effective week of 10/4.
- WHC additional camera installation in change order completed effective week of 9/1 – 9/7.

## Planned activities:

### Original scope

- Replace existing dam and interior cameras at WD and PRD. These tasks may continue beyond project close as ADT resources will not be required to replace the cameras. The camera orders delayed due to national/global supply chain issues. Electronics Techs will perform all physical installation and configuration and operation in Genetec will be supported by Security team.
- Migrate EDC and MLBDC pending CIP PACS Policies and Procedure certification. 10/4 – 10/7.
- Rollout new HID cards.
- Project close 10/15 – 10/28.





**Powering our way of life.**



# Quarterly Business Report

*September 2021*

*Leadership & Organizational Development*

# Agenda

1. Organizational Linkage
2. Performance Indicators
3. Progress Toward Objectives
4. The Year Ahead

# 01 Organizational Linkage

**Aligning the work of the team with the needs of the organization**

# Organizational Objective 2

## OBJECTIVE 2

### DESIGN AND SUSTAIN AN ENGAGING & FULFILLING GRANT PUD CULTURE

Workplace culture is the infrastructure that guides how we function. Business outcomes, such as safety, compliance, financial results, and operational excellence, all hinge on a healthy workplace culture that supports people. We continuously design our culture so every role has purpose and every employee has value. We make meaningful investments in our workforce. We encourage transparent and authentic communication, and engage our teammates with respect and empathy.

## STRATEGIES

- Recruit, develop and retain a best-in-class workforce
- Translate organizational values into actionable behaviors
- Deliver a rigorous onboarding experience
- Sponsor a vibrant employee association
- Establish a deliberate, continuous learning strategy aligned to business outcomes
- Implement the ADDIE instructional systems design framework for training
- Articulate and reinforce our desired leadership culture
- Deliver industry-leading educational reimbursement programs

## KEY METRICS

- Organizational Health Index
- Employee Engagement Assessment
- Educational Reimbursement Target
- Training Effectiveness Assessment



# Department Objectives



## VISION

To reinforce a people-centric culture where employees acknowledge problems, focus on possibilities and share responsibility for their growth.



## MISSION

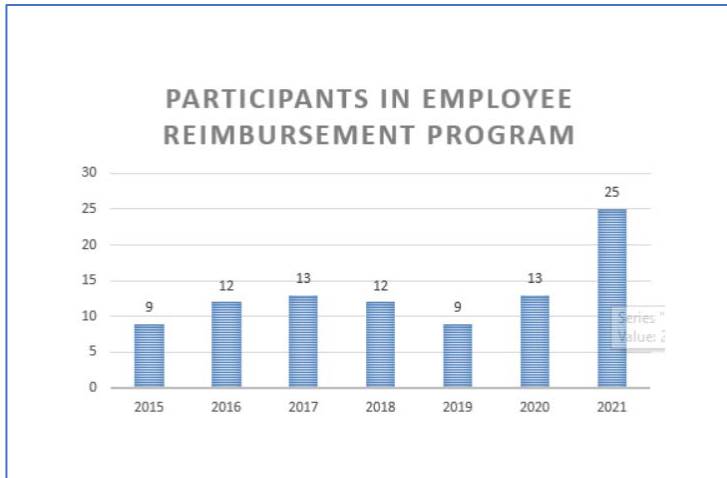
We exist to support organizational health by creating clarity around how we **lead**, **train** and **treat** people at Grant PUD.



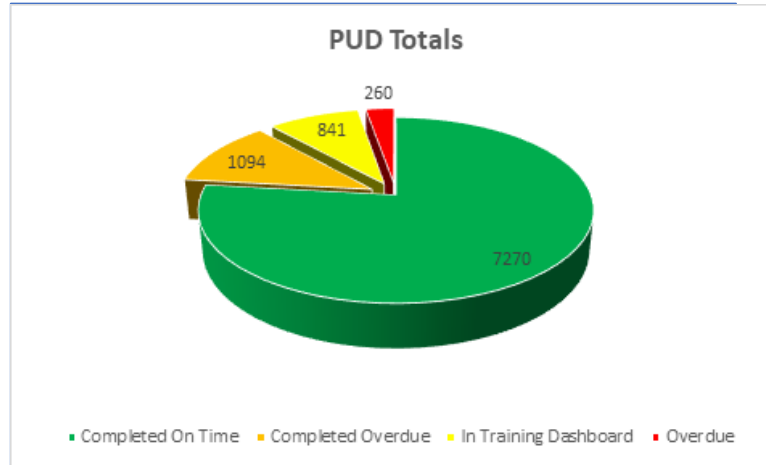
# 02 Performance Indicators

## Making good on our commitments

# Active Education Reimbursement



# Training Completion

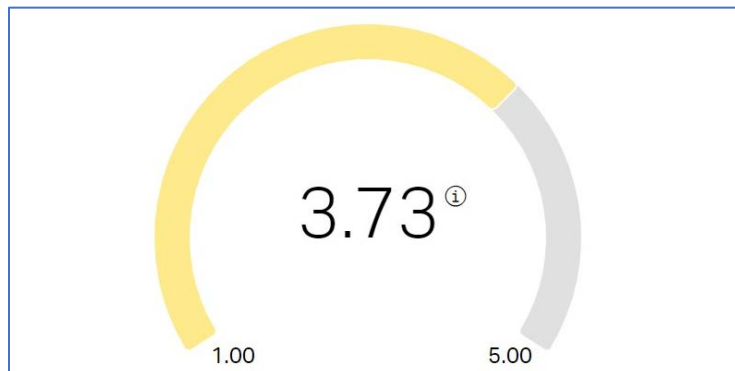


As of August 24, 2021

# Orientation Satisfaction



# Q12, Engagement



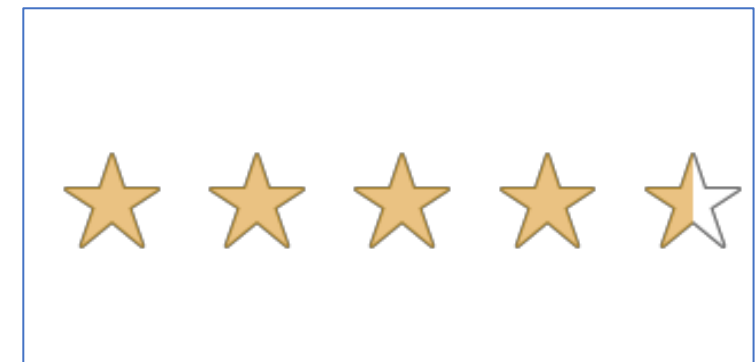
As of 2020

# Online Training Satisfaction



As of August 30, 2021

# Live Training Satisfaction



As of August 30, 2021



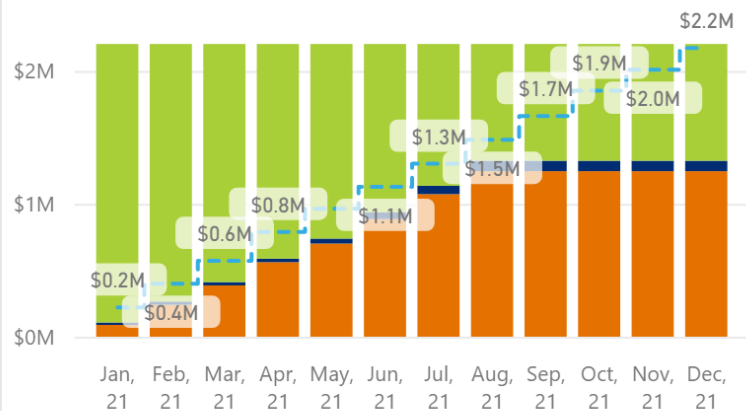


Operating Unit

DH - Organizational Development

### Capital Labor & Net Actuals YTD Vs. Year-End-Projections

● Net Actuals ● Capital Labor ● YEP Remaining ● Budget YTD



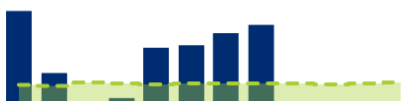
### Gross Actuals Vs. Budget

\$1.3M -10.6%



### Capital Labor Actuals Vs. Budget

\$78.6K +139.1%



### Net Actuals Vs. Budget

\$1.2M -14.0%



### O&M Budget vs Actuals (Including Cap Labor)

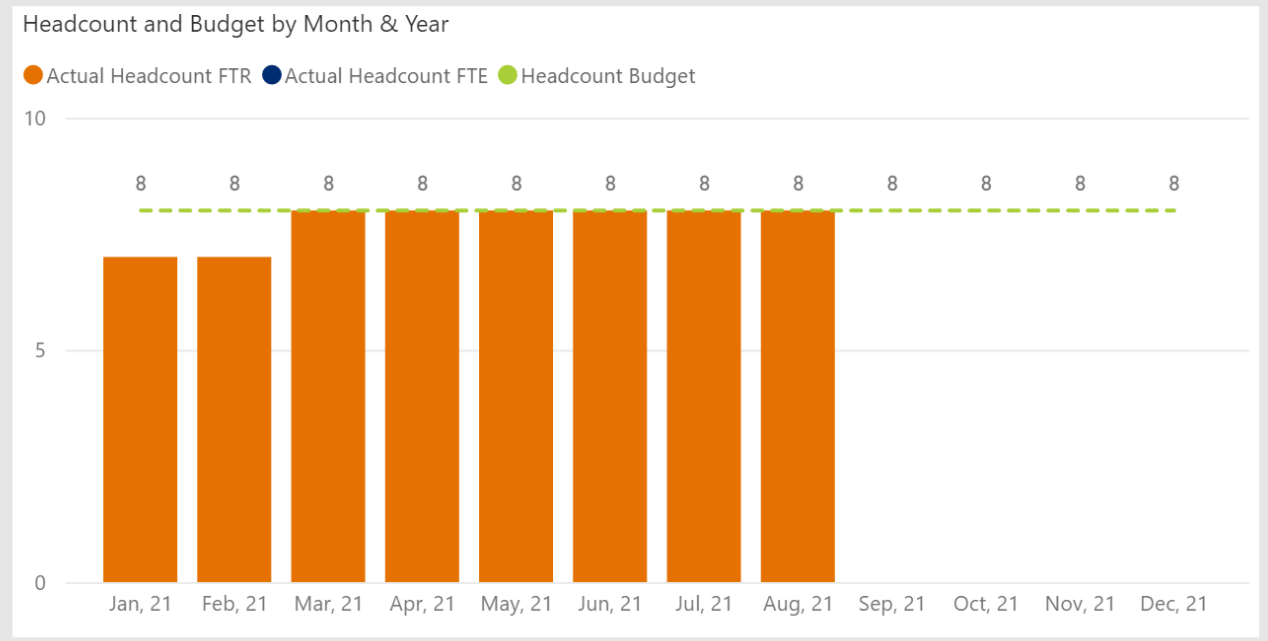
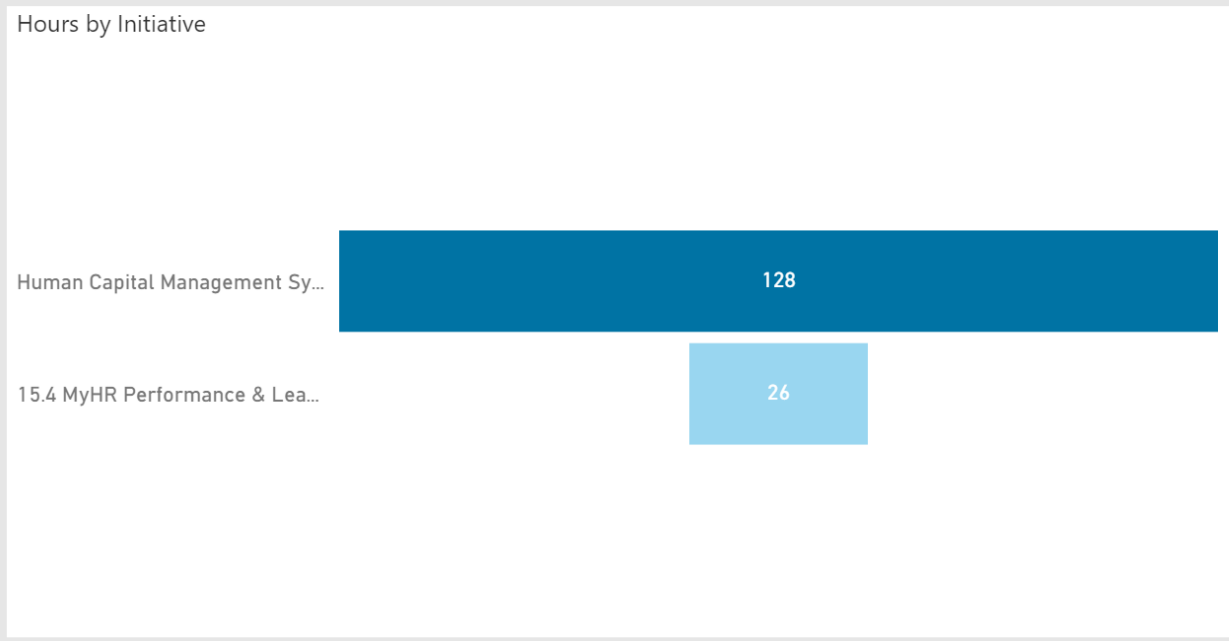
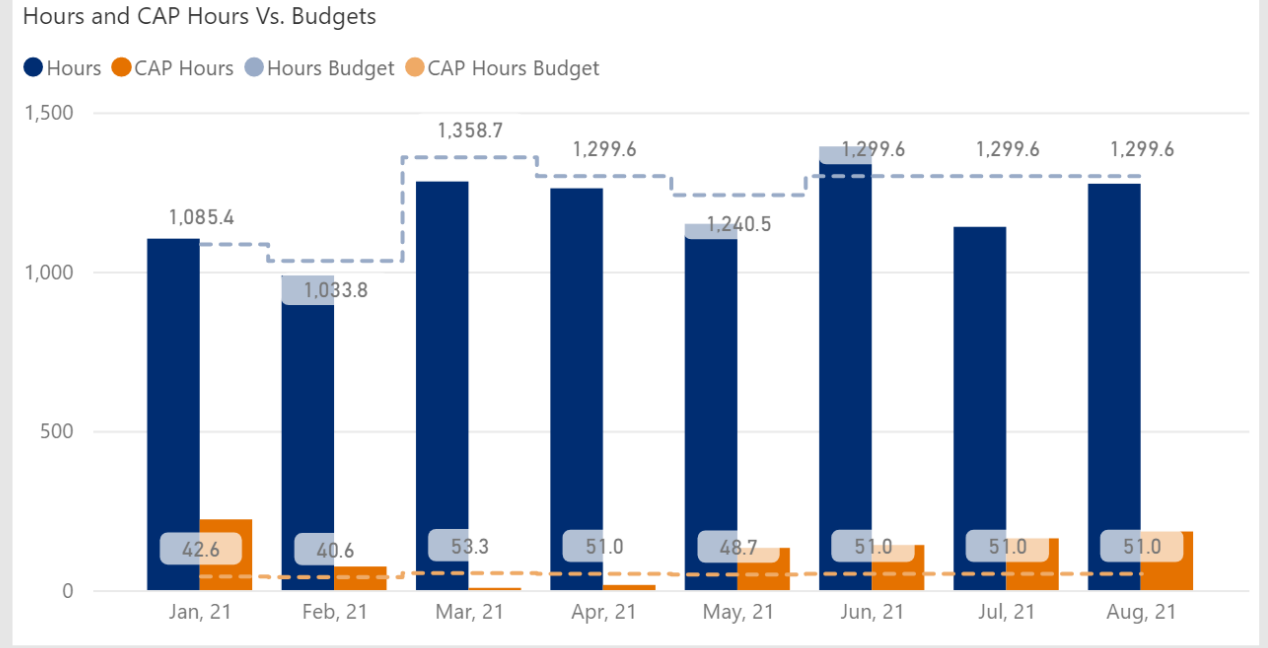
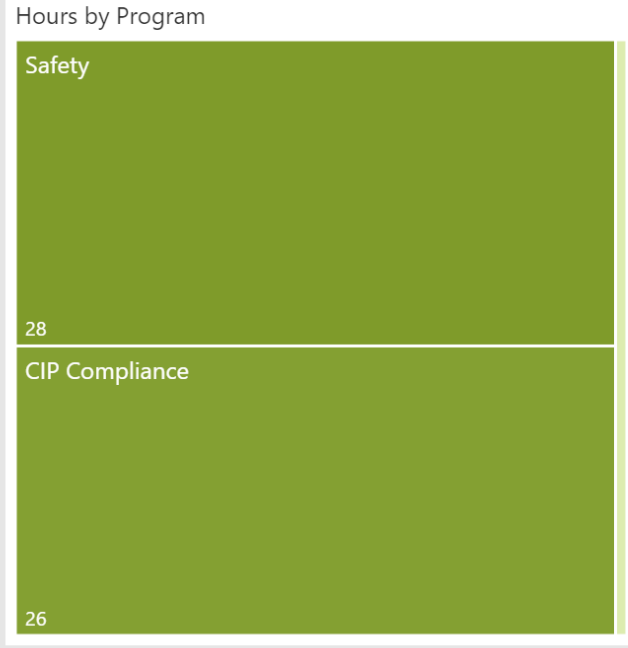
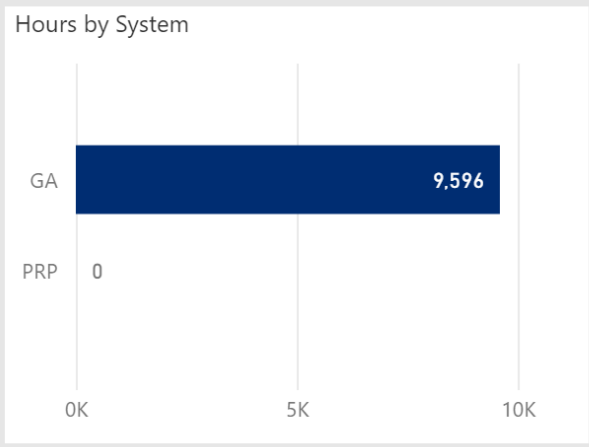
Cost Category Type/Cost Category	Budgeted	Actuals	Budget Var	Budget Var %	Consumed %
<b>Labor</b>	<b>\$849,648</b>	<b>\$845,133</b>	<b>-\$4,515</b>	<b>-0.5%</b>	<b>99.5%</b>
Salaries & Wages	\$542,398	\$545,805	\$3,407	0.6%	100.6%
Benefits	\$302,955	\$296,006	-\$6,949	-2.3%	97.7%
Other Labor	\$4,296	\$3,323	-\$973	-22.7%	77.3%
<b>Purchased Services</b>	<b>\$556,900</b>	<b>\$378,728</b>	<b>-\$178,172</b>	<b>-32.0%</b>	<b>68.0%</b>
<b>Operating Materials &amp; Equipment</b>	<b>\$53,200</b>	<b>\$39,041</b>	<b>-\$14,159</b>	<b>-26.6%</b>	<b>73.4%</b>
<b>G&amp;A</b>	<b>\$21,300</b>	<b>\$57,313</b>	<b>\$36,013</b>	<b>169.1%</b>	<b>269.1%</b>
<b>IT</b>		<b>\$3,594</b>			
<b>Total</b>	<b>\$1,481,048</b>	<b>\$1,323,809</b>	<b>-\$157,239</b>	<b>-10.6%</b>	<b>89.4%</b>

- Capital Labor is a subset of the Labor above

- Net Actuals vs Budget = Gross Actuals minus Capital Labor

Operating Unit

DH - Organizational Development



**03**

**Progress Toward Objectives**

**Making good on our commitments**

# Employee Interest Survey



1. Which of the following events would you be most likely to participate in: (mark all that apply)

[More Details](#)

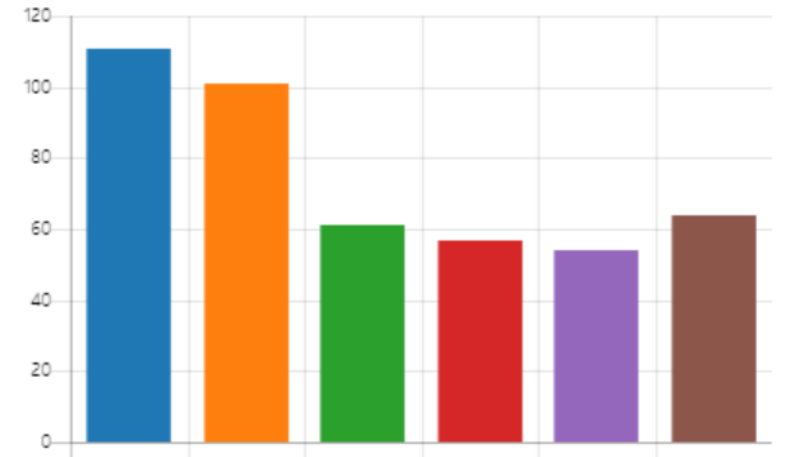
● Holiday Social	114
● Summer Picnic	123
● Family Bowling event	68
● Family Movie Night	74
● Family Aquatic Center event	50



4. Please mark all the Community Outreach activities you would be interested in:

[More Details](#)

● Food bank	111
● Habitat for humanity	101
● Clean up roads	61
● Education Scholarships	57
● Trade Scholarship	54
● Mentoring	64



# Activities in 2020

- 30 Grant PUD employees made 500 homemade masks, donated to co-workers.
- EA Dollar Drive raised \$3,345.10 for Grant County food banks COVID needs.
- EA helped get groceries or running errands for anyone experiencing COVID-19 symptoms.
- EA members reached out to the families of sequestered employees.
- EA hosted several Virtual Happy Hour Events.
- EA hiked to Clara and Marion Lakes
- EA took part in stand-up paddle boarding
- EA sponsored a pumpkin decorating contest - 31 entries, 3 Prizes Adult \$50, Teen \$25, and Kiddo \$25
- EA hosted a virtual Cooking Class with Chef R.J. Harvey, 25 employees and their families participated
- EA promoted an employee “Snow fun” contest
- Grant PUD and EA partnered to raise \$2,046.52 for food banks/pantries in Grant County



# Employee Association

## Mission



With compassion and kindness, we will promote and empower employees to express themselves, explore new experiences, and participate in meaningful service.

## Vision



To inspire a sense of connection, belonging, and purpose in our jobs as well as our community.

## Goals 2021

### Act



- Clubs
- Employee Events
- Community Outreach
- Co-worker Recognition

### Adapt



- Communicate/Awareness
- Meet Member Needs/Desires
- Head, Heart, Hands Wellness Events

### Advance



- Continuous Improvement
- Financial Stability
- Organizational Improvement

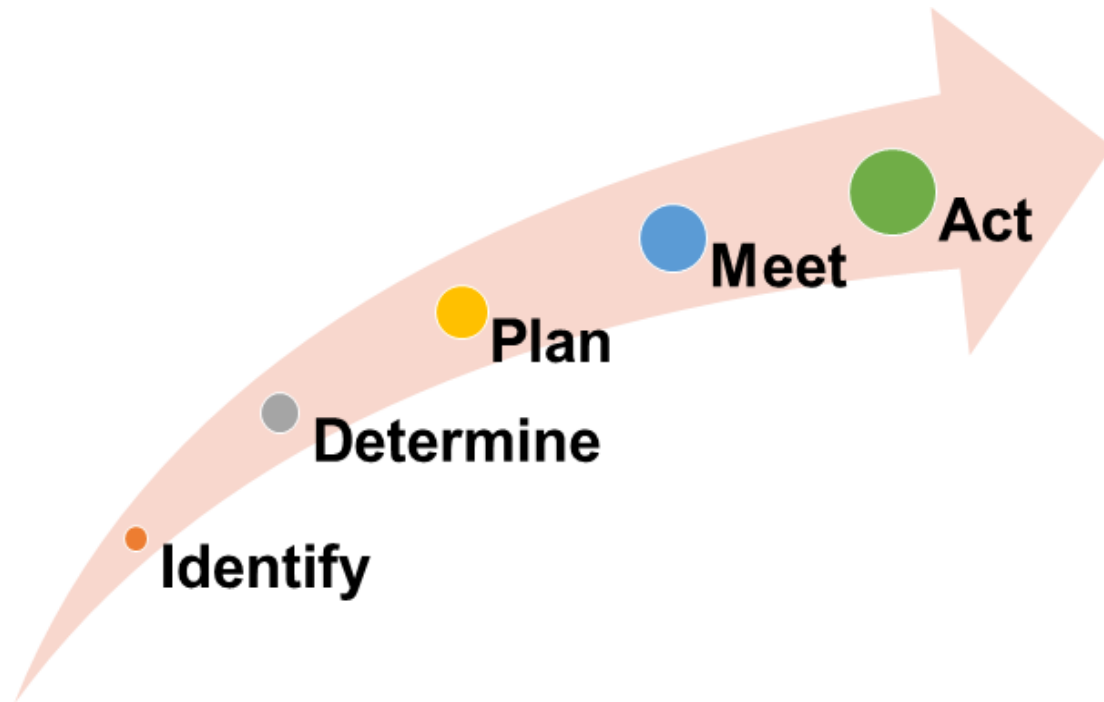
# Activities 2021-2022

- Summer family event – Surf & Slide Park Moses Lake Summer 2022
- Family Movie Night Summer 2022
- Winter Celebrations – Kid’s Party and Adult Party – Virtual in 2021 and in person 2022
- Scholarship Awards – Spring 2022
- Care Committee -Recognition of employees for life events, work events - Ongoing
- Welcoming of new employees during on-boarding - Ongoing
- Seasonal Contests : Pumpkin Art, Winter Fun Photo and Hiking bingo – Ongoing
- Dollar Food Bank Drive & Fill the Bucket 2021
- Book Club – Active
- Outdoor Channel - Active
- Travel Club - 2022
- Gardening Club – Spring/Summer 2022
- Golf Club – 2022
- Head, Heart & Hands Wellness Events – Ongoing
- Ski Trips – Winter 2021/2022
- Indoor Activities – Board Games, Trivia, Cribbage, Bridge – Planning for In person
- Family Paint Nights – Active on Teams
- Community Clean Ups – Active
- 2021 October Day of Giving, Ephrata Clean Up - Active



# Individual Development Plan (IDP)

**What's an IDP?** A process the employee directs, in partnership with their manager, to enhance their own professional growth.



## IDP EXAMPLE:

<b>Name</b>	Jane Smith	<b>Date</b>	1/23/19
<b>Professional Goals/Motivations (1-3)</b> What are my professional growth & career aspirations? How do I think these aspirations can be best met at Grant PUD?			
<i>I would like to be using my knowledge of accounting in a more senior role, maybe in the next 3-5 years. This could be at a manager level, where I could influence decision-making and contribute to a better financial planning and budgeting process across the organization.</i>			
<b>Talents &amp; Strengths to Recognize</b> What are my Talents & Strengths?		<b>Development Opportunities</b> What knowledge or skills do I need to enhance?	
<ol style="list-style-type: none"> <li>1.) Accounting knowledge</li> <li>2.) Ability to explain finance info to non-finance people</li> <li>3.) Strong Analytics</li> <li>4.) Skilled at presenting data visually in a clear and compelling manner</li> </ol>		<ol style="list-style-type: none"> <li>1.) I need more experience managing people.</li> <li>2.) I need to learn how to effectively delegate.</li> <li>3.) I need better understanding of the organizational business lines.</li> </ol>	
<b>Focused IDP Objectives &amp; Action Steps</b> What development goals do I have for the next 12 months? The next 5 years? What specific actions can I take to achieve these goals?			
<p>Present @ 2 or 3 key financial meetings- explain finance data or new process to senior leaders. Identify these opportunities at the start of each quarter by my manager.</p> <p>By April 30-create a plan to meet with 5 different Sr. Managers for 1 hour with the intent to learn more about their work. I will then follow up with my Manager to discuss what I learned.</p> <p>Participate in the Fall Leading@Grant Series with the intent to learn the fundamentals of what it means to lead here at Grant PUD.</p>			
<b>Next Review Meeting Date with my Manager/Supervisor</b>			



# Edu. Reimbursement –Target: 75% Completion

**Completion Rate:** 64% (Since 2016)

- **Master Degrees Completed:** 4
- **Bachelor Degrees Completed:** 2
- **Certifications Completed:** 1 (CDL)
- **Other:** 2 (Apprenticeship)

**What:** Reflects that employees complete what they set out to accomplish

**Why:** Gives indication of program effectiveness, barriers, organizational support

**Phase 2 of this metric:** % of program participants promoted following completion of program



**04** The Year Ahead  
**Q4 Commitments**

# Organizational Health Index Assessment

**What:** We are administering another Organizational Health Index assessment starting **October 27<sup>th</sup> 2021**

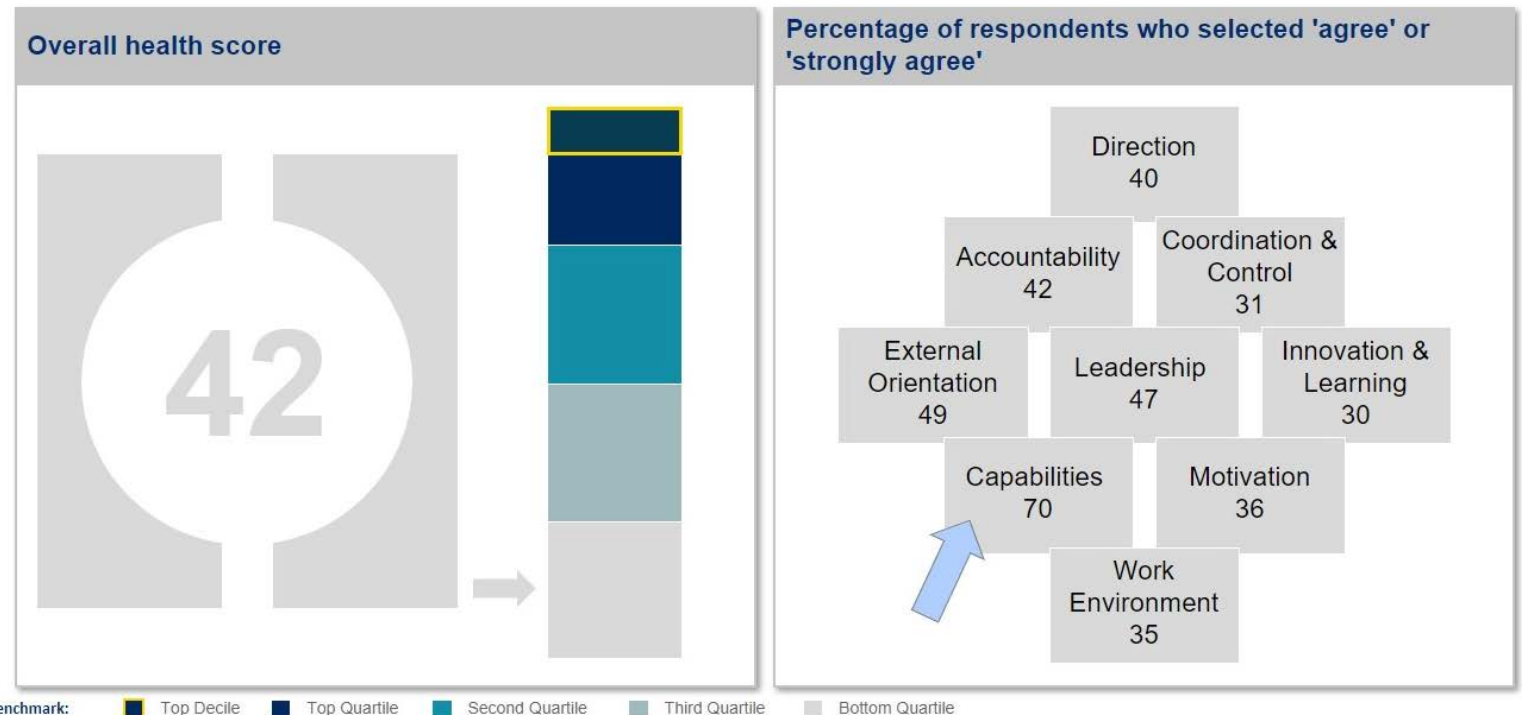
**Why:** This is one of our methods for measuring "Organizational Health" as outlined in **Objective 2** of the *Strategic Plan*

## 2019 - Organizational Health Index Assessment Data

### Objective 2

#### KEY METRICS

- **Organizational Health Index**
- Employee Engagement Assessment
- Educational Reimbursement Target
- Training Effectiveness Assessment



# Performance Development Competencies

- Technical Expertise and Usage:** Learns quickly and acquires necessary skills in area of specialty. Comprehends job procedures and methods as outlined in job description.

- Interpersonal Understanding:** Aligning one's behavior and actions with the behaviors identified within the Commitment to the Code of Excellence.

- Outcomes Orientation:** Demonstrating disciplined attention and focus on achieving concrete and tangible results in alignment with agreed upon deadlines.

- Sensing Systems:** Considers the impact of one's work product on the larger system and adjusts their approach based on the needs of those impacted. Includes an ability to foresee unintended consequences and mitigate for future risks.



**From Boss to Coach:** Focused on developing and distributing one's leadership to those served. Concerned with having the right questions, identifying the strengths of team-members, being a growth partner, supporting self-accountability and interdependency among teams. Someone that seeks to listen first, provide clarity of intention, direction and purpose.

# Workforce Development Position

- Position will support both HR and Leadership & Org Development. Focus will be on supporting outreach and coordination with area colleges, high schools, trade schools and local workforce development councils.
- The position will also support the work ahead relative to succession management.
- Priority #1 for this role will be the creation of a workforce development strategy that will become the workplan for the coming years.
- To be posted internal/external in September

# Department Top 3 Priorities For 2022:

1.

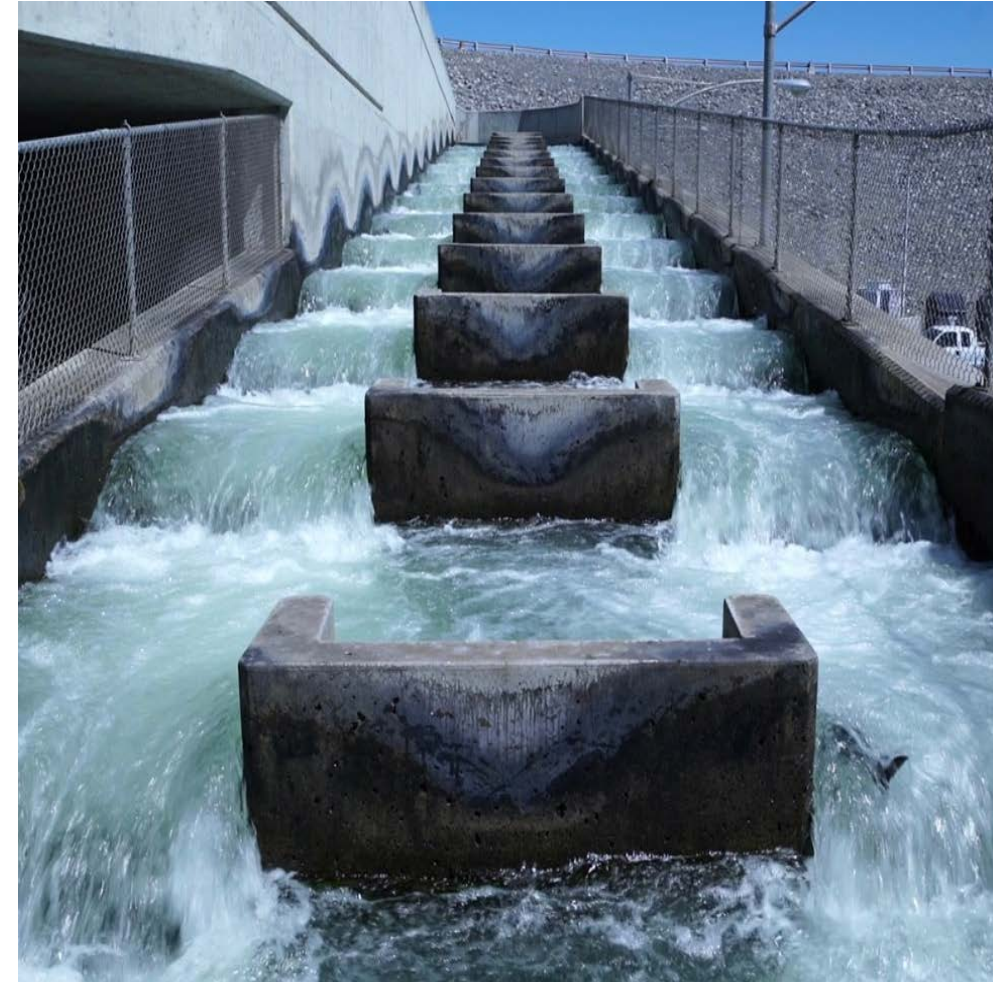
Individual Development Plans & Mentorship Program

2.

Succession Management within MyHR

3.

*Orange & Blue U* (Emergent Leadership Curriculum Development and Pilot)



**Questions?**

# Commission Report

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## Operational Excellence Quarterly Business Report

September 28, 2021

Senior Manager of Operational Excellence Daniel Blazquez



Powering our way of life.





# Operational Excellence Team

## OPEX Vision

Excellence in service and leadership as a high reliability organization

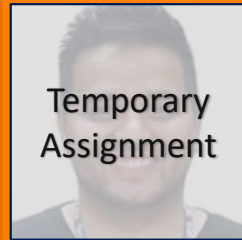
## OPEX Mission

To make Grant PUD the safest, most reliable, and efficient provider of energy and fiber on earth.

### Continuous Improvement



Daniel Blazquez  
OPEX Senior Manager



Temporary  
Assignment

Rey Pulido  
CI Manager

### Corrective Action



Robert Lougee  
CAP Manager

### Human Performance Improvement



Mark Beattie  
Project Spc. IX



Abel Sabedra  
Sr. Program Spc



Tyler O'Brion  
Sr. Safety  
Coordinator



Brad Martinez  
Sr. Program Spc  
Interim CI Mgr.



Cindi Harr  
Admin. Assistant



Danny Combs  
Program Spc.



Montague Meadows  
Lead Program Spc.

# Corrective Action Program (CAP)

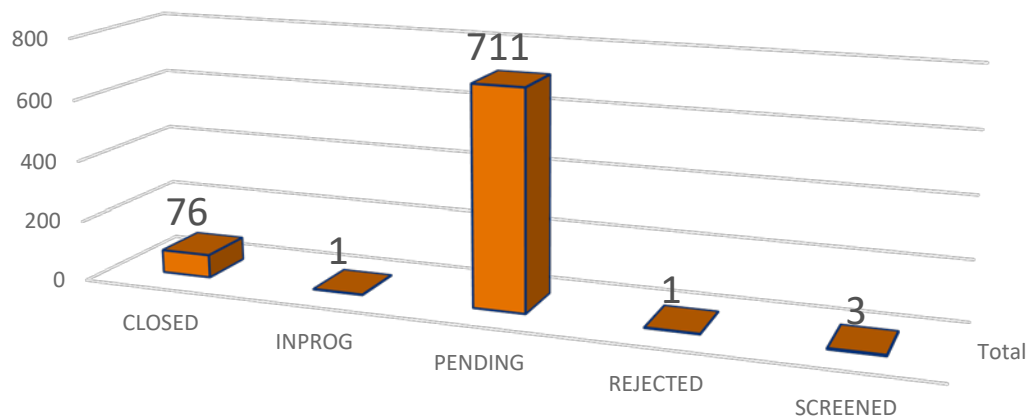


## Condition Reporting System is now operational

- Close Call reporting
- Injury and Incident reporting
- Safety Action Items
- Mobile Incidents

## Condition Reports

792 Count of Condition Reporting by Status



## Open Evaluations

- Receipt of Payment #12047
- COVID-19 Exposure #12585
- Security Contract Vehicle Accident #12261
- W-1 Broken Shear Pin #11274
- Tainter Gate Event #11116
- Rescue Vessel Event #10647





## In Work

- Uploading of historic safety data
- PowerBi reporting improvement





# Continuous Improvement (CI)







## ■ Closed

- District System Load Processes 
- Planning and Scheduling 
- Service Connection Agreement Process 
- WAN Planning and Scheduling 

## ■ On Hold

- SCA Work Order Request Process 
- Clearance Request Process 

## ■ Open

- Confined Space Standardization 
- Leadership Assessment 
- Fiber Workflow/ Staffing Process 
- W-1 Broken Shear Pin 
- 25-ton Bulkhead Crane Wheel Bearing Failure 
- Outage Reporting Process 

# Human Performance Improvement (HPI)

## Closed

### WAN Plant Maintenance Procedures

- Standardize procedures
- Increase unit availability
- Increase plant employee knowledge of complex maintenance operations

## On Hold

- NA

## Open

### FERC 12 - Dam Safety and Plant SOPs

- Standardize procedures
- Meet compliance requirements
- Improve safety at projects

### FME Program

- Improve reliability
- Increase unit availability
- Standardize practices and procedures

### Central Ephrata Sub Station Outage

- Improve system reliability
- Standardize practices and procedures
- Increase employee knowledge of complex switching operations



# OPEX

## Overview

### OPEX Integration

- Quarterly review of risk registry and risk reporting
- Quarterly review of CRS analytics
- Deep dive review of Internal Audit reports
- Providing focus areas that require support from CXO's
- Performance improvement training
- Safety Metrics Review Improvement Prioritization

### OPEX 2022

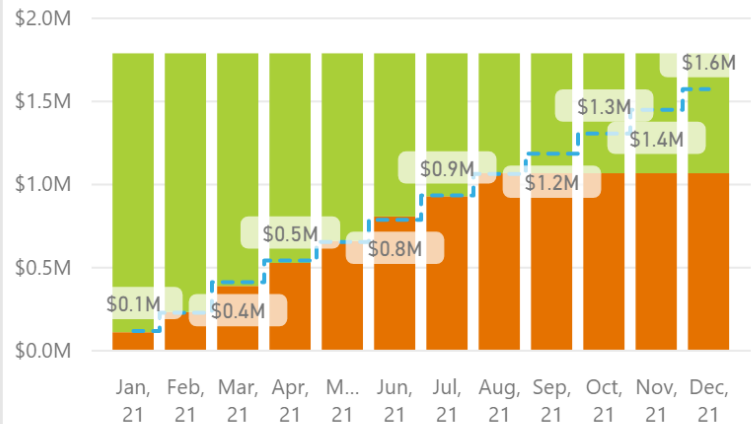
- Grant Standards
- CI, CAP, & HPI Training Paths
- OPEX Key Performance Indicators
- Grant Quality Assurance
- Initiatives and focus efforts

Operating Unit

EF - Operational Excellence

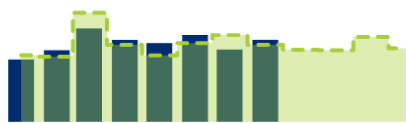
Capital Labor & Net Actuals YTD Vs. Year-End-Projections

● Net Actuals ● Capital Labor ● YEP Remaining ● Budget YTD



Gross Actuals Vs. Budget

\$1.1M +0.4%



Capital Labor Actuals Vs. Budget



Net Actuals Vs. Budget

\$1.1M +6.8%



O&M Budget vs Actuals (Including Cap Labor)

Cost Category Type/Cost Category	Budgeted	Actuals	Budget Var	Budget Var %	Consumed %
<b>Labor</b>	<b>\$888,925</b>	<b>\$1,037,222</b>	<b>\$148,296</b>	<b>16.7%</b>	<b>116.7%</b>
Salaries & Wages	\$564,269	\$657,807	\$93,538	16.6%	116.6%
Benefits	\$318,183	\$362,816	\$44,632	14.0%	114.0%
Other Labor	\$6,473	\$16,409	\$9,936	153.5%	253.5%
Overtime		\$190			
<b>Purchased Services</b>	<b>\$119,000</b>	<b>\$16,179</b>	<b>-\$102,821</b>	<b>-86.4%</b>	<b>13.6%</b>
<b>G&amp;A</b>	<b>\$47,976</b>	<b>\$8,484</b>	<b>-\$39,492</b>	<b>-82.3%</b>	<b>17.7%</b>
<b>IT</b>	<b>\$1,600</b>	<b>\$177</b>	<b>-\$1,423</b>	<b>-89.0%</b>	<b>11.0%</b>
<b>Operating Materials &amp; Equipment</b>	<b>\$540</b>	<b>\$15</b>	<b>-\$525</b>	<b>-97.2%</b>	<b>2.8%</b>
<b>Total</b>	<b>\$1,058,041</b>	<b>\$1,062,076</b>	<b>\$4,035</b>	<b>0.4%</b>	<b>100.4%</b>

# OPEX QBR v4 Aug2021

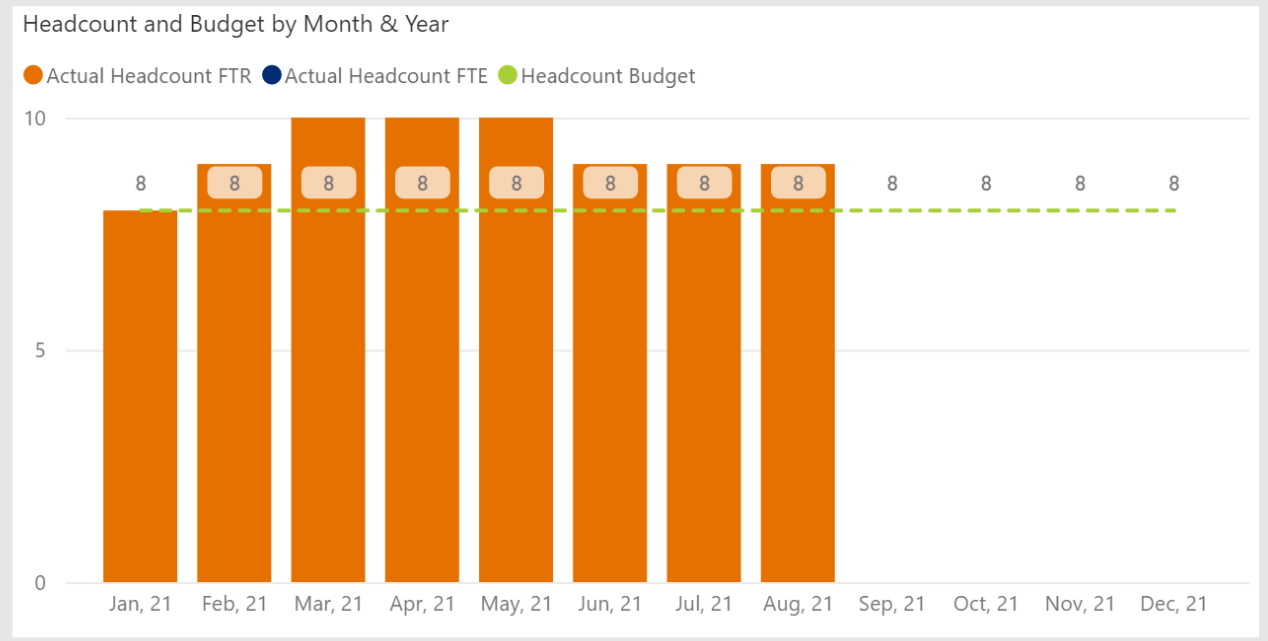
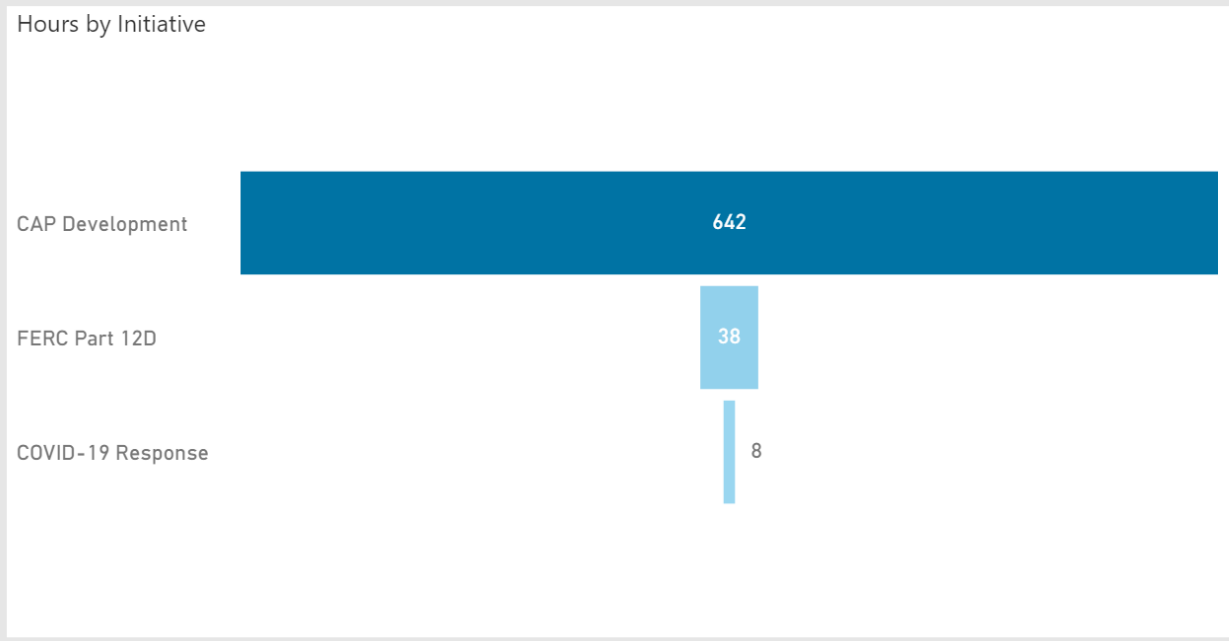
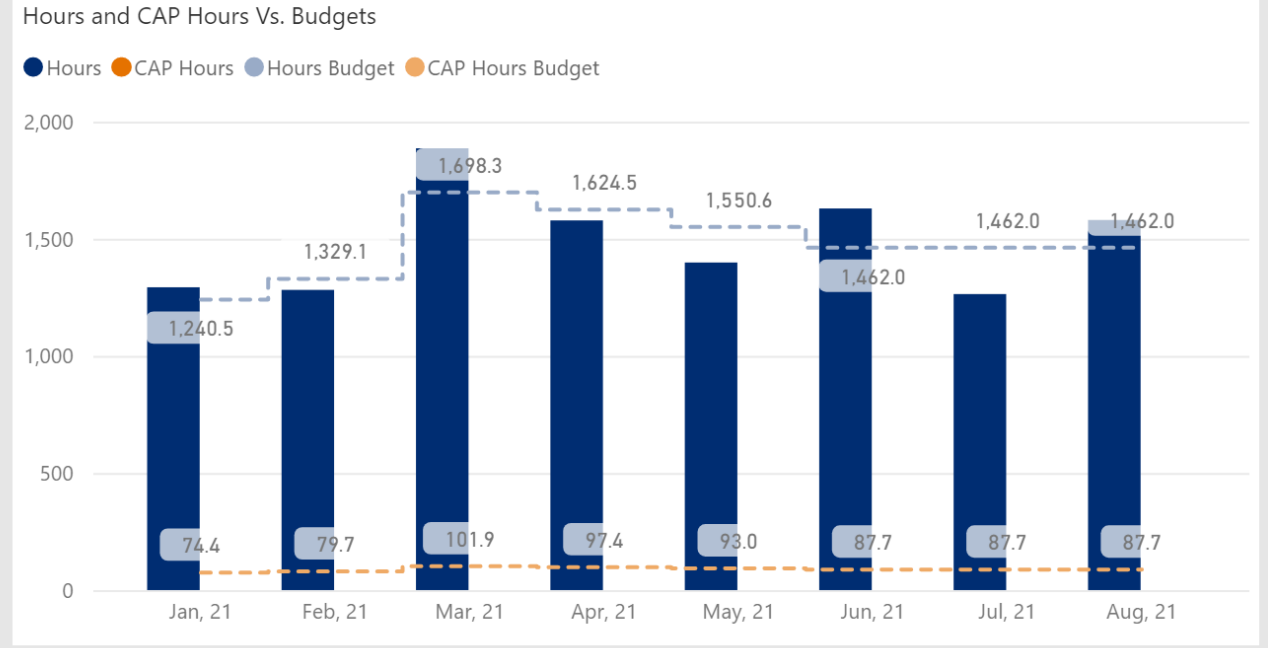
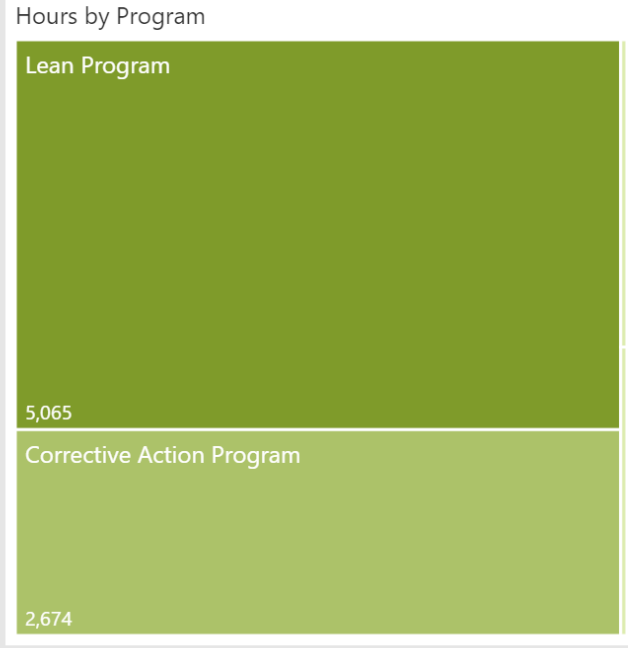
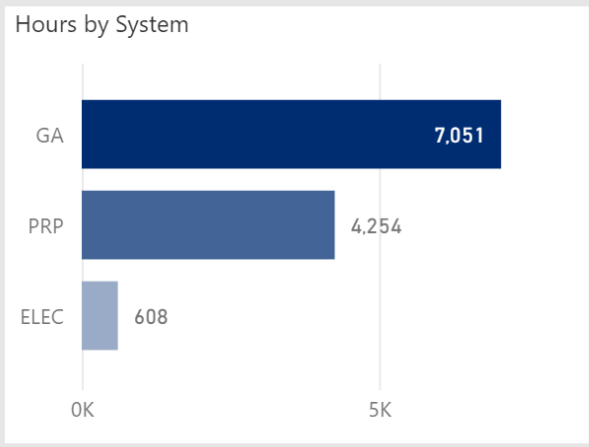


- Capital Labor is a subset of the Labor above

- Net Actuals vs Budget = Gross Actuals minus Capital Labor

Operating Unit

EF - Operational Excellence



# Thank You



Powering our way of life.





# PUBLIC POWER / INDUSTRY OUTREACH ACTIVITY REPORT

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Commission Presentation  
Sept. 28, 2021

Andrew Munro, Senior Manager  
External Affairs & Communications

Chuck Allen, Supervisor  
Public Affairs



Powering our way of life.

# Public Power/Industry Outreach Activity Report – Agenda:

- I. Vision and Goals
- II. Memberships
- III. Leadership
- IV. Recent Activities
- V. All-New Waterpower Tradeshow 2021!

01

**Vision & Goals**

**Trusted & Reliable Utility Leader**

# 2021 Goals

## External Affairs & Communications

### 1. Increase Revenue Opportunities

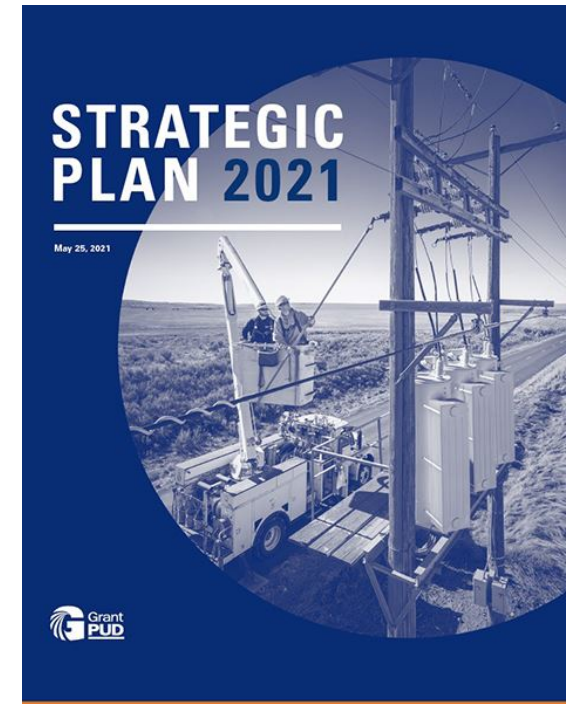
- \$50M for Fiber by end of 2021
- \$100M for PP/PD by end of 2021
- $\geq 65\%$  Fiber take rate by end of 2021

### 2. Top 5% Utility in Communications Excellence

- Develop “Bot” for [grantpud.org](http://grantpud.org) by Q4 – deferred to 2022.
- Develop customer engagement comms. plan by Q2 – deferred to 2022.
- Conduct customer satisfaction survey by Q4

### 3. Operational & Compliance Excellence

- Achieve balanced WA carbon policy (CETA)
- Maintain 100% compliance with PRA
- Implement Policy Mgt. Tool Districtwide



Operating Unit Goals align/support  
GCPUD Strategic Plan Objectives.

02

## Industry Memberships

**Unified Voice**

# Industry Memberships (Unified Voice)



03

**Industry Leadership**

**Powerful Voice**

# Industry Leadership (Powerful Voice)

Board of Directors – Tom Flint



President of Board of Directors – Chuck Allen



Environmental Task Force CEO Sponsor – Kevin Nordt



Board of Directors – Andrew Munro



Resource Adequacy Steering Committee – Rich Flanagan





# Industry Leadership (Powerful Voice)

Board Chair – Kevin Nordt



Executive Committee Vice Chair – Kevin Nordt



Board of Directors – Judy Wilson



Communications Committee – Ryan Holterhoff



Communications Committee – Chuck Allen




04

**Recent Activities**


**Industry Collaboration & Outreach**

# Public Power Week Campaign

Participated with hydro industry partners in social media campaign for National Hydropower Day on Aug. 24 by posting Two Dams video.

 **Grant PUD**  
Published by Chuck Allen · August 24 at 9:58 AM · 🌐

To celebrate National Hydropower Day, we're sharing our Two Dams video, which celebrates the construction of Priest Rapids and Wanapum dams. For more than 60 years, these dams have been producing clean, renewable hydropower for Grant PUD and beyond. [#HydroDay](#)



GRANTPUD.ORG

**Two Dams: The story of constructing Priest Rapids and Wanapum dams** [Learn More](#)

16,975 People Reached      1,987 Engagements      [Boost Again](#)

# Public Power Week Campaign

Working with Moses Lake Museum & Art Center for “Art of Dam Building” exhibit.

- Exhibit featuring photos from construction of Wanapum Dam opens on Oct. 8.
- Lecture on Oct. 8 by Chuck Allen to open exhibit.



# FWEE & NWAHA

- Collaborated to provide for hydro power teacher kits and training to science teachers throughout the Northwest.



PowerWheel

## Electricity Production for Secondary Students

Middle and High School  
Virtual Teacher Training

The curriculum acts as an introduction to learning about engineering design, alternative energy, or physical science concepts. The PowerWheel was designed to be a foundational tool for the instruction of energy and physics.

Students will learn how decisions are made while considering tradeoffs and stakeholders. To do this, they will explore which form of energy best meets the needs for Dakota Brown, a fictitious environmental engineer looking to relocate to a new state.

### Available to Teachers at No Cost

- \$200 kit with PowerWheel for classroom activity
- Google Classroom access to:
  - Curriculum with teacher notes via PowerPoint
  - Video tutorials
- 90-minute training with WA OSPI clock hours offered October 12 or 14: 4:00 – 5:30 PM

### Supplies Limited, Apply Now

- Sign up for training at [[insert PD Enroll link](#)]
- Distribution will be First Come, First Serve
- Kits will be distributed after participant attends training

### Questions?

Contact Bob Bauer (509) 661-4939  
[Robert.bauer@chelanpud.org](mailto:Robert.bauer@chelanpud.org)

### Quality Assurance

- Written by Mechelle Lalanne, STEM Educational Consultant and former North Central ESD Managing Director of Science Education
- Aligned with Next Generation Science Standards
- Reviewed and supported by power generation providers

### Science Standard Alignment

#### Middle School

MS-ETS1-1: [nextgenscience.org/pe/ms-ets1-1-engineering-design](https://www.nextgenscience.org/pe/ms-ets1-1-engineering-design)

MS-ETS1-2: [nextgenscience.org/pe/ms-ets1-2-engineering-design](https://www.nextgenscience.org/pe/ms-ets1-2-engineering-design)

MS-ETS1-3: [nextgenscience.org/pe/ms-ets1-3-engineering-design](https://www.nextgenscience.org/pe/ms-ets1-3-engineering-design)

#### High School

HS-ETS1-1: [nextgenscience.org/pe/hs-ets1-1-engineering-design](https://www.nextgenscience.org/pe/hs-ets1-1-engineering-design)

HS-ETS1-2: [nextgenscience.org/pe/hs-ets1-2-engineering-design](https://www.nextgenscience.org/pe/hs-ets1-2-engineering-design)

HS-ETS1-3: [nextgenscience.org/pe/hs-ets1-3-engineering-design](https://www.nextgenscience.org/pe/hs-ets1-3-engineering-design)

HS-ETS1-4: [nextgenscience.org/pe/hs-ets1-4-engineering-design](https://www.nextgenscience.org/pe/hs-ets1-4-engineering-design)

#### With the PowerWheel

HS-PS3-3: [nextgenscience.org/pe/hs-ps3-3-energy](https://www.nextgenscience.org/pe/hs-ps3-3-energy)

HS-PS2-5: <https://www.nextgenscience.org/pe/hs-ps2-5-motion-and-stability-forces-and->

Sponsored by



# Columbia River Treaty Power Group



## Highlights include:

- **Action alerts for Power Group Members.**
- **Defining list of engagement opportunities for key Power Group members.**
- **Website and other branding material updates for the power group.**
- **Press releases and future op-eds to regional media.**

05

**All-New Waterpower Tradeshow**  
**Clean Currents 2021**

# All-New Waterpower Tradeshow + Conference!



## INTRODUCING THE ALL-NEW WATERPOWER INDUSTRY EXPERIENCE

Clean Currents 2021 is the all-new, official waterpower tradeshow + conference of the National Hydropower Association—promoted by North American waterpower to benefit the industry.

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HOST UTILITY:  Georgia Power



# Industry Participants

JOIN THESE PARTICIPATING GENERATORS  
AT NHA'S CLEAN CURRENTS 2021





**Powering our way of life.**