



TACOMA WATER REORGANIZATION

JANUARY 22, 2020

SCOTT DEWHIRST

SDEWHIRST@CITYOFTACOMA.ORG

Quality

Supply

Distribution Operations

Distribution Engineering

Asset & Information Management

Finance & Analytics

Green River
Headworks &
Watershed O&M

Natural Resource
Management

Water Treatment &
Maintenance

Water Quality
Assurance

Regulatory
Compliance

Water Supply
Structure
Development &
Maintenance

Water Rights
Administration

Water Facility
Management

Enterprise Emergency
Preparedness &
Security

Distribution System
Operations &
Maintenance

New Service
Installation

Customer Service

Water Safety Program
Management

Distribution System
Planning

System Engineering

Construction
Management

Key Account
Management

Growth &
Development

Permitting

Technology Support

Strategic Asset
Management

GIS

System Support &
Administration

Strategy Development

Data Management

Financial Mgmt &
Planning

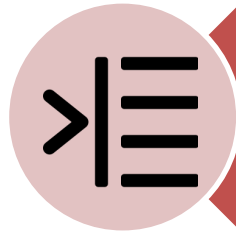
Reporting & Analysis

Budget & Rate
Development

Performance
Management

Program Leadership &
Support

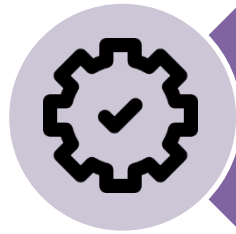
Enterprise Support
Services



Strategic Alignment



Strong Workforce



Increased Efficiency &
Effectiveness



Empowered Decision
Making

Source Water & Treatment Operations

Production and delivery of potable water into the transmission and distribution system while protecting source water and providing natural resource stewardship

Treatment of all source water to meet regulatory requirements, operational monitoring & reporting

Customer & Employee Experience

Facilitating the customer experience for new and existing customers, enterprise communications, education, and conservation activities

Supporting employees with water-wide personnel management support, payroll, records compliance & management, and SharePoint administration

Planning & Engineering

Providing technical support and planning for construction projects, procurement, installation, and operation

Asset management strategy, planning, and decision-making, including level of service

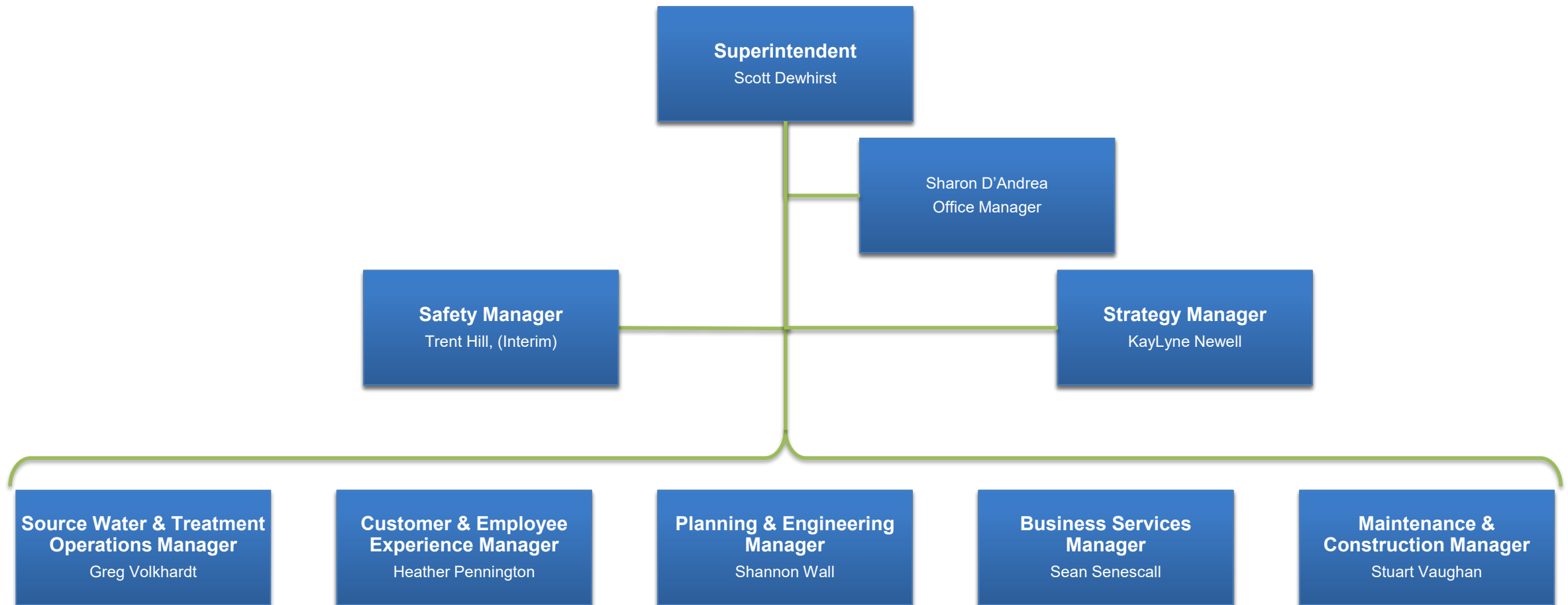
Business Services

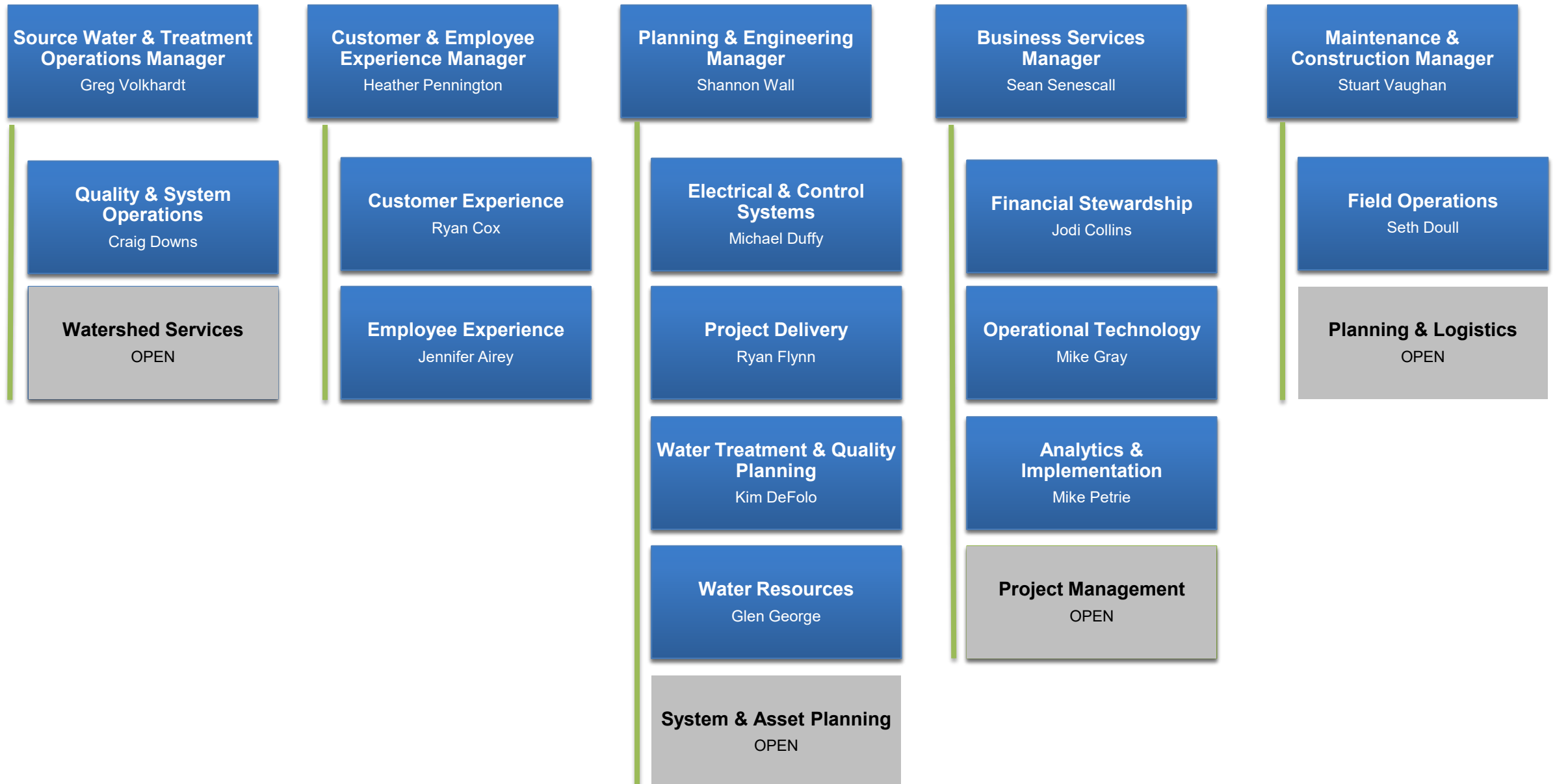
Delivering customer value through integrated, strategic capabilities in the domains of finance, operational technology, project and portfolio management, analytics, and risk

Maintenance & Construction

Maintain and repairing all parts of the Water System

Plan and create work packages to be completed by field crews. Track and reports on progress of Division work







Tacoma Public Utilities Emergency Management

Meet the Team



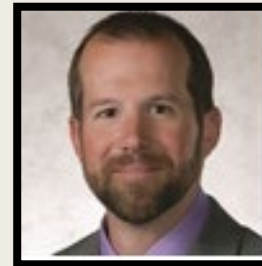
**Tacoma Public Utilities
Emergency Manager
Courtney Rose**
crose2@ci.Tacoma.wa.us



**Power Emergency Manager
Jayson Lelli**
jlelli@ci.Tacoma.wa.us



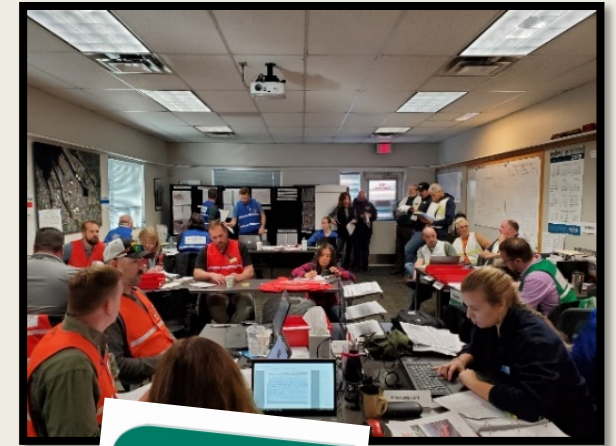
**Water Emergency Manager
Jeremy Kaiser**
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**Rail Emergency Manager
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What is Emergency Management

- Emergency management is the process of creating and implementing strategies and developing plans to prepare for and manage emergencies or disasters.
- At TPU, we do this by coordinating TPU resources, equipment and personnel as well as working with a host of outside agencies to effectively prepare for, respond to, and recover from natural and man-made disasters.



What is Emergency Response

- Emergency Response is utilizing the plans, procedures, equipment (includes personnel) and coordinating with partners (local, state, and federal) to minimize the impact of the emergency or disaster from a centrally located and familiar location (Emergency Operations Center)

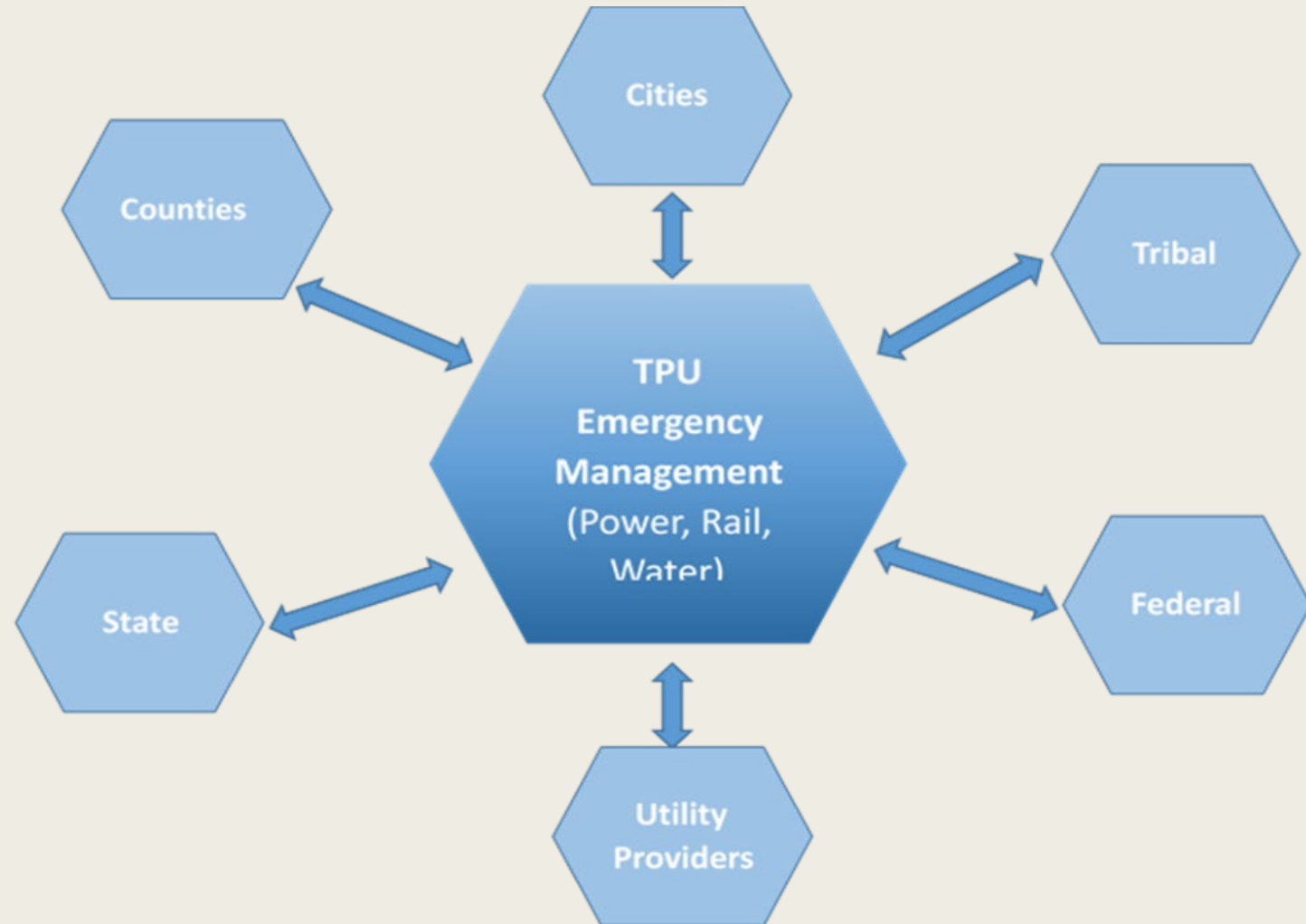


Potential Threats and Hazards

Naturally Occurring	Man-Made Incidents (unintentional/intentional)	
<ul style="list-style-type: none">• Severe Storms (winter, wind, and electrical)• Volcanic Hazards• Earthquakes/Tsunami• Mudslides/landslides• Fire• Flood	<ul style="list-style-type: none">• Active Shooter• Bomb threat (handwritten note, email, and phone call)• Civil Disturbance• Cyber Threat• Explosions• Hazardous Materials (spill/leak, white powder/unknown substance)• Medical Incidents	<ul style="list-style-type: none">• Power outage• Public health emergency (pandemic)• Suspicious item• Terrorist attack• Dam Failure• Pipelines• Transportation Accident

2019 Accomplishments

- Relationship Building



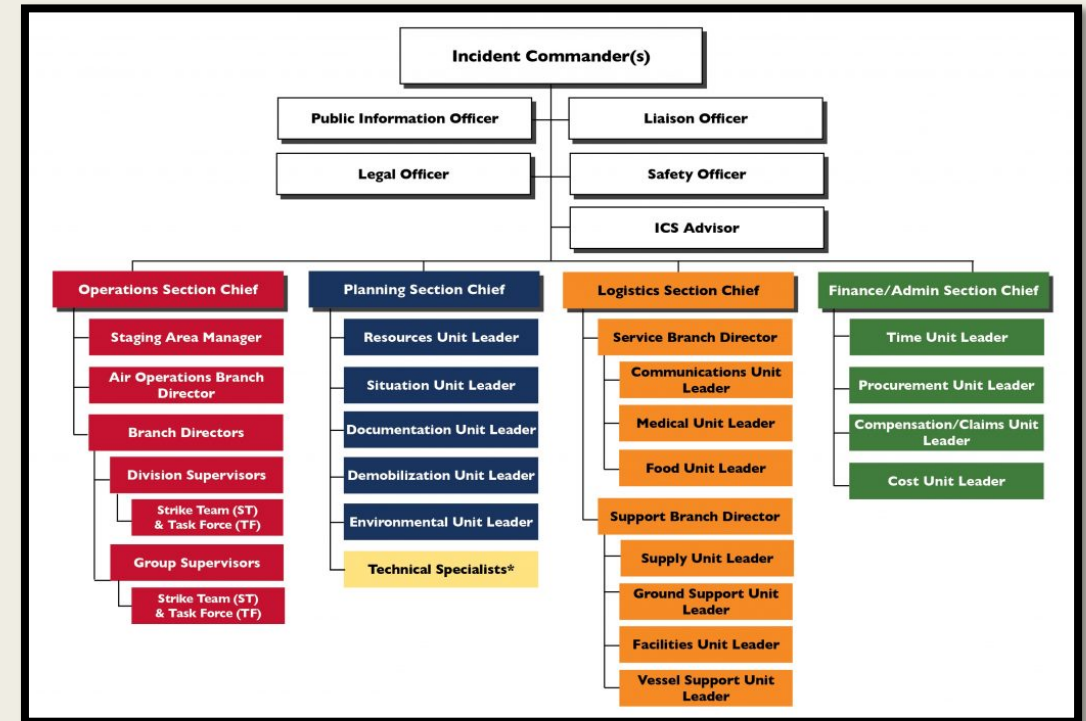
2019 Accomplishments

- Relationship Building
- Plan Development



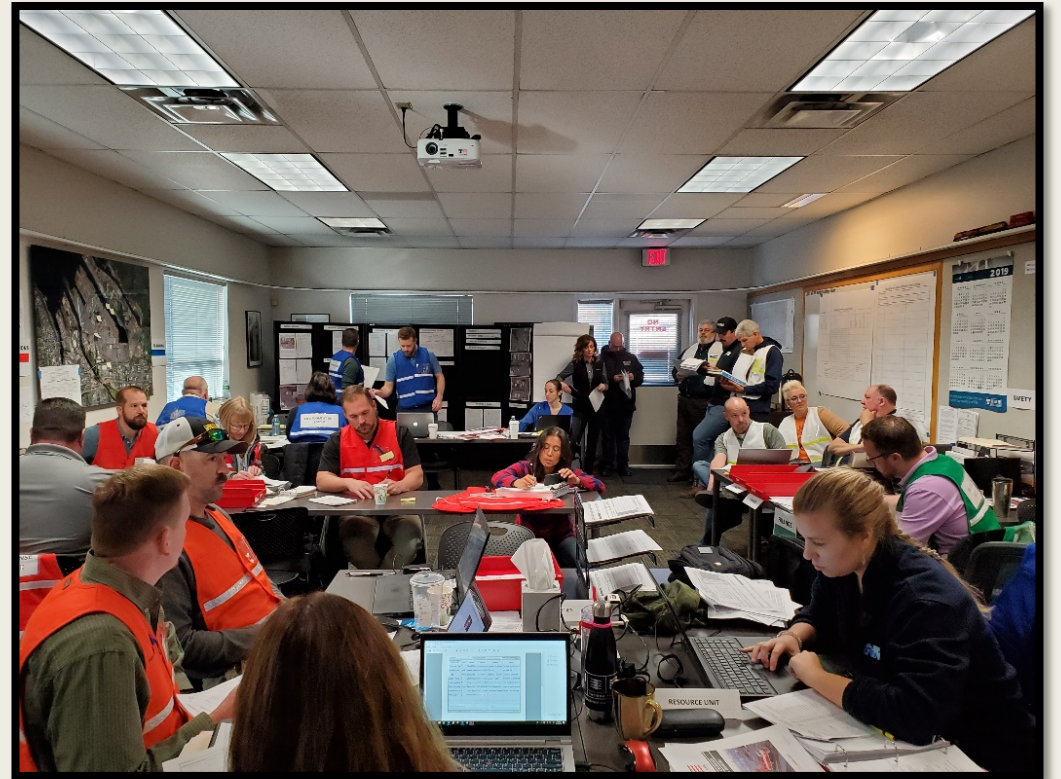
2019 Accomplishments

- Relationship Building
- Plan Development
- Training



2019 Accomplishments

- Relationship Building
- Plan Development
- Training
- Exercising



What We Do

Day to Day

- Create & Collaborate Plans (Emergency Response)
- Conduct Training & Exercises
- Provide assistance to our stakeholders/partners as a Subject Matter Expert and Liaison

Incidents/Disasters

- Coordinate the response and resources for the incident/disaster
- Provide assistance to our stakeholders/partners as a Subject Matter Expert and Liaison



TPU EMERGENCY MANAGEMENT 2020 GOALS



Goal 1: Planning

Strengthen the Emergency Management Program including integration of TPU-wide plans and alignment with national planning standards/guidelines.

- Continuity of Operations Plan (COOP)
- Finalize the COOP
- Develop 3 year Training and Exercise Plan (TEP)
- Support all planning efforts with Water, Rail, Power and partnering agencies as Subject Matter Experts

Goal 2: Training and Exercise

Improve the emergency management capabilities of TPU personnel.

- Standardize a training and exercise program for personnel
- Support all exercise efforts with Water, Rail, Power, and partnering agencies as Subject Matter Experts.

Goal 3: Education and Outreach

Educate and invest in our personnel to foster resiliency at home and at work.

- Develop an outreach plan with TPU's Public Affairs and Communications
- Increase engagement with all TPU personnel at all locations
- Alignment with PTU Strategic Directive: Equity and Inclusion

Goal 4: Partnerships

Build and expand partnerships internally and externally to TPU. These partnerships include: utility providers and customers, private sector, community-based organizations, regional and federal partners.

- Alignment with TPU Strategic Directive: Stakeholder Engagement
- Support partners with providing subject matter experts for committees, boards, planning efforts, training and exercises.
- Clarify roles and opportunities in regards to emergency management programs.
- Coordinate with internal and external partners to maximize available resources

Goal 5: Response and Coordination

Improve the capabilities of staff to respond and coordinate during an incident/event.

- Provide a dedicated space for response and coordination during an incident/event
- Co-location of Emergency Management Staff
- Provide TPU liaison to any event/incident upon request
- Explore options for emergency food supply for personnel during an incident/event

Goal 6: Emergency Management Team

Build the Emergency Management Team

- Advertise position for TPU Emergency Management
- Develop a work plan

Questions



Tacoma Public Utilities Emergency Management 2020 Strategic Plan



Courtney Rose

TPU Emergency Manager

Tacoma Public Utilities Executive Summary

It is my privilege as Tacoma Public Utility's Emergency Manager to share with you our 2020 Strategic Plan. This document is intended to serve as a guide for our agency. Tacoma Public Utilities emergency management is currently in its infancy which provides us a great opportunity to build a program that is a leader in the industry.

TPU provides a unique opportunity for practicing emergency management. The utility has the potential to experience a wide range of natural, technological, and man-made hazards that will challenge us and require the program to be creative in its approach, coordinate with our partners, stakeholders, and customers to solve the problem. We are fortunate that the leadership of TPU and City of Tacoma General Government recognize the importance of a robust emergency management program.

Creating a culture of preparedness is a key component to our mission, and we know this can only be achieved through collaboration with our partners and support from our staff and leadership. We will work tirelessly to strengthen our partnerships while enhancing our outreach efforts. The development of a mutual training and exercise program based on the needs of our emergency response partners will ensure that we maintain working relationships with our partners and stakeholders while enhancing their knowledge, skills, and abilities to increase our resiliency.

Planning is another key component of our emergency management program; therefore we have to put a high value on planning and its supporting components. We plan to focus on the TPU as a whole and integration of plans between departments while supporting our regional partner plans.

All the efforts mean nothing if we cannot execute our plans through effective response and coordination. One of the most important undertakings is the goal to strengthen our response capabilities and building our Incident Command Team. The true measure of program success will be our response when incident or disaster strikes. Enhancing these capabilities will be building our Agency Coordination Center.

This plan represents our commitment to putting ideas into action that will improve Tacoma Public Utility as a whole and increase our disaster readiness and resiliency.

Current Accomplishments for 2019

- Relationships Built
 - TPU Power, Rail, and Water
 - City of Tacoma Emergency Management
 - Pierce County Emergency Management
 - Puyallup Tribe
 - Port of Tacoma
 - WA Department of Commerce Energy Emergency Management Director
 - WA Emergency Management Division
 - Department of Homeland Security
- Projects
 - WA Emergency Fueling Plan (we are one of the first utilities to participate)-ongoing
 - Continuity of Operations Plan overhaul to align with industry standards and integration of all TPU as a whole-ongoing
 - Communication Protocol for personnel during events and disasters-ongoing
 - Building a training plans for all Incident Command System (ICS positions)-ongoing
 - Creation of Situation Report to be shared internally to TPU and to external partners during power outages-Complete
 - The Department of Homeland Security has selected TPU as the pilot for the Multi-Asset and System Assessment (MASA). The assessment will collect data at the enterprise and asset levels and provides a ranked list of assets based on criticality. Based on the outcome of the assessment options will be provided for any discovered vulnerabilities.
 - October 31, 2019-Annual Oil Spill Contingency Functional Exercise
 - November 13, 2019-conducted Grid Exercise Tabletop in cooperation of the North American Reliability Corporation (NERC) exercise.

Program Overview

Emergency Management Team

Tacoma Public Utilities Emergency Management is currently comprised of three emergency managers.

	TPU Emergency Manager- Courtney Rose		Water Emergency Manager- Jeremy Kaiser
	Power Emergency Manager- Jayson Lelli		Rail Emergency Manager- Kyle Kellem

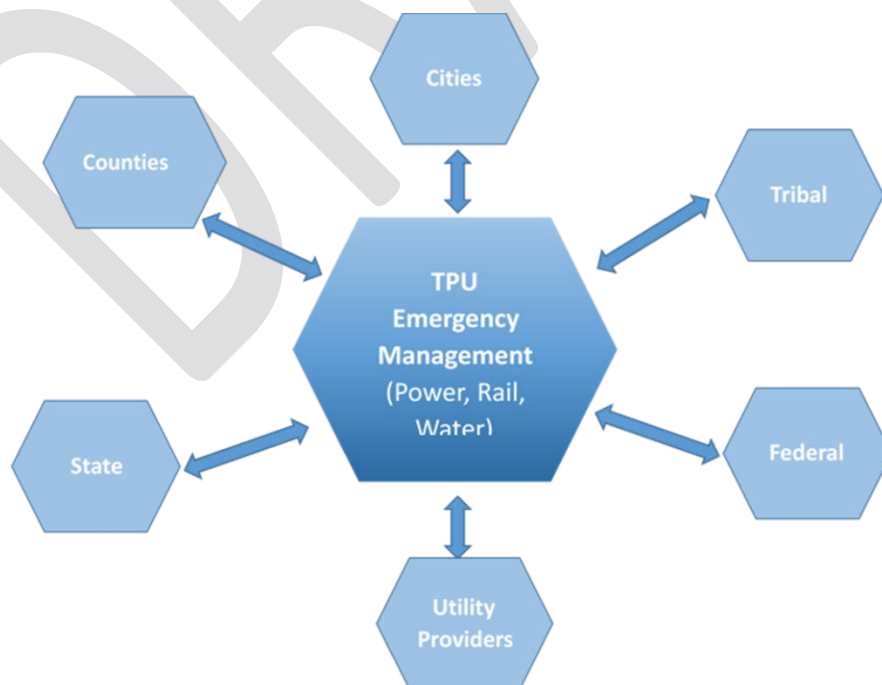
Primary Functions

Tacoma Public Utilities Emergency Management support 5 primary functions:

- Planning
- Training
- Exercise
- Response and Coordination to incidents/event
- Liaison to external response agencies

Partnerships

Building and enhancing resiliency requires the combined efforts of all Tacoma Public Utilities departments, Tacoma Public Utilities Emergency Management, and external stakeholders. An Example of our stakeholders are represented below:



Introduction

Purpose

The purpose of the Strategic Plan is to identify the direction and priorities of Tacoma Public Utilities Emergency Management and to establish clear, actionable goals which promote resiliency within the utility and jurisdictions it serves.

Mission Statement

To develop a TPU-wide comprehensive emergency management program in partnership with all TPU divisions (water, rail, and power), jurisdictions and stakeholders in order to protect lives and property, and safeguard the environment.

Vision

- Create a disaster resilient utility
- Educate personnel regarding their role in emergency preparedness and response efforts/roles, both at work and at home.
- Conduct training and exercises to build and test TPU's plans, response and recovery capabilities and to identify areas for improvement
- Emergencies are managed in accordance with National Incident Management System/Incident Command System (NIMS/ICS) and governing regulatory standards
- Monitor incidents (TPU, local, regional, and national) incidents for their potential impacts on TPU and customers in order to provide decision makers with vital information and warning
- Reduce the harmful impact of incidents/disasters

Core Values

- Community
 - To engage with our community partners through training, education, outreach, and inclusion in the emergency management process.
 - To cultivate strong engagement and build trust with all stakeholders and community partners
- Leadership
 - To be a leader in utility emergency management and drive the field of emergency management forward.
- Integrity
 - To be transparent in our workings with our partners and community members
 - To hold ourselves and each other accountable to the highest of standard of ethical behavior and organizational excellence in all that we do.
 - To be responsible fiscal stewards with our available resources
- Collaboration
 - To work cohesively with our partners/stakeholders throughout the entire emergency management process
- Professionalism
 - To appear, speak, and interact with others in a professional manner
 - To invest in a skilled workforce through training and professional development
- Innovation

- To be proactive in seeking opportunities to move the utility and emergency management field forward
- To always look for ways to improve upon the services we offer and ensuring that we are providing the highest quality of services

DRAFT

Goals and Objectives

Goal 1: Planning

Strengthen the Emergency Management Program including integration of TPU-wide plans and alignment with national planning standards/guidelines.

- 1.1: Continuity of Operations Plan
 - 1.1.2: Employees Communication Protocol (also supports TPU Goal 3)
 - 1.1.2.1: Personnel Accountability Plan
 - 1.1.2.1: Personnel Notification Plan
- 1.2: Finalize the COOP
 - 1.2.1: Signatory acceptance by all partners/stakeholders
 - 1.2.2: Present the COOP to personnel with emphasis on their roles and responsibilities
- 1.3: Develop and implement 3 year Training and Exercise Plan (in coordination with COT EM)
- 1.4: Support all planning efforts with Water, Rail, Power, and partnering agencies as Subject Matter Experts
 - 1.4.1: Water Emergency Operations Plan
 - 1.4.2: Transmission and Distribution Emergency Response Plan
 - 1.4.3: Generation Emergency Action Plan
 - 1.4.4: Washington State Fuel Plan

Goal 2: Training and Exercise

Improve the emergency management capabilities of TPU personnel.

- 2.1: Standardize a training and exercise program for personnel (in coordination with COT EM)
 - 2.1.1: Incident Command Training
 - All Staff: 100, 200, and 700
 - Section Chiefs and Deputies: 100, 200, 300, 400, 700, & 800
 - Incident Command Forms training
 - 2.1.2: Conduct exercises with Water, Power, Rail, and stakeholders
- 2.2: Support all exercise efforts with Water, Rail, Power, and partnering agencies as Subject Matter Experts
 - 2.2.1: Generation Exercises:
 - 2.2.2: Wynoochee Functional Exercise
 - 2.2.3: Cowlitz & Cushman Siren Test
 - 2.2.4: Cowlitz, Cushman, and Nisqually Notification Drill
 - 2.2.5: Rail Oil Spill Worst Case Functional Exercise
 - 2.2.6: Complex Coordinated Terrorist Attack (Pierce County CCTA grant)
 - 2.2.7: Cybersecurity Exercise

Goal 3: Education and Outreach

Educate and invest in our personnel to foster resiliency at home and at work.

- 3.1: Develop an outreach plan with TPU's Public Affairs and Communications
- 3.2: Increase engagement with all TPU personnel and at all locations
 - 3.2.1: New Employee Orientation presentations
- 3.3: Alignment with TPU Strategic Directive: Equity and Inclusion

Goal 4: Partnerships

Build and expand partnerships internally and externally to TPU. These partnerships include: utility providers and customers, private sector, community based organizations; regional and federal partners.

- 4.1: Alignment with TPU Strategic Directive: Stakeholder Engagement
- 4.2: Support partners with providing subject matter experts for committees, boards, planning efforts, training and exercises.
- 4.3: Clarify roles and opportunities in regards to emergency management programs.
- 4.4: Coordinate with internal and external partners to maximize available resources

Goal 5: Response and Coordination

Improve the capabilities of staff to respond and coordinate during an incident/event

- 5.1: Provide a dedicated space for response and coordination during an incident/event
 - 5.1.1: Select ACC location on TPU campus
 - 5.1.2: Budget for 2021 to build Agency Coordination Center and supply with equipment
 - 5.1.3: Provide adequate space for additional supporting agencies
- 5.2: Co-location of Emergency Management Staff
- 5.4: Provide TPU liaison to any event/incident upon request
- 5.5: Explore options for emergency food supply for personnel during an incident/event

Goal 6: Emergency Management Team

Build the Emergency Management team

6.1: Advertise position for TPU Emergency Management

6.2: Develop a work plan

6.2.1: Plan Management

6.2.2: Training and Coordination Tracking

6.2.3: Staff Outreach

Acronyms

ACRONYM	TERM
CCTA	Complex Coordinated Terrorist Attack
COT	City of Tacoma
EM	Emergency Management
ICS	Incident Command System
NIMS	National Incident Management System
TPU	Tacoma Public Utilities

Tacoma Public Utilities Emergency Management 2020 Strategic Plan

Mission:

To develop a TPU-wide comprehensive emergency management program in partnership with all TPU divisions (water, rail, and power), jurisdictions and stakeholders in order to protect lives and property, and safeguard the environment



Core Values:
Community



Leadership



Integrity



Collaboration



Professionalism



Innovation

**Our Vision: To
create a disaster
resilient utility**

Goal 1: Planning

- Strengthen the Emergency Management Program including integration of TPU-wide plans and alignment with national planning standards/guidelines.

Goal 2: Training & Exercise

- Improve the Emergency Management capabilities of TPU personnel.

Goal 3: Education & Outreach

- Educate and invest in our personnel to foster resiliency at home and at work.

Goal 4: Partnerships

- Build and expand partnerships internally and externally to TPU. These partnerships include: utility providers and customers, private sector, community-based organizations, regional and federal partners.

Goal 5: Response & Coordination

- Improve the capabilities of personnel to respond and coordinate during an incident/event.

Goal 6: Emergency Management Team

- Build Emergency Management Team Capabilities

Tacoma Power

Power Supply Update on Hydro Conditions

Todd Lloyd

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Assistant Power Manager, Resource Operations & Trading

January 22, 2020



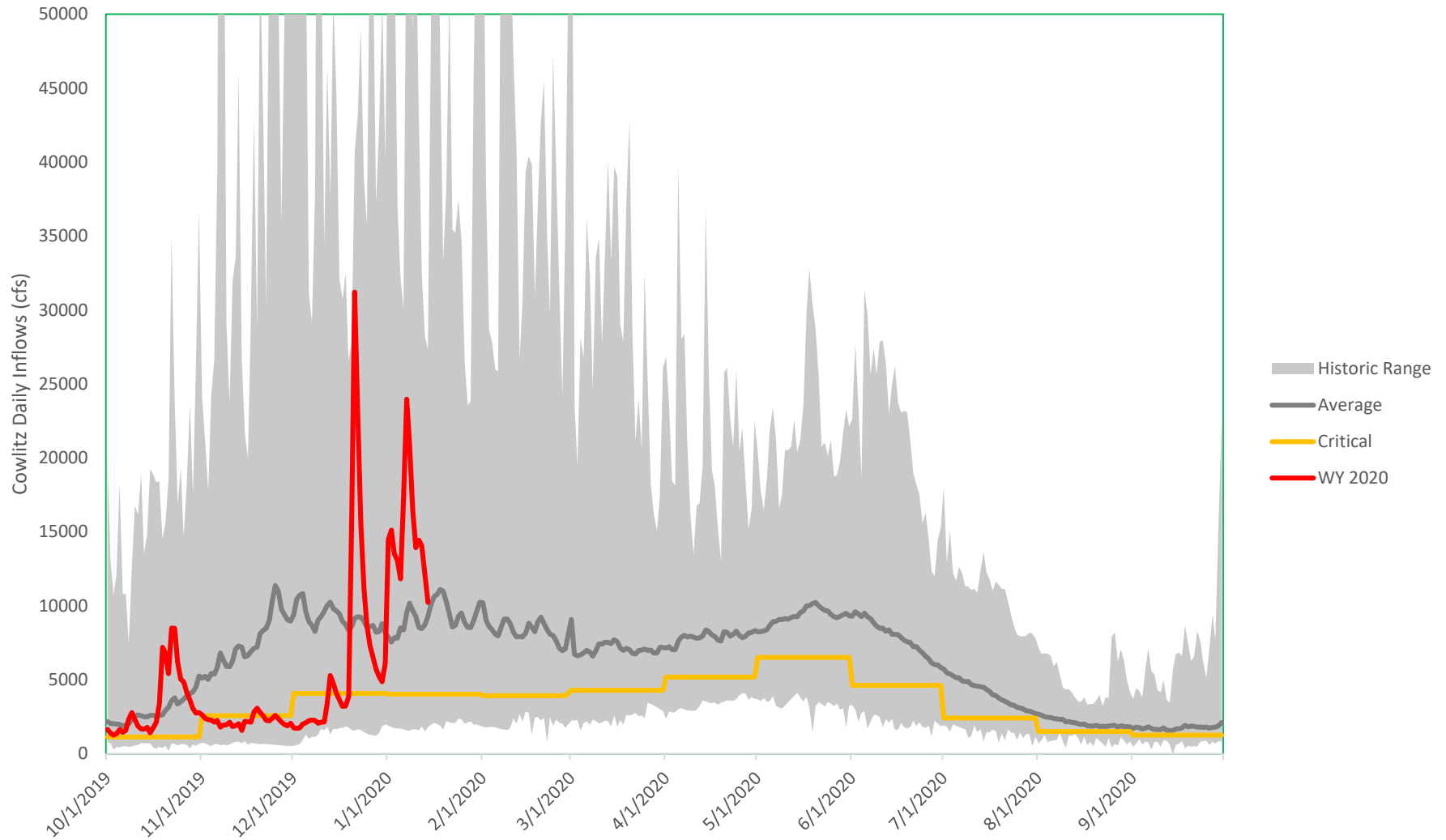
Hydro Conditions



Hydro Conditions

Graph 1: Daily Cowlitz Inflows Water Year 2020

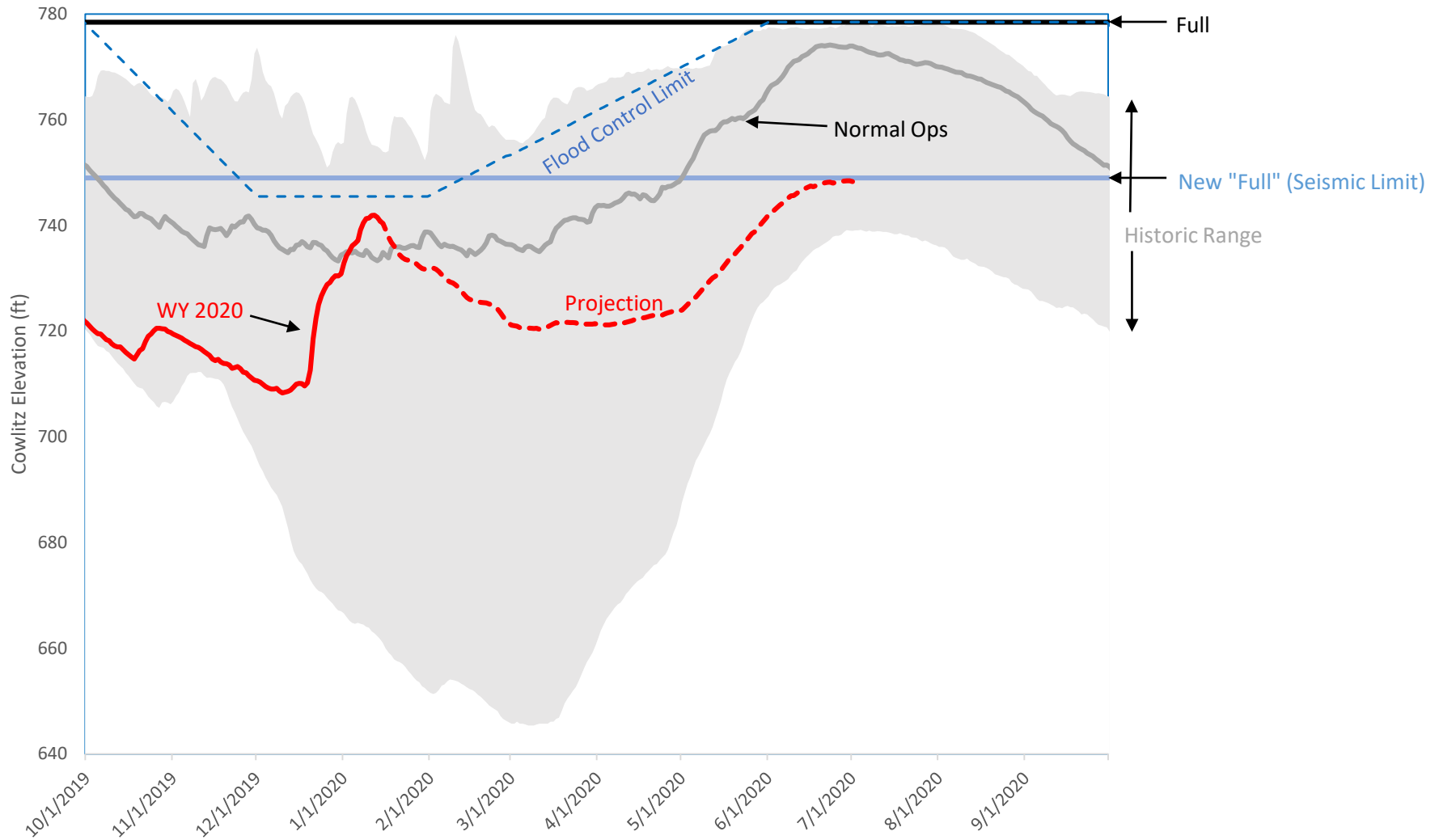
(Cowlitz Inflows, Water Year 1950 – 2019)



Hydro Conditions

Graph 2: Cowlitz Reached Normal Levels During December Storm

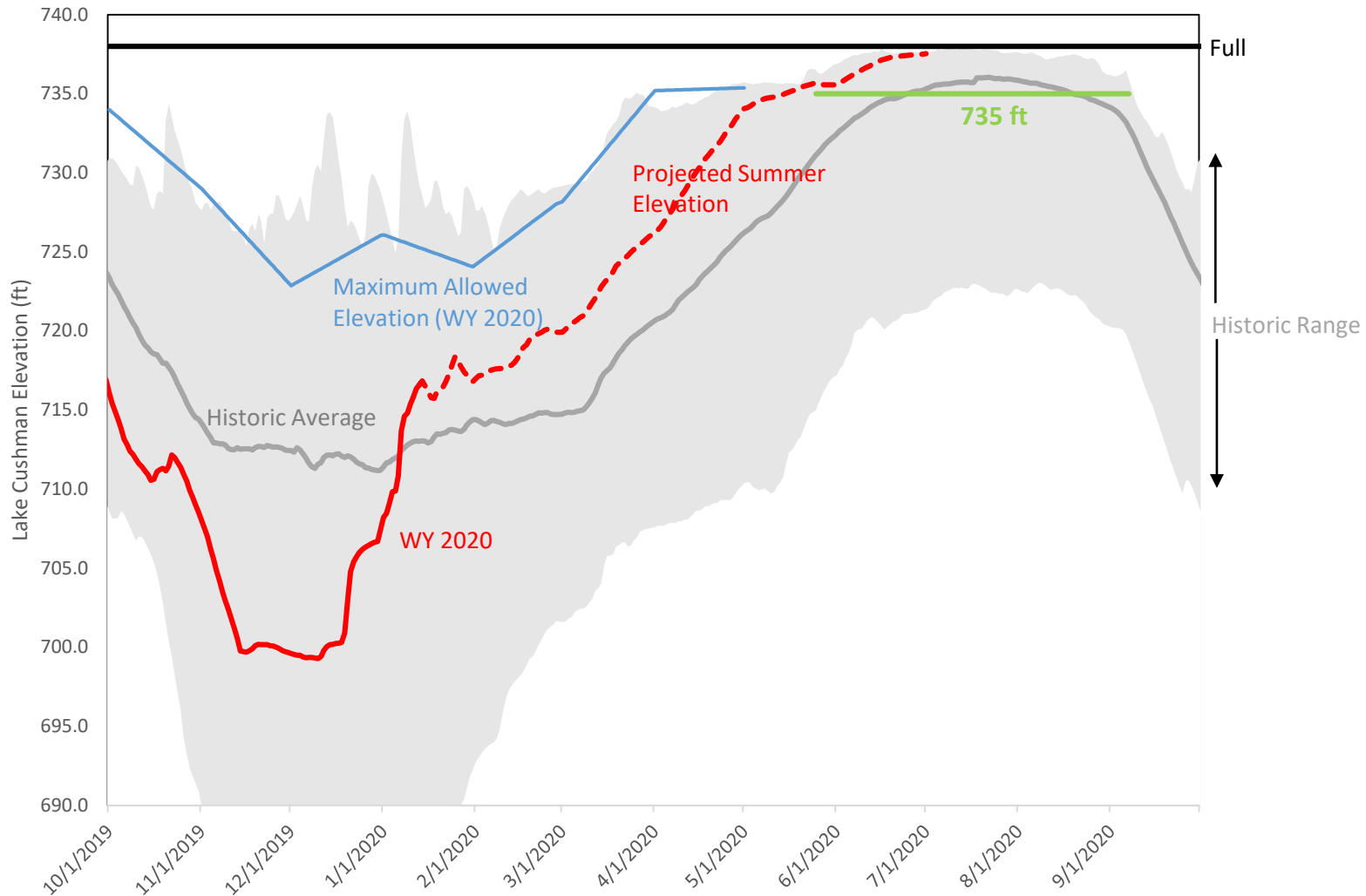
(Cowlitz Elevation, Current vs. Historic)



Hydro Conditions

Graph 3: Lake Cushman Reached Normal Levels in Early January

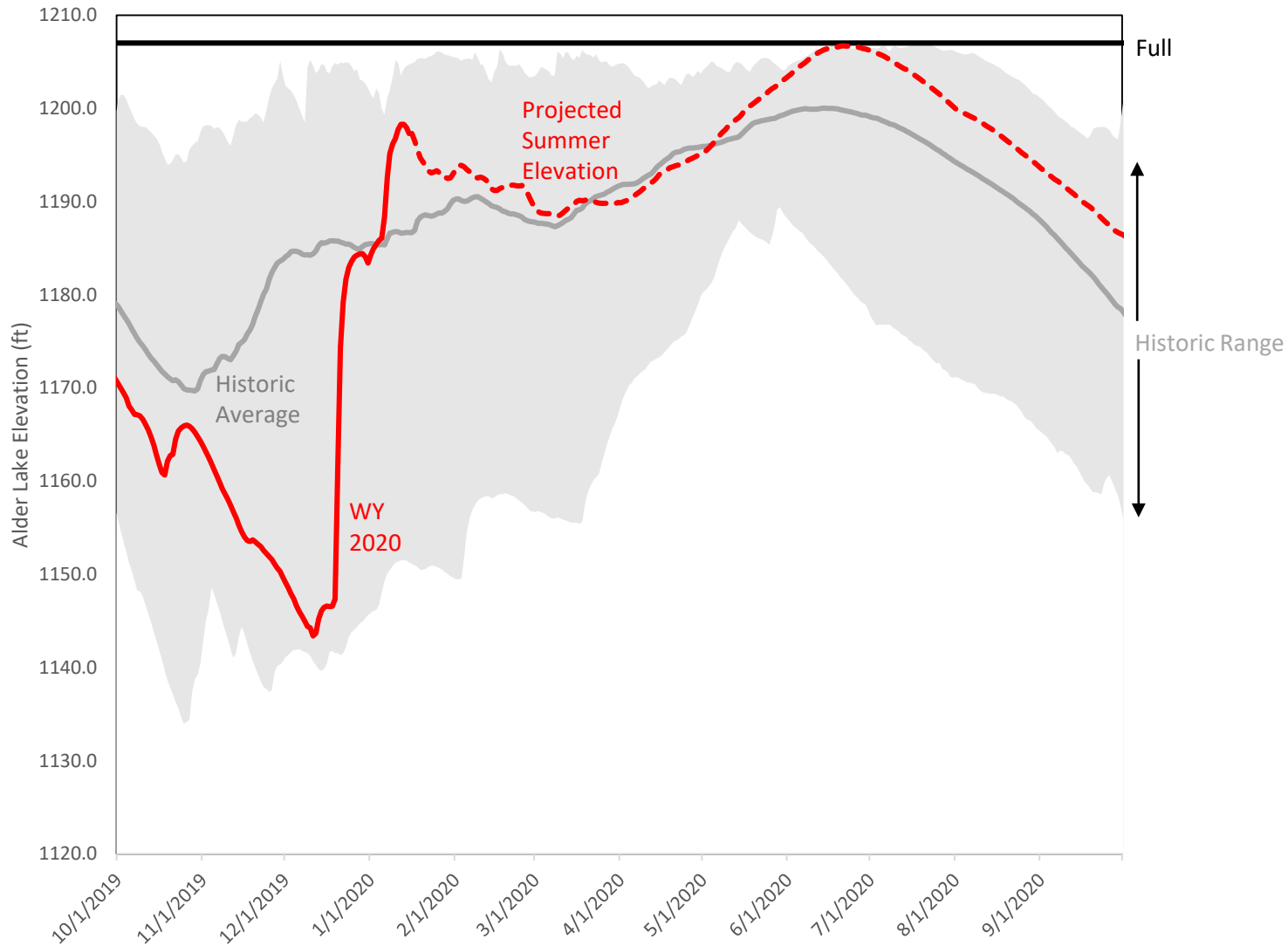
(Cushman Elevation, Current vs. Historic)



Hydro Conditions

Graph 4: Alder Lake Filled 55 ft From Late December to Early January

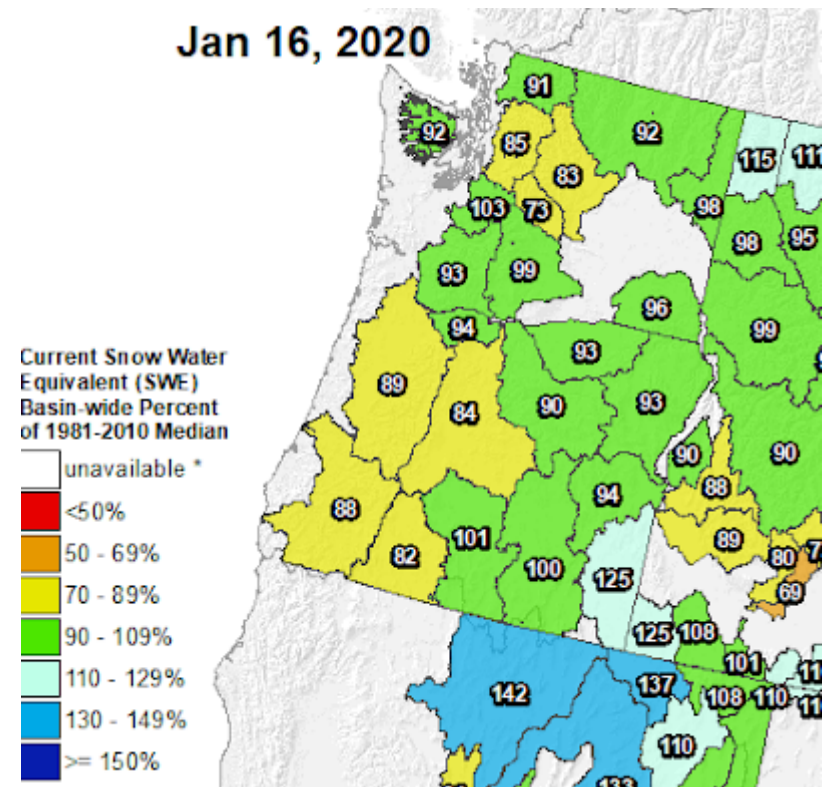
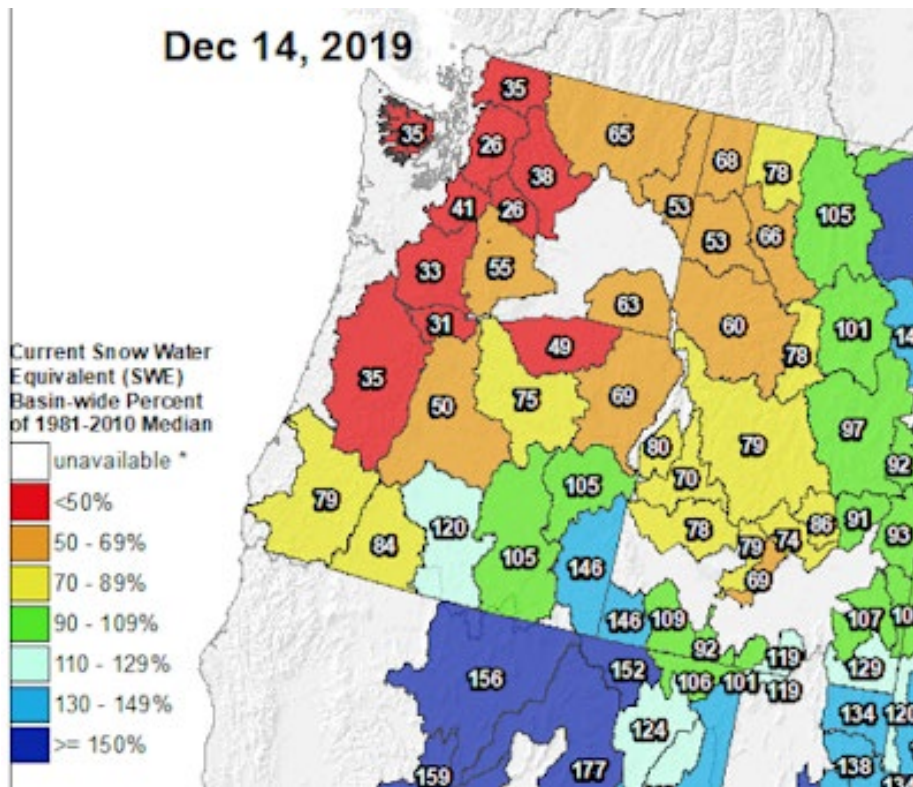
(Alder Elevation, Current vs. Historic)



Hydro Conditions

Graph 5: Snowpack Recovering

(Regional Snowpack Percent of Average)



Wholesale Net Revenues



Wholesale Net Revenues

Graph 6: 2019 Net Wholesale Revenues \$27M Below Budget

(Cumulative Actual vs. Budget Wholesale Net Revenues, 2019-2020)

