

# Electrical Quarterly Load Update



*January 7, 2019*

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# Today's Agenda

- New Large Retail Loads
- Updated Load Forecast
- Substation & Infrastructure Planning
- Outreach & Planning Efforts



*We are continuing to see steady growth  
in new construction throughout the County*



*Photo: Chelan County Port District - Cashmere*



Photo: Conrad Rose Mansion, Wenatchee

Trends in re-purposing of existing properties





During 2018 we connected over 1,000 electrical Services – primarily residential

2019 projections show continuation of high numbers in residential connection



# Residential "Net" Annual Service Additions

(Rolling 12)



# Active Customer Projects:

Memory Care Red Apple Rd- Wenatchee	2018	0.5 MW
Computer/ASIC Repair – Malaga	2018	0.25 MW
Other Cryptocurrency- Wenatchee	2019	0.2 MW
Cryptocurrency Expansion- Cashmere (Contracted)	2019	2.0 MW
84 unit apartment, - Red Apple Rd Wenatchee	2019	0.5 MW
311 unit apartments, -Leavenworth & Wenatchee	2019	0.9 MW
Port District Mill property - Cashmere	2019	1.5 MW
Icicle Brewery – Leavenworth	2019	0.3 MW
Slide Waters Ph. 1 expansion – Chelan	2019	1.7 MW
Conrad Rose Mansion Restoration – Wenatchee	2019	0.3 MW
Hilton Hotel - WallaWalla St –Wenatchee	2019	0.5 MW
Comfort Suites Hotel – Wenatchee – Olds Station	2019	0.4 MW
Fruit Storage – Chelan	2019	2.0 MW
Conf Health Parking Garage – Wenatchee	2019-2020	0.15 MW
Diamond Foundry – North Wenatchee	2019-2020	7.0 MW+
Residential Subdivisions, County wide	2019-2020	(700+ Meters)
Mission Ridge Ph.1 - Squilchuck	2020-2021	1.5 MW

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~ 25 MW

# Electric requests by area

( 3 to 5 year view )

**Leavenworth area:**

Commercial	~ 1.0 MW
Residential Multi complex	~ 1.0 MW
Housing Developments	~ 0.35 MW
Recreation	~ 0.20 MW
Restaurant/Brewery	~ 0.30 MW

**2.85 MW**

**Chelan area:**

Recreation	~ 1.5 MW
Commercial/Ag.	~ 5.0 MW
Residential Developments	~ 3.0 MW

**9.5 MW**

**Cashmere area:**

HDL-Mining (previously approved)	~ 2.0 MW
Commercial	~ 1.5 MW

**3.5 MW**

**Entiat area:**

Residential	~ .10 MW
Commercial	~ .25 MW

**0.35 MW**

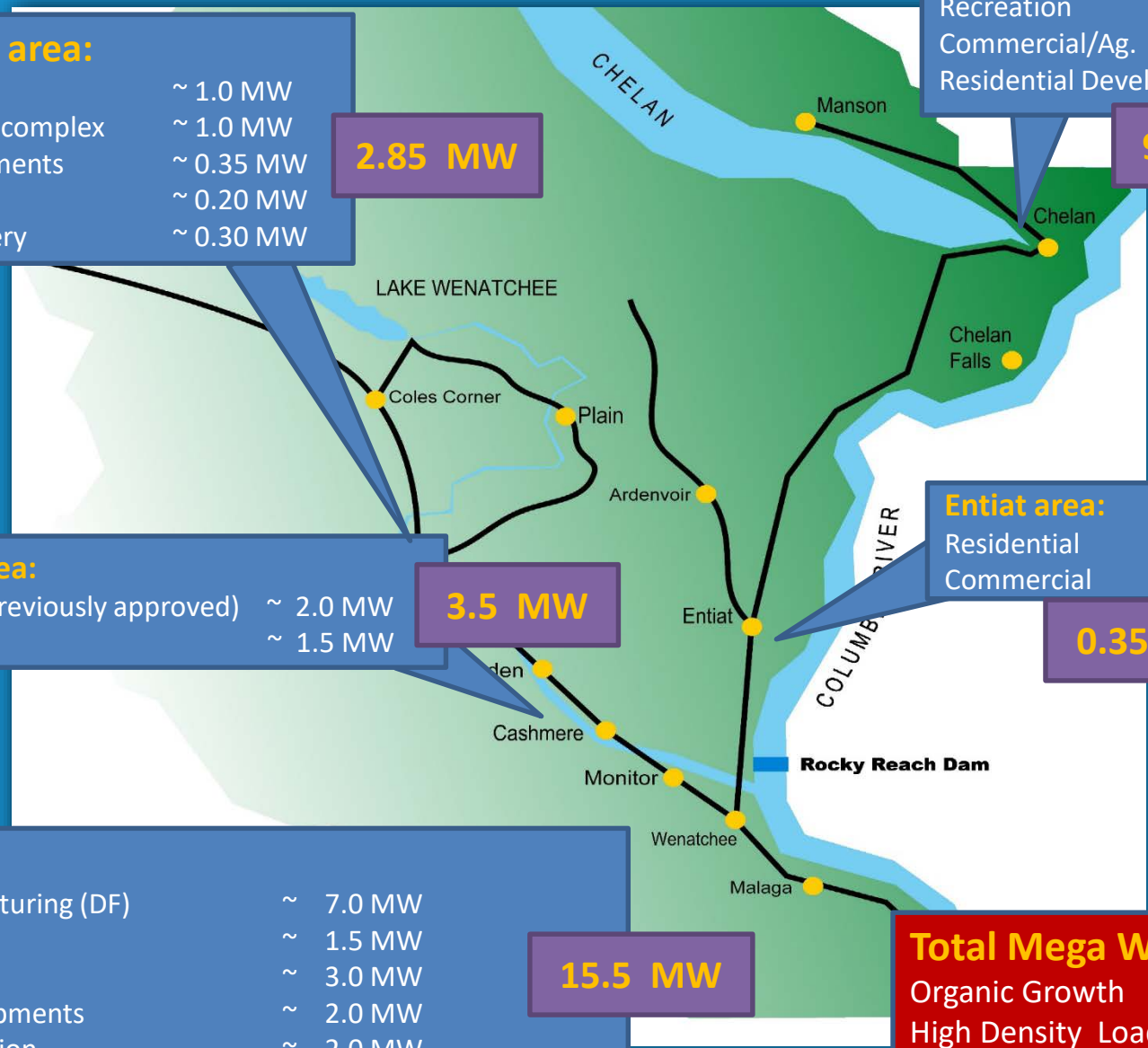
**Wenatchee area:**

High Tech Manufacturing (DF)	~ 7.0 MW
Ski / Recreation	~ 1.5 MW
Commercial	~ 3.0 MW
Residential Developments	~ 2.0 MW
Agriculture - Irrigation	~ 2.0 MW

**15.5 MW**

**Total Mega Watts**

Organic Growth	=	23 MW
High Density Load	=	7 MW
Crypto currency	=	2 MW



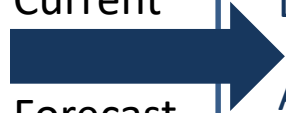


# 10 Year Load Forecast Change

(Net of Energy Conservation Plans)

Date of Forecast	Base Case	High Case	Low Case
June 2018	77 aMW	245 aMW	7 aMW
Sept 2018	77 aMW	245 aMW	7 aMW
Dec 2018	<b>48 aMW *</b>	<b>203 aMW *</b>	7 aMW
Annual Growth Rate	<b>2 %</b>	6.6 %	0.3 %

Current  
Forecast



\* Note:

Reduction in Base and High cases is primarily associated with anticipating less Crypto/HDL over ten year forecast



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[www.chelanpud.org](http://www.chelanpud.org)

# Substation Planning Current Focus Areas:

North Shore Lake Chelan	Property Acquired	Design	✓
Leavenworth City	Property Acquired	Design	✓
Ohme/ Olds Station	Property Acquired	Design	✓
Entiat City North	Property Acquired	Pre-Design	✓
Wenatchee City Downtown	Property Review	Approaching PSA	
South Shore Lake Chelan	Property Needed	Feasibility	Requires New Transmission
Stemilt Creek / Malaga	Property Needed	Feasibility	
Cashmere - West	Property Needed	Feasibility	
Upper Squilchuck / Mission Ridge	Property Needed	Feasibility	Requires New Transmission
Howard Flats - Chelan	Property Needed	Feasibility	Requires New Transmission

Current Area of Focus

# Long Range Planning Objectives

- Engaging Municipal Planning Teams & Various Stakeholder groups
  - Chelan County Land-use & Planning January 7, 2019
  - Chelan City Regional Planning Outreach January 2019
- Continue Acquisition of Substation Properties
- Further Evaluation of Current Infrastructure Limitations
- Refining Timelines for Construction
- Community collaboration on siting, timing & impact analysis

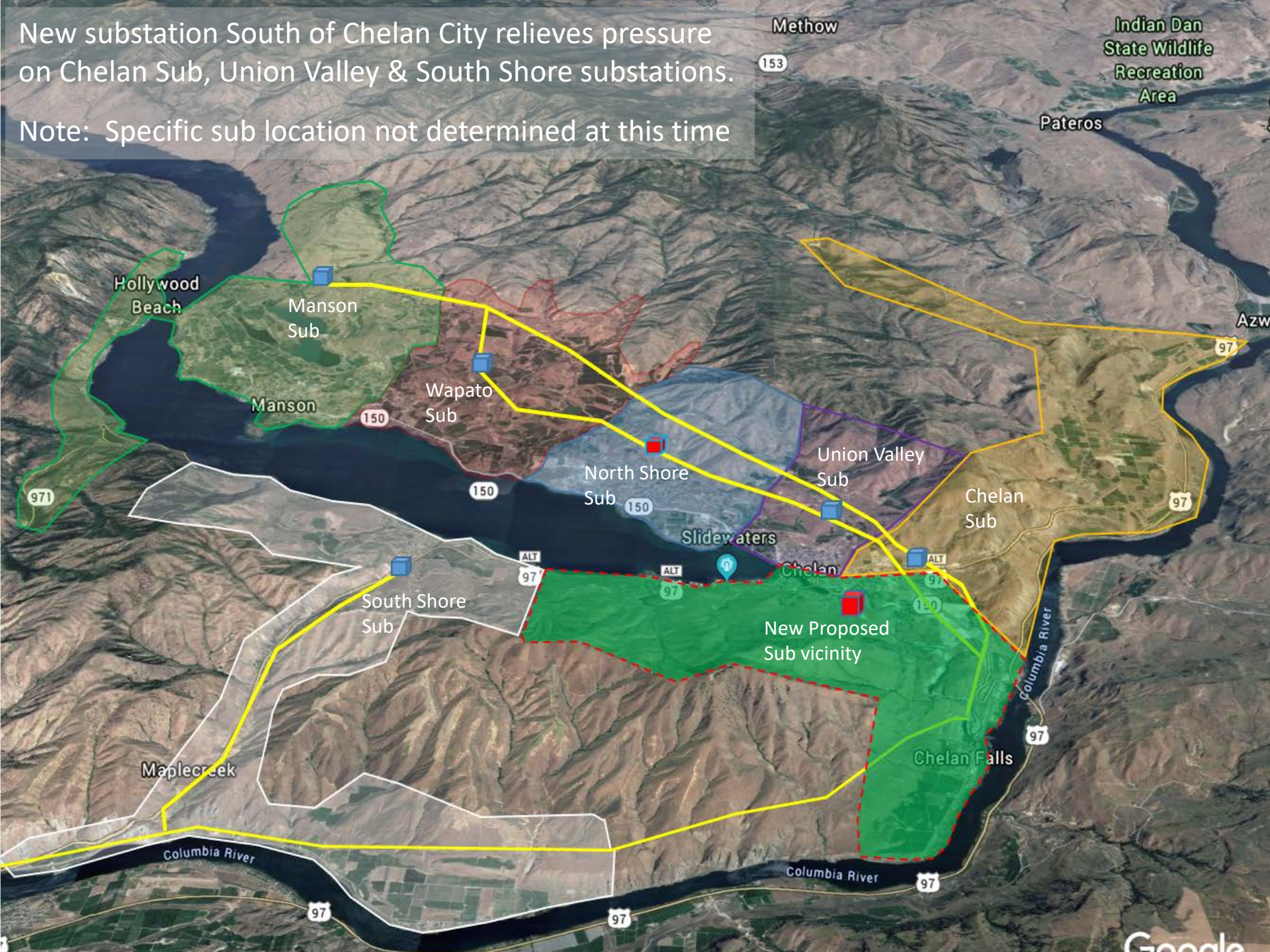


# Lake Chelan Regional Planning

- Two Primary Objectives:
  - 1) Improving service reliability of transmission grid by introducing fire resilient materials
  - 2) Building infrastructure to meet forecasted growth
  
- Current Recommendations:
  - 1) Rebuild portions of existing wood pole transmission using steel materials
  - 2) Construct a new substation in the vicinity of the Chelan Dam, south of the downtown Chelan corridor

New substation South of Chelan City relieves pressure on Chelan Sub, Union Valley & South Shore substations.

Note: Specific sub location not determined at this time







Steel Structure

Wood Structure

# Chelan Area Reliability Improvement

Reconstruct portion of the Chelan Falls-Manson Transmission line using fire resilient steel material within the existing corridor



# Action Items Q1 2019

- Communicate planning agenda with Chelan County
- Stakeholder overview in Lake Chelan regional area
- Seek alignment on fire resiliency planning - Chelan
- Seek alignment on South Shore Chelan Sub need
- Evaluate transmission routes for new Chelan substation
- Procure property for Wenatchee sub expansion

# Questions

