

2018  
Integrated Resource Plan  
Progress Report

**Initial Portfolio Analysis Results**

May 14, 2018

# Board and Public Process – 2018

**May 14 - No Board Action Requested Today**  
Initial Portfolio Analysis results

**June 4 (tentative)**  
Finalized Portfolio Analysis and Final Draft IRP document

**June 25 (tentative)**  
Final Draft IRP for Board Approval  
(Resolution to be presented)

**Prior to September 1**  
Submit Final IRP to Department of Commerce

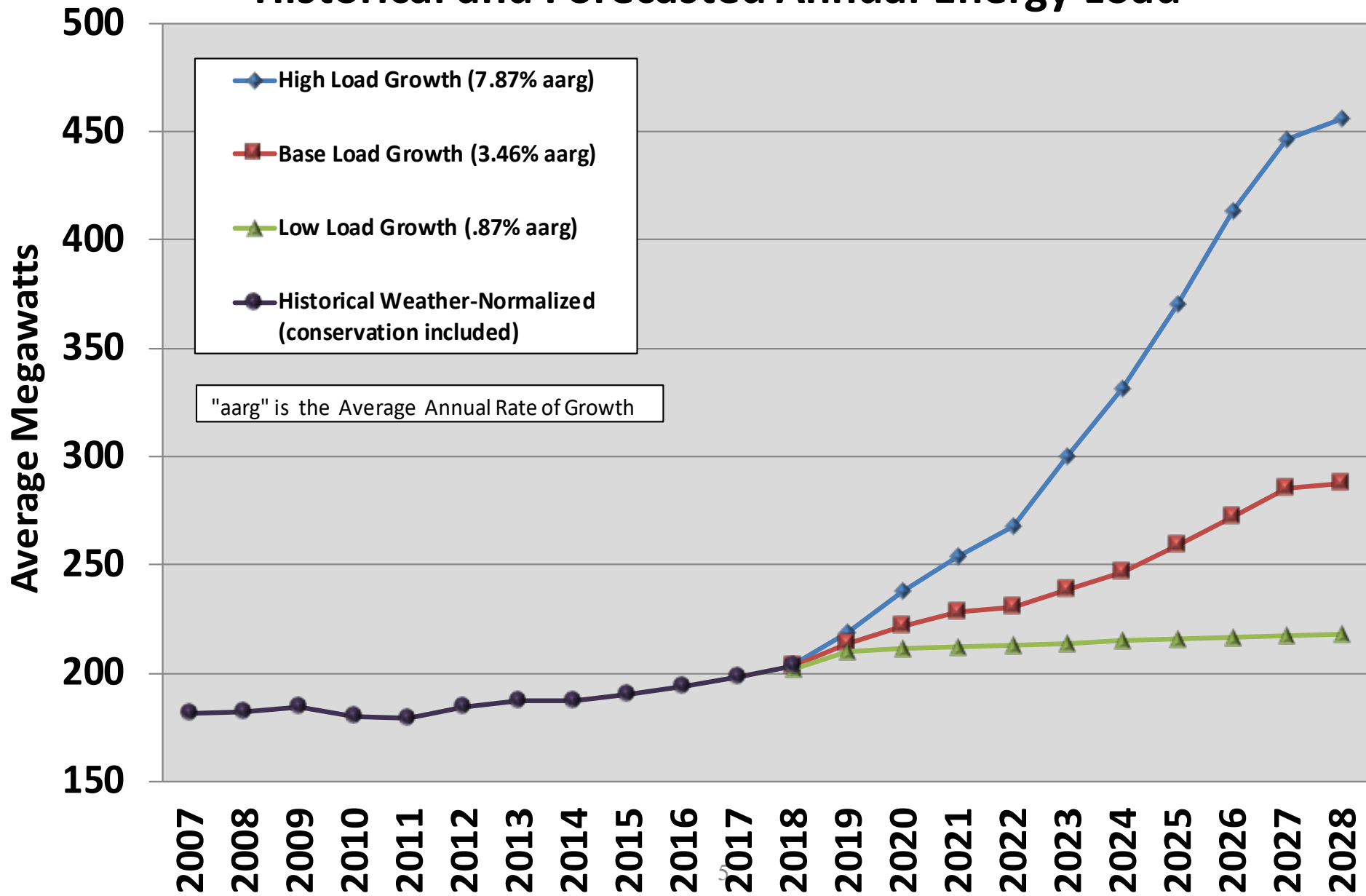
# Today's presentation

- Load Forecast
  - Renewable Resources Required
- Conservation
- District Net Position and Load Forecasts
- Portfolio: Scenario Results

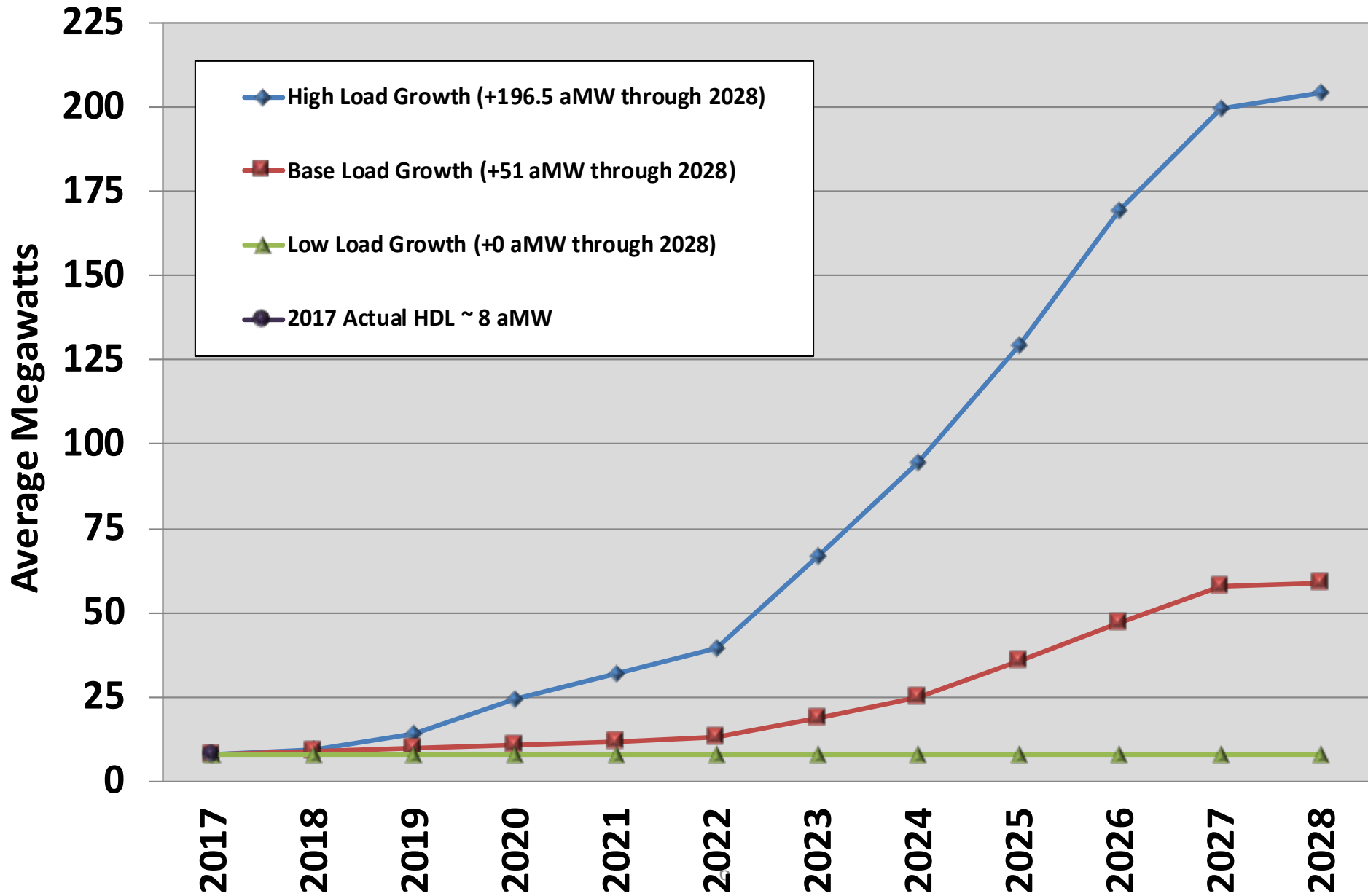
# Load Forecast

- Total Sector Sales – Residential, Commercial, Industrial, HDL, EV & all “Other” (plus losses) for 2018-2028 (rates are before the effects of conservation)
  - Low – 0.87% average annual rate of growth (1.14% in 2016)
  - Base – 3.45% average annual rate of growth (2.28% in 2016)
  - High – 7.87% average annual rate of growth (3.21% in 2016)
- District’s Historical Load Growth
  - 2007-2017 – approx. 1.43%
  - 2007-2017 – approx. 0.90% (after the effects of cumulative conservation)
- Based upon current base load forecast (net of conservation), the amount of renewable resources required will be approximately:
  - 18-19 aMW (9% of retail load) in 2018-2019
  - 32-41 aMW (15% of retail load) in 2020-2028

# Historical and Forecasted Annual Energy Load

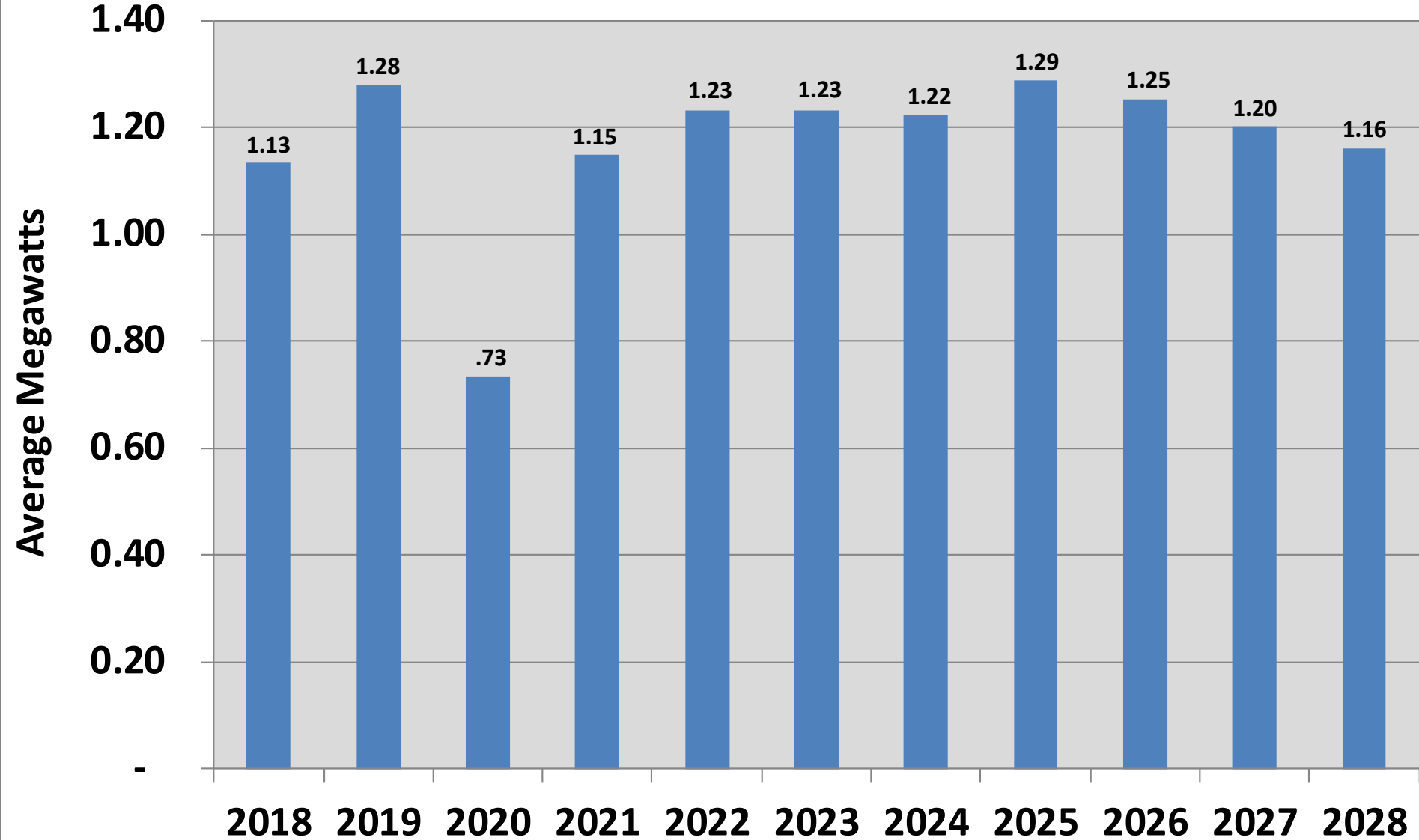


# Forecasted High Density Load (HDL) Annual Energy



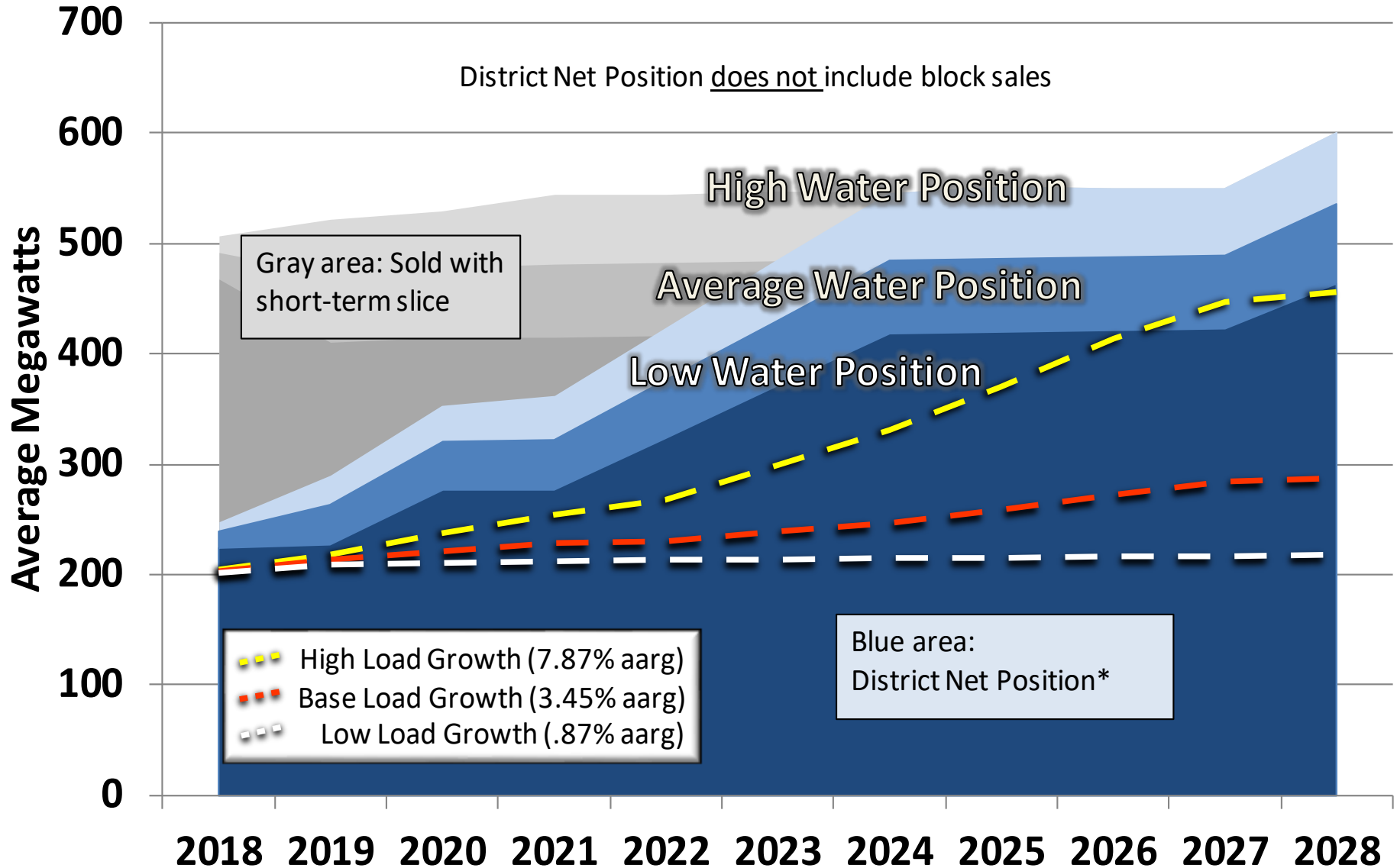
# 10-Year Conservation Targets

Source : 2017 District Conservation Potential Assessment



2 Year Target

# District Net Position and Load Forecasts



\*District net position includes the effects of encroachments, Canadian Entitlement Allocations, other contractual obligations including long-term power purchaser contracts and short-term hedging strategy slice contracts



# Portfolio: Scenario Results

## 2018-2028

- Load/Resource Balance
  - Low, Base and High levels of Hydro Generation stressed with various stream flows
  - Low, Base and High Load Growth forecasts
  - Expected to be able to serve retail load without new power supply
  - Conservation resources increased since 2016 to 1.17 aMW (2018-2028)
- Service Reliability
  - Meets Council’s voluntary loss of load probability standard
  - Potential slice or other hedging strategy contract amounts would be reduced before service reliability jeopardized
- Environmental Impacts
  - District’s hydro and wind resources **do not** emit air pollutants
  - District is purchaser of “market mix” during certain hours

# Chelan PUD IRP Website

<http://www.chelanpud.org/environment/operating-responsibly/integrated-resource-plan>

Operating Responsibly

Fish and Wildlife

Habitat Conservation Plans

Web Links



Read RCW 19.280

Related Documents



2016 IRP Document

2014 IRP Progress Report

2012 IRP Document

2010 IRP Progress Report

2008 IRP Document

[Home](#) / [Environment](#) / [Operating Responsibly](#) / [Integrated Resource Plan](#)

## Integrated Resource Plan

Chelan County PUD is developing its 2018 Integrated Resource Plan (IRP) Progress Report as required by state law, RCW 19.280.

In 2006, RCW 19.280 was adopted by the Washington State legislature. The statute requires investor-owned and consumer-owned electric utilities with more than 25,000 customers to develop IRPs and progress reports. Among other things, IRPs must include a range of load forecasts, assessments of commercially-available, utility-scale renewable and nonrenewable generating technologies, a comparative evaluation of renewable and nonrenewable generating resources and conservation and efficiency resources and an assessment of methods for integrating renewable resources and addressing overgeneration events, if applicable. Utilities must produce progress reports reflecting changing conditions related to and the progress towards the IRP every two years, and an updated IRP must be developed at least every four years.

The 2018 IRP Progress Report outlines the sources of power needed to supply PUD customers through 2028. It describes the mix of resources from generation, conservation and efficiency that will meet current and projected needs at the lowest reasonable cost and risk to the utility and its customer-owners.

The 2018 IRP Progress Report will be submitted to the Washington State Department of Commerce before the Sept. 1, 2018, deadline.

The public meeting and hearing schedule is presented below. Links to presentations and notices for the 2018 IRP Progress Report will be added as they become available.

Send comments to [contactus@chelanpud.org](mailto:contactus@chelanpud.org)

Public Meetings/Hearing - 2018