

Quarterly Energy Resources Review

for the quarter ended March 31, 2024



May 6, 2024

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What We Will Cover Today

- Wholesale and energy-related revenue update
- Western power markets update
- Operations and planning

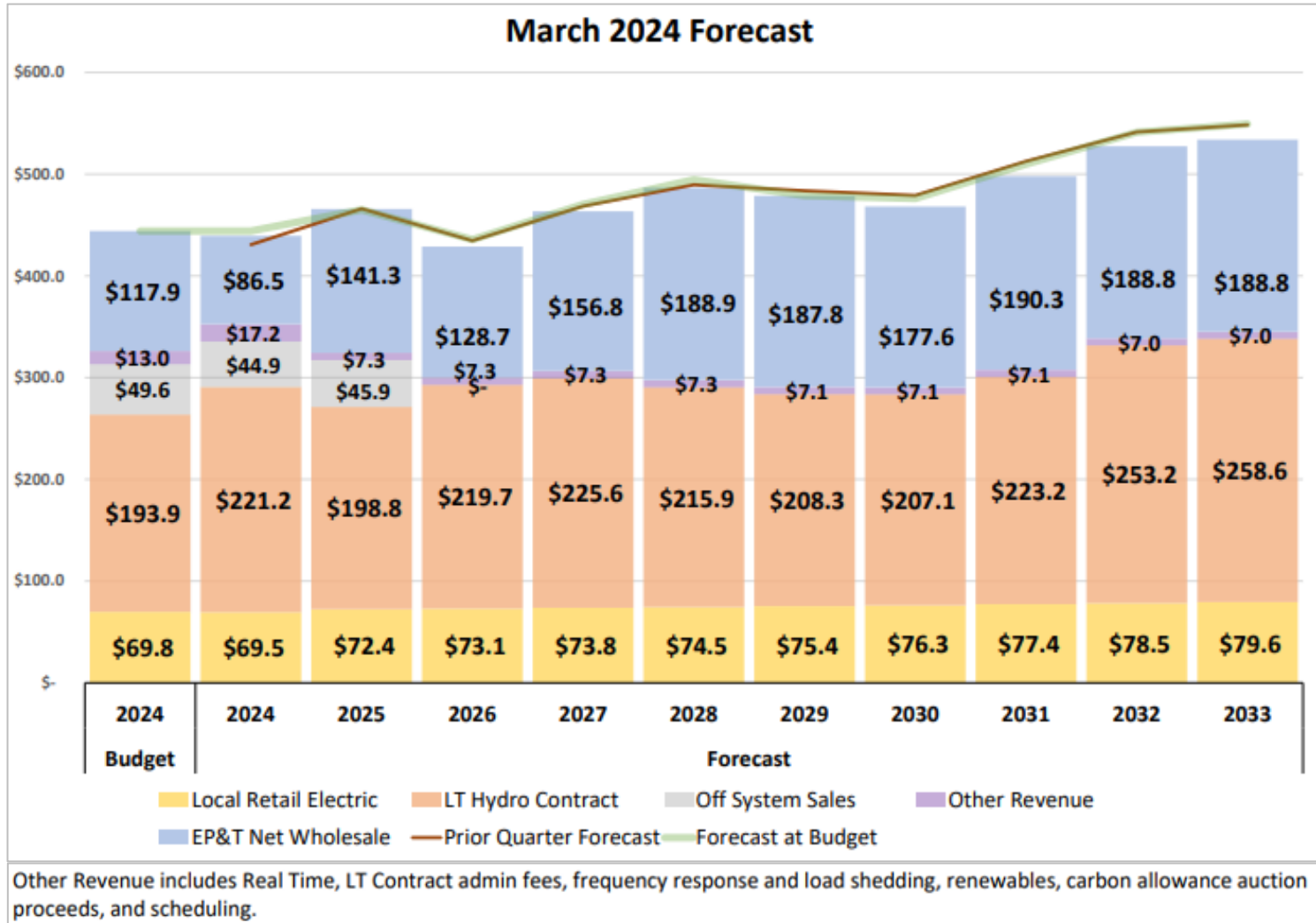
Update only, no action required

Appendix: Additional detailed information not covered today

Q1 2024 Key Highlights

- Below average water to start 2024
 - Rocky Reach inflow averaged 60%, Jan-Mar
 - Columbia River water supply forecast is 83% of normal for Jan – Jul
 - Lake Chelan runoff forecast Apr – Jul is 60% of average
 - NWR and other Energy-Related Revenue is forecasted to be \$179M (\$1.4M below budget)
- Climate Commitment Act (CCA)
 - WA allowance prices dropped drastically in past 6 months – WA initiative 2117
- Day-Ahead Market Initiatives
 - SPP Markets+
 - Staff to recommend Phase 2 participation
 - CAISO Energy Day Ahead Market (EDAM)
 - Pathways Initiative or West wide Governance Pathways Initiative, WWGPI

Electric Revenues Forecast - \$ Millions



2024 NWR and Other Energy-Related Revenue

(\$ Millions)

	Budget	Actual [1]	Variance
EP&T Net Wholesale Revenue (NWR)			
Energy Sales/Purchases	\$ 91.8	\$ 60.5	\$ (31.3)
Specified Source Premium	\$ 25.4	\$ 25.4	\$ -
Renewables - Bundled	\$ 0.6	\$ 0.6	\$ -
NWR Sub-total [2]	\$ 117.9	\$ 86.5	\$ (31.3)
Off System Sales			
Off System end use sales	\$ 49.5	\$ 44.9	\$ (4.6)
Other Energy-Related Revenue			
LT Power Contract- Retained Surplus	\$ -	\$ 30.4	\$ 30.4
LT Power Contract- Admin Fees	\$ 4.1	\$ 4.1	\$ -
Frequency Response & Load Shedding	\$ 1.2	\$ 1.2	\$ -
Other [3]	\$ 0.6	\$ 3.8	\$ 3.2
Renewables - Unbundled	\$ 0.1	\$ 0.1	\$ -
Real-Time Revenue	\$ 7.0	\$ 8.0	\$ 1.0
Other Energy-Related Sub-total	\$ 13.0	\$ 47.5	\$ 34.6
NWR and Other Energy-Related Revenue	\$ 180.3	\$ 179.0	\$ (1.4)

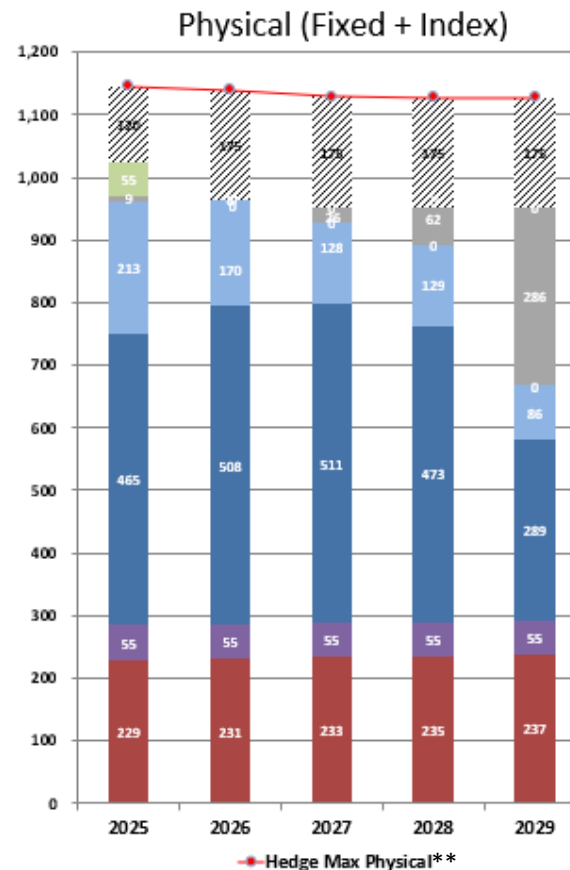
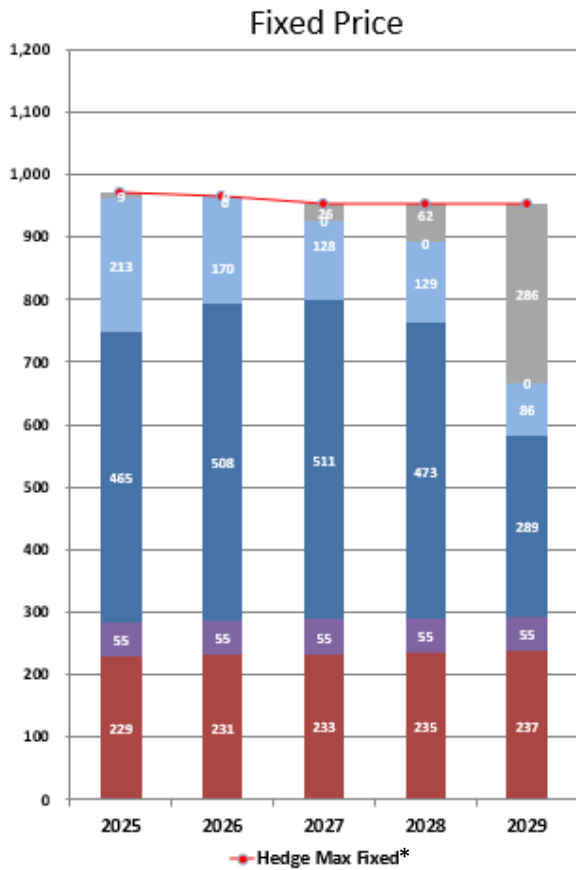
[1] 2024 forecast based Jan - Mar actuals Apr-Dec estimates (4/4/24 NWR forecast)

[2] NWR includes PWX specified source sale/full requirements purchase and transmission pass through costs

[3] Other includes scheduling, carbon allowance proceeds & admin fees and the sale of reserves

District's Energy Commitments

(Average MW)



Note: The graphs represent the limits contained in resolution 20-14439 approved by the Board on March 23, 2020.

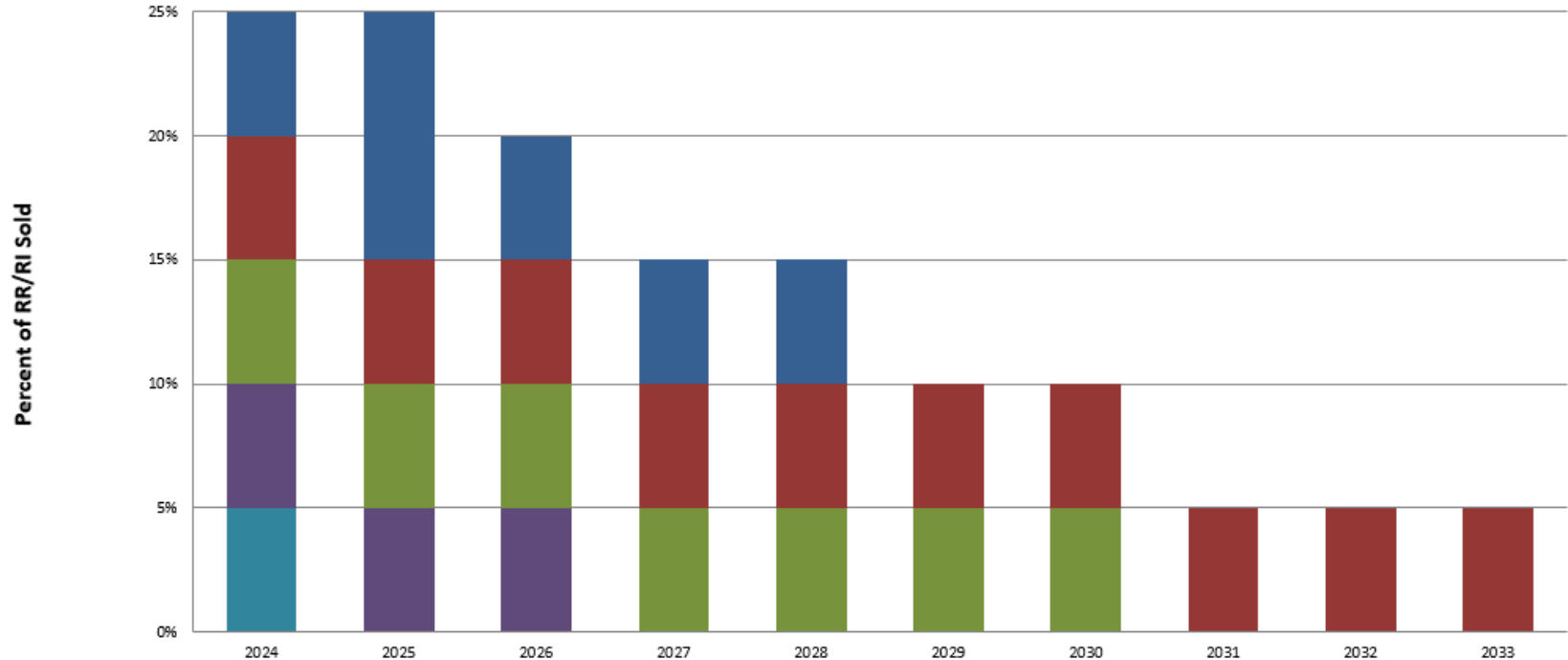
- Available to Sell at Fixed Price
- Fixed Price Block Contracts
- Fixed Price Slice
- Long-term Cost Plus Slice
- Canadian Entitlement
- Local Load

- Available to Sell at Index Price
- Available to Sell at Fixed Price
- Index Price Block Contracts (Includes Off-System End-Use)
- Fixed Price Block Contracts
- Fixed Price Slice
- Long-term Cost Plus Slice
- Canadian Entitlement
- Local Load

*Hedge Max Fixed = stress water generation

**Hedge Max Physical = stress water generation + 175 aMW

Fixed Price Slice Contracts



	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
■ Slice Product 38 - Puget Sound Energy	5.0%	10.0%	5.0%	5.0%	5.0%					
■ Long Term Slice 2 - Avista	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
■ Long Term Slice - Avista	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%			
■ Slice Product 35 - Puget Sound Energy	5.0%	5.0%	5.0%							
■ Slice Product 34 - Powerex	5.0%									

Changes in the Western Power Market

Western Resource Adequacy Program (WRAP)

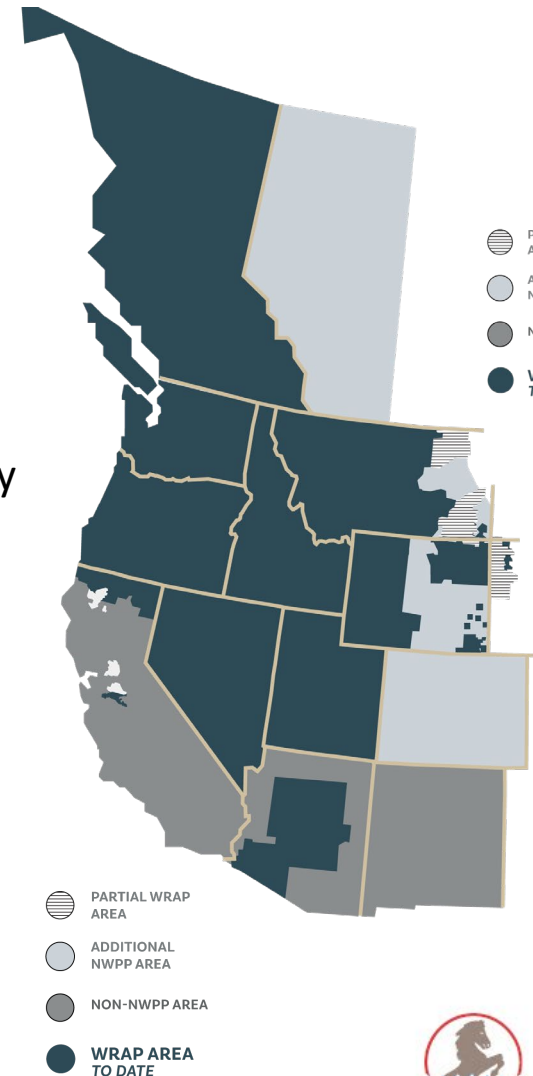
- New binding season target: Summer 2027– stakeholders & WPP issued explanatory letters
- Continue non-binding Forward Showing submittals & operational program
- Business Practice Manuals being drafted/approved

Climate Commitment Act (CCA)

- Next regularly scheduled quarterly auction on 06/05/2024
- Allowances currently trading \$36/metric ton of CO₂e in secondary market
- Electric utilities will submit updated cost burden estimates July 2024

Short term markets (within hour → real-time → day ahead)

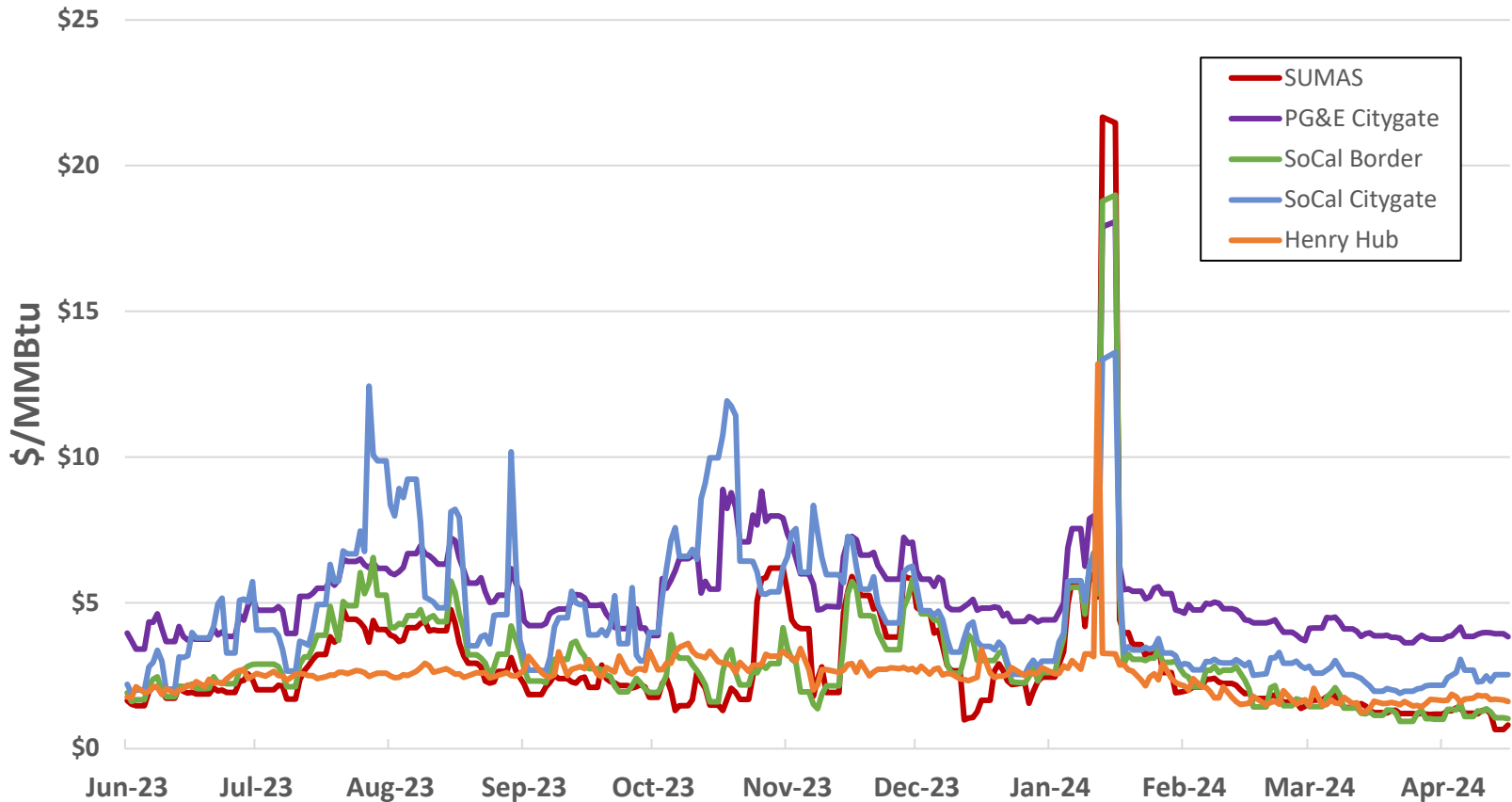
- SPP Markets+ tariff filed on March 29th
 - Chelan/consultant will provide educational presentation to Board
 - Staff to recommend funding Phase 2 later this year
- CAISO EDAM tariff largely approved by FERC
 - Stakeholder meetings have begun to address remaining items
- Westwide Governance Pathways Initiative (WWGPI or Pathways) Effort Releases Initial Proposal



Daily Natural Gas Prices

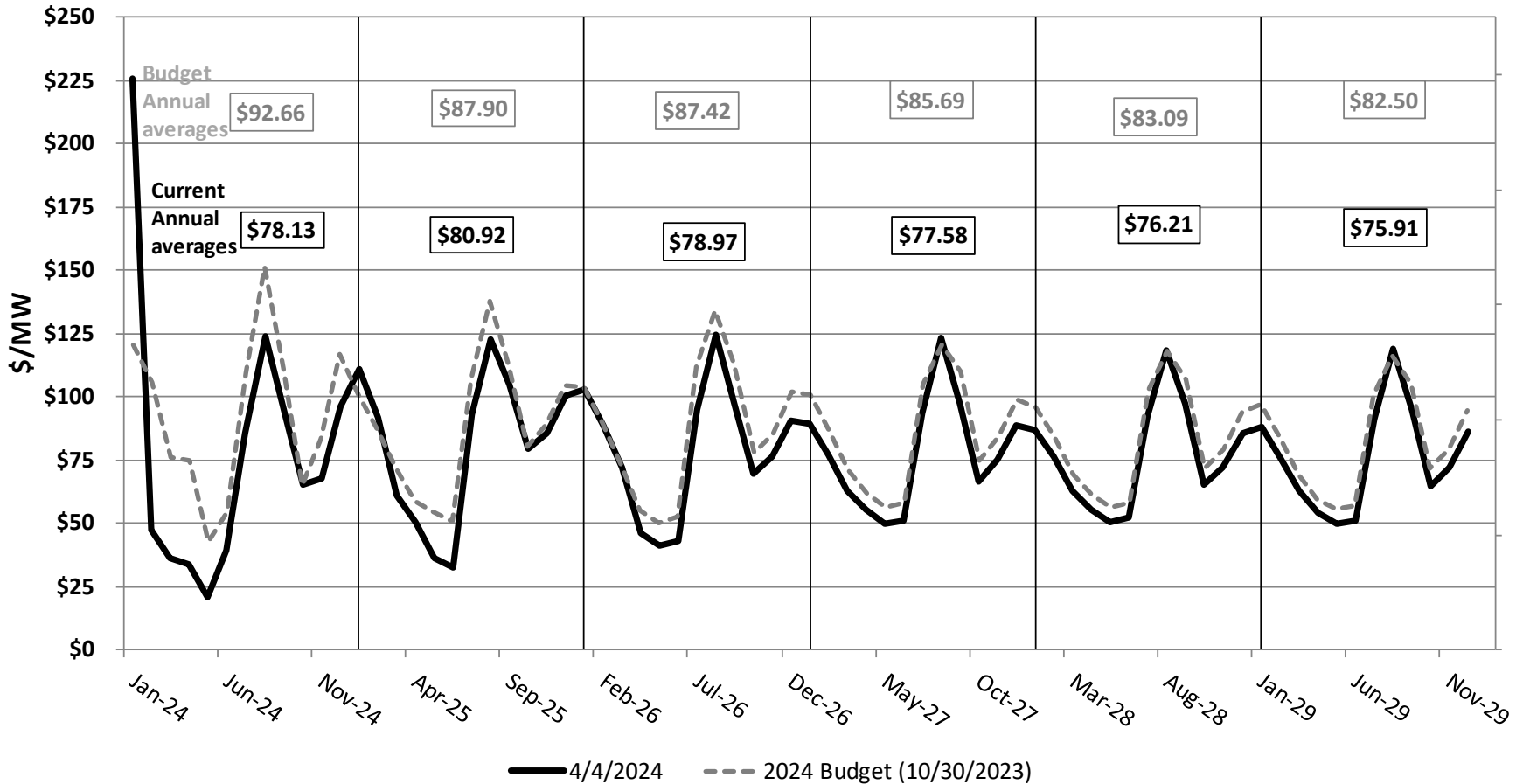
Jun 2023 – Apr 2024

Select Western Natural Gas Hubs
Spot Prices



Mid-C forward price curve

MIDC Flat Forward Price Curve
(ICE DA index prices for previous months)



Water Year 2024: Water Supply forecast

Water Supply Forecasts COLUMBIA - GRAND COULEE DAM Period JAN to JUL -- Water Year 2024

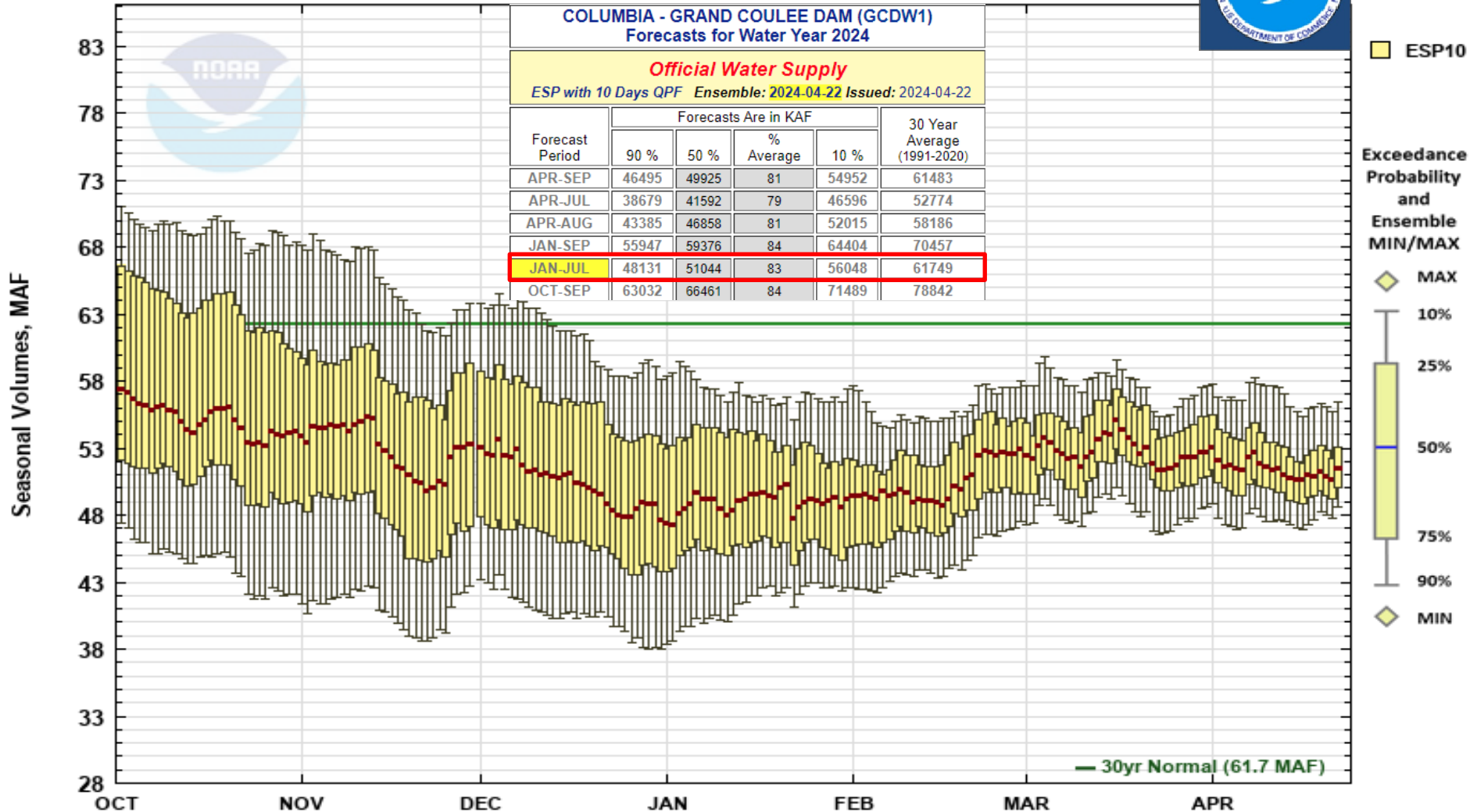


COLUMBIA - GRAND COULEE DAM (GCDW1) Forecasts for Water Year 2024

Official Water Supply

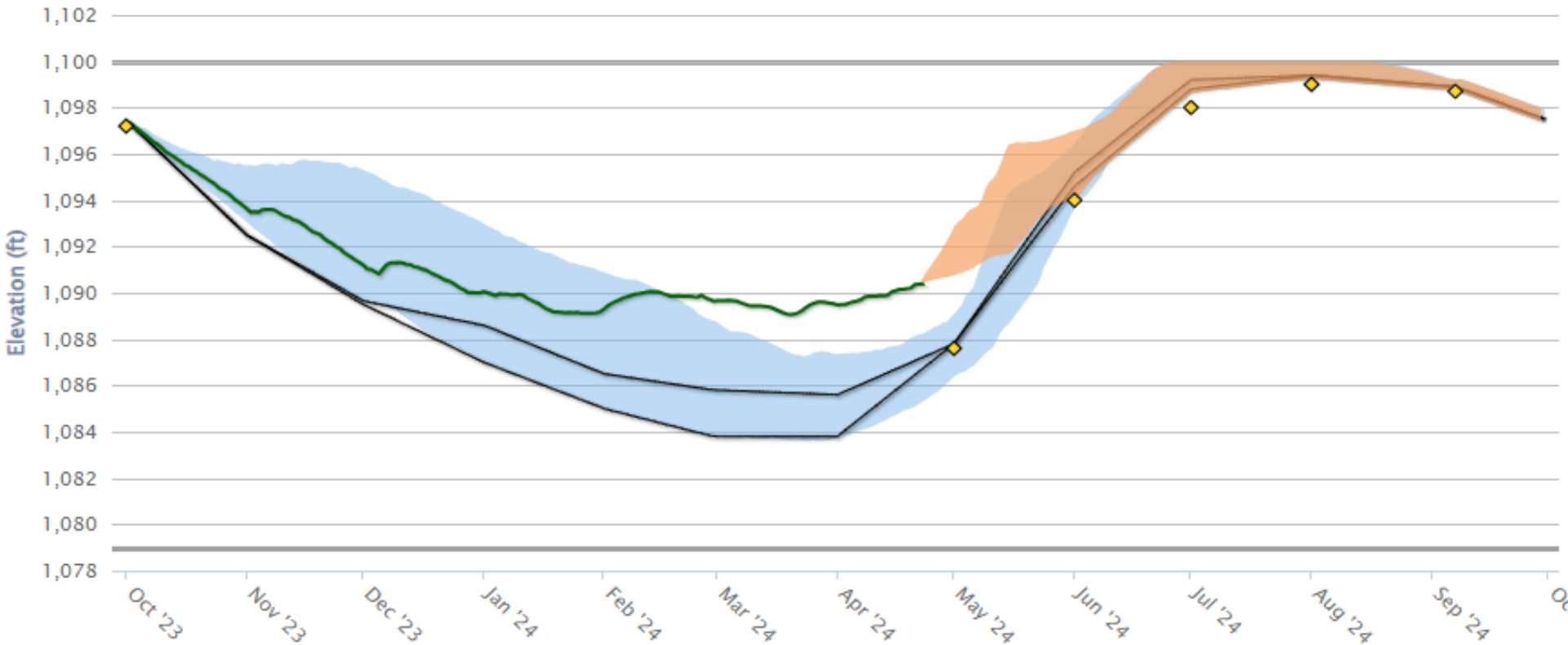
ESP with 10 Days QPF Ensemble: 2024-04-22 Issued: 2024-04-22

Forecast Period	Forecasts Are in KAF				30 Year Average (1991-2020)
	90 %	50 %	% Average	10 %	
APR-SEP	46495	49925	81	54952	61483
APR-JUL	38679	41592	79	46596	52774
APR-AUG	43385	46858	81	52015	58186
JAN-SEP	55947	59376	84	64404	70457
JAN-JUL	48131	51044	83	56048	61749
OCT-SEP	63032	66461	84	71489	78842



Lake Chelan level webpage

Chelan Lake Levels: Expected Operating Ranges



- Current Year Actual Elevation (ft)
- Previous Year Actual Elevation (ft)
- Current Forecasted Operating Range (ft)
- Current Forecasted Average Elevation (ft) (50% chance of occurring)
- October 1 Forecasted Operating Range (ft)
- October 1 Forecasted Average Elevation (ft)
- Target Curve During Dry and Average Water Years (ft)
- Target Curve During Wet Water Years (ft)
- ◆ Minimum Target Elevation

Q1 2024 Key Messages

- NWR and other energy-related revenue slightly below budget mainly due to low water
- Monitoring I-2117 for future of Climate Commitment Act (CCA)
- Evaluating organized market options – Staff to recommend funding SPP Markets+ Phase 2 later this year

Questions?