



**THE OFFICE OF
COLUMBIA RIVER**



DEPARTMENT OF
ECOLOGY
State of Washington

Water for Families, Farms, and Fish

Office of Columbia River Forecast Update

Tom Tebb and Scott Turner

April 4, 2024

OCR Operations

- Columbia River 2024 Forecast
 - March 1st of each year
 - Determines what the Status of the Columbia River is for April through September
- Columbia River Drought Insurance Program Update
 - Since the establishment of the Columbia River Rule Ecology has issued hundreds of interruptible Water Rights
 - The Office of Columbia River is tasked with assisting interruptible water users in drought years



Status of the Columbia River – Chapter 173-563 WAC

- Columbia River forecast on March 1st
 - April – September runoff
 - Measured at the Dalles, Oregon
- High – Medium – Low (Three levels of status)
 - High = above 88 million acre-feet of runoff
 - Medium = between 88 – 60 million acre-feet of runoff
 - Low = 60 million acre-feet or less of runoff



Northwest River Forecast Center Water Supply Forecasts

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- Adjustments
- Verification
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- Archive
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- Help

Choose Date: Archive:

COLUMBIA - THE DALLES DAM (TDAO3) Forecasts for Water Year 2024

Official Water Supply

ESP with 10 Days QPF Ensemble: 2024-03-01 Issued: 2024-03-01

Forecast Period	Forecasts Are in KAF				30 Year Average (1991-2020)
	90 %	50 %	% Average	10 %	
APR-SEP	68507	77086	82	89320	94166
APR-JUL	57821	65984	81	77336	81933
APR-AUG	63376	72335	81	84389	89196
JAN-SEP	88334	96155	83	109328	115946
JAN-JUL	78276	85171	82	97473	103714
OCT-SEP	101588	109409	83	122583	132314

Experimental Water Supply

HEFS with 15 days EQPF Ensemble: 2024-03-01 Issued: 2024-03-01

APR-SEP	67325	79736	85	89166	94166
APR-JUL	56407	68142	83	76517	81933
APR-AUG	62160	74677	84	83581	89196
JAN-SEP	87651	98725	85	110603	115946
JAN-JUL	77520	88118	85	97619	103714
OCT-SEP	100906	111979	85	123857	132314

Reference

ESP with 0 Days QPF Ensemble: 2024-03-01 Issued: 2024-03-01

APR-SEP	66528	78991	84	89245	94166
APR-JUL	54820	67755	83	76706	81933
APR-AUG	61348	74283	83	83876	89196
JAN-SEP	87074	99180	86	111503	115946
JAN-JUL	76775	88222	85	98307	103714
OCT-SEP	100329	112434	85	124758	132314

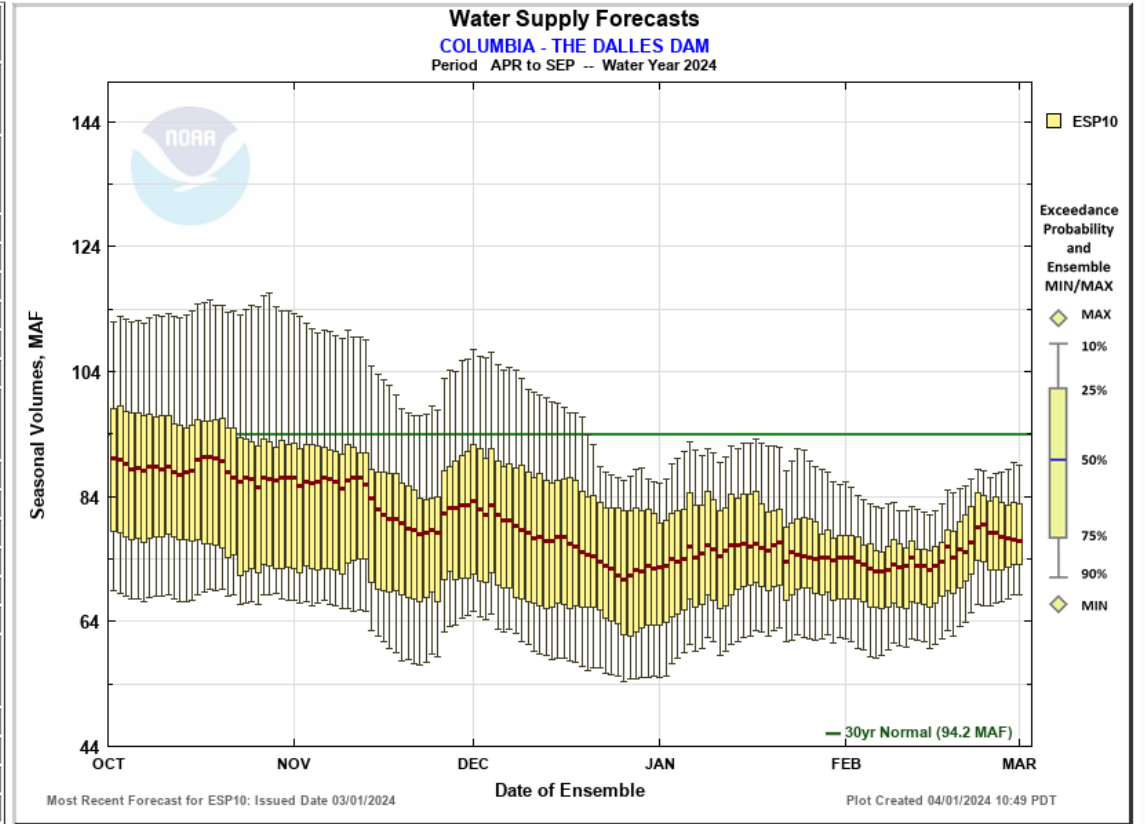
Move the mouse over the desired "Forecast Period" to display a graph.

Overlay

ESP10 HEFS ESPO

Data Files

CSV (ESP10 / APR-AUG)



- Max Scale
- Scale To Data
- Scale To Last 45 Days
- Show Min/Max Ensemble Volume
- Show Tooltips Help

2024 March 1st Forecast





Office of Columbia River's Directives RCW 90.90.020

The department of ecology shall focus its efforts to develop water supplies for the Columbia river basin on the following needs:

- Alternatives to groundwater for agricultural users in the Odessa subarea aquifer
- Sources of water supply for pending water right applications
- A new uninterrupted supply of water for the holders of interruptible water rights on the Columbia river mainstem that are subject to instream flows or other mitigation conditions to protect streamflows
- New municipal, domestic, industrial, and irrigation water needs within the Columbia river basin

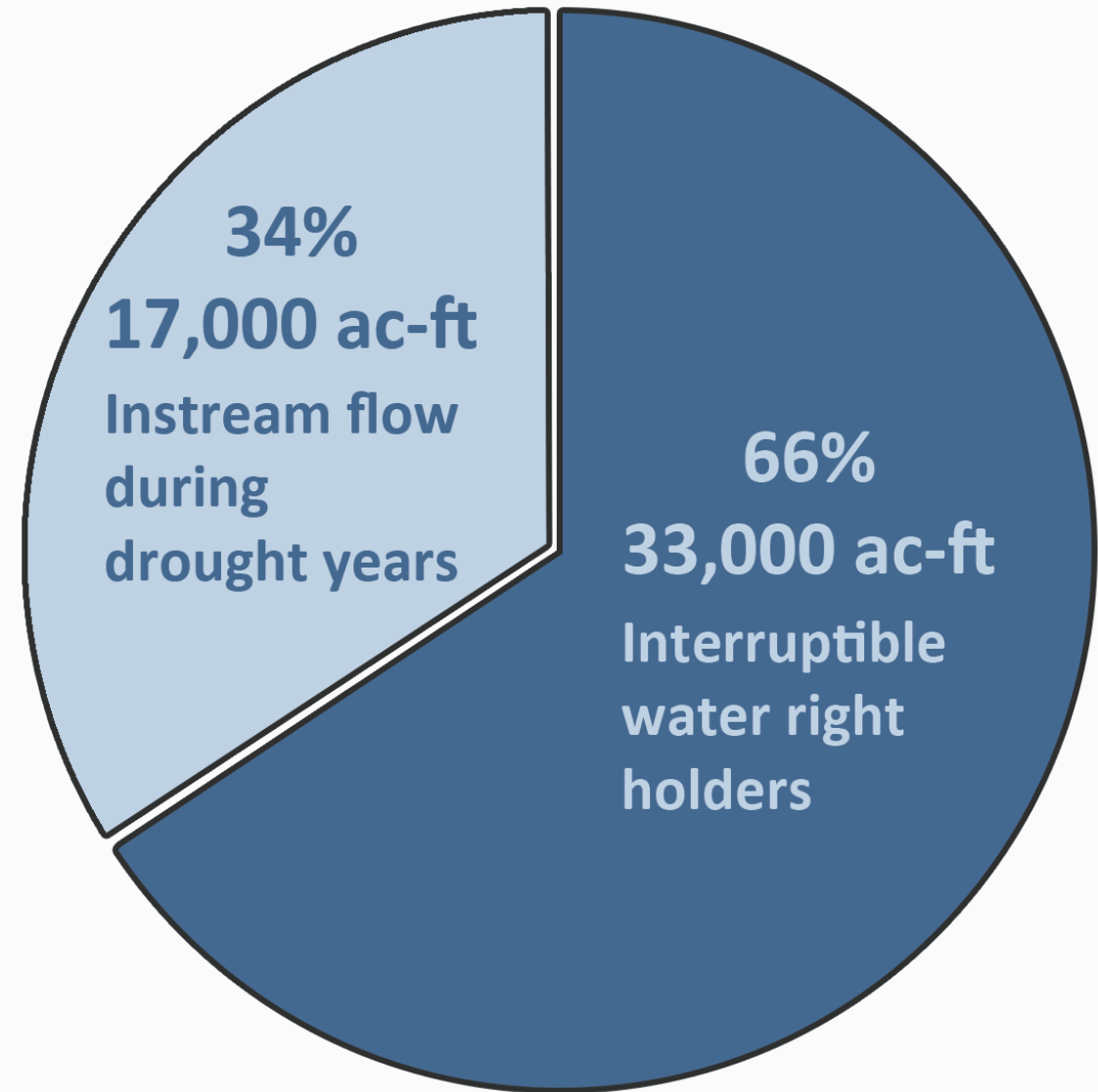
Columbia River Drought Insurance Program

Sources of Water For the Program

- Lake Roosevelt Incremental Storage and Release Program
- Water Banking Solutions

Lake Roosevelt Releases in Drought Years

- If the April – September forecast drops to or below 60 MAF the 33,000 acre-feet from the LRISRP will become available to assist interruptible water users
- The LRISRP Final Supplemental EIS discussed six alternatives for distributing water to the interruptible users with three preferred alternatives.
- Even Distribution Allocation
- Market-Based Allocation
- Voluntary Enrollment
- The preferred method would provide Ecology with the maximum flexibility in meeting the goal of the program



Additional 50,000 from Lake Roosevelt released during drought years

Lake Roosevelt Releases in Drought Years

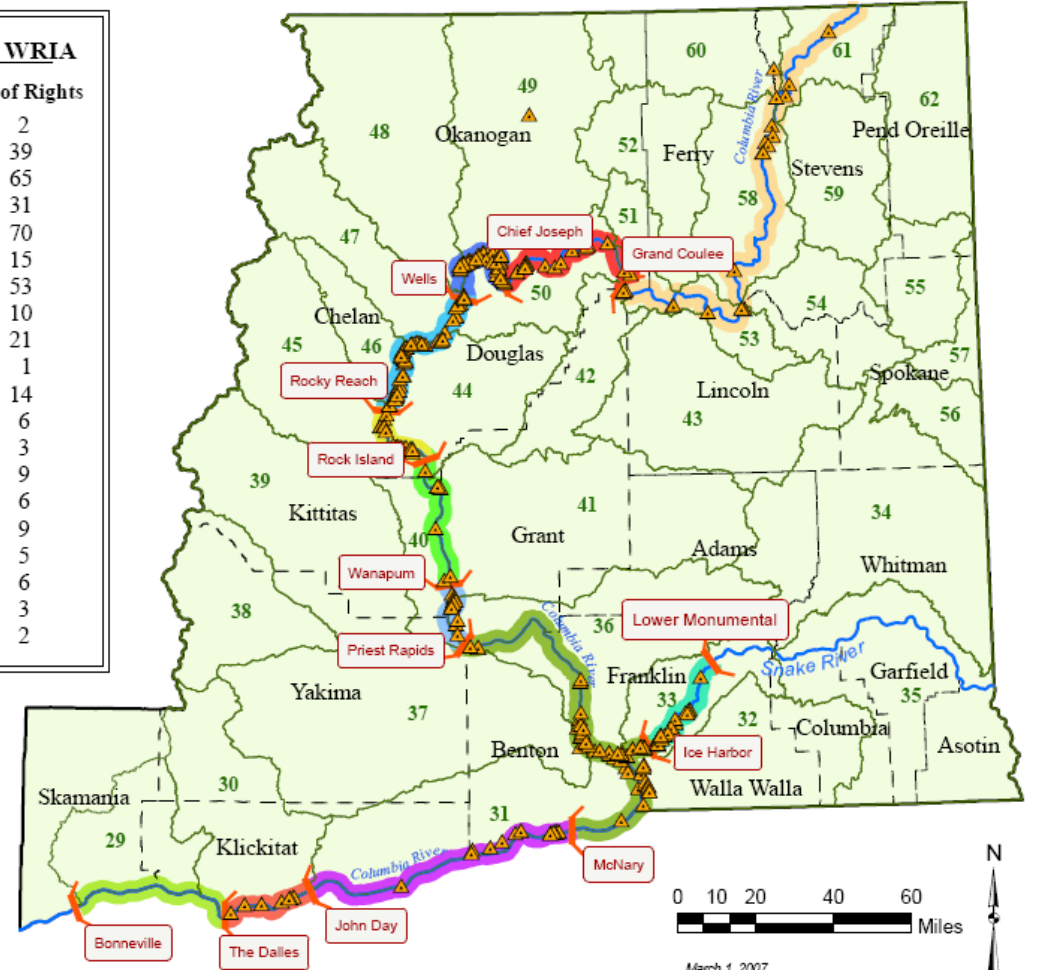
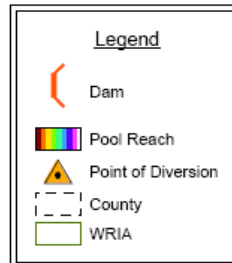
- 379 Interruptible Water Rights on the Columbia River
- 309,159 acre-feet
- Ecology is beginning efforts to put the LRISRP water into play when needed
- Clean up the water right ownership information

Interruptible Water Rights within the Columbia River Water Management Program

Draft

Interruptible Qa by WRIA

WRIA	Qa (afy)	No. of Rights
42	214,000	2
33	106,043	39
31	53,062	65
40	26,764	31
50	24,745	70
36	14,703	15
44	12,949	53
32	10,823	10
49	5,756	21
37	4,960	1
47	2,697	14
53	1,573	6
45	1,502	3
30	824	9
48	677	6
58	466	9
41	413	5
46	146	6
61	34	3
60	7	2





Water Banking Options

- OCR is working with several large agricultural entities to establish water banks
- Banks can be established through multiple methods such as:
- Shade cloth deployment
- Current on farm efficiencies
- If the March 1st forecast drops to 60 MAF or lower, in a given year, water held in these banks can be made available to OCR for the use of assisting interruptible water users

Questions?