

# Streamflow & Groundwater Conditions in Washington State as of 7 May 2025



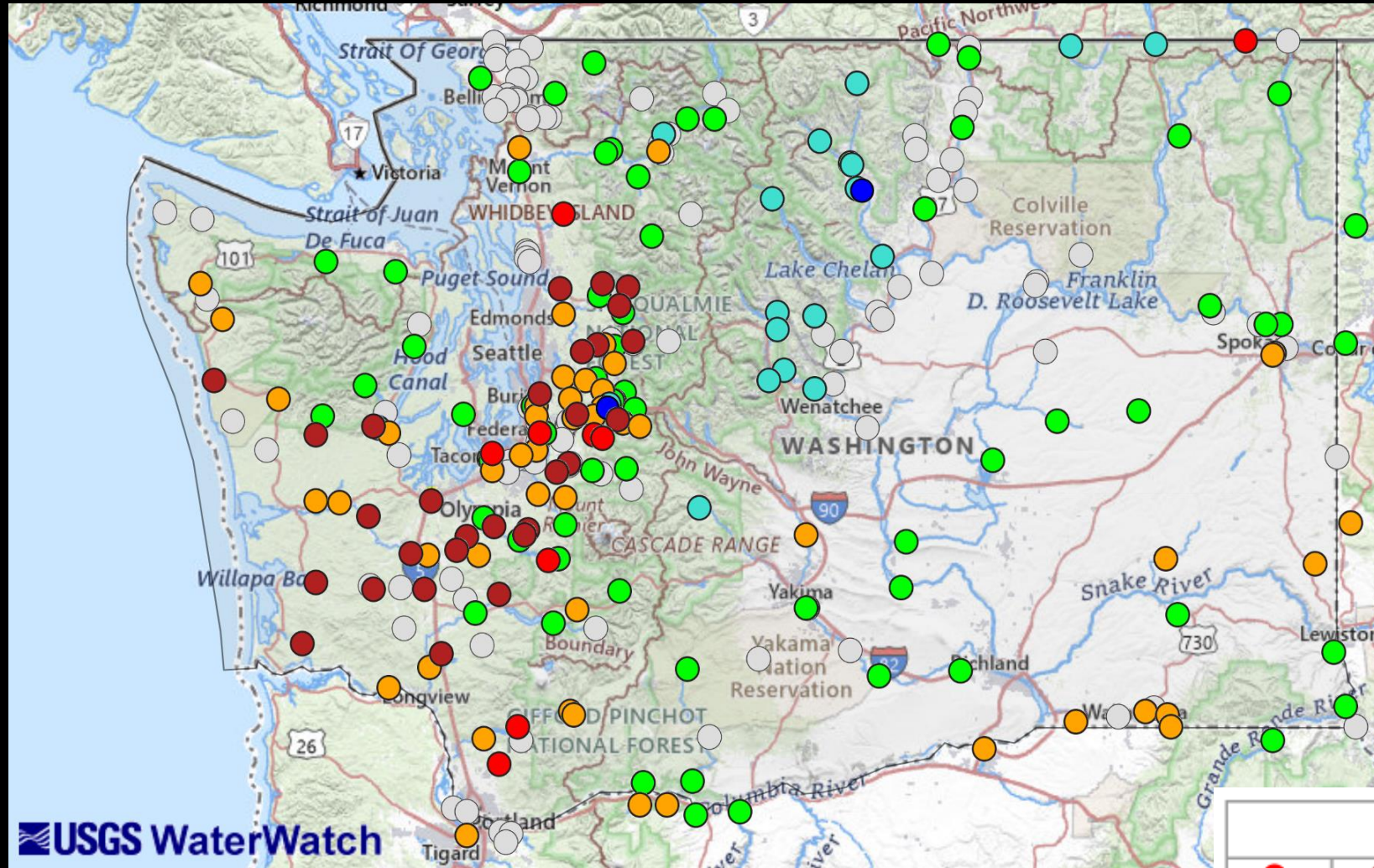
Presented on 8 May 2025  
to the Washington Water Supply  
Availability Committee  
by Nicholas Sutfin,  
[nsutfin@usgs.gov](mailto:nsutfin@usgs.gov)  
USGS Washington Water  
Science Center

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# 7-day Average Streamflow









Conditions as of 7 May 2025



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Citation or Distribution.**

**WaterWatch is scheduled  
to be discontinued in 2026**

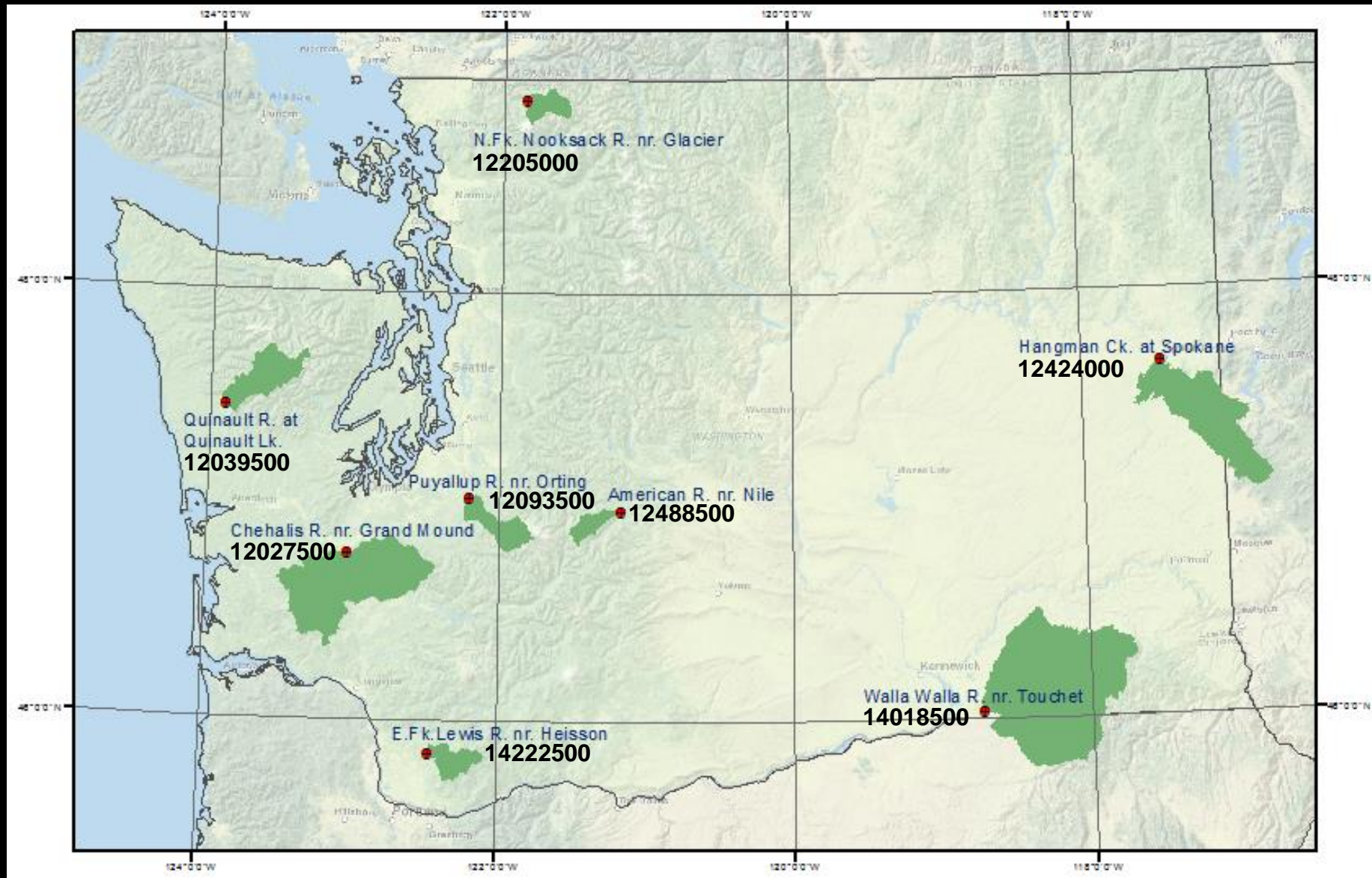
USGS WaterWatch

Explanation - Percentile classes							
							
Record Low	<10 Much below normal	10-24 Below normal	25-75 Normal	76-90 Above normal	>90 Much above normal	Record High	Not-ranked



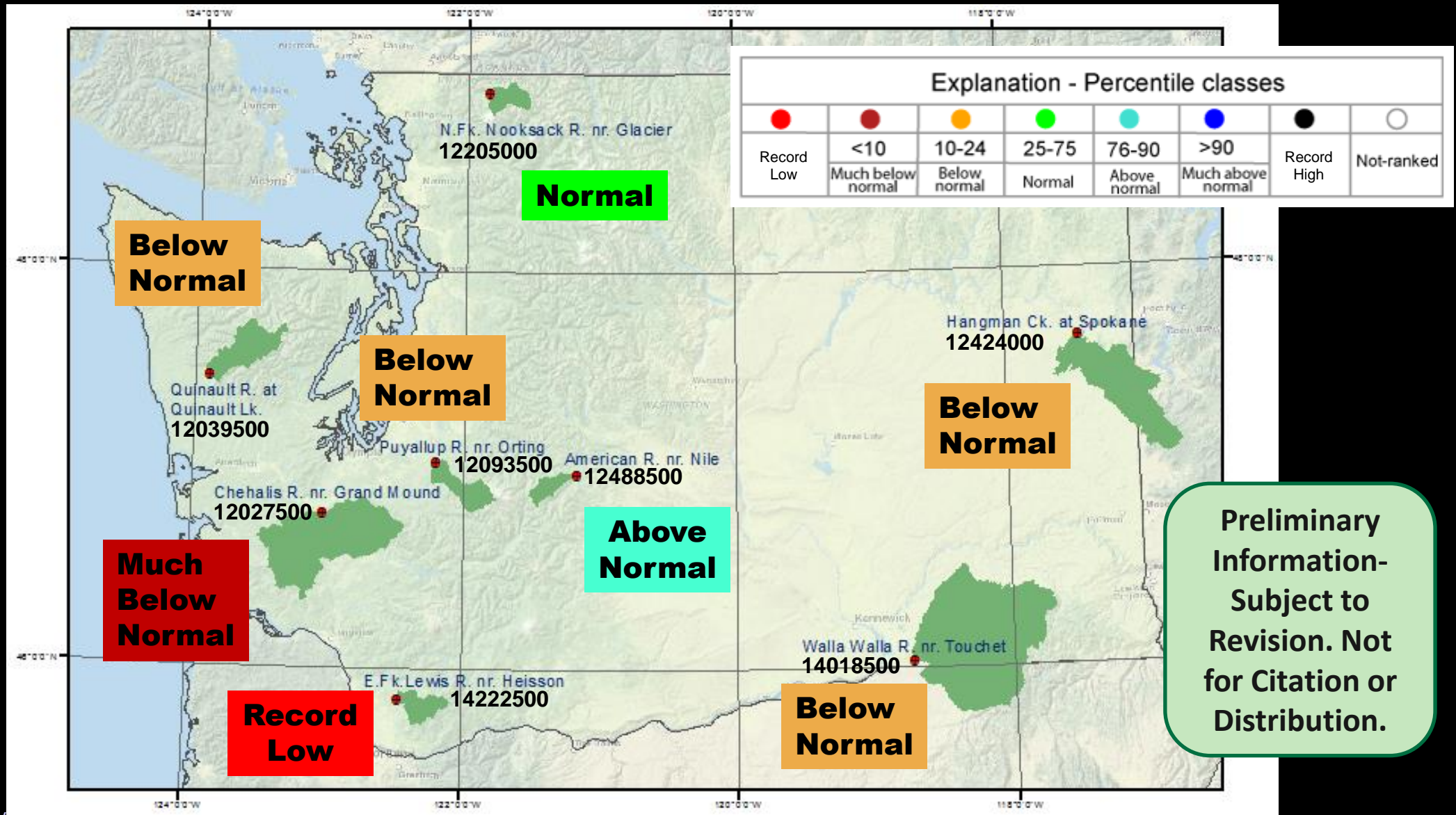
# Index Gaging Stations

(Stations that measure natural or near-natural streamflow)



# Index Gaging Stations

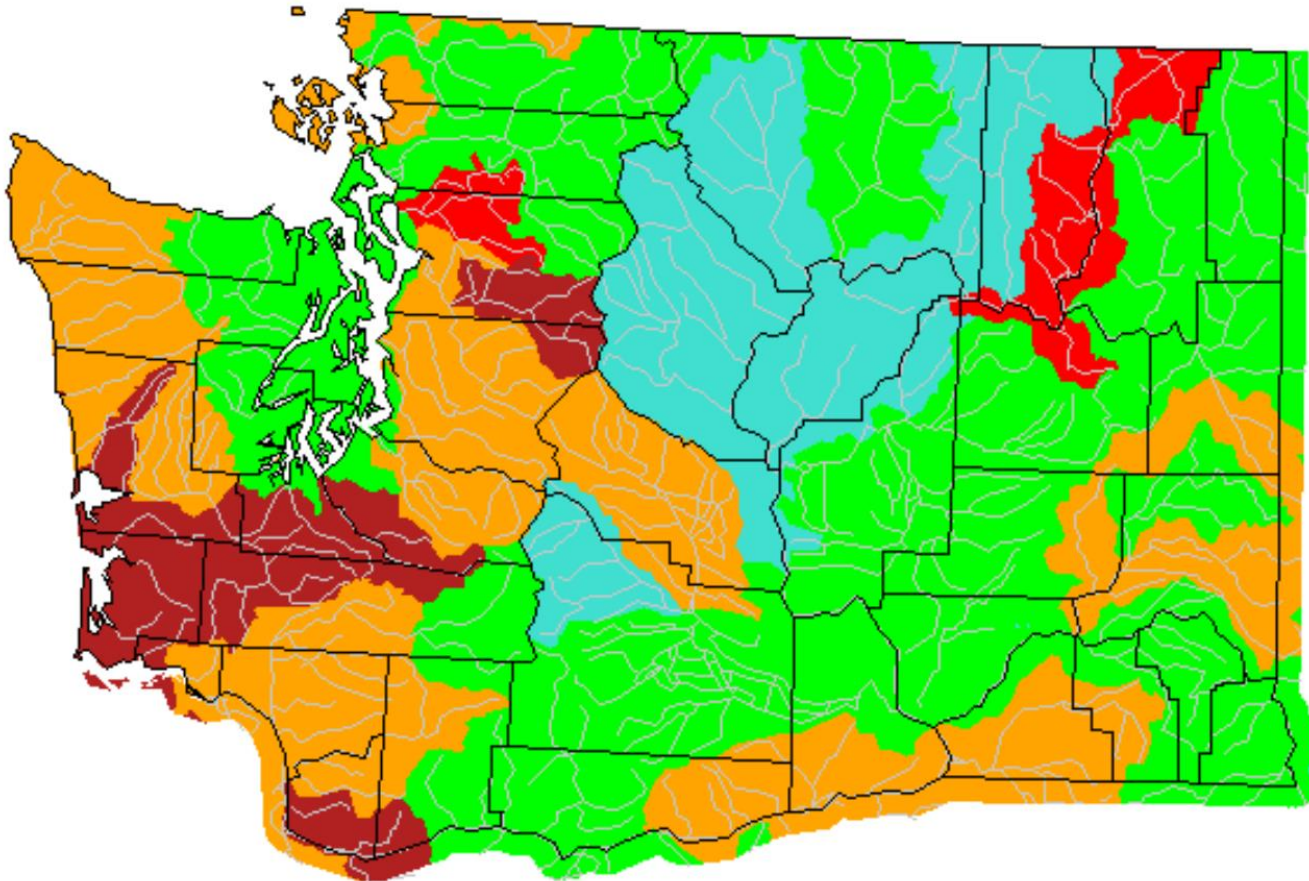
7-day average streamflow as of 7 April 2025





# Average streamflow compared to historical streamflow

Current area-weighted 7-day average as of 7 May 2025

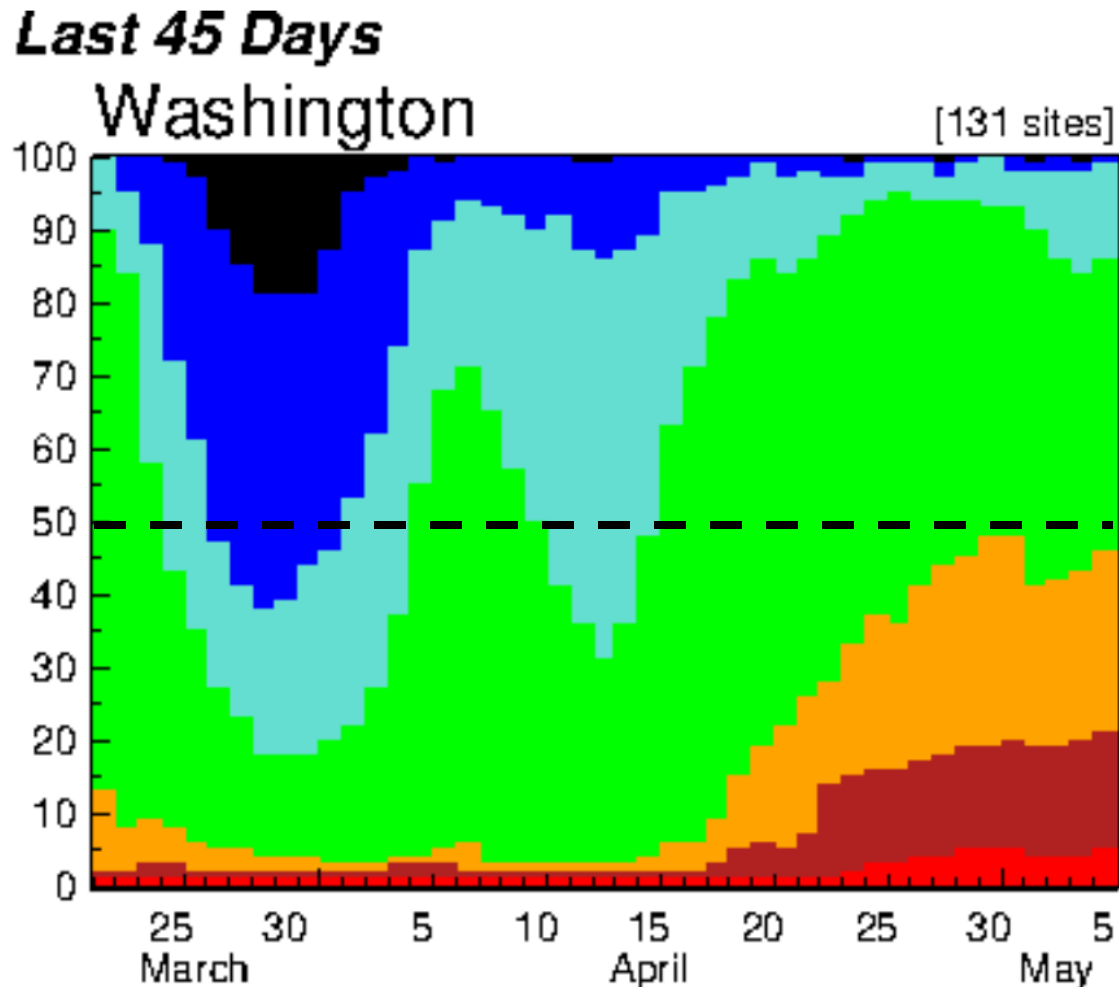


Explanation - Percentile classes						
Record Low	<10	10-24	25-75	76-90	>90	Record High
	Much below normal	Below normal	Normal	Above normal	Much above normal	

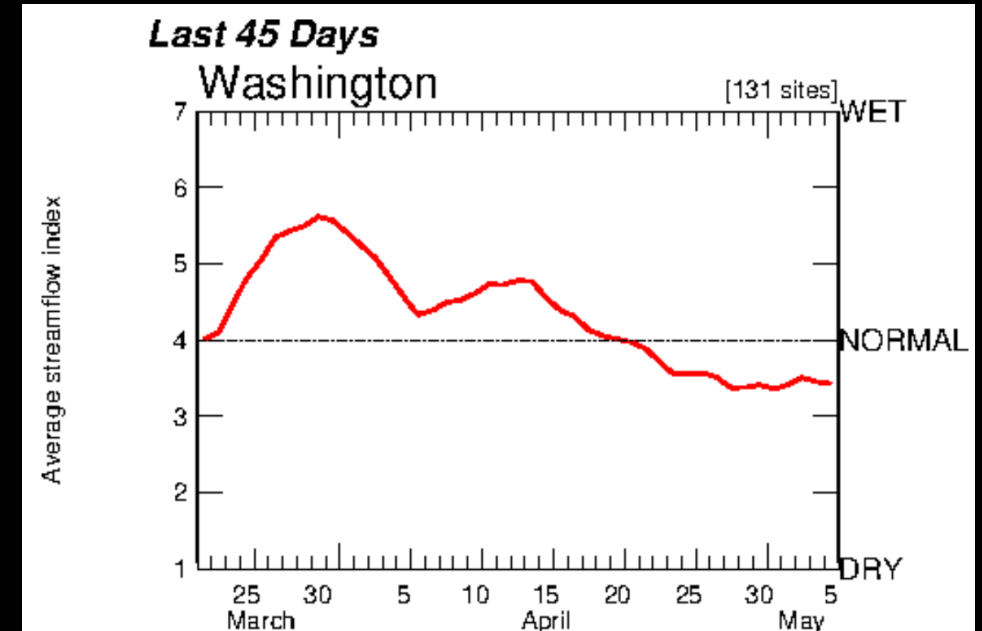
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# 7-day average streamflow

Most USGS stream gages at **normal** as of 7 May 2025



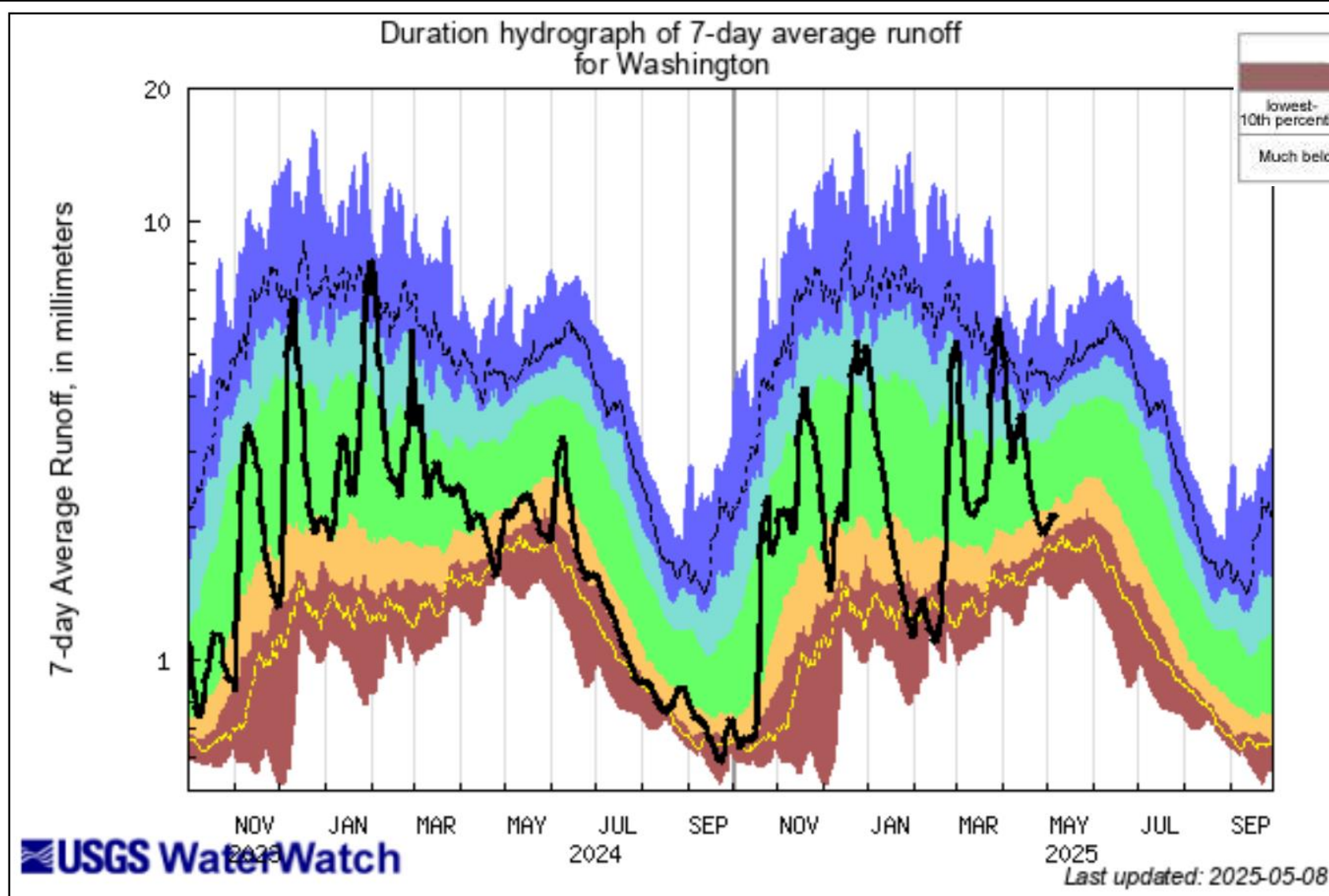
Preliminary Information-Subject to Revision.  
Not for Citation or Distribution.



Explanation - Percentile classes						
Record Low	<10	10-24	25-75	76-90	>90	Record High
	Much below normal	Below normal	Normal	Above normal	Much above normal	

# Area-Based Runoff Duration Hydrograph

7-day average streamflow



Explanation - Percentile classes						
lowest-10th percentile	5	10-24	25-75	76-90	95	90th percentile-highest
Much below Normal	Below normal	Normal	Above normal	Much above normal		Flow

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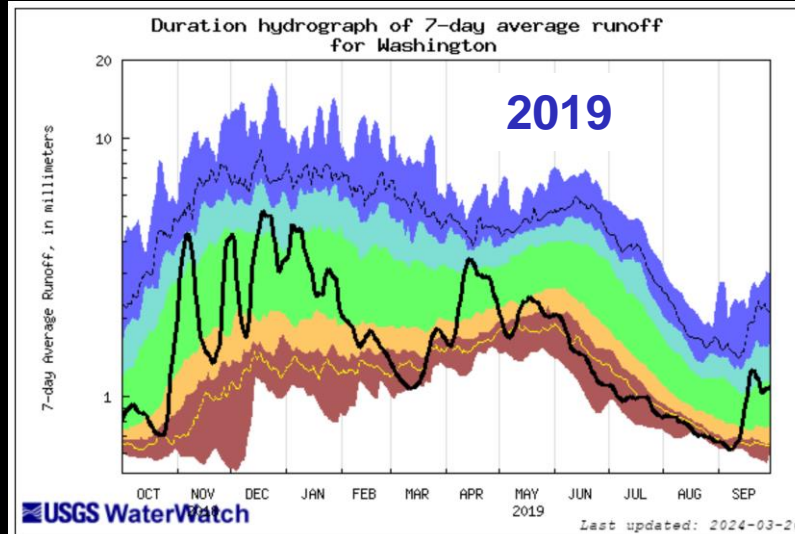
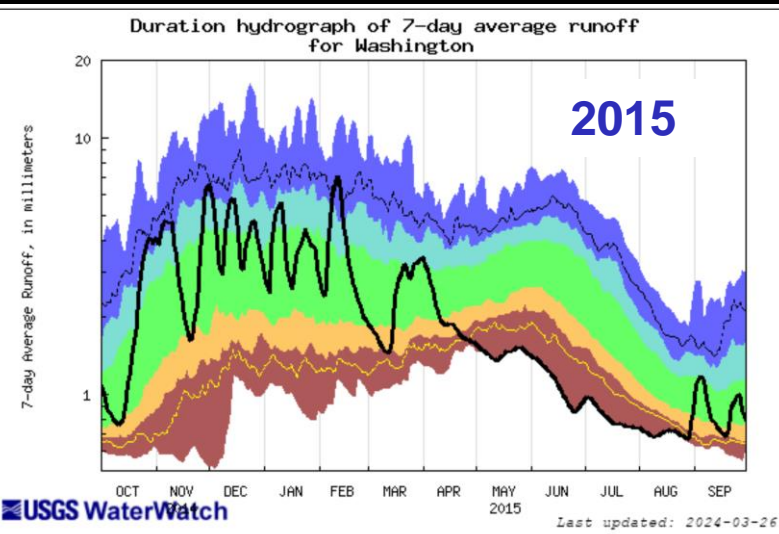
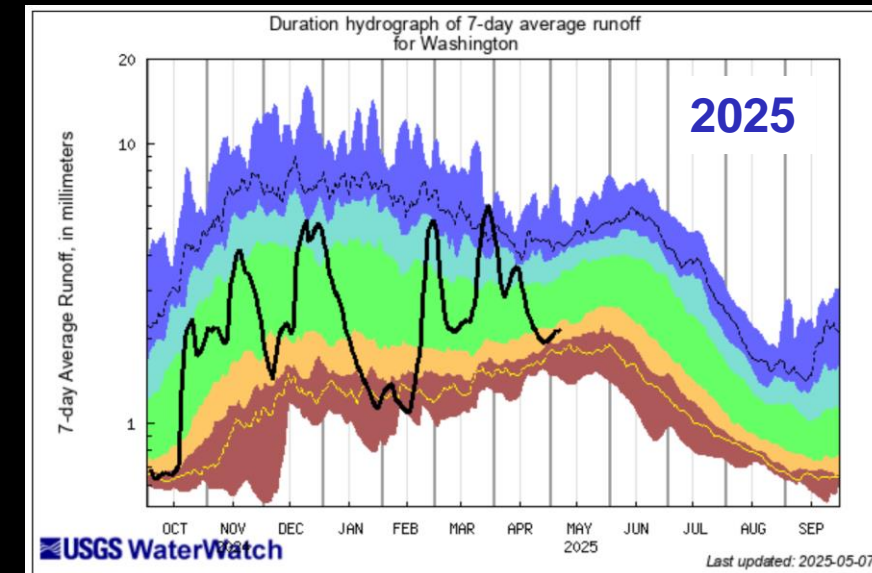
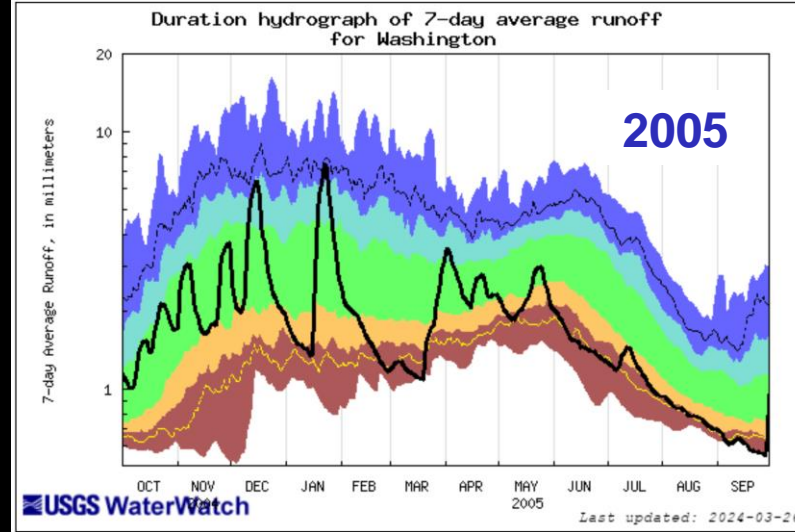
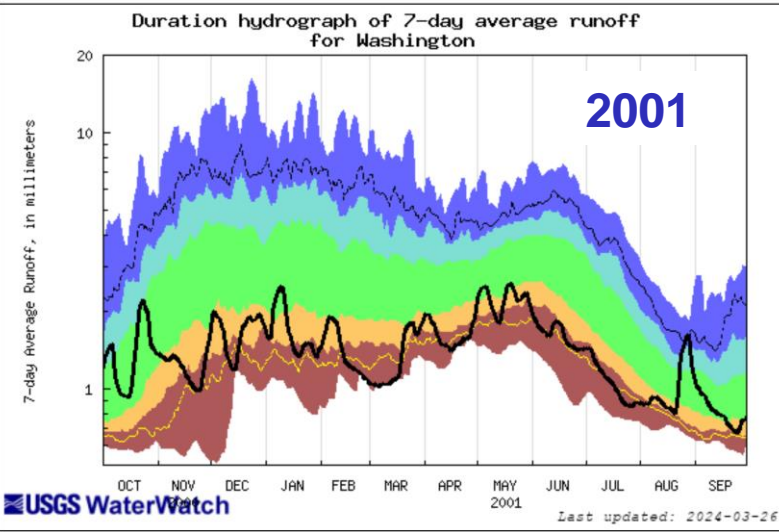
**For some streams, flow  
statistics may have been  
computed from mixed  
regulated  
and unregulated flows; this  
can affect depictions of flow  
conditions.**









# Area-Based Runoff Duration Hydrograph

## 7-day average streamflow

Duration hydrograph for the year compared to recent years of drought










Explanation - Percentile classes							
							
lowest-10th percentile	5	10-24	25-75	76-90	95	90th percentile - highest	Flow
Much below normal	Below normal	Normal	Above normal	Much above normal			

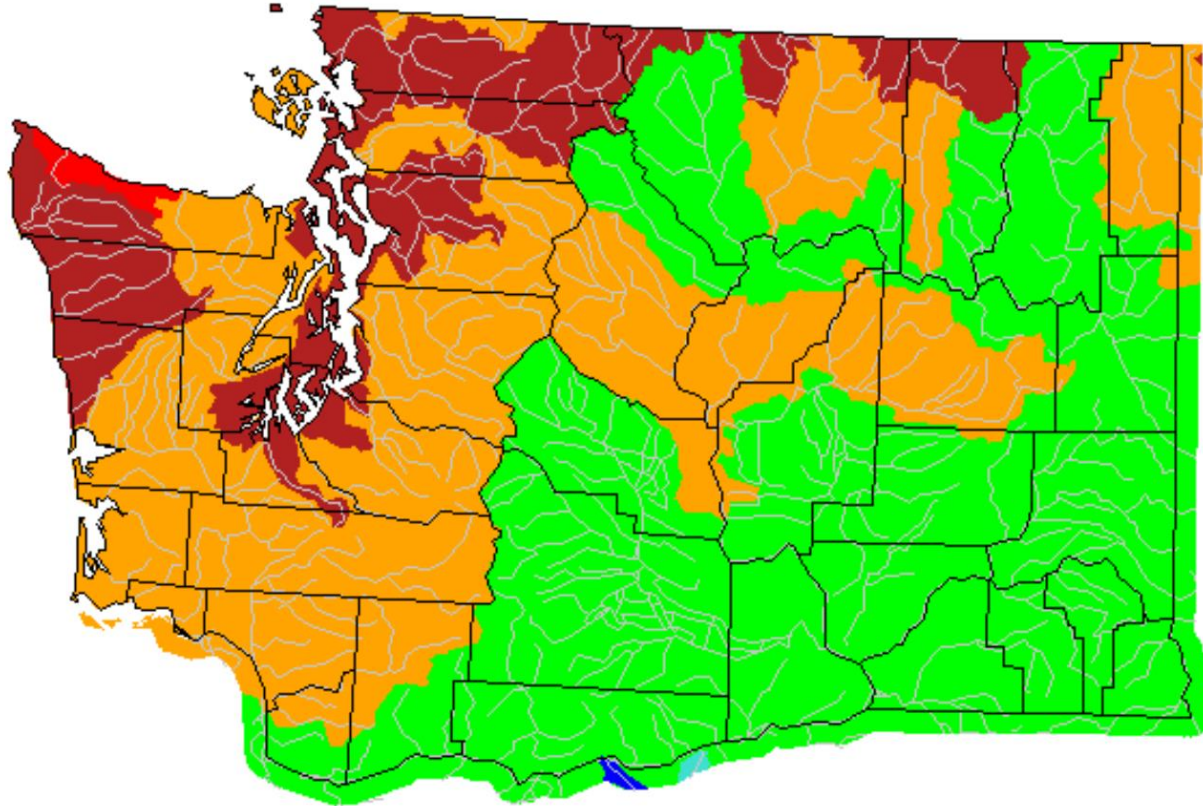
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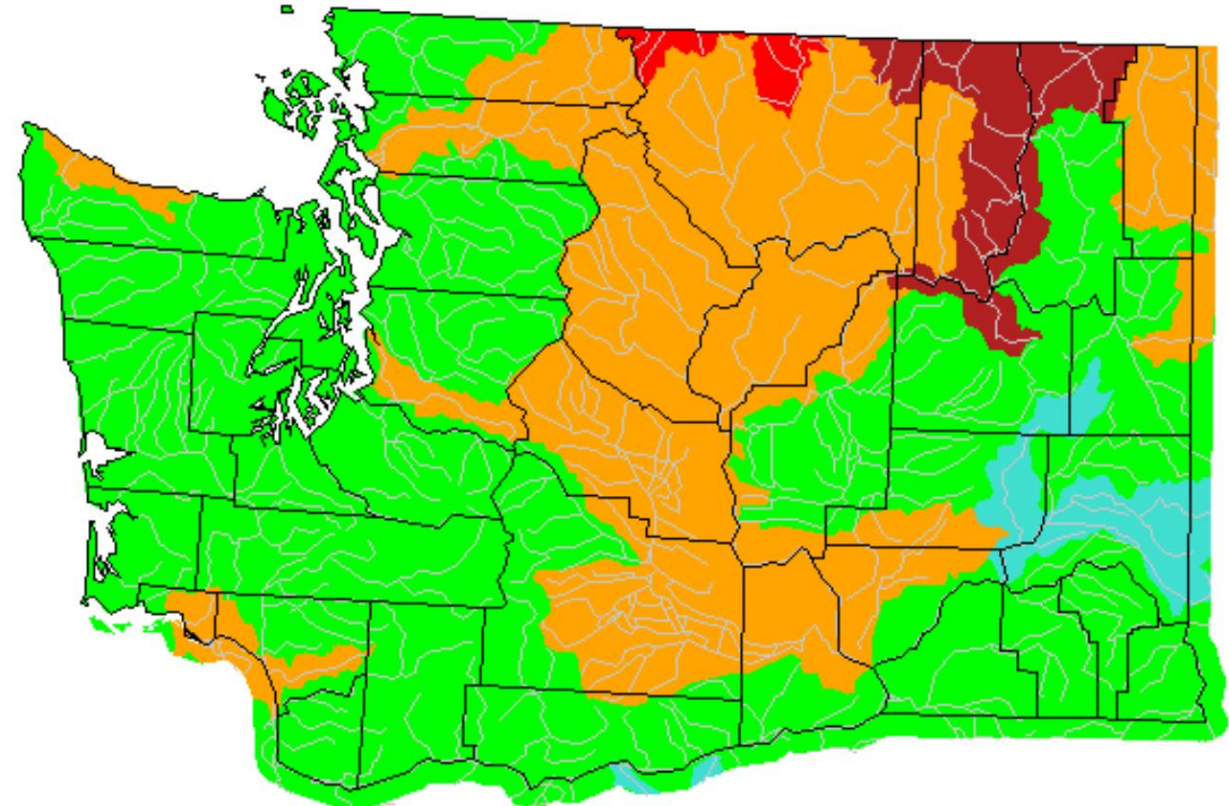
# Monthly average streamflow compared to historical streamflow

Explanation - Percentile classes						
						
Record Low	<10	10-24	25-75	76-90	>90	Record High
	Much below normal	Below normal	Normal	Above normal	Much above normal	

**January 2025**



**February 2025**



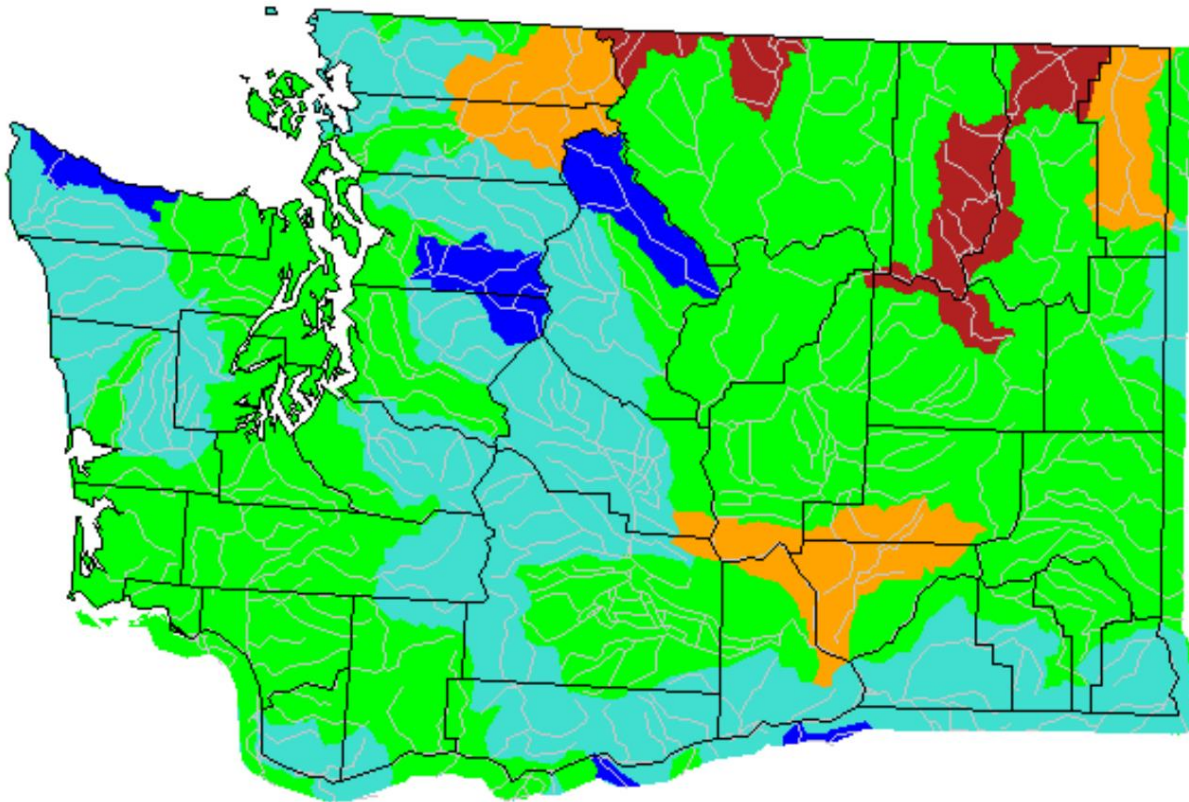
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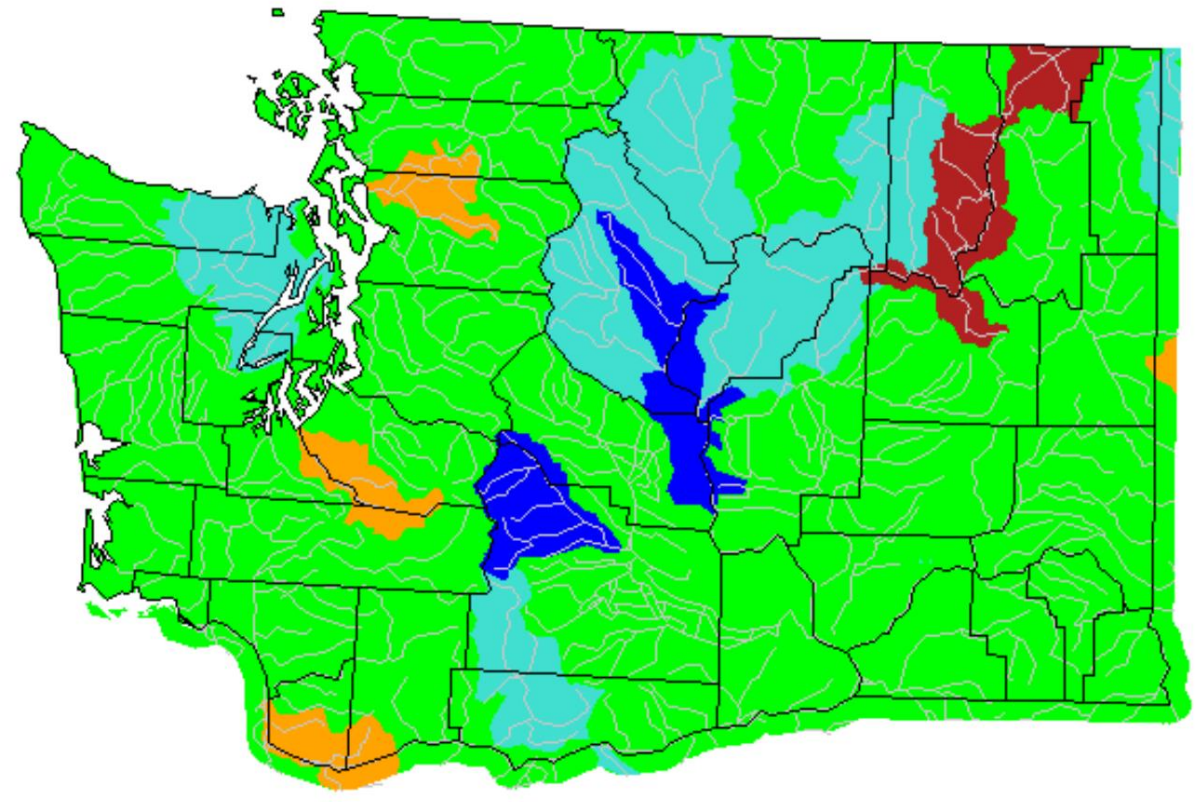
# Monthly average streamflow compared to historical streamflow

Explanation - Percentile classes						
Record Low	<10	10-24	25-75	76-90	>90	Record High
	Much below normal	Below normal	Normal	Above normal	Much above normal	

**March 2025**



**April 2025**



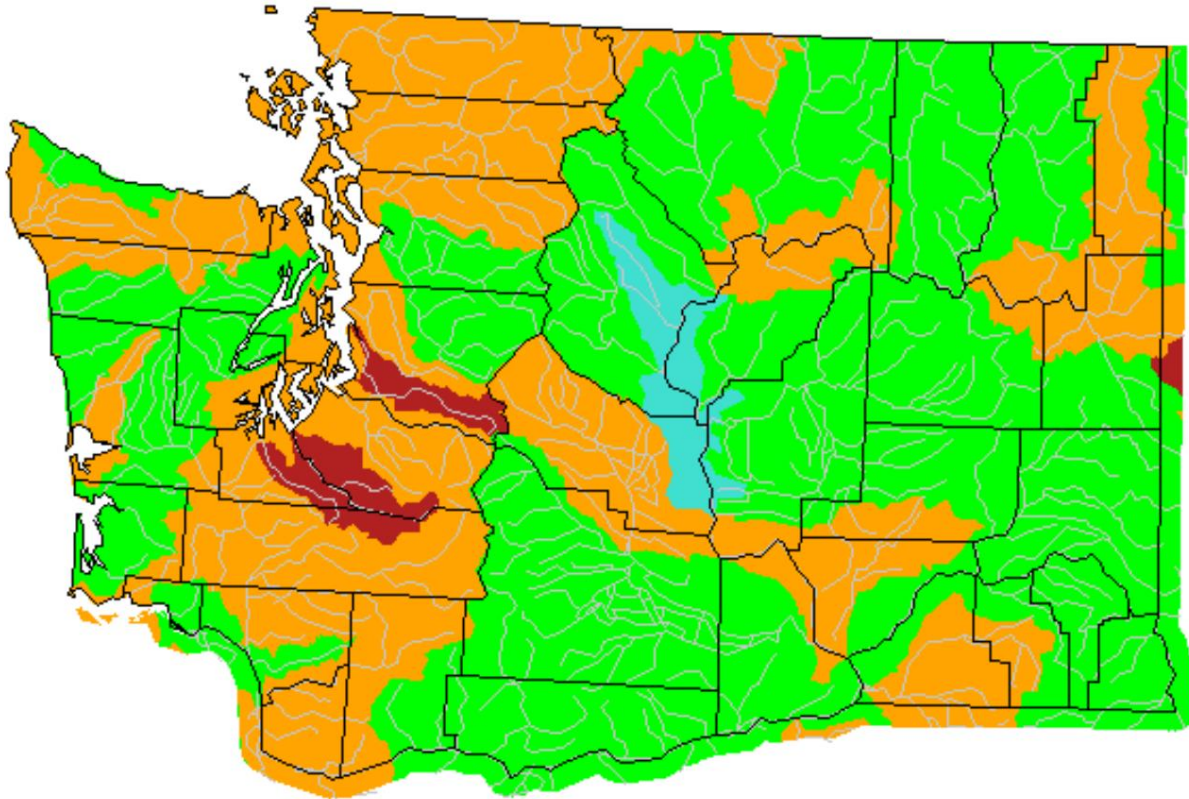
**Preliminary Information-Subject to Revision. Not for Citation or Distribution.**



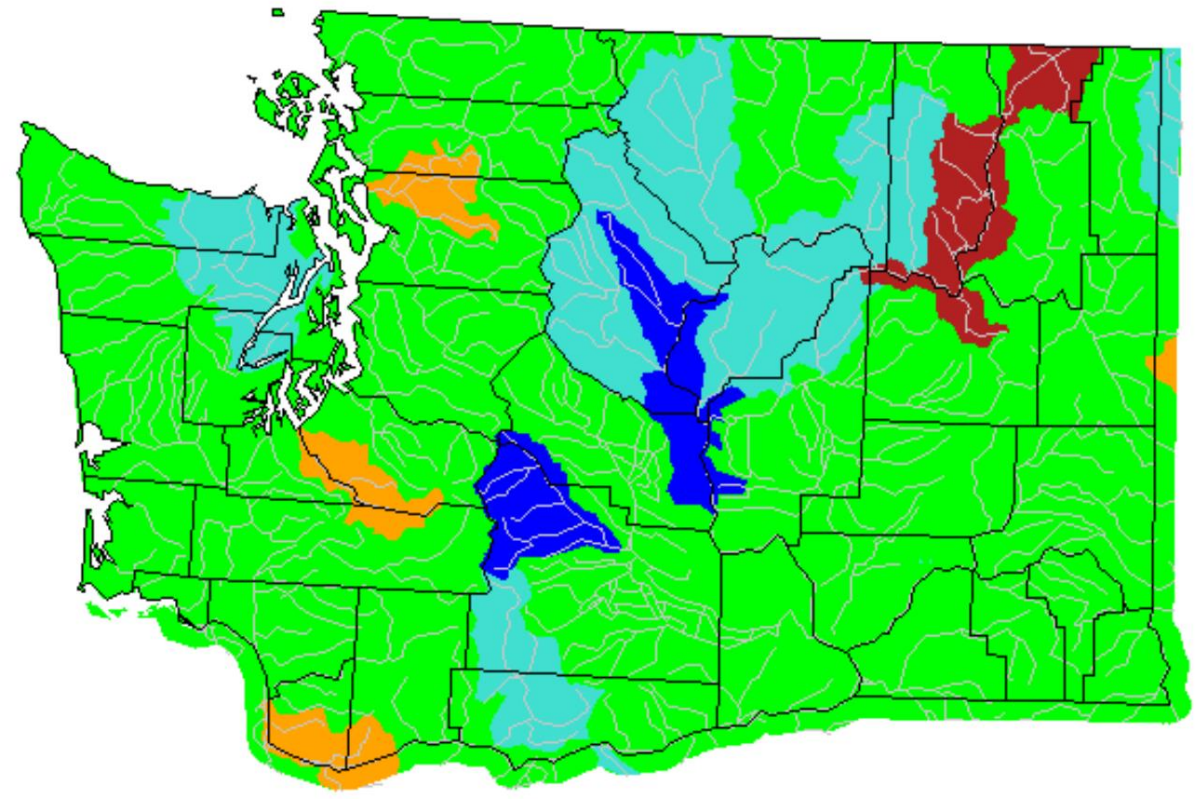
# Monthly average streamflow compared to historical streamflow

Explanation - Percentile classes			
Record Low	<10	10-24	25
	Much below normal	Below normal	Non

April 2024



April 2025

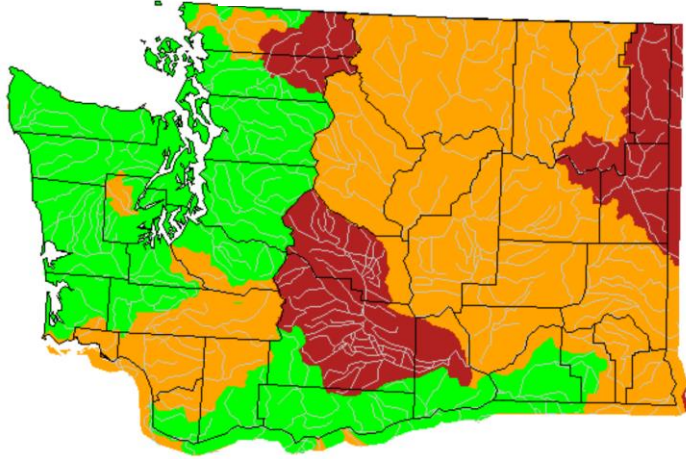


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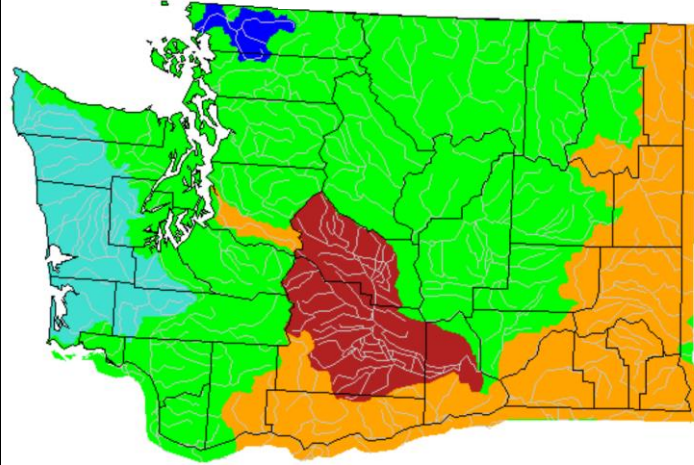


# Monthly average streamflow compared to historical streamflow

April 2001



April 2005

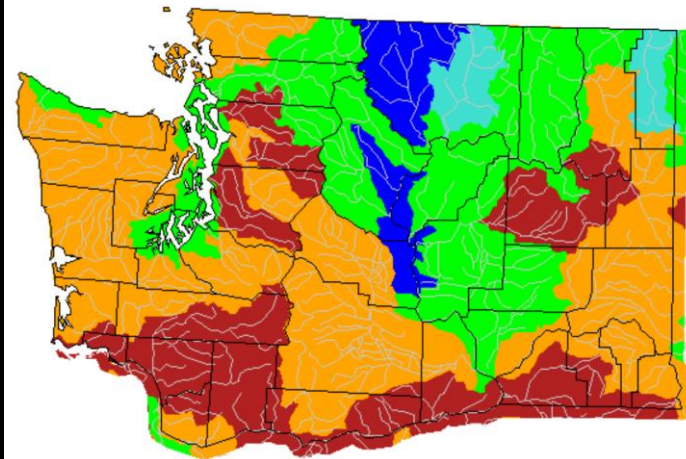


Explanation - Percentile classes						
Record Low	<10	10-24	25-75	76-90	>90	Record High
	Much below normal	Below normal	Normal	Above normal	Much above normal	

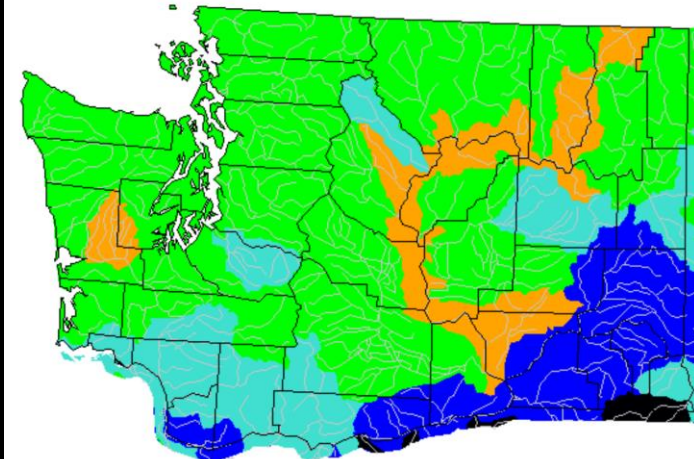
<https://waterwatch.usgs.gov/>

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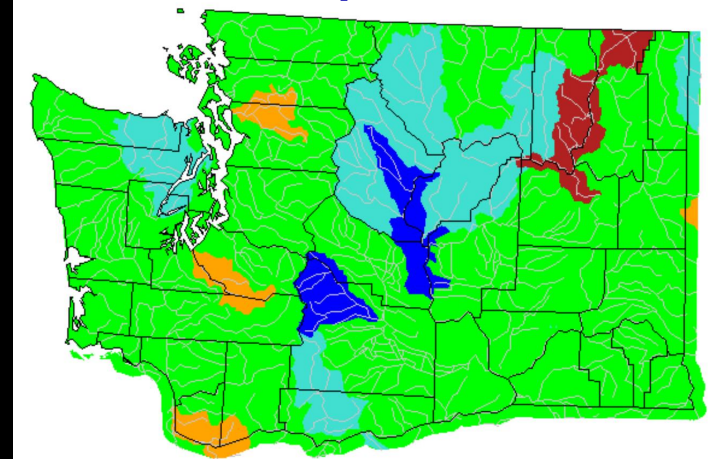
April 2015



April 2019



April 2025

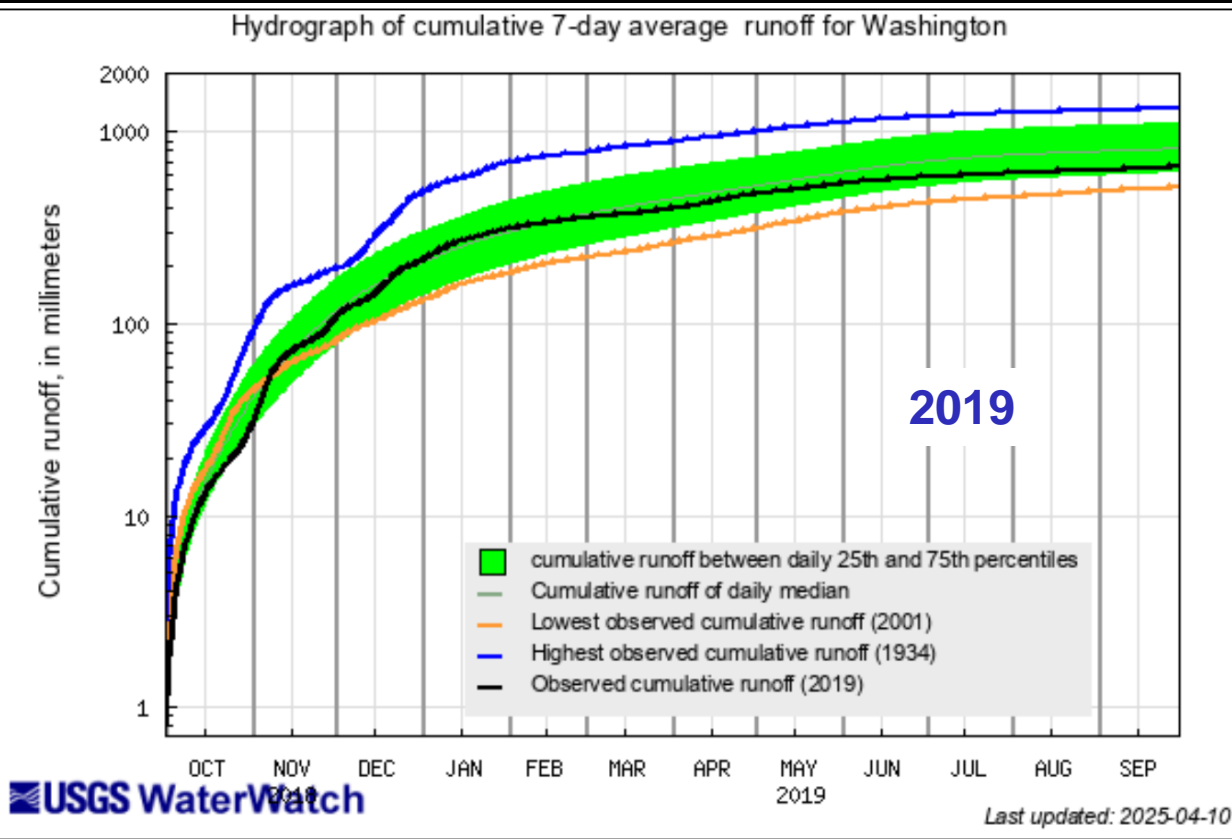




# Cumulative runoff hydrograph

## Area-based runoff based on 7-day average

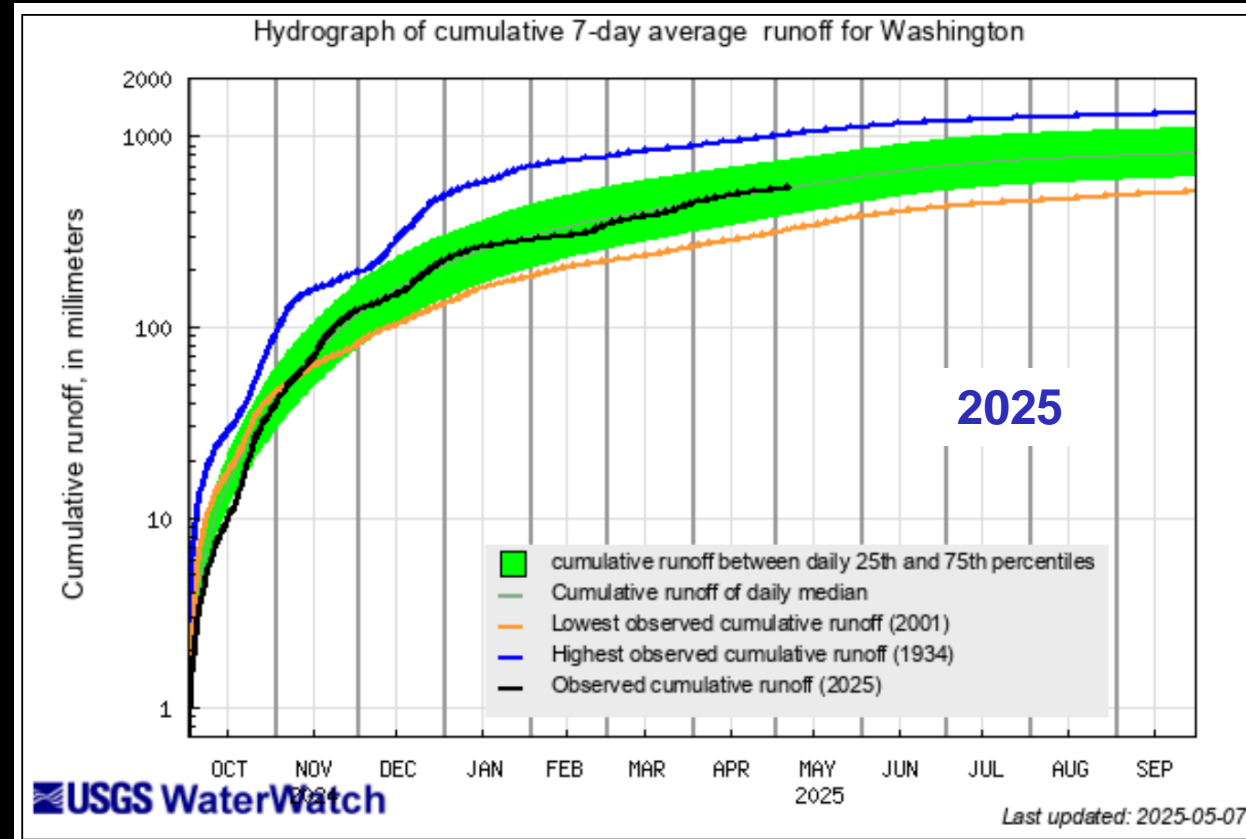
Normal for 2025 water year as of 7 April



2024 water year

Area-based runoff may have been computed from mixed regulated and unregulated streamflows

<https://waterwatch.usgs.gov/>



2025 water year

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# Two reference groundwater wells



## Aquifers



- Blues Unconsolidated and semiconsolidated sand and gravel aquifers
- Yellow Coastal Plain aquifer systems in semiconsolidated sand
- Greens Sandstone aquifers
- Purples Sandstone and carbonate-rock aquifers
- Browns Carbonate-rock aquifers
- Reds Igneous and metamorphic-rock aquifers
- White Other

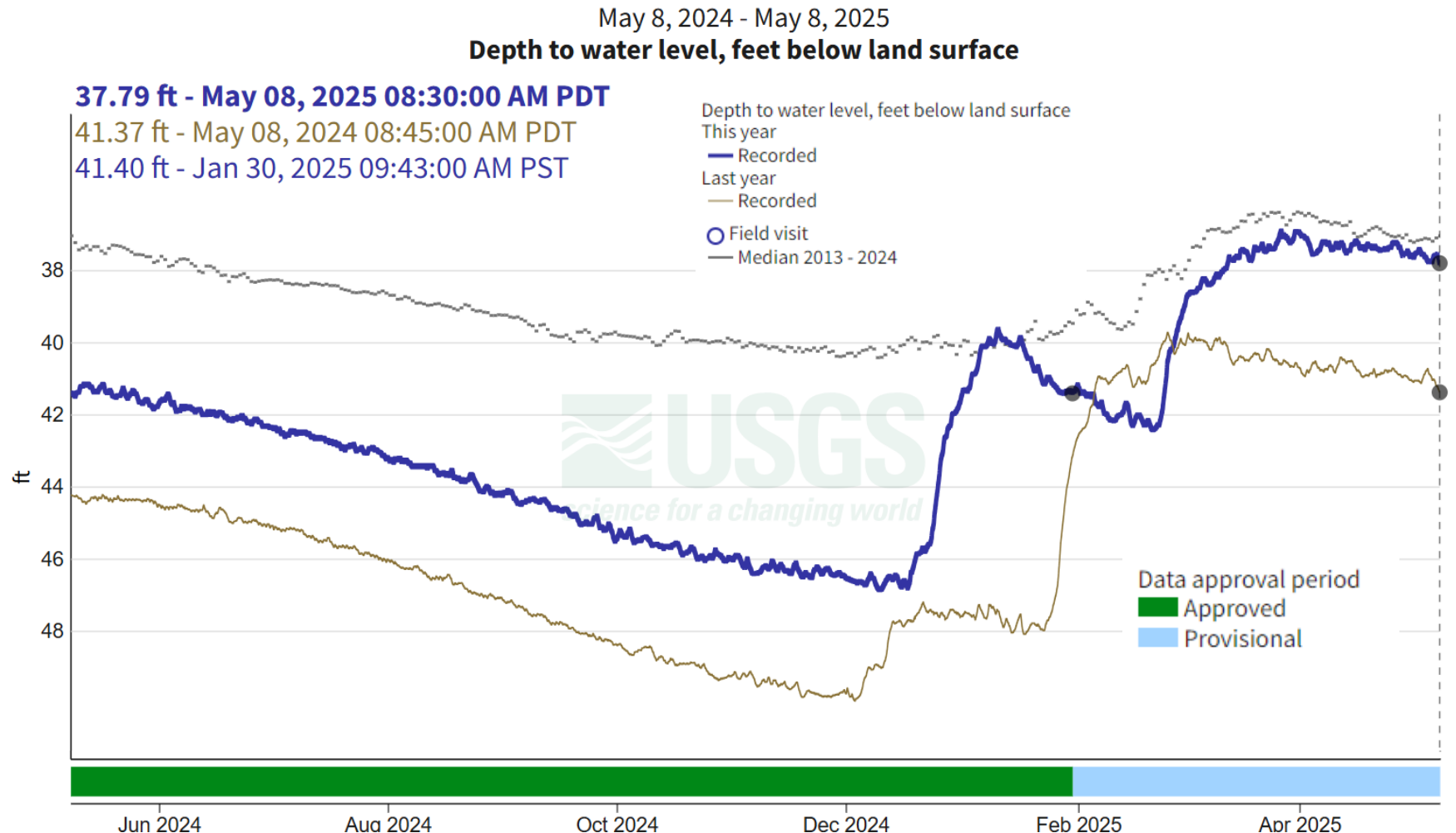
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# Davenport Well Groundwater Conditions

24N/36E-16A01 - 473442118162201

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## Davenport well

### Well Details

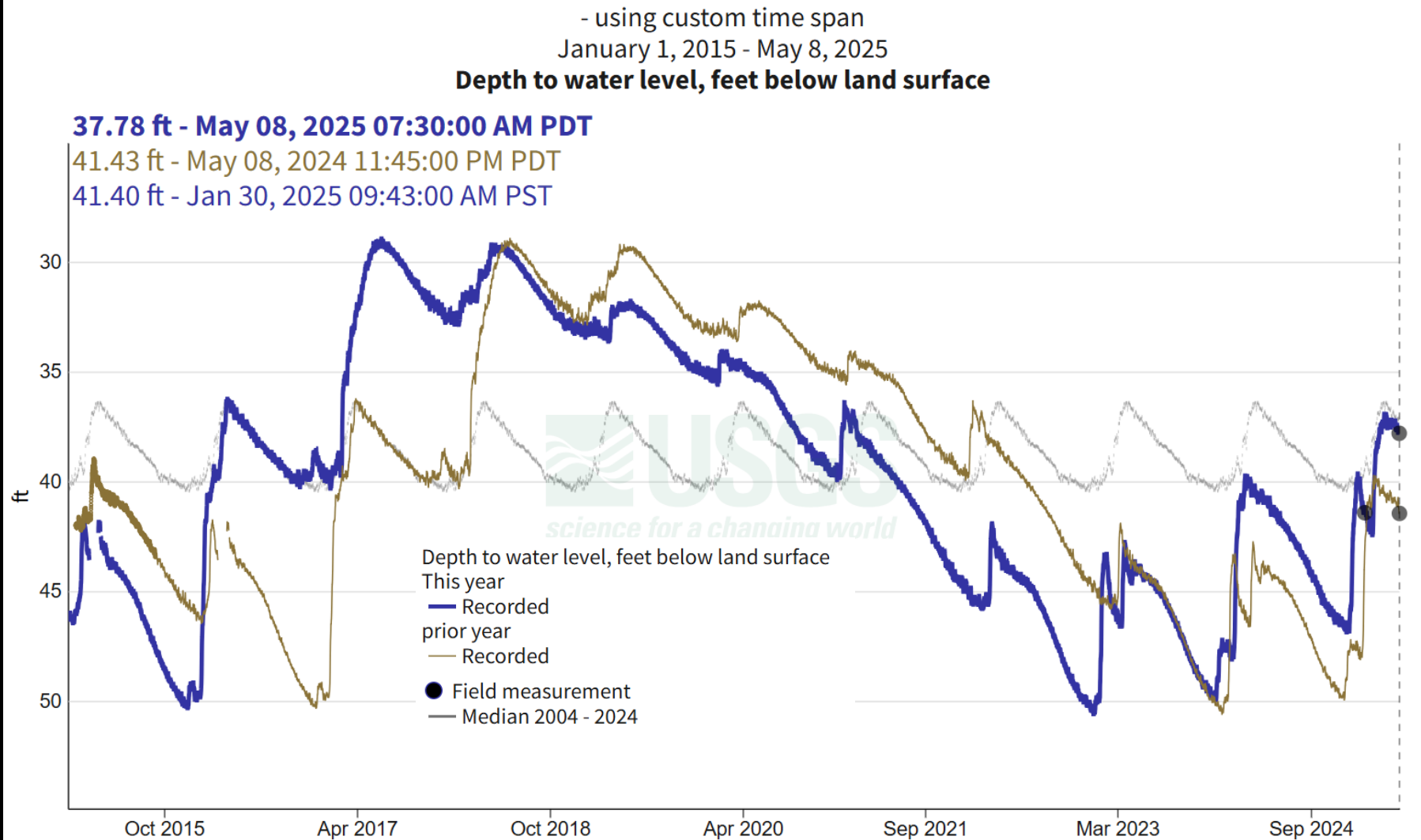
- Lincoln County
- 117-ft deep
- Wanapum Basalt

**Preliminary Information-  
Subject to Revision. Not for  
Citation or Distribution.**

# Davenport Well Groundwater Conditions

24N/36E-16A01 - 473442118162201

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## Well Details

- Lincoln County
- 117-ft deep
- Wanapum Basalt

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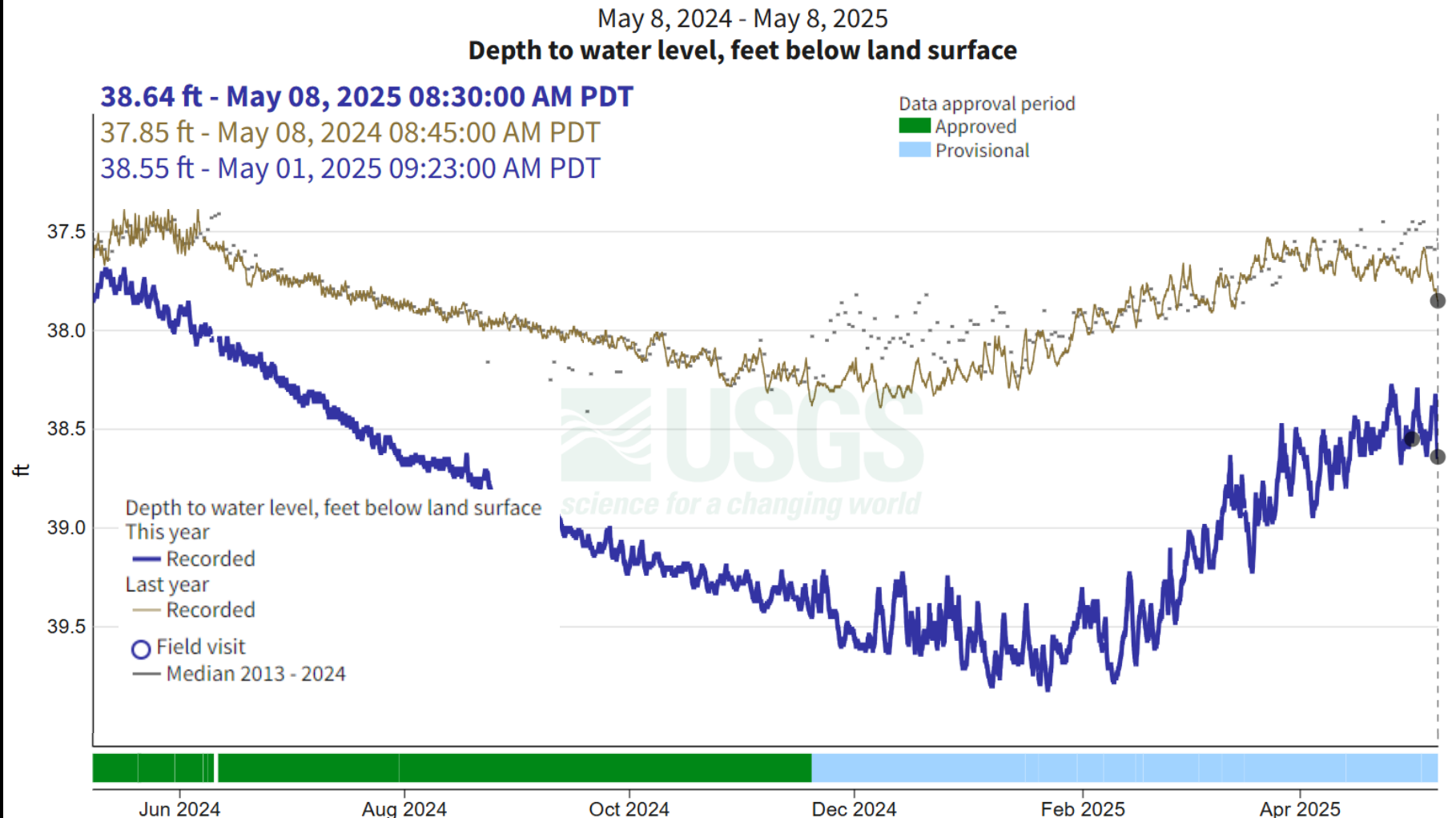
<https://dashboard.waterdata.usgs.gov/app/nwd/en/?aoi=state-wa>



# Whetstone Well Groundwater Conditions

10N/37E-23R01 - 461935118081501

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## Whetstone well

### Well Details:

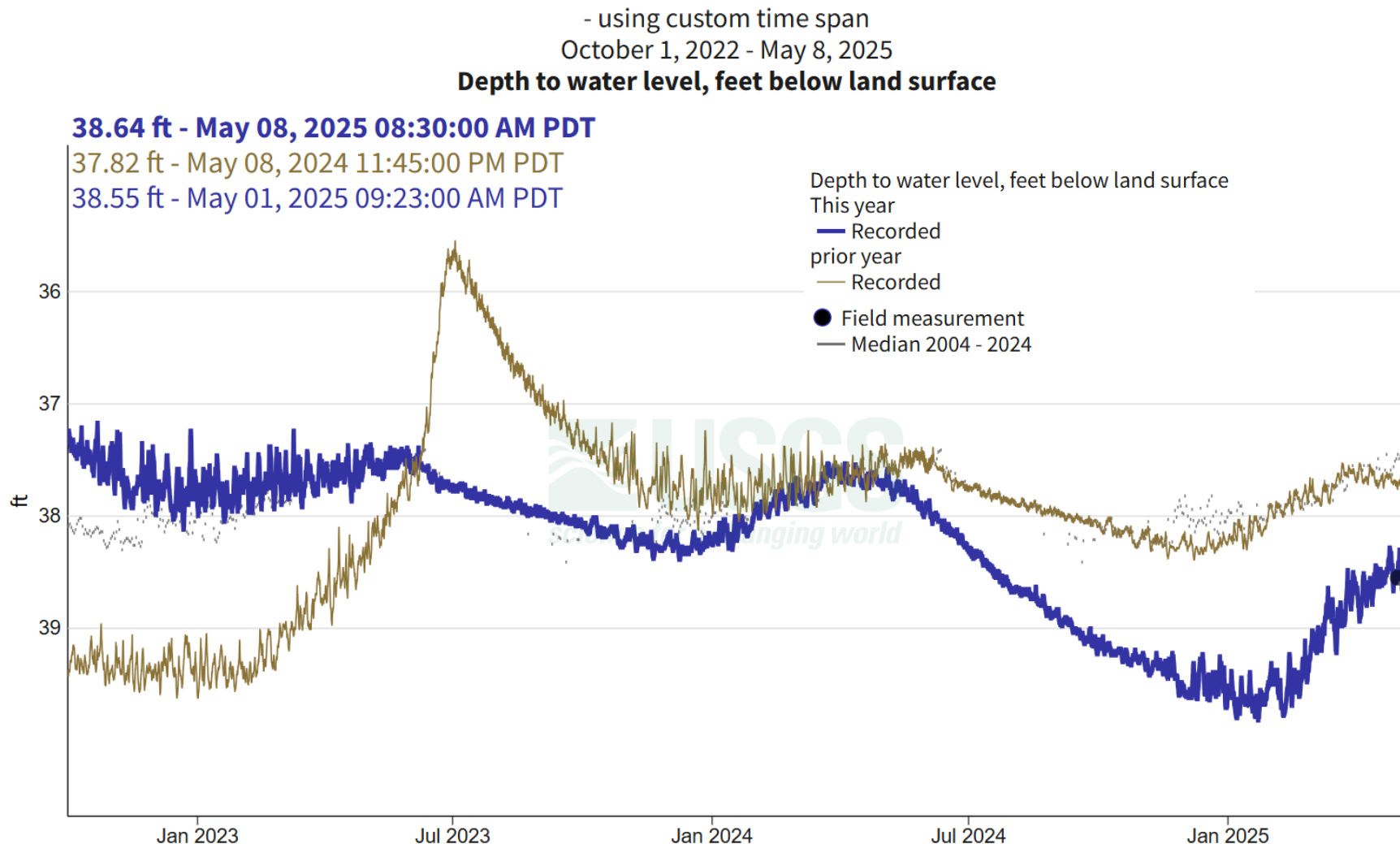
- Columbia County near Waitsburg
- 172.5-ft deep
- Grande Ronde Basalt Formation

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# Whetstone Well Groundwater Conditions

10N/37E-23R01 - 461935118081501

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## Well Details:

- Columbia County near Waitsburg
- 172.5-ft deep
- Grande Ronde Basalt Formation

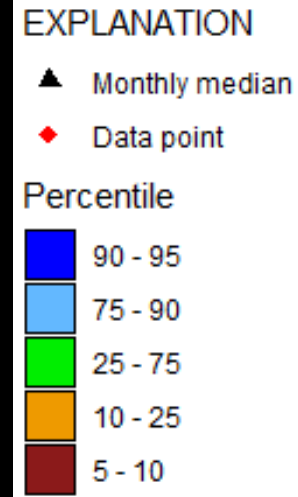
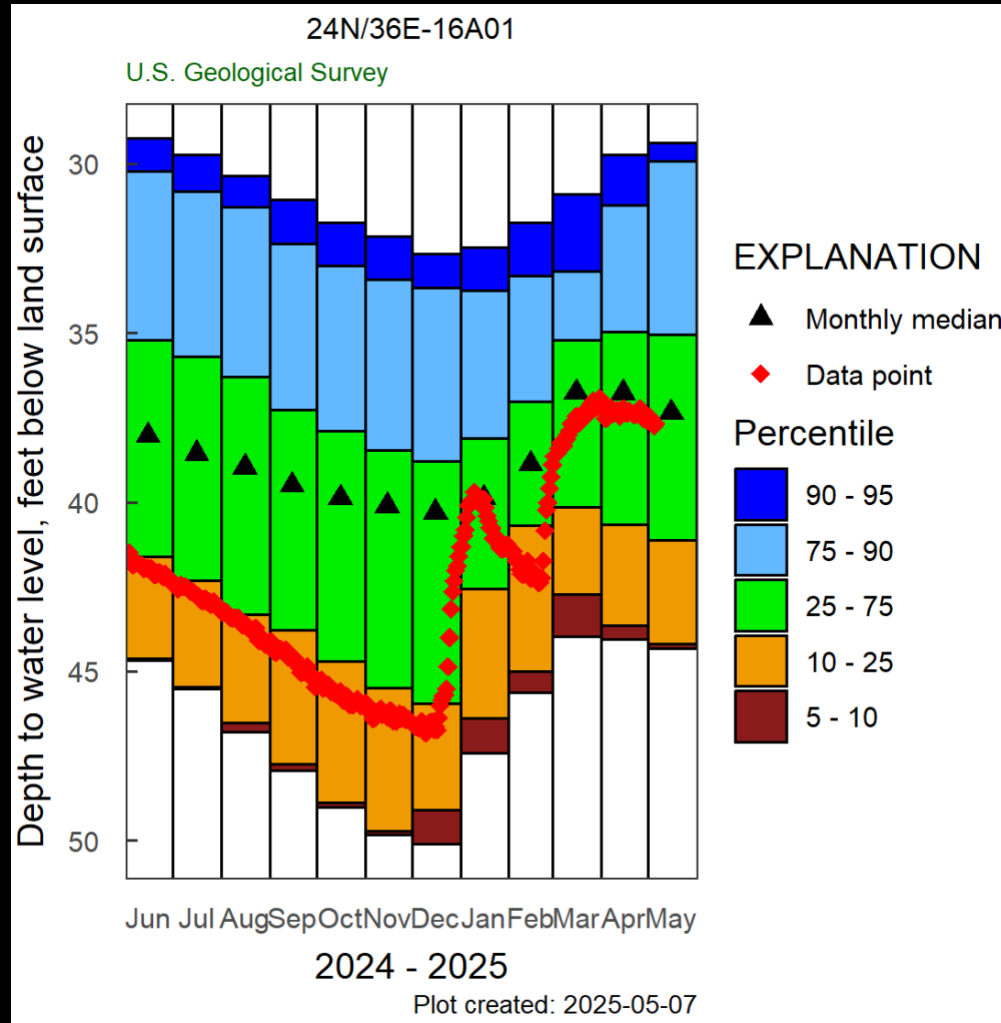
**Preliminary  
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<https://dashboard.waterdata.usgs.gov/app/nwd/en/?aoi=state-wa>



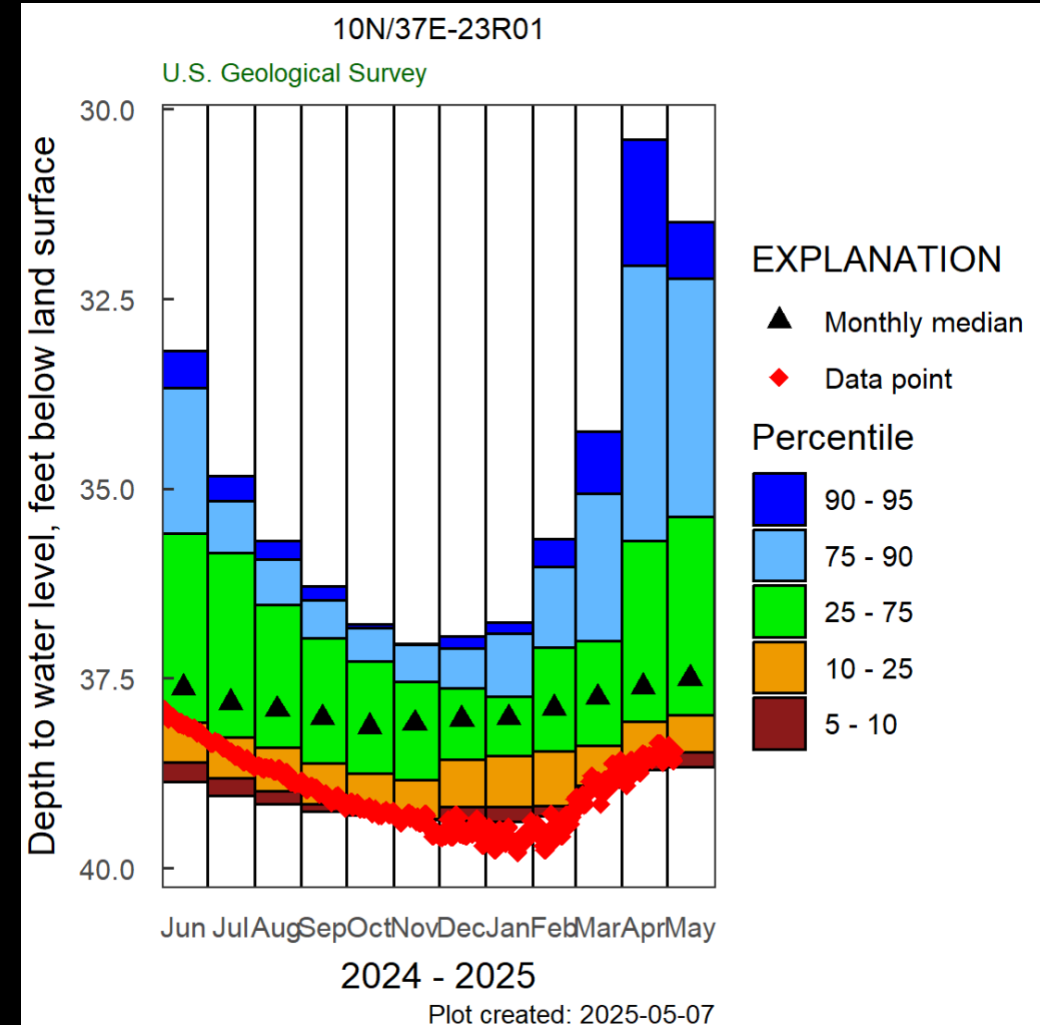
# Groundwater Conditions

## Davenport well



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## Whetstone well



# Summary of Washington Streamflow and Groundwater Conditions as of 7 May 2025

## 7-day average streamflow at eight index gaging stations:

### **Above Normal**

- American River

### **Normal**

- Nooksack River

### **Below Normal**

- Quinault River
- Puyallup River nr. Orting
- Hangman Creek
- Walla Walla River

### **Much Below Normal**

- Chehalis River nr. Grand Mound

### **Record Low**

- EF Lewis River

## Monthly average groundwater conditions in April and May:

- Davenport well
  - Normal
- Whetstone well
  - Below to much below normal

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# Summary of Washington Streamflow and Groundwater Conditions as of 7 May 2025

## Monthly average area-based runoff normal to above normal in April

- Very low in Roosevelt Lake
- Highs east of Cascades in north central WA
  - Upper Columbia-Entiat
  - Naches
  - Chelan
  - Methow

## 7-Day Area-based runoff below normal at start of May

- Similar trend in recent drought years
- Higher flow conditions in March and April in 2025

## Cumulative Runoff

- Normal for water year 2025

