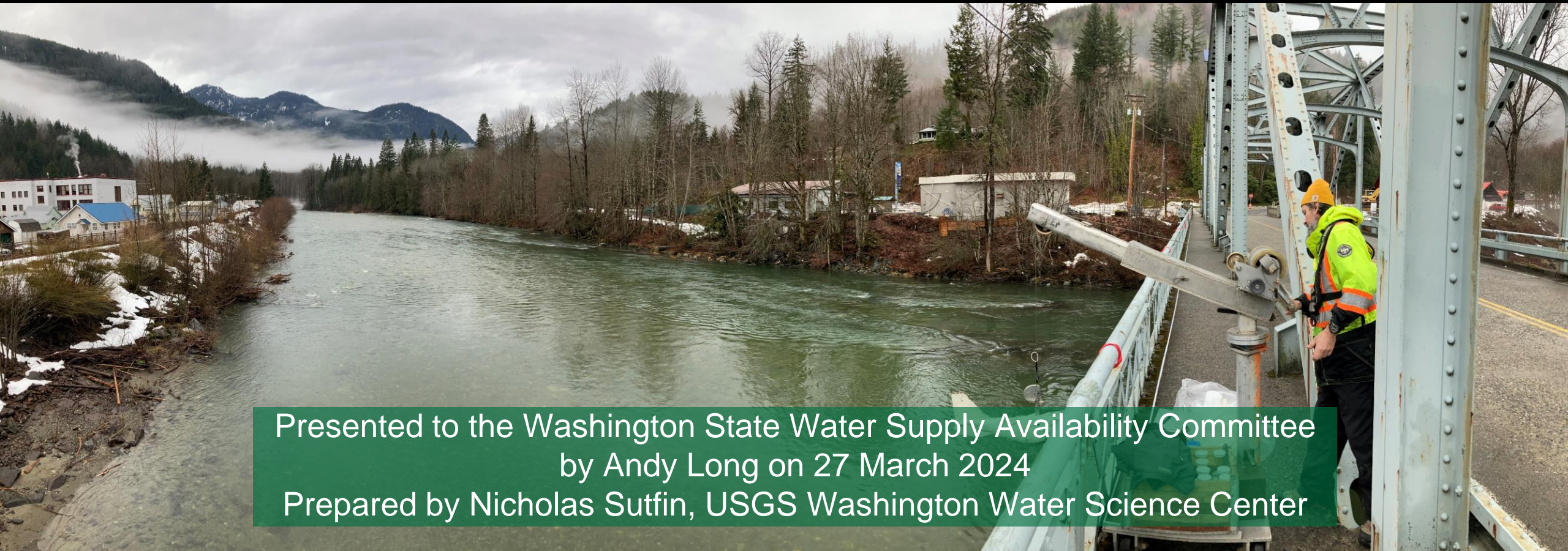


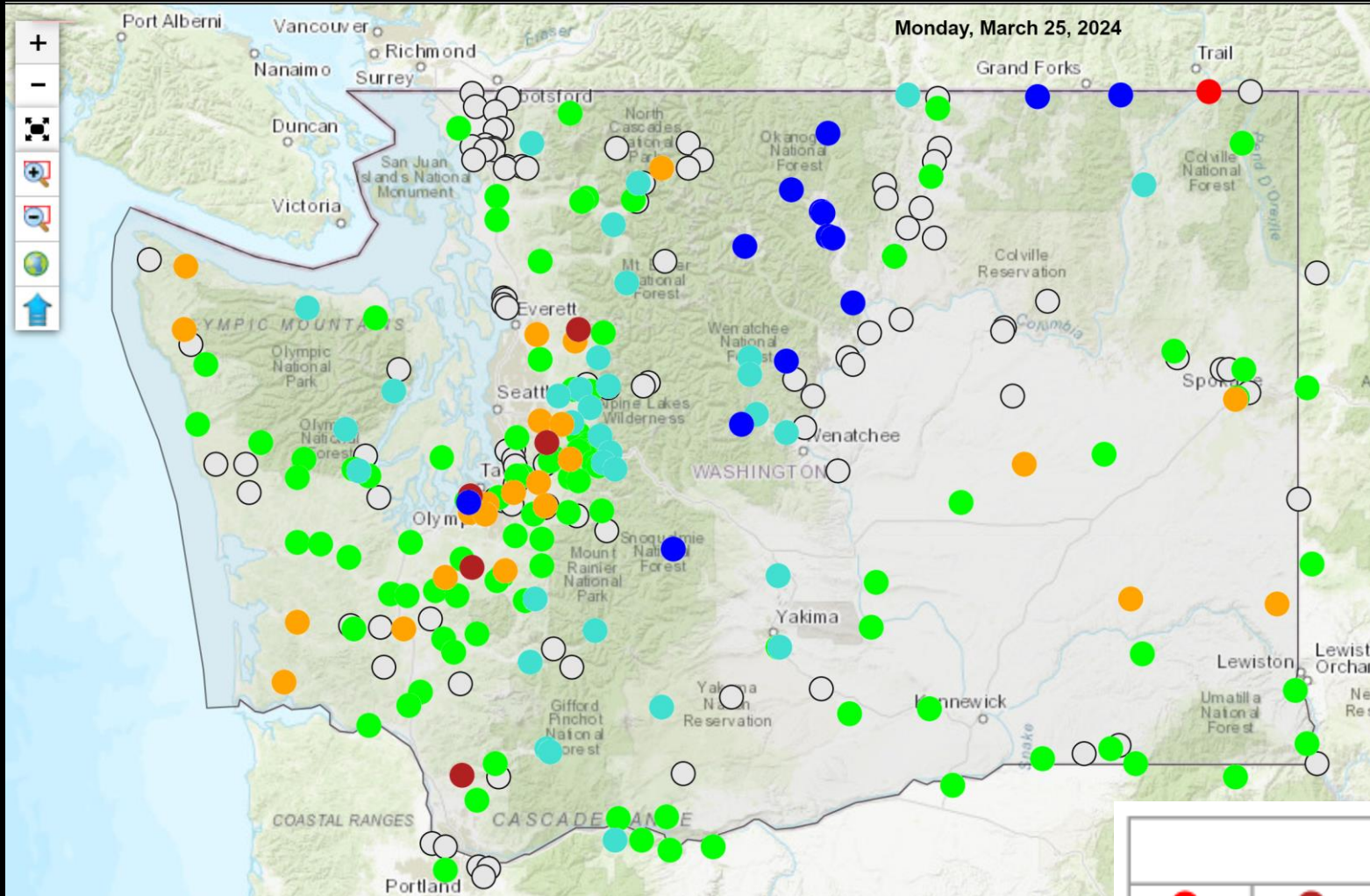
Streamflow & Groundwater Conditions in Washington State as of 26 March 2024











Presented to the Washington State Water Supply Availability Committee
by Andy Long on 27 March 2024
Prepared by Nicholas Sutfin, USGS Washington Water Science Center

7-day Average Streamflow

Conditions as of 26 March 2024

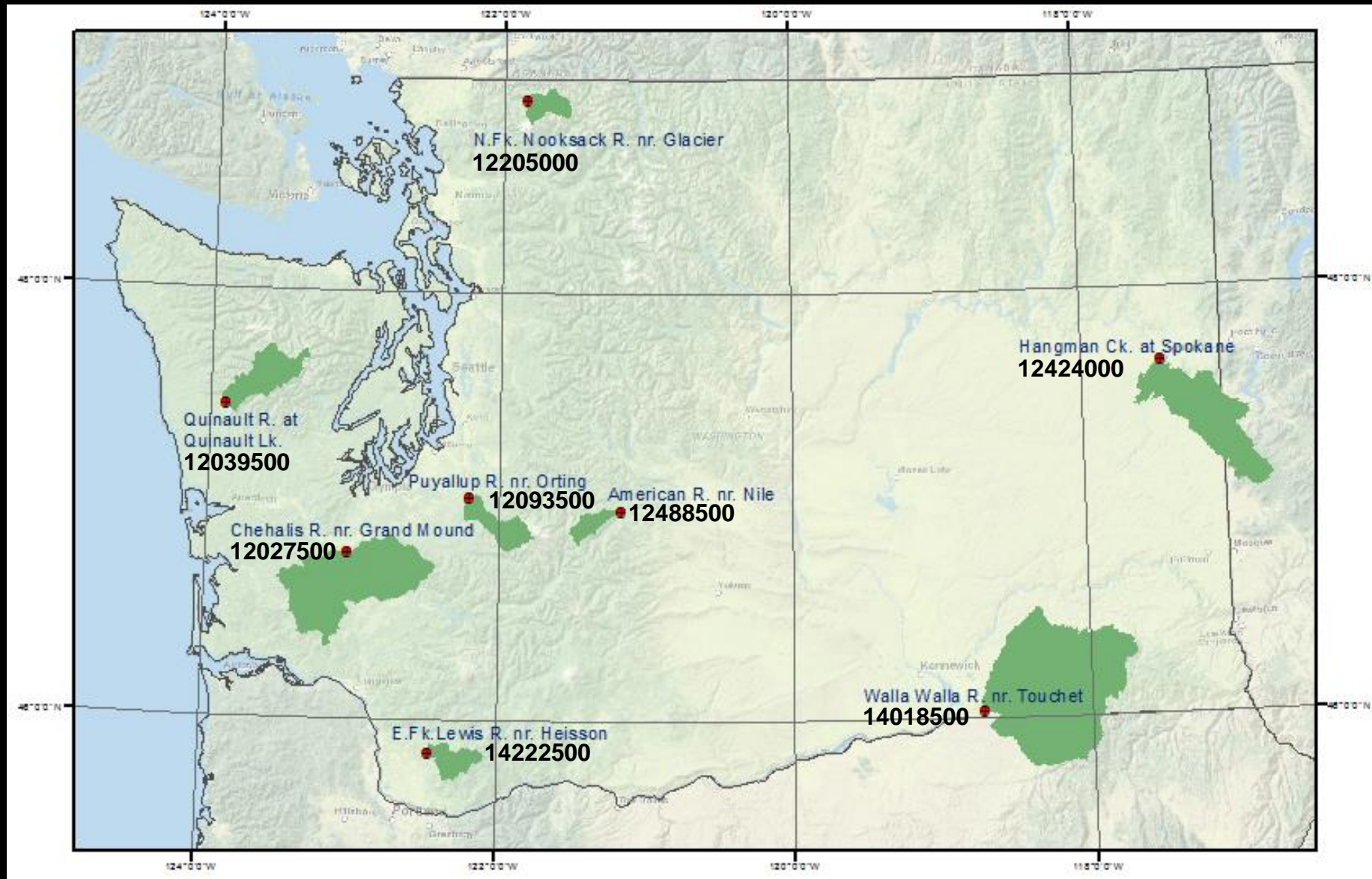


**Preliminary Information-
Subject to Revision. Not for
Citation or Distribution.**

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

Index Gaging Stations

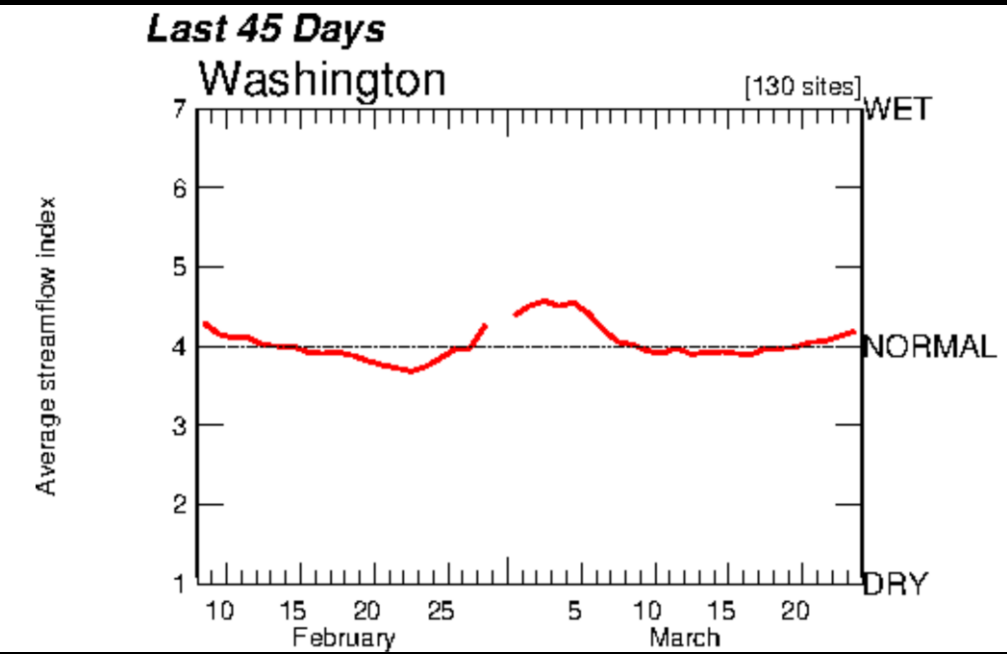
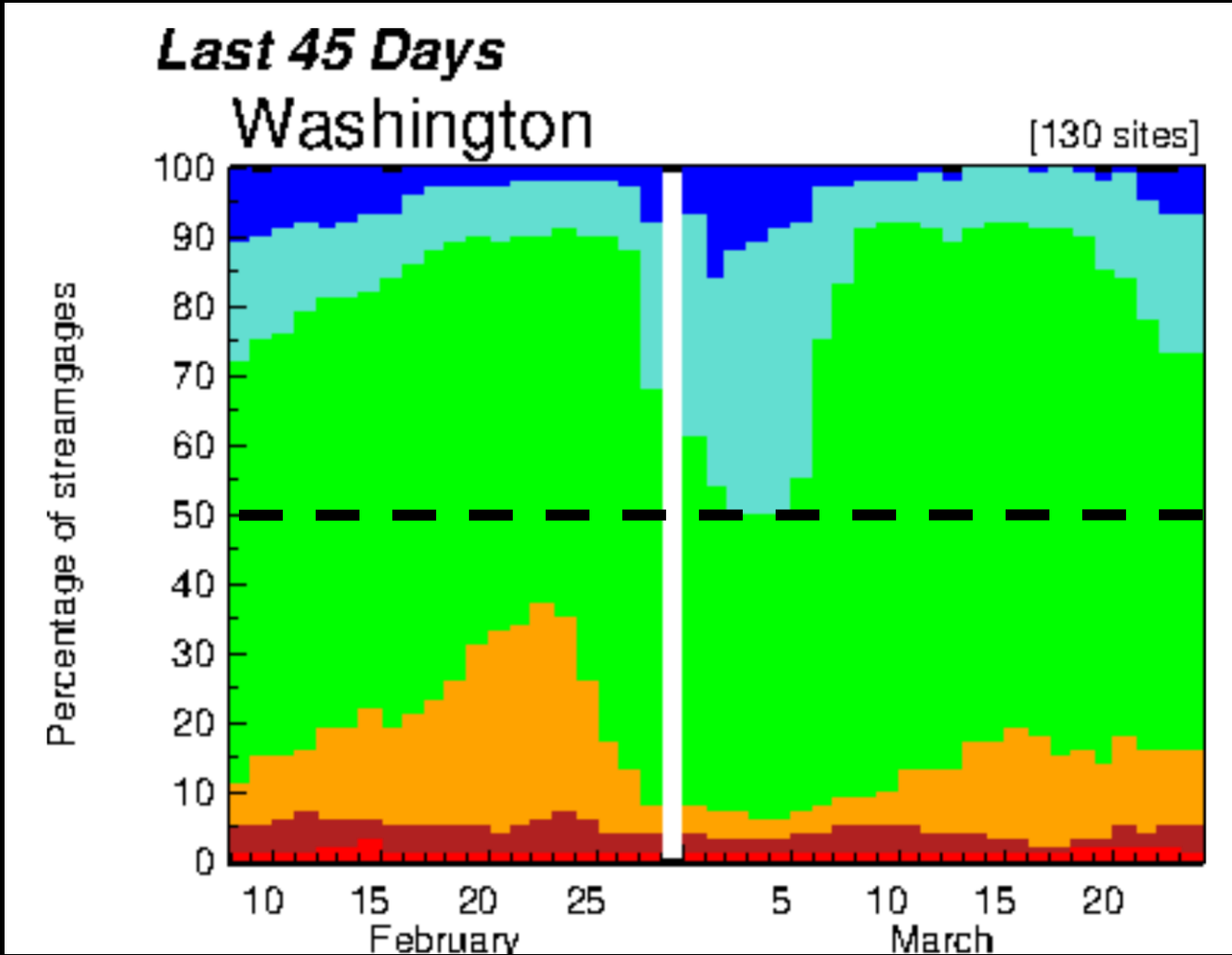
(Stations that measure natural or near-natural streamflow)



7-day average streamflow

7-day average streamflow as of 26 March 2024 is ~normal

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Not for Citation or Distribution.

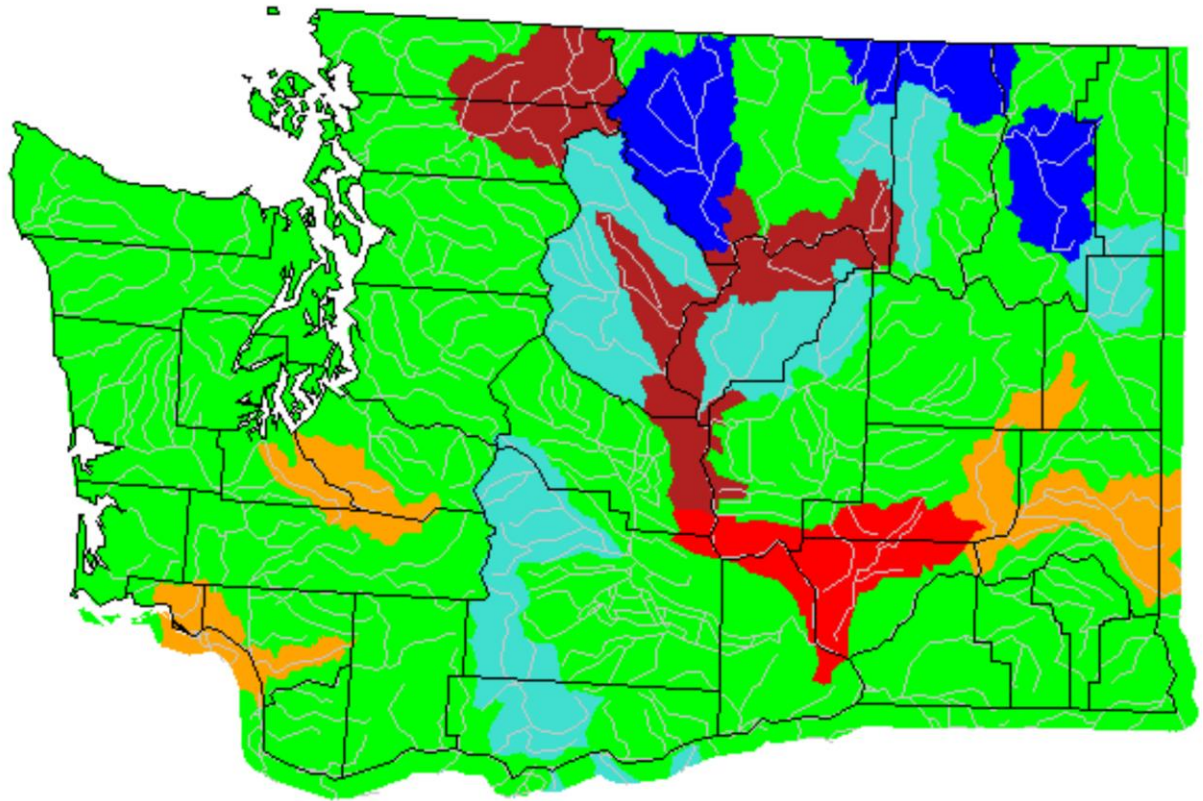


Explanation - Percentile classes

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

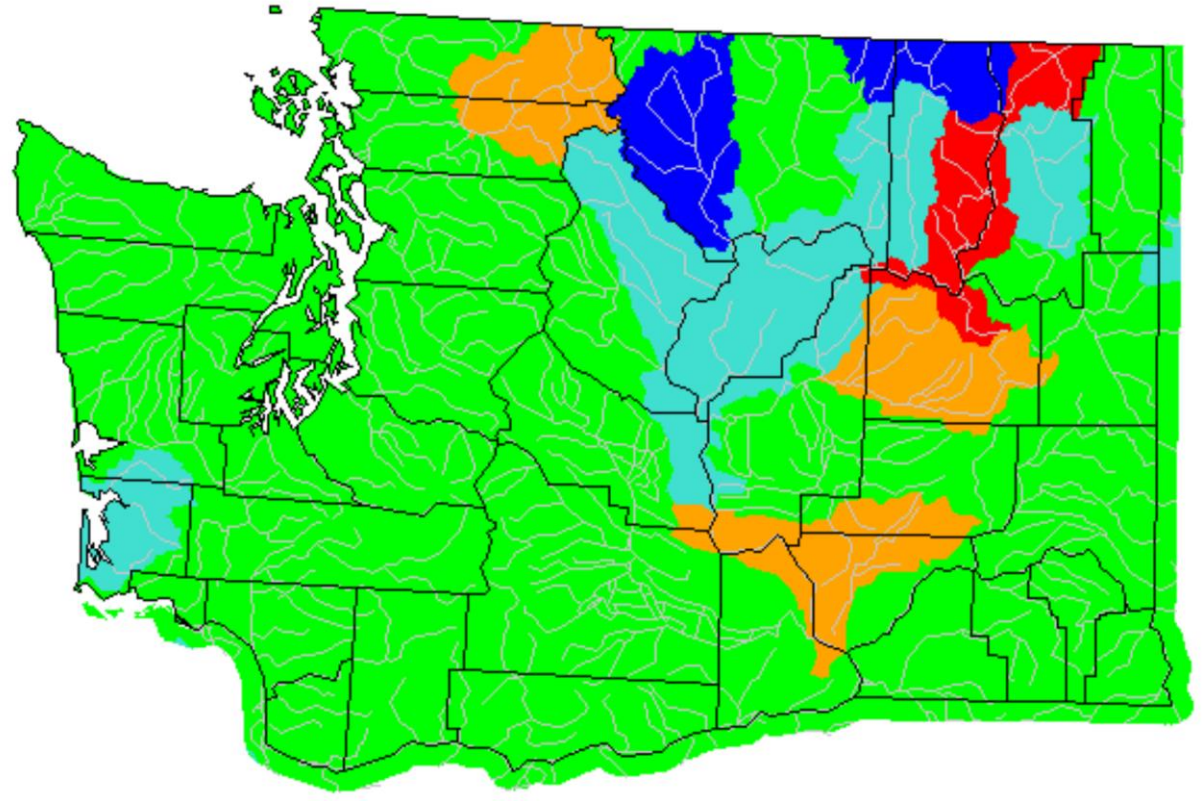
Monthly average streamflow compared to historical streamflow

February 2024



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

Last 28 days (March 2024)



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

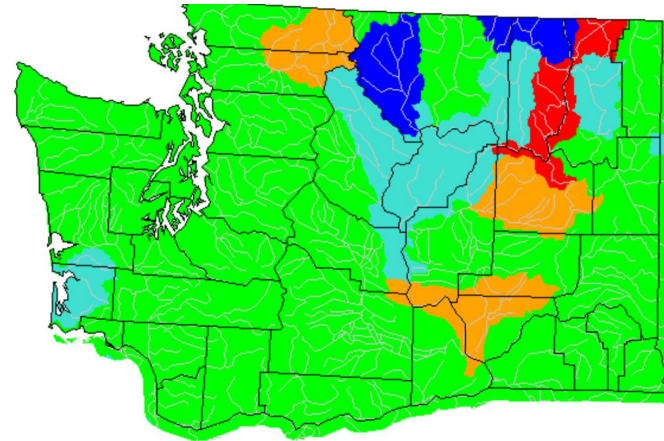
Monthly average streamflow

compared to historical streamflow as of 26 March 2024

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

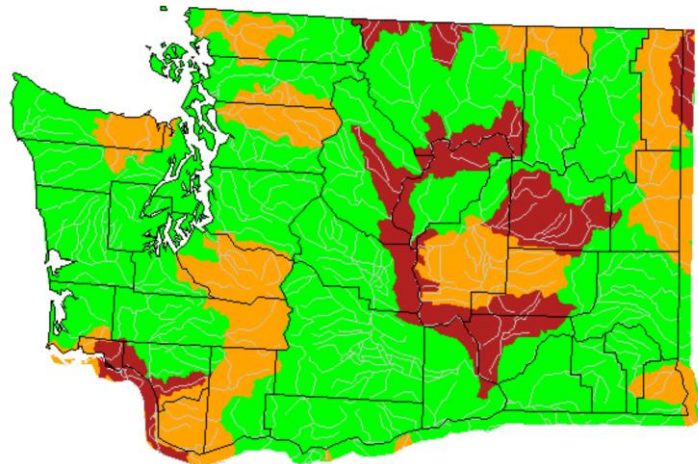
<https://waterwatch.usgs.gov/>

Last 28 days (as of March 26)

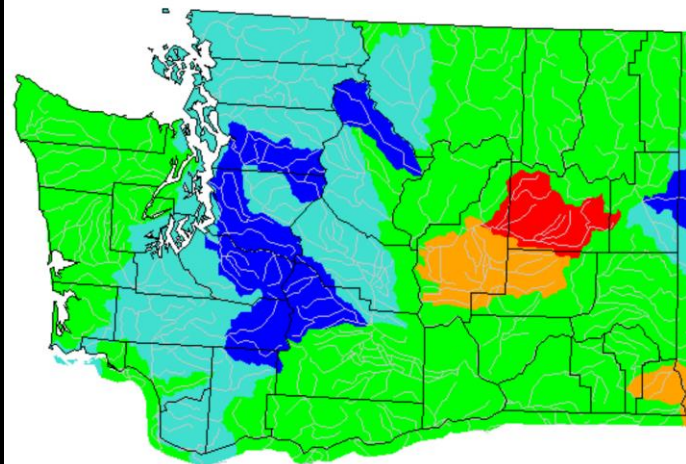


**Preliminary Information-
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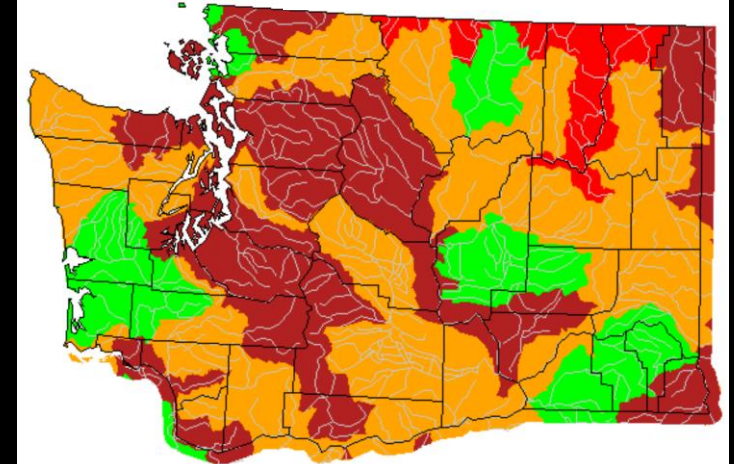
March 2021



March 2022



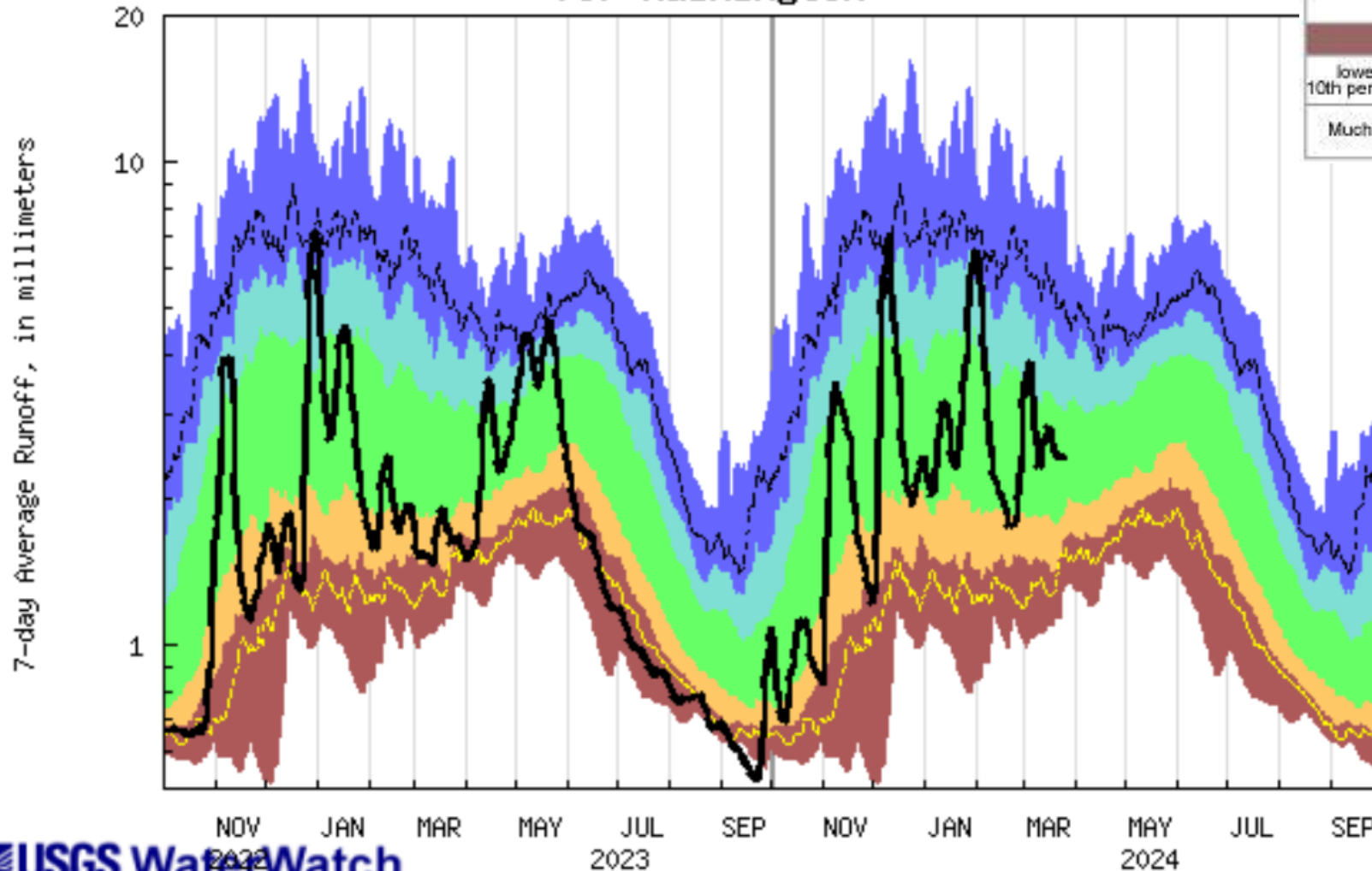
March 2023



Area-Based Runoff Duration Hydrograph

7-day average streamflow as of 26 March 2024 is ~normal

Duration hydrograph of 7-day average runoff for Washington



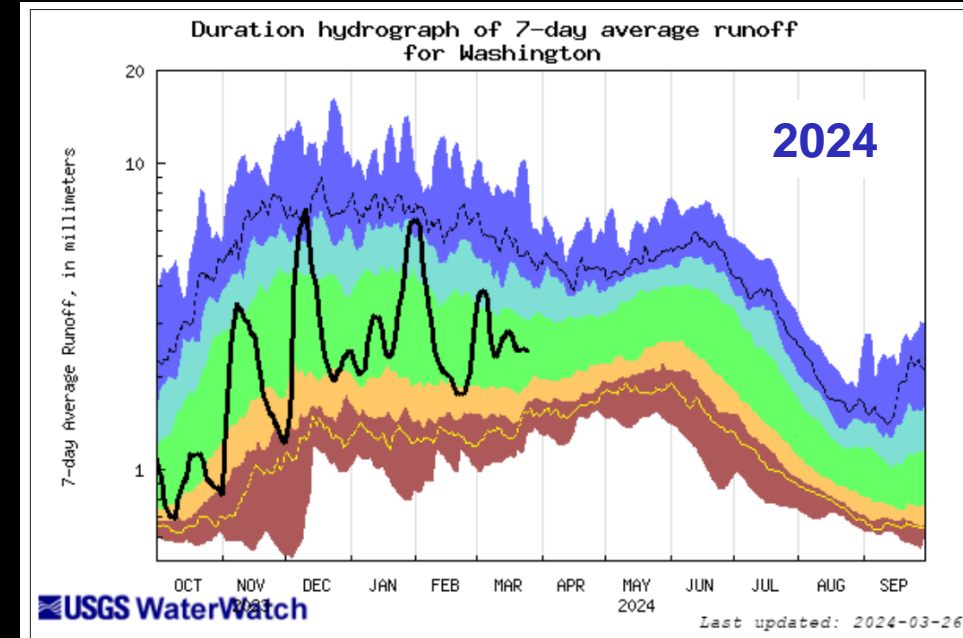
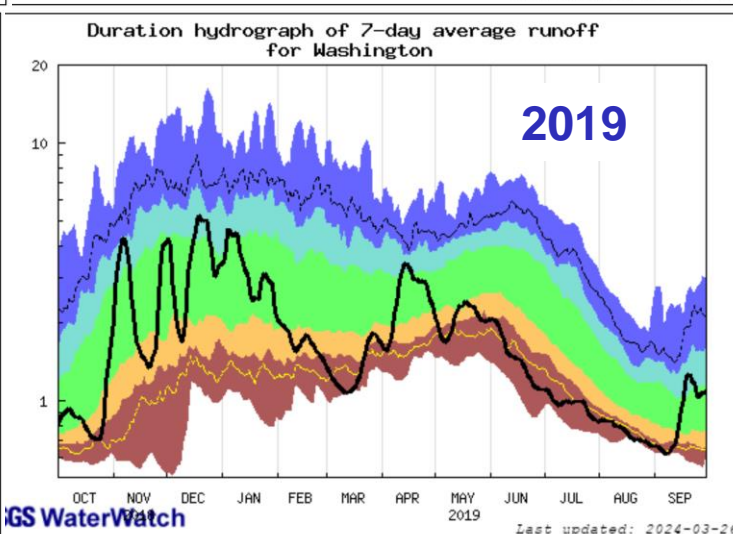
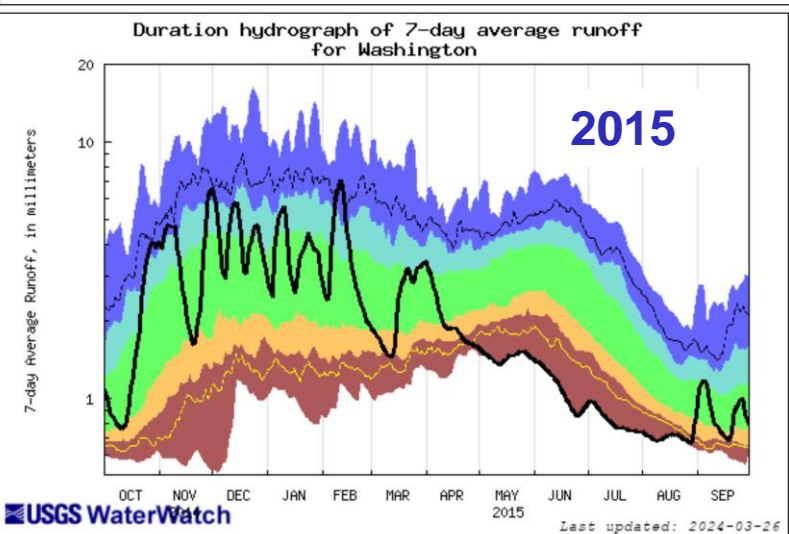
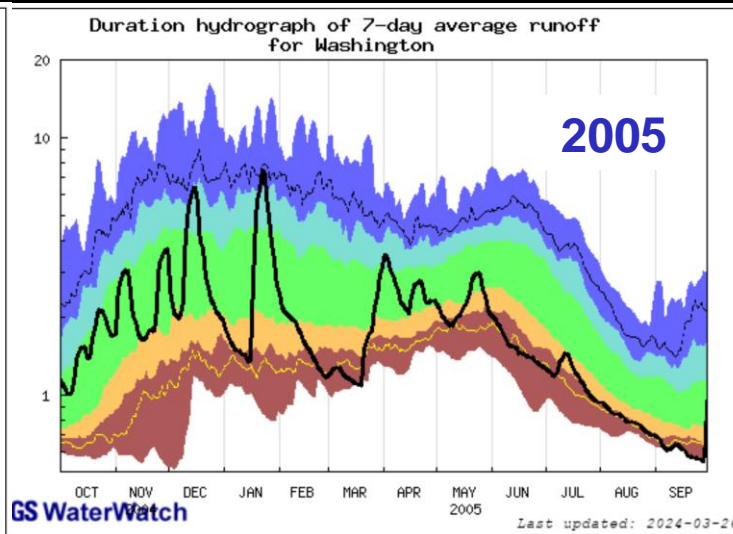
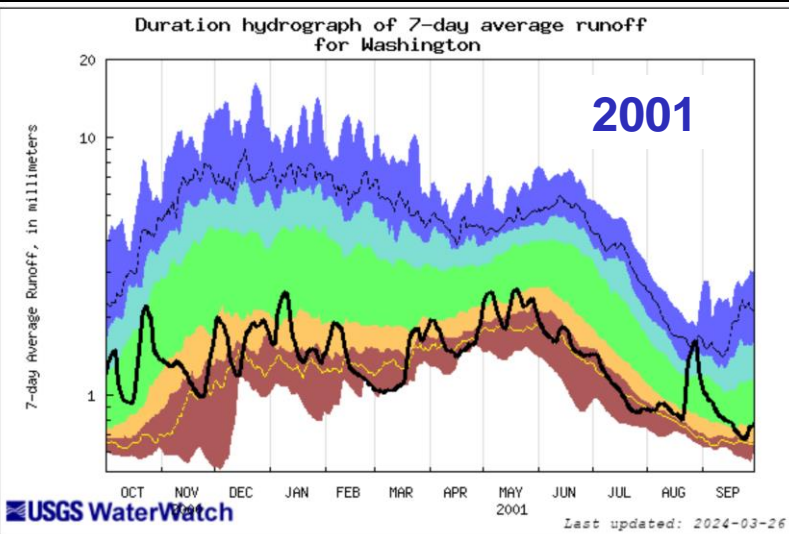
Explanation - Percentile classes						
lowest-10th percentile	5	10-24	25-75	76-90	95	90th percentile -highest
Much below Normal	Below normal	Normal	Above normal	Much above normal		Flow

Preliminary Information-
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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.

7-day average runoff compared to historical runoff as of 26 March 2024

Duration hydrograph for the year compared to recent years and years of drought



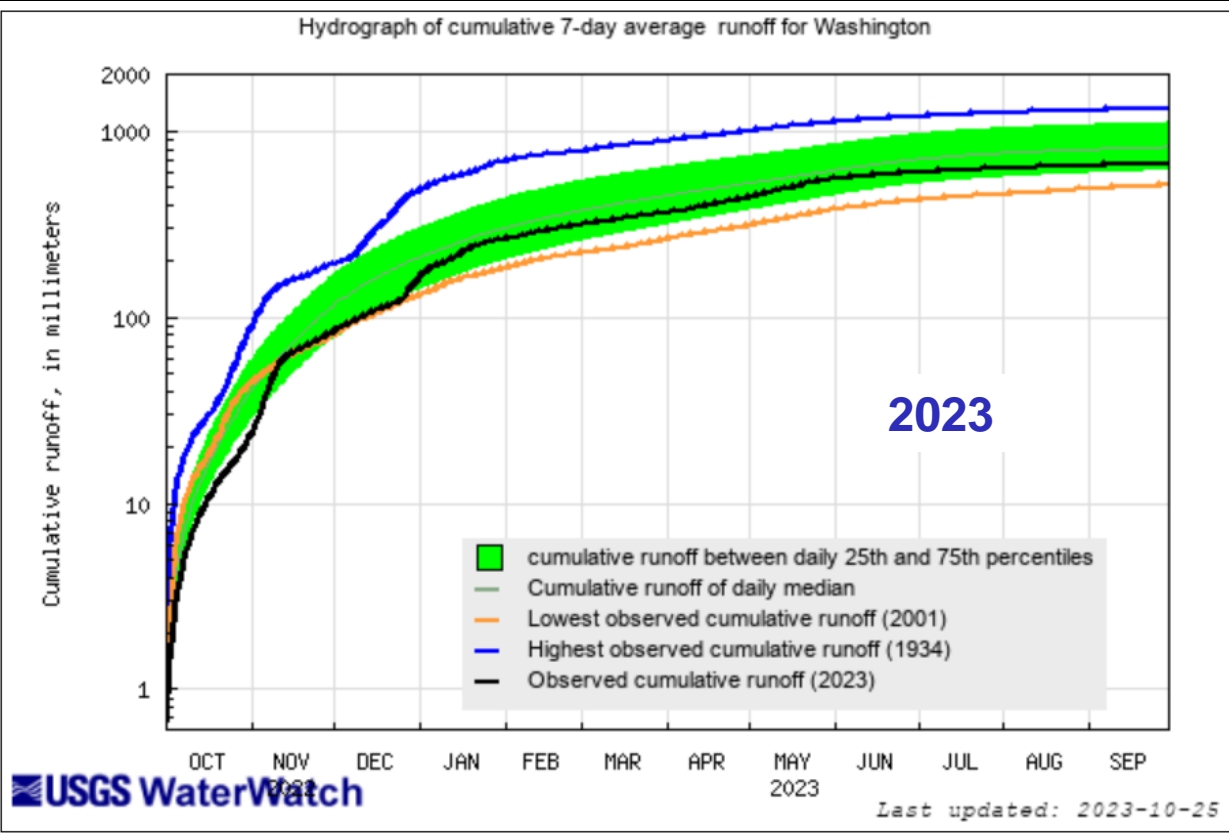
Explanation - Percentile classes						
Low	<10	10-24	25-75	76-90	>90	High
	Much below normal	Below normal	Normal	Above normal	Much above normal	

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

Cumulative runoff hydrograph

Area-based runoff based on 7-day average

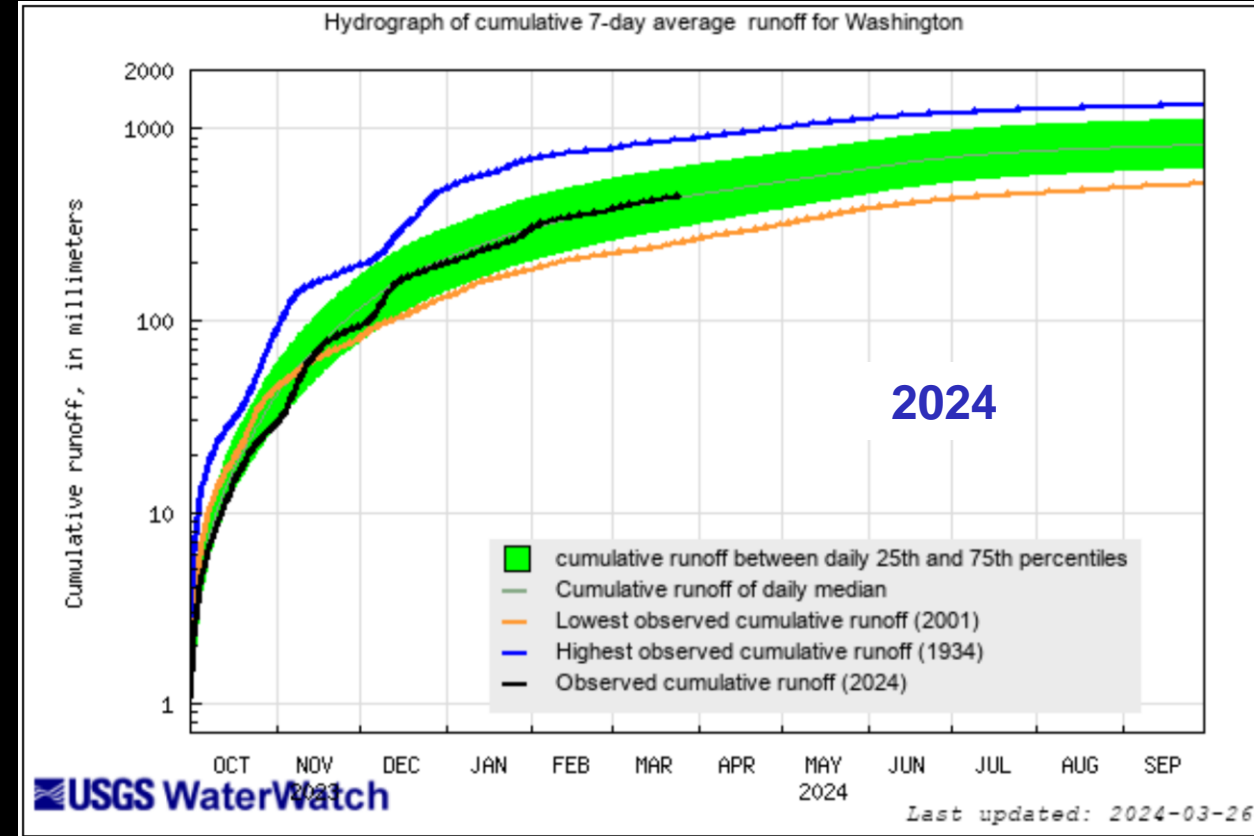
Normal as of 26 March 2024



2023 water year

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

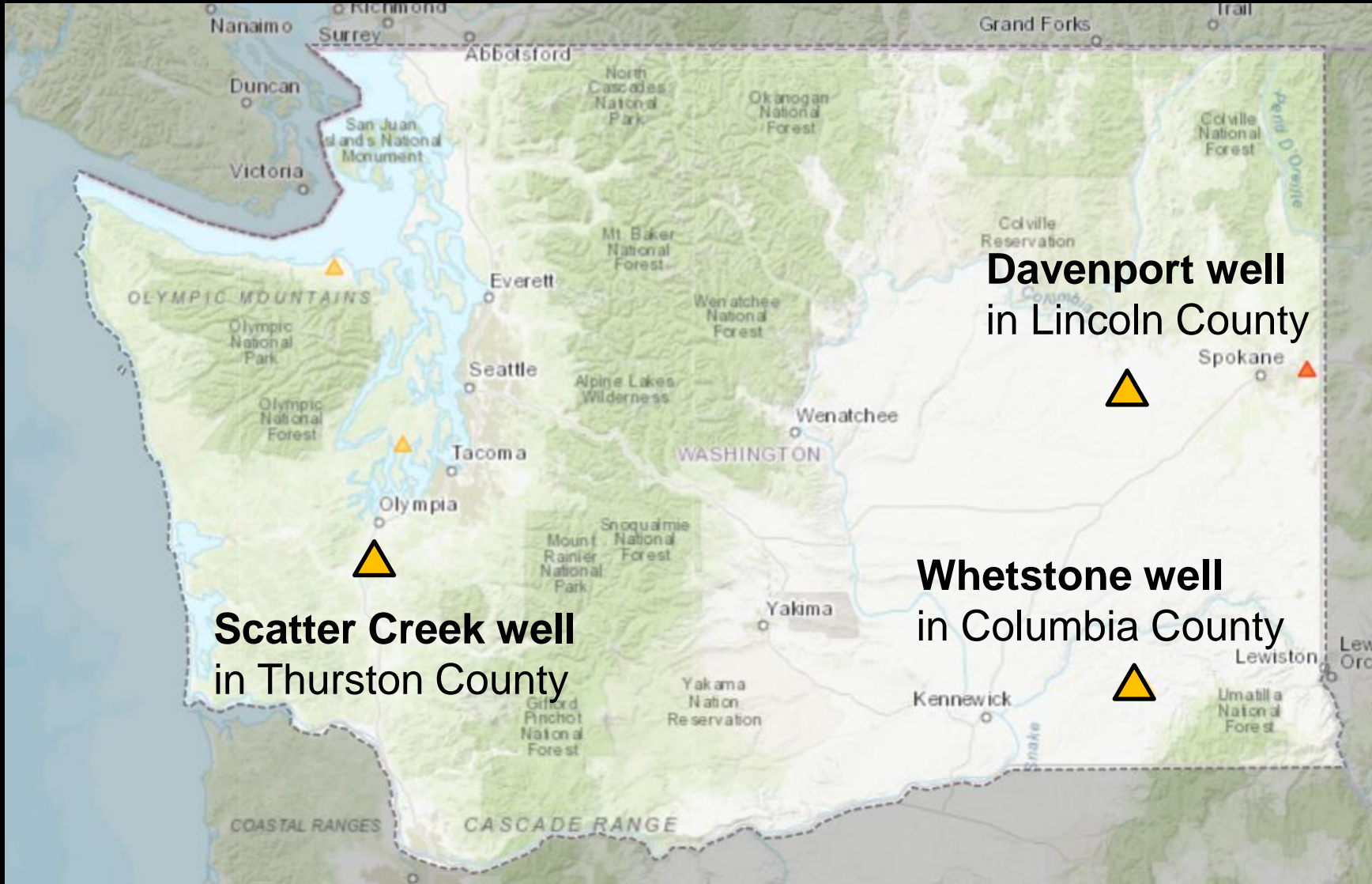
<https://waterwatch.usgs.gov/>



2024 water year

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

Three reference groundwater wells



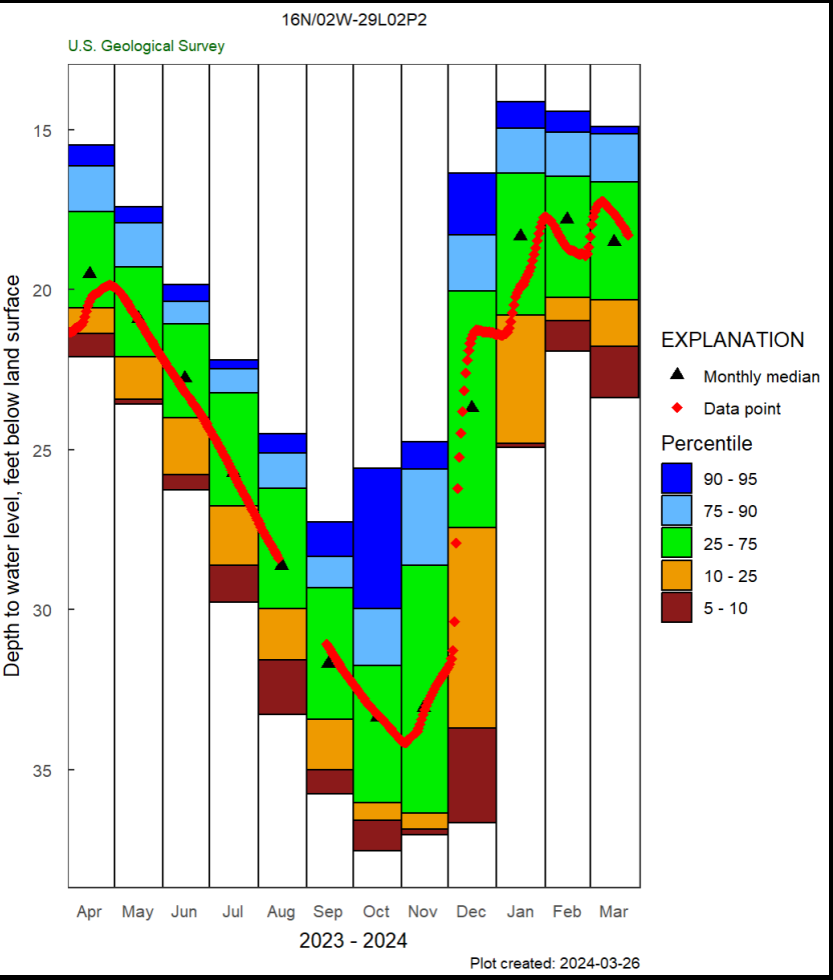
Groundwater Levels

DEPTH TO WATER

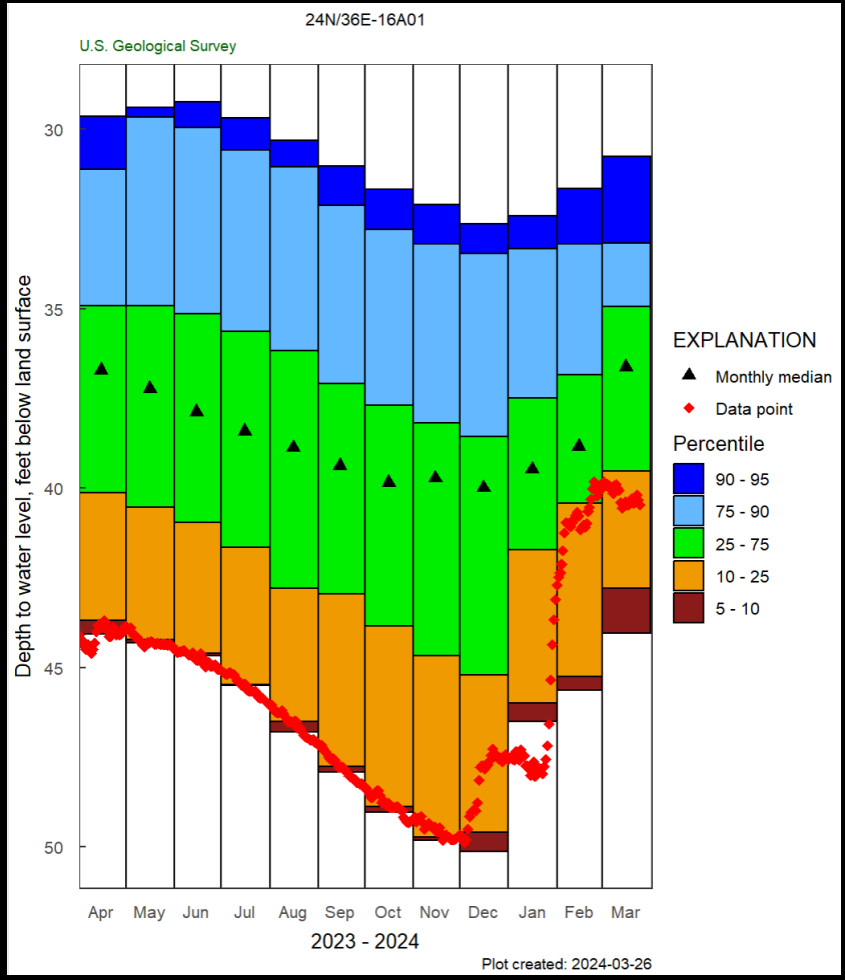
- ▲ 0 – 50 feet
- ▲ > 50 – 100 feet
- ▲ > 100 – 150 feet
- ▲ > 150 – 200 feet
- ▲ > 200 – 250 feet
- ▲ > 250 feet
- ▲ Measurement flag
- ▲ Recent measurement unavailable
- ▲ Depth to water unavailable

**Preliminary Information-
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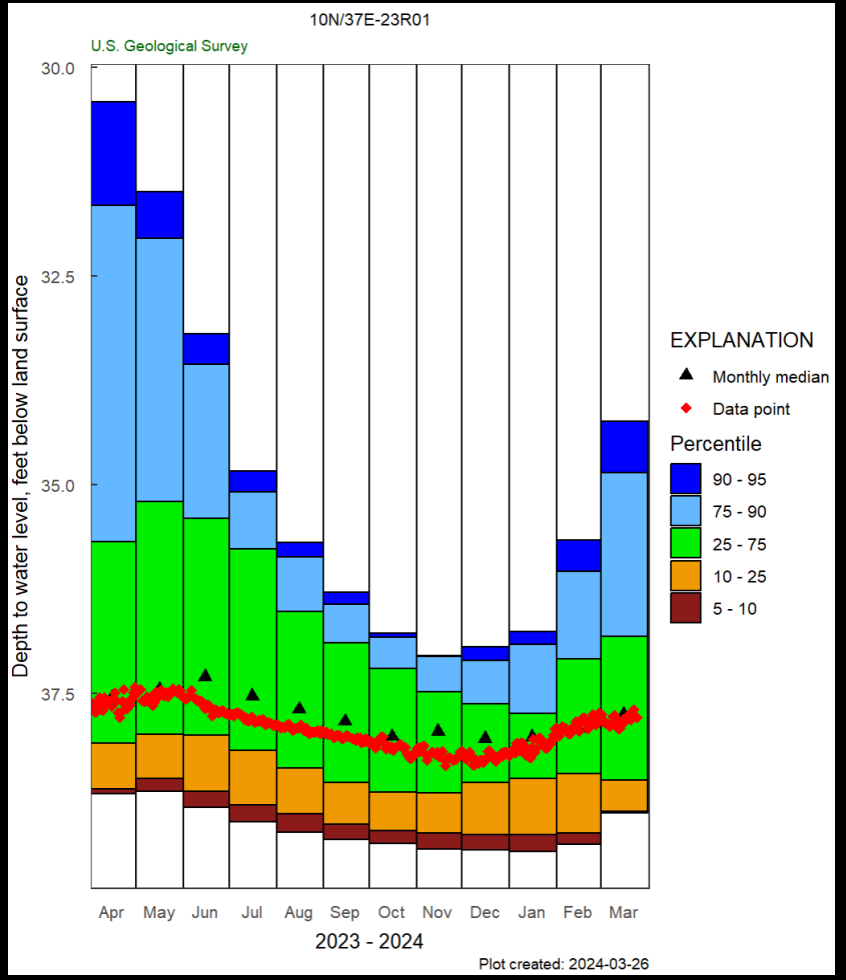
Scatter Creek well



Davenport well



Whetstone well



16N/02W-29L02P2 - 465033122570202

March 27, 2023 - March 26, 2024

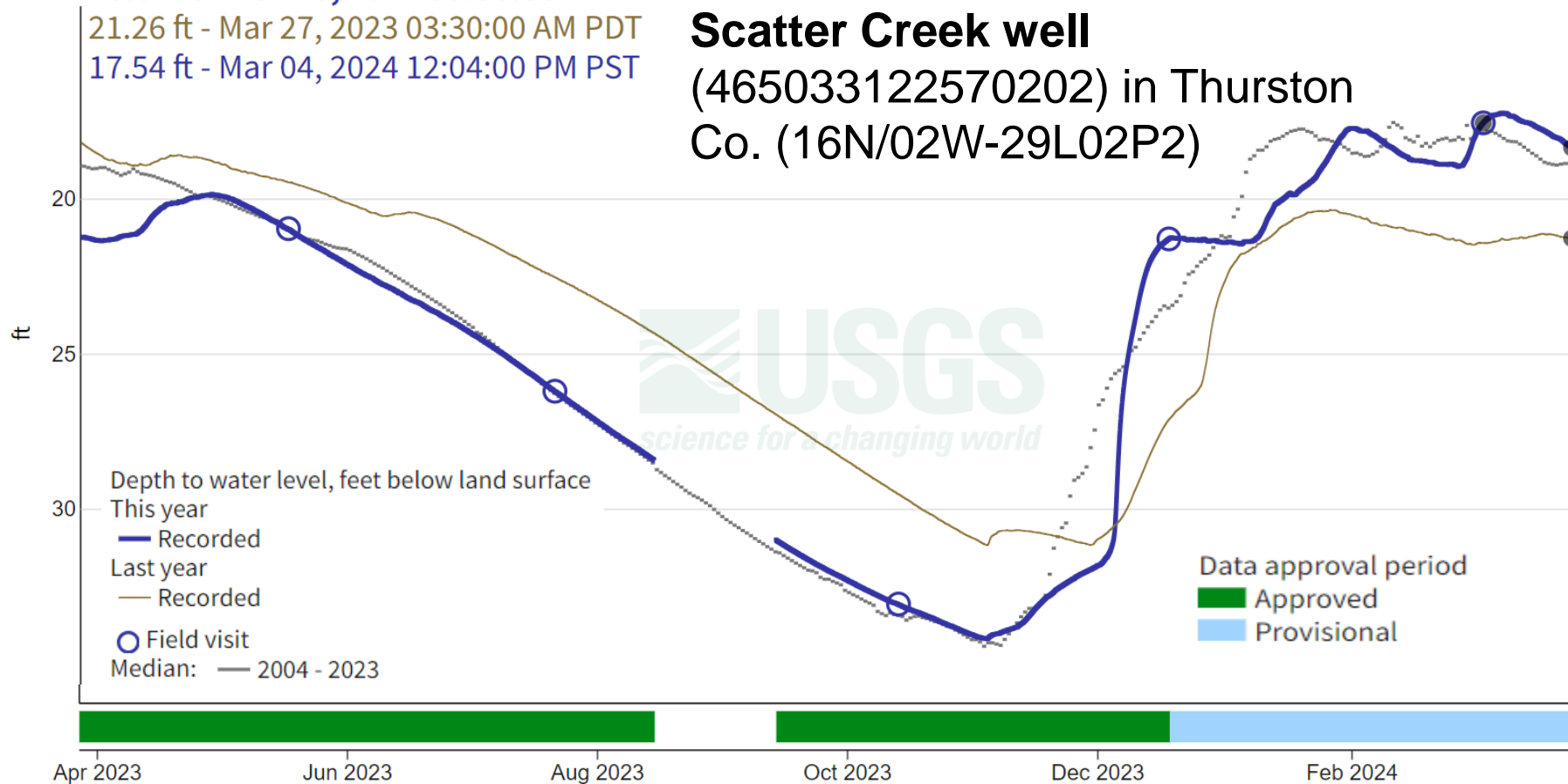
Depth to water level, feet below land surface

18.34 ft - Mar 26, 2024 03:30:00 AM PDT

21.26 ft - Mar 27, 2023 03:30:00 AM PDT

17.54 ft - Mar 04, 2024 12:04:00 PM PST

Scatter Creek well
(465033122570202) in Thurston
Co. (16N/02W-29L02P2)



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Information-
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Revision. Not for
Citation or
Distribution.

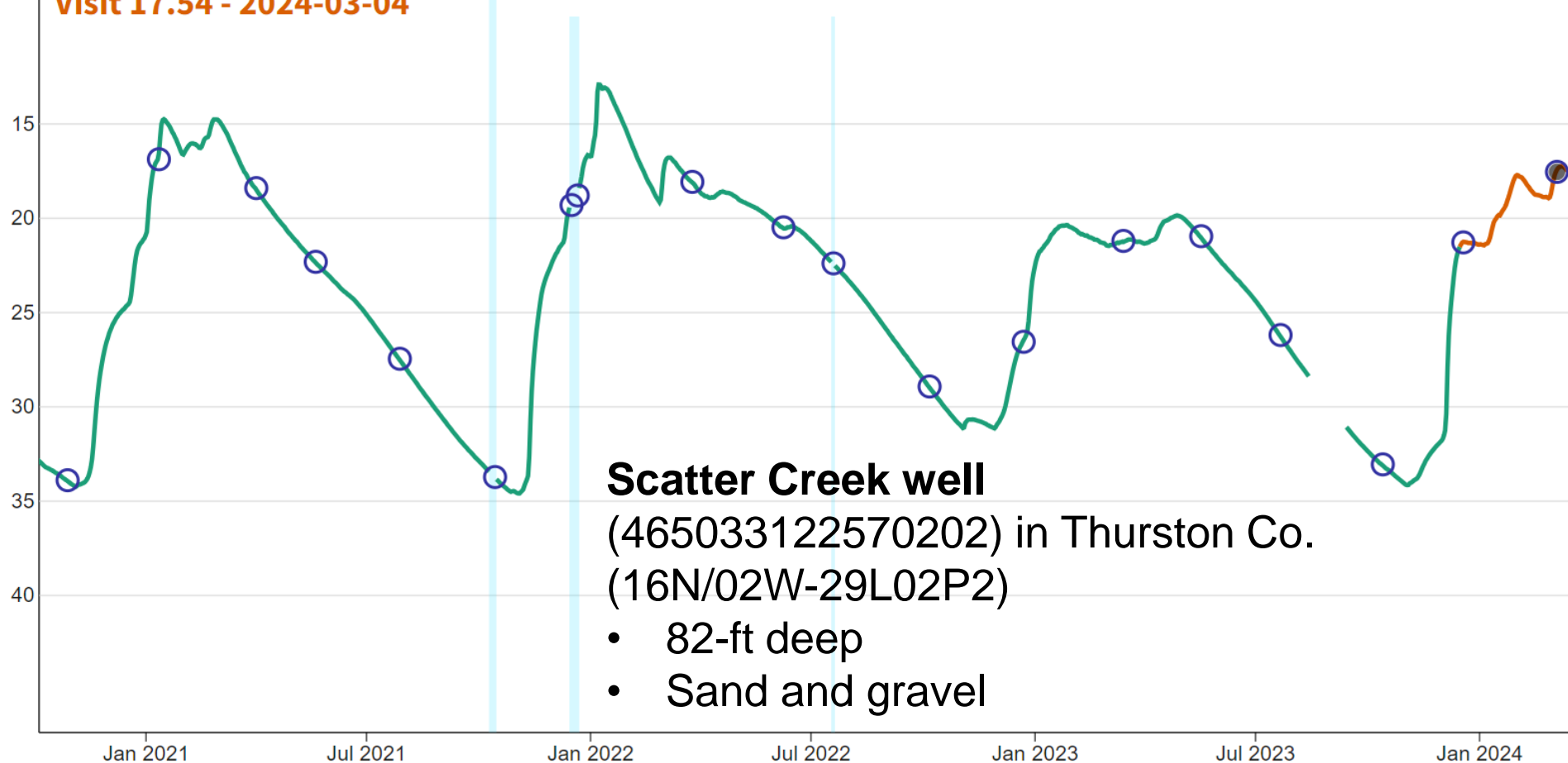
Scatter Creek Well Groundwater Conditions

Depth to water level, ft below land surface, ft

Mean 18.28 ft - 2024-03-25

Visit 17.54 - 2024-03-04

Mean: — Approved — Provisional — Equipment malfunction
Field visit: ○ Approved



Scatter Creek well

(465033122570202) in Thurston Co.
(16N/02W-29L02P2)

- 82-ft deep
- Sand and gravel

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

24N/36E-16A01 - 473442118162201

March 27, 2023 - March 26, 2024

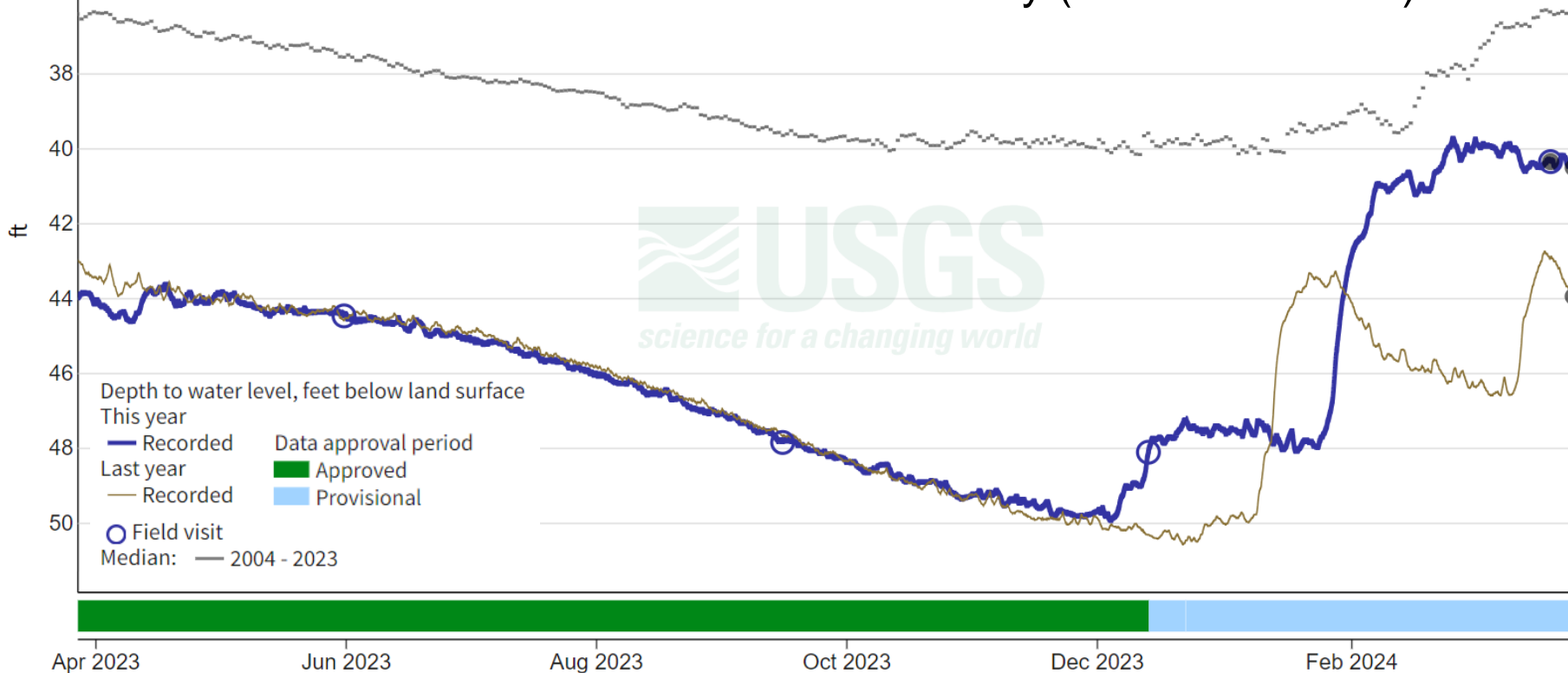
Depth to water level, feet below land surface

40.50 ft - Mar 26, 2024 03:45:00 AM PDT

43.94 ft - Mar 27, 2023 03:45:00 AM PDT

40.34 ft - Mar 20, 2024 02:57:00 PM PDT

Davenport well (473442118162201)
in Lincoln County (24N/36E-16A01)



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

Davenport Well Groundwater Conditions

Depth to water level, ft below land surface, ft

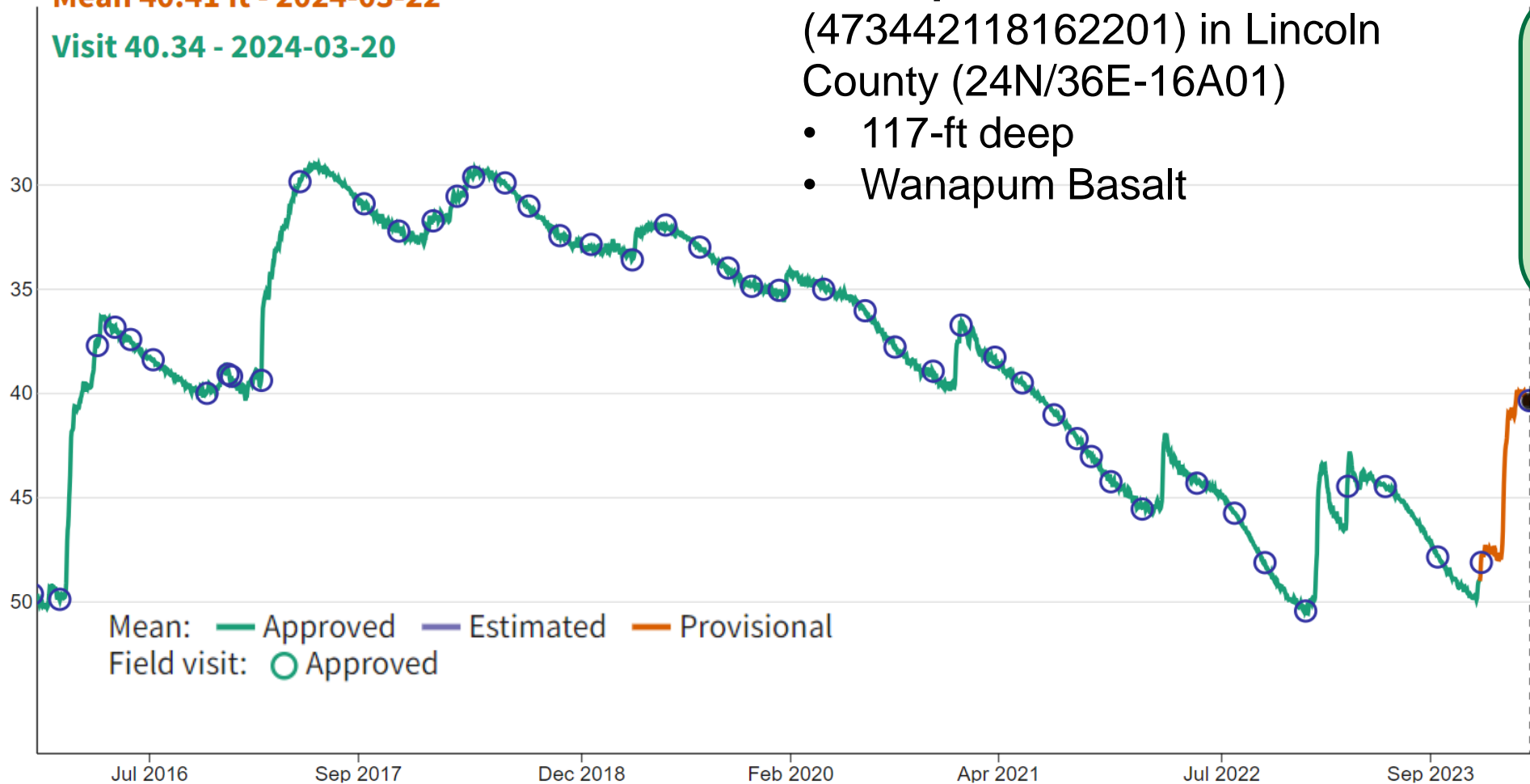
Mean 40.41 ft - 2024-03-22

Visit 40.34 - 2024-03-20

Davenport well

(473442118162201) in Lincoln County (24N/36E-16A01)

- 117-ft deep
- Wanapum Basalt



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

Whetstone Well Groundwater Conditions

10N/37E-23R01 - 461935118081501

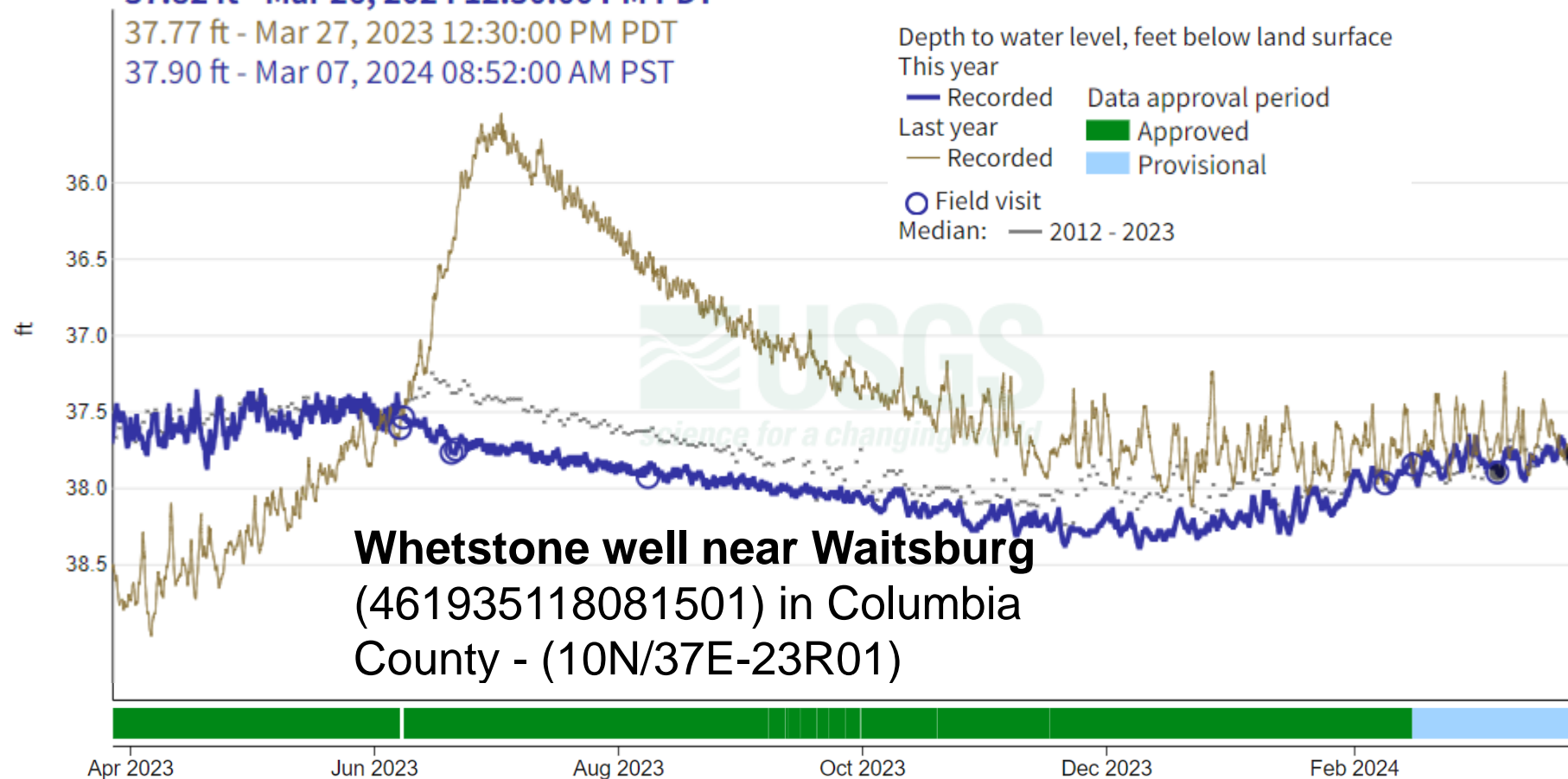
March 27, 2023 - March 26, 2024

Depth to water level, feet below land surface

37.82 ft - Mar 26, 2024 12:30:00 PM PDT

37.77 ft - Mar 27, 2023 12:30:00 PM PDT

37.90 ft - Mar 07, 2024 08:52:00 AM PST



Whetstone well near Waitsburg
(461935118081501) in Columbia
County - (10N/37E-23R01)

**Preliminary
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7-day average streamflow at eight index gaging stations:

Normal

- NF Nooksack River
- Chehalis River nr. Grand Mound
- Walla Walla River
- Puyallup River nr. Orting
- EF Lewis River
- Quinault River

Below Normal

- Hangman Creek

Much Above Normal

- American River

State-wide monthly average streamflow:

Normal

Cumulative Runoff Hydrograph **Normal**

Monthly average groundwater conditions:

Normal

- Scatter Creek well
- Whetstone well

Below Normal

- Davenport well

**Preliminary Information-
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