Snowpack and Water Supply Forecasts

IDAHO WATER SUPPLY COMMITTEE MEETING
December 10, 2021

USDA NRCS
Natural Resources Conservation Service

Presented by
Erin Whorton

2022 snowpack

2021 snowpack

April 1 vs Current Snowpack

7-day Accumulated Precipitation (mm)
1200 UTC 07 Apr - 14 Apr 2022
50°N
45°N
40°N
35°N
30°N
125°W
120°W
115°W
110°W
250
240
230
220
210
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0.1
Center for Western Weather and Water Extremes
UCSD Scripps CW3E; Contact: B. Kawzenuk/M. Ralph

Snow Water Equivalent Delta	Value	April 1, 2022 - March 1, 2022, first of day

13 day Precipitation	Value	April 1, 2022 - April 13, 2022

83 day Precipitation	Percent of POR Median	January 9, 2022 - April 1, 2022

Precipitation

Water Year to Date Departure from Normal (mm)
01 Oct 2021 - 14 Apr 2022
50°N
45°N
40°N
35°N
30°N
125°W
120°W
115°W
110°W
2000
1600
1200
800
600
400
200
100
-100
-200
-400
-600
-800
-1200
-1600
-2000
Center for Western Weather and Water Extremes
UCSD Scripps CW3E; Contact: B. Kawzenuk/M. Ralph

Total Water Year Precipitation (mm)
01 Oct 2021 - 14 Apr 2022
50°N
45°N
40°N
35°N
30°N
125°W
120°W
115°W
110°W
5000
4500
4000
3500
3000
2500
2250
2000
1750
1500
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
50
1
Center for Western Weather and Water Extremes
UCSD Scripps CW3E; Contact: B. Kawzenuk/M. Ralph

Clearwater River Basin

Boise River Basin

5th lowest water supply years (31 yr record w/ 1991,1992, 1994, 2001 worse years)
Boise River near Boise = -432 KAF (65% of normal)

Snake River Above Heise

Snake R at Flagg Ranch = -123.5 KAF (75% of normal)

Snake R at Heise = -936 KAF (74% of normal)

3rd lowest water supply year on record (2001, 2002 were worse), 70% forecast is worse than those years though

Big Wood River Basin

Big Wood below Magic Reservoir = -118 KAF (35% of normal)

Big Wood at Hailey = -93.7 KAF (59% of normal)

3rd lowest water supply year on record below reservoir (2021, 1992 were worse)

Little Wood River Basin

Little Wood River near Carey = -22 KAF (62% of normal)

Big Lost River Basin

Big Lost River below Mackay = -45.5 KAF (64% of normal)

Forecast Volume, 50% Exceedance Probability	Percent NRCS 1991-2020 Median	Primary Period, April 1, 2022

Forecast Volume, 50% Exceedance Probability	Percentile (POR)	Primary Period, April 1, 2022

Western United States - 7 month SPEI
March 2021
50°N
48°N
46°N
44°N
42°N
40°N
38°N
36°N
34°N
32°N
120°W
115°W
110°W
105°W
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
-1.0
-1.5
-2.0
-2.5
WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Final), created 16 OCT 2021

Western United States - 7 month SPEI
March 2022
SPEI7
120°W
115°W
110°W
105°W
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
-1.0
-1.5
-2.0
-2.5
SPEI7
/ide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 11 APR 2022

Thank you!

Idaho Snow Survey - NRCS

Erin Whorton
erin.whorton@usda.gov
208-685-6983

NRCS