Presented to the GDPUD Board of Directors by Operations Manager: Adam Brown



Note: Full Pool – 21,206 acre feet | February 16, 2024 – 21,206 acre feet

#### Water Supply/Budget

February 15, 2024

2023/2024 Water Year Water Budget Outcome Scenarios

Exceedance Percentile	Stumpy Meadows Inflow (2023/2024 Water Year)
10 <sup>th</sup> Percentile	129,389
25 <sup>th</sup> Percentile	120,636
50 <sup>th</sup> Percentile	33,001
75 <sup>th</sup> Percentile	17,828
90 <sup>th</sup> Percentile	11,793
95 <sup>th</sup> Percentile	9,066

**Notes** 

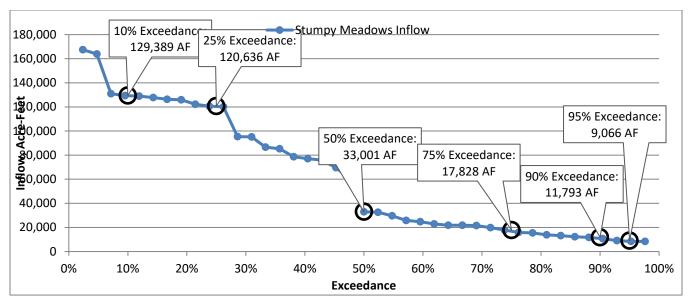
units – acre feet

A water budget was prepared for water year 2023/2024 and is included below. Utilizing current supply, projected demand, available climate forecast and the District's forecast tool, expected inflow into Stumpy Meadows is estimated to range between 9,066 and 129,389 acre feet (ac-ft). Stumpy Meadows reached capacity on February 5, 2024, therefore it is anticipated no water delivery restrictions for the 2024 water season. Forecast output charts are included on page two.

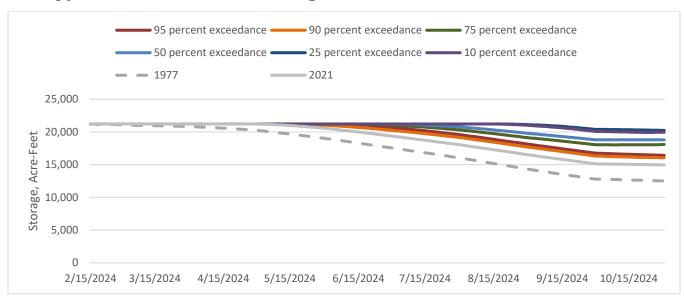


Presented to the GDPUD Board of Directors by Operations Manager: Adam Brown

### Total Inflow to Stumpy Meadow Reservoir, Remainder of Water Year

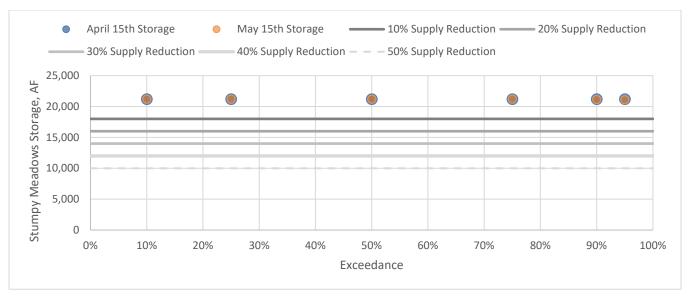


### Stumpy Meadow Reservoir Storage

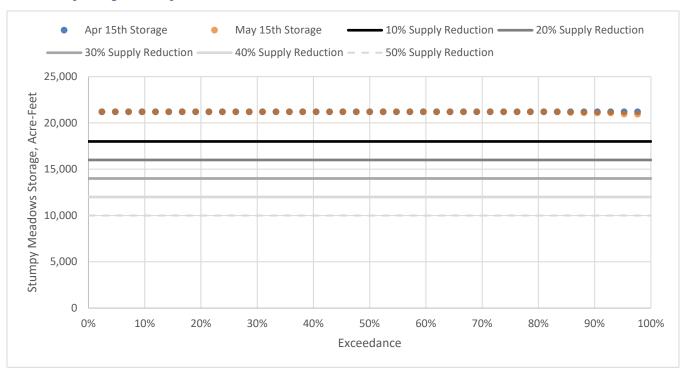


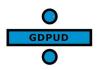
Presented to the GDPUD Board of Directors by Operations Manager: Adam Brown

### **Delivery Capability**



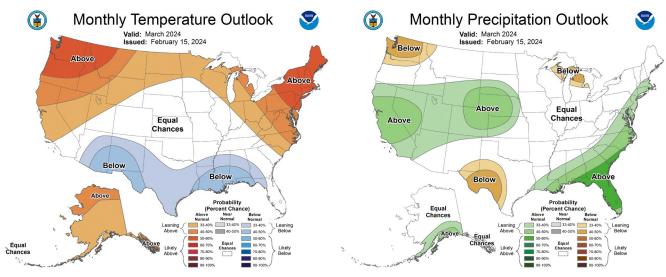
#### **Delivery Capability**



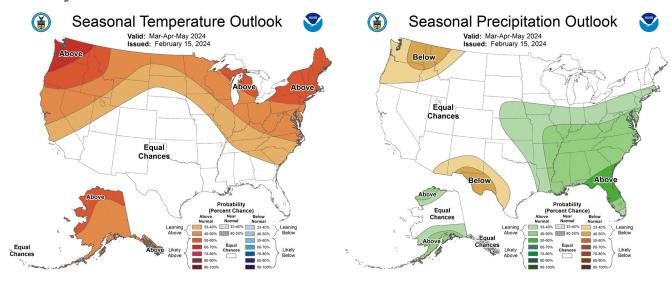


Presented to the GDPUD Board of Directors by Operations Manager: Adam Brown

### 30-Day Outlook



#### 90-Day Outlook



Temperature and precipitation outlooks indicate short-term above average rainfall and long-term above average temperature. Impact to District operations indicate heavy vegetation growth as a result of above normal to normal precipitation with above average temperature.

California Data Exchange Center (CDEC) February 13, 2024, Bulletin 120 (B120) recorded American River Watershed at 85% of average with a forecasted April-July runoff, at a 50 percent exceedance scenario, that would be at 83% of average. With reasonable certainty the District can expect a lower than average spring runoff.

A review of the most current conditions indicate a normal irrigation demand water year (May 1 through September 30).



Presented to the GDPUD Board of Directors by Water Resources Manager: Alex Elliott

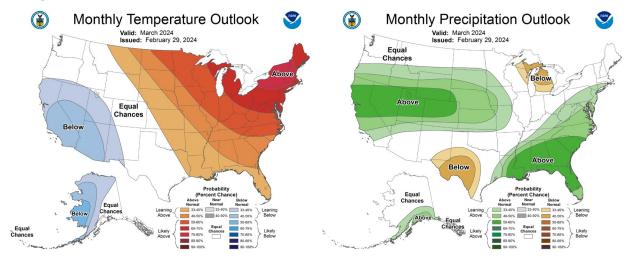
Informational Item March 7, 2024

"During January 2024, above-average sea surface temperatures (SST) continued across most of the equatorial Pacific Ocean. SST anomalies weakened slightly in the eastern and east-central Pacific, as indicated by the weekly Niño index values. However, changes were more pronounced below the surface of the equatorial Pacific Ocean, with area-averaged subsurface temperature anomalies returning to near zero. Although above-average temperatures persisted in the upper 100 meters of the equatorial Pacific, below-average temperatures were widespread at greater depths. Atmospheric anomalies across the tropical Pacific also weakened during January. Low-level winds were near average over the equatorial Pacific, while upper-level wind anomalies were easterly over the east-central Pacific. Convection remained slightly enhanced near the Date Line and was close to average around Indonesia. Collectively, the coupled ocean-atmosphere system reflected a weakening El Niño.

The most recent IRI plume indicates a transition to ENSO-neutral during spring 2024, with La Niña potentially developing during summer 2024. Even though forecasts made through the spring season tend to be less reliable, there is a historical tendency for La Niña to follow strong El Niño events. The forecast team agrees with the latest model guidance, with some uncertainty around the timing of transitions to ENSO-neutral and, following that, La Niña. Even as the current El Niño weakens, impacts on the United States could persist through April 2024 (see CPC seasonal outlooks for probabilities of temperature and precipitation). In summary, a transition from El Niño to ENSO-neutral is likely by April-June 2024 (79% chance), with increasing odds of La Niña developing in June-August 2024 (55% chance;)."

Source: cnrfc.noaa.gov/

### 30-Day Outlook

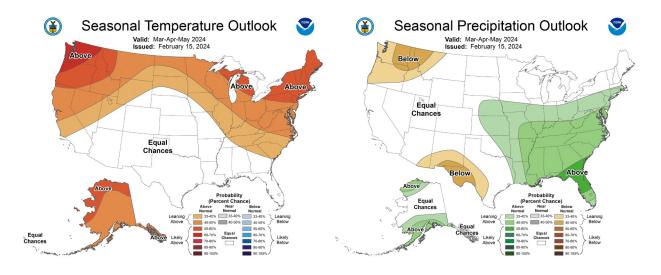




Presented to the GDPUD Irrigation Committee by Operations Manager: Adam Brown

Informational Item February 20, 2024

### 90-Day Outlook



#### 6-Year Rainfall History (Cool)

Rainfall	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2024	11.79	10.93											22.72
2023	14.66	8.05	15	0.33	1.23	0.07	0	0.17	0.68	2.76	2.70	3.65	49.30
2022	0.69	0.17	1.6	7.54	0.41	0.99	0	0	1.2	0.07	4.45	24.12	41.24
2021	9.10	4.72	4.30	0.14	0.01	0.00	0.02	0.00	0.93	14.29	2.84	16.59	52.94
2020	5.26	0.00	10.15	5.49	2.84	0.06	0.00	0.00	0.00	0.00	4.64	3.51	31.95
2019	10.00	18.09	6.89	2.02	6.50	0.00	0.00	0.00	1.30	0.40	1.88	11.13	58.21

The 30-day outlook has increased in precipitation; however, the long-term outlook remains the same. The District will continue to monitor temperature and precipitation outlooks along with snow accumulation within the Pilot Creek Watershed for water year determination in April.

A review of the most current conditions indicate a normal irrigation demand water year (May 1 through September 30).

