

## Reservoir Storage & Release Update

### SUMMARY/DISCUSSION:

The Board of Directors receives monthly updates on the status of Agency reservoirs.

**RESERVOIR ELEVATION / STORAGE:** As of April 2, 2024, San Antonio Reservoir has a water surface elevation of approximately 766.95 feet (NGVD 29), with 267,465 acre-feet of water in storage. Nacimiento Reservoir has a water surface elevation of approximately 795.8 feet, with 354,210 acre-feet of water in storage. San Antonio Reservoir is currently at 80% of storage capacity and Nacimiento Reservoir is at 94% of capacity.

**RESERVOIR RELEASES:** Following a staff assessment of watershed conditions in response to hydrologic triggers, Nacimiento releases were increased on February 1, 2024, to an approximate flowrate range of 280 to 300 cfs, to support Steelhead upstream passage conditions, in accordance with the Agency's Interim Operations Plan (IOP) and the Salinas Valley Water Project Flow Prescription for Steelhead Trout in the Salinas River (Flow Prescription). By February 3, sustained storm activity had begun to provide targeted Flow Prescription flowrates in the lower Salinas River, obviating the need for supplemental flow, and Nacimiento releases were reduced to minimum fisheries releases of 60 cfs. Subsequently, on February 5, periodic inspection and testing of Nacimiento's high level gates required a temporary release of water through the gates, resulting in a daily average flowrate of approximately 90 cfs on that day. Nacimiento releases were subsequently reduced to a target flow of 60 cfs to support fish habitat below the dams. On February 18, during storms occurring over the Presidents Day weekend, an unexpected outage of the Nacimiento hydropower plant resulted in a shift in releases to a combination of valves and bypass flow requiring a slight increase in releases (to about 80 cfs) to avoid potentially damaging valve cavitation. Region-wide storm activity in late February and early March necessitated the initiation of flood control releases of approximately 1,000 cfs from Nacimiento Reservoir on March 2, to maintain sufficient empty space to accommodate additional inflow. With inflow tapering off, flood control releases were reduced to approximately 350 cfs on March 8. San Antonio Reservoir remained and has remained at minimum fisheries releases of 10 cfs since the end of conservation releases on October 27, 2023.

In accordance with operational specifications stipulated in the Flow Prescription and incorporated into the Agency water rights that license and permit utilization of the reservoirs for annual storage and withdrawal of water within the Nacimiento and San Antonio watersheds, Agency staff completed a Year Type Forecast based on Arroyo Seco streamflow data through March 14. The forecast was for a Normal year type. The Flow Prescription stipulates that in normal category years (including "Wet-Normal," "Normal" and "Dry-Normal" year types) flow triggers are in effect beginning on March 15, that could result in a "Block Flow" release, when combined reservoir storage exceeds 150,000 Acre-Feet.

With all trigger thresholds substantially exceeded in the week leading up to the March 15 Year Type Forecast, the Agency initiated a block flow release on March 13 to best take advantage of existing flow in the Salinas River. As described in the Flow Prescription, a block flow release action is intended to meet and sustain a target of 700 cfs at the USGS Salinas River near Soledad streamflow gage ("Soledad gage") for five consecutive days as soon as the trigger thresholds are exceeded on or after March 15, followed by a flow of 300 cfs at the Salinas River near Spreckels streamflow gage, to be sustained for 15 consecutive days or until April 20, whichever is longer. With recession limbs and river forecasts indicating a likely flow decline to below 700 cfs by

around March 15, Nacimiento releases were increased by approximately 300 cfs on March 13, from 340 cfs to approximately 640 cfs. With provision of adequate releases to meet block flow requirements of at least 700 cfs at the Soledad gage from March 15-19, releases were then reduced to 340 cfs on March 19. Continued release adjustments have been made in late March to meet block flow requirements. Most recently, a reduction to minimum releases was completed on March 29, 2024, based on forecasted storm flows expected to sustain block flow requirements into early to mid-April.

**INFLOW:** Rainfall through the region this winter and early spring has generated inflow to both reservoirs. As of April 2, 2024, storage volume at Nacimiento reservoir has increased by approximately 146,000 acre-feet and storage volume at San Antonio Reservoir has increased by approximately 53,000 acre-feet, since December 18, 2023, when reservoir elevations saw their first seasonal increase.

**SALINAS LAGOON:** High tides and large waves on December 28 and 30, 2023 caused the Salinas Lagoon to fill to over 7 feet in elevation. Agency staff managed the sandbar to open the lagoon to the ocean on January 4, 2024. The lagoon has remained open to the ocean since this action.

Releases as of April 2, 2024:

• Nacimiento Reservoir:	60 cfs
• San Antonio Reservoir:	10 cfs

Total releases from both reservoirs to the Salinas River are approximately 70 cfs. The following “provisional” flows have been recorded by the USGS:

• Salinas River near Bradley:	490 cfs
• Salinas River at Soledad:	591 cfs
• Salinas River near Chualar:	802 cfs
• Salinas River near Spreckels:	765 cfs

Prepared by: Peter Kwiek, Associate Hydrologist (831) 755-4860