



## INFORMATION ITEM

### Delta Plan Performance Measures: 2020 Year in Review

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**Summary:** Council staff will highlight key Delta Plan performance measure updates and progress, including recent enhancements to tracking capabilities and dashboard features. Staff will also outline steps to promote and track performance measures in 2021.

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#### BACKGROUND

Water Code Section 85308(b) requires that the Delta Plan “include quantified or otherwise measurable targets associated with achieving the objectives of the Delta Plan.” To fulfill this requirement, the Delta Plan includes performance measures that detect environmental or administrative changes due to the implementation of policies and recommendations in the Delta Plan. Relying on science and monitoring data, these measurable indicators are based on numeric targets and include target dates and baseline conditions against which to evaluate progress. Delta Plan performance measures allow the Council to integrate science and monitoring results into decision-making about priorities and funding, inform adaptive management, and, over time, track progress towards achieving the coequal goals.

The Delta Plan contains 154 performance measures. These include 122 administrative measures, which track the status of implementing the recommended management actions (e.g., implement water efficiency and water management planning laws, update Delta flow objectives, investigate opportunities for carbon markets); and 32 output and outcome performance measures, which track measurable features over time, using defined baselines, metrics, and targets (e.g., acre-feet of Delta water exported, abundance of native species, subsidence reversal, and carbon sequestration projects area).

The original Delta Plan performance measures were adopted as part of the 2013 Delta Plan. The Council adopted the current performance measures in April 2018 (Appendix E of the Delta Plan). This is the second year of reporting on the new measures.

Council Performance Measures Unit staff manage the tracking and evaluation of performance measures on an annual basis. The schedule for performance data collection and evaluation is based on the source dataset frequency and availability. While some performance data are updated annually, certain performance targets and evaluations are related to a specific water year type (e.g., critically dry years versus wet years), or triggered by specific events. Staff track and evaluate

administrative performance measures annually by collecting and processing status updates from agencies responsible for implementing the Delta Plan's recommendations.

## **OUTPUT AND OUTCOME PERFORMANCE DATA 2020 UPDATES**

2020 marks the second year of performance tracking using the Council's online, publicly accessible Performance Measures Dashboard (dashboard; [viewperformance.deltacouncil.ca.gov](http://viewperformance.deltacouncil.ca.gov)). It should be noted that for most measures, baseline values were established in 2018, meaning that these measures can only begin to identify preliminary trends based on, at most, two years of data.

This report provides an overview of several key output and outcome performance measure data updates, key progress made by implementing agencies, and new enhancements to the dashboard and tracking capabilities. The report concludes with a look ahead into the upcoming year, with the goal of continuing to promote and track performance measures for the future.

### *Water Supply Reliability*

**Urban Water Use (PM 3.1), Alternative Water Supply (PM 3.2), Water Supply Reliability (PM 3.4), and Agricultural Water Planning (PM 3.6):** These performance measures rely on 2020 Water Management Plans to be completed by the Department of Water Resources (DWR) and subsequent reporting by individual water suppliers. In August 2020, DWR released a draft Agricultural Water Management Plan (AWMP) Guidebook and a draft Urban Water Management Plan (UWMP) Guidebook. These guidebooks incorporate new requirements from the 2018 water conservation legislation (AB 1668 and SB 606) discussed at the August 2020 Council meeting (Staff report: <https://deltacouncil.ca.gov/pdf/council-meeting/meeting-materials/2020-08-27-item-11-swr-cb-water-use-reporting.pdf>). AWMPs are now required to include efficiency quantification and annual water budgets. The Agricultural Water Planning performance measure tracks the efficiency quantification. Additionally, both UWMP and AWMP guidebooks include guidance on how water suppliers would provide information in the AWMPs and UWMPs in order to demonstrate reduced reliance on Delta water supplies as required by the Delta Plan. The deadline for AWMP submissions is April 1, 2021, while the deadline for UWMP submissions is July 1, 2021. Associated performance measures will be updated after these deadlines.

**Sustainable Groundwater (PM 3.8):** This performance measure tracks submissions of groundwater sustainability plans (GSPs) for critically over-drafted basins by January 2020. As of November 2020, 47 GSPs have been submitted to DWR. Of those 47 plans, 42 have completed their public comment period. DWR will assess the GSPs by 2022 to determine whether the plans are adequate and likely to

achieve the basin’s groundwater sustainability goals. This matter was discussed in greater detail at the September 2020 Council meeting (Staff Report: <https://deltacouncil.ca.gov/pdf/council-meeting/meeting-materials/2020-09-24-item-7-draft-sustainable-groundwater-management.pdf>).

**Water Exports (PM 3.9):** This performance measure tracks annual total water exports from the State and Federal water projects. The target is set to adaptively match the amount of exported water to the availability of water supplies, and has three components based on the water year. During critically dry years, when Delta ecosystems are most vulnerable, water exports need to be lower than the critically dry year export baseline. During wet years, when there is more available water, exported water can be higher than the historical average during wet years. The long-term baseline (15-year rolling average) of annual Delta water exports should decrease overall. 2019 was a wet year, and water exported from the Delta exceeded the average of historical wet years. 2020 was a dry year, but neither the critically dry year nor the wet year targets for Delta water exports were triggered (**Figure 1**).

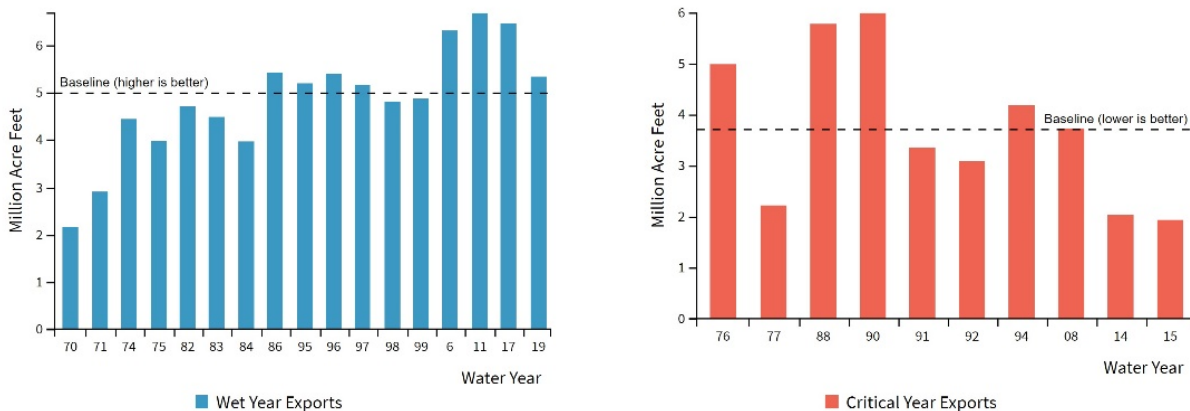


Figure 1. Wet Year and Critically Dry Year Delta Water Exports

*Ecosystem*

**Yolo Bypass Inundation (PM 4.2a), Peak Flow (PM 4.2b), Recession Flow (PM 4.2c):** For the Delta ecosystem, due to a dry 2020 water year, Sacramento River flows were not high enough to overtop the Fremont Weir to provide floodplain inundation that would support native species. The Yolo Bypass Inundation (PM 4.2a) performance target of 21 days of consecutive inundation every other year was met in 2020 only because, in 2019, the Yolo Bypass was inundated for 30 consecutive days. Likewise, with a dry water year, the Peak Flow (PM 4.2b) and Recession Flow (PM 4.2c) targets were not met for either performance measure. Spring peak (pulse) flows aid in cottonwood tree recruitment and improve fish habitat; 2017 was the last time the performance measure target was met. More

gradual recession (receding) flows in the Sacramento River help prevent aquatic species from stranding and with the establishment of riparian plants; 2015 was the last time the target was met.

**Invasive Species (PM 4.10):** This performance measure tracks the establishment of new invasive species, non-native fish, and invasive aquatic vegetation in the Delta. While no new significant invasive species were discovered in 2020, the recent invasions of nutria (spotted in 2018) and alligatorweed (spotted in 2017) continues to be a threat. Nutria is actively managed by the California Department of Fish and Wildlife; as of December 3, 2020, 1,183 nutria have been eradicated from the watershed, with 13 from within the Delta. Other significant actions regarding nutria management include the signing of HR 3399 (Nutria Eradication and Control Act) in Fall 2020, which allows federal funds to be appropriated to assist California eradication efforts once existing Proposition 1 funds are exhausted after FY 2022. The Delta Science Program, through a collaborative interagency effort, developed a “nutria pocket guide” to increase awareness of the issue, and assist with identification. Distribution of this pocket guide continues.

Based on 2019 fish monitoring and likely due to a wet water year, non-native fish biomass and abundance within the overall Delta fish population has decreased. For the first time since 2011, relative native fish abundances met the performance target of 20 percent above baseline in 2019 due to high numbers of Sacramento splittail. In 2019, invasive aquatic vegetation control efforts led by the California Department of Parks and Recreation, Division of Boating and Waterways treated 2,400 acres of submerged vegetation and 2,300 acres of floating vegetation.

#### *Delta as Evolving Place*

**Delta Tourism (PM 5.8):** This performance measure tracked an increase in the sale of fishing licenses in all Delta counties during 2020. A new website promoting tourism in the Delta was launched in 2018 ([Visit CA Delta](#)). Website traffic and associated social media metrics for this website during 2018 provide a baseline for one of the metrics in the Delta Tourism performance measure.

#### *Water Quality*

**Harmful Algal Blooms (PM 6.10):** Harmful Algal Blooms (HAB) in Delta waterways impact Delta water quality and the health of Delta residents and visitors. This performance measure tracks locations of cyanobacteria blooms (e.g., *Microcystis*) in Delta waterbodies. The metric was set to track only large Delta waterbodies where the cyanobacteria could be detected by satellite remote sensing tools. In 2020, the satellite tool provided only provisional data. As an alternative data source, the performance measure uses HABs Incident Report Map managed by the California Cyanobacteria and Harmful Algal Bloom Network. The HABs Incident Report Map

tracks voluntary sightings of HABs statewide. In 2020, 28 incidents of HABs were reported in Delta waterways, with a majority occurring during the summer months (June-August). This is generally consistent with sightings reported in two previous years (27 in 2019, 30 in 2018). However, in 2020, 10 HABs incidents were given a “danger” advisory level, advising people and pets to stay away from the water and water spray due to present danger. This compares to one danger advisory in 2019 and only three in 2018. The increase in danger advisories this year is attributed to the increase of sample collection compared to previous years. In 2019, new California legislation was passed (AB 834) that requires the State Water Resources Control Board to establish a Freshwater and Estuarine Harmful Algal Bloom Program to coordinate immediate and long-term algal bloom event incident response and conduct algal bloom field assessments.

#### **ADMINISTRATIVE PERFORMANCE MEASURES 2020 STATUS**

DWR has made significant progress reporting on the Water Supply Reliability Element (**PM WR R01-01**) in UWMPs and AWMPs, described with the water supply performance measures earlier. Draft urban and agricultural water management guidebooks published by the Department include appendices with guidance on water supply reliability and reduced reliance on the Delta. This was also recommended in the Governor’s Water Resilience Portfolio.

In February 2020, the California Natural Resources Agency and the California Environmental Protection Agency released a framework for potential voluntary agreements to improve river flows and habitat to help recover salmon and other native fishes in the Sacramento-San Joaquin Delta. The framework is a milestone with ongoing discussions related to the Bay-Delta Water Quality Control Plan, which includes updates to the flow objectives in the Delta (**PM ER R01-01**) and the Delta tributaries (**PM ER R01-02**).

The Sacramento-San Joaquin Delta Conservancy has established its Community and Economic Enhancement Grant Program using funding from Proposition 68. This is the first time that state bond funding has been made available to the Delta Conservancy for economic development. The program’s priorities include recreation and tourism, historic and cultural preservation, and environmental education. It is anticipated the funds will improve several Delta as Place Delta Plan performance measures (e.g., Bank Fishing, Hunting, Levee Trails and Environmental Education (**PM DP R16-01**), Enhance Tourism Business by Supporting Recreation Infrastructure (**PM DP R17-01**), and Encourage Partnerships between Agencies, Landowners, and Businesses to Promote Tourism (**PM DP R12-01**)).

The Central Valley Water Quality Control Board (CVWQCB) made progress in implementing the Central Valley Salt and Nitrate Management Control Program (**PM WQ R07-01**) when it established two pathways for permittees to pursue in their

compliance permitting process (individual permitting or local management zone). The CVWQCB commissioned scientific reviews of the Delta Mercury Control Program (**PM WQ R08-07**). The Delta Science Program facilitated the independent scientific evaluations of methylmercury control studies and point source characterization. The second phase to evaluate mercury non-point sources is expected to be completed in early 2021 by DWR.

The Council has made significant progress updating the analysis supporting the Delta Levees Investment Strategy (DLIS) using the best available data. These updates support the achievement of performance measures Developing Funding Priorities for Investments in Delta Levees (**PM RR R04-01 and PM RR P01-01**).

### **ENHANCED DASHBOARD FEATURES AND TRACKING CAPABILITIES**

The Council deployed a web-based dashboard in 2019 to visually track the performance measures and provide open access to the associated data, methods, and information. During 2020, the dashboard had more than 21,000 page-views (a three-fold increase from the previous year), averaging 1,000 to 2,000 views each month. Dashboard access peaked in August at approximately 4,000 monthly views after a Council announcement was broadly circulated highlighting updates to some of the performance data and new dashboard enhancements. Users mostly accessed the dashboard from the Council's main website or through search engines in response to Council electronic news blasts. The average user spent about four minutes on the dashboard and reviewed three to five performance measures in a single session. The average time spent on a single performance measure page was between 1.5 to 4.5 minutes, depending on the performance measure's complexity, context, and the number of metrics included within a measure.

Additional features were added this year to the online dashboard. Of note is a new page identifying a schedule of performance data updates (<https://viewperformance.deltacouncil.ca.gov/nodeschedule-performance-measures-data-updates>) to provide a quick overview of when each measure was last updated and the anticipated date of the next update. These changes were the result of Councilmember feedback to improve the predictability and usability of the information.

In 2020, Council staff established an internal protocol for performance data collection and evaluation to increase transparency and provide repeatable and replicable workflows to update performance measure data and identify important trends on an annual basis. The internal protocol defines the process for performance data analysis and synthesis, quality assurance and control, performance evaluations and assessments, and technical and management-relevant reporting.

## **2021 NEXT STEPS**

In the upcoming year, further enhancements will be made to the dashboard to continue to improve navigation and help users quickly get to new data and content updates. Going forward, digital communication about the status of the performance measures will be expanded. Staff will also explore other novel outreach tools and leverage them with existing Council communications resources to continue promoting and building an understanding of performance goals, metrics, evaluations, and the value they add to our state of knowledge. These may include short recorded technical videos, podcasts, blogs, data-rich story maps, a newsletter, and digital posters.

In 2021, to better align with recent statutes and executive orders and keep agency progress tracking updated, relevant, and effective, staff will initiate a new project to define and propose revisions to the administrative performance measures to incorporate progress made since the performance measures were first adopted in 2013. Staff will provide regular, timely updates to the Council regarding the administrative performance measures revisions project throughout 2021. The proposed revisions would require Council approval at a future date.

## **FISCAL INFORMATION**

Not applicable.

## **LIST OF ATTACHMENTS**

Attachment 1: Performance Measures Guidebook, 2019

## **CONTACT**

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