

ACTION 19

Develop long-term drought plans

Incorporate planning for long-term droughts of at least five years duration into all levels of water supply planning. Document efforts that will help sustain the Estuary through future extended droughts.

TASK 19-1 Fund an assessment that analyzes which retail and wholesale water supply agencies around the Estuary have long-term water supply plans for five to 10 year droughts.

BY 2017 Complete assessment.

TASK 19-2 Working through the multi-agency Bay Area Regional Reliability (BARR) partnership, or through individual water agencies, refine or adaptively manage long-term water supply plans to include plans for five to 10 year droughts.

BY 2020 Engage at least three water agencies in the region in long-term drought planning.

TASK 19-3 Highlight the best of the region's efforts by compiling Best Management Practices for Bay Area and Delta agencies. Gather input from agencies throughout the Estuary region.

BY 2020 Compile and distribute BMPs.

BACKGROUND

Climate change is anticipated to make California's climate more variable in the future, increasing the frequency of both droughts and floods, and reducing average Sierra Nevada snowpack. While water agencies are currently required to create contingency plans, these plans only address water shortages or interruptions of up to 36 months. Since California has, as of this date, completed the fourth year of a drought cycle, drought plans should assume droughts of five to 10 years in duration. Some water suppliers are already doing so.

This CCMP action supports long-term water supply planning processes that: 1) address the hydrologic conditions of the service area; 2) plan for multiple scenarios, including extended multi-year droughts of five to 10 years; and 3) document efforts to implement programs and investments that will help the Estuary respond to future extended droughts at the individual agency level and through multi-agency coordination efforts such as Bay Area Regional Reliability (BARR) feasibility studies and Integrated Regional Water Management Planning.

This CCMP action is identified in both the Governor's *California Water Action Plan: Revise Operations to Respond to Extreme Conditions* and in a drought response publication called *Wetter or Not* written

by non-governmental organizations. Preparation for extended droughts should flow from state and regional analyses of potential disruptions that could be caused by events like the decade-long drought recently experienced in Australia. Planning should consider the impacts of long-term drought to natural resources, businesses, regional agriculture, and communities, including the most vulnerable communities. For instance, the impacts of long-term drought on the Estuary's fish and wildlife, wildlife refuges, and natural habitat are often exacerbated by a greater diversion of their water sources to meet human needs.

This action also supports the Delta Plan's Expanded Water Supply Reliability Element (WR R4). This element calls for suppliers that receive water from the Delta watershed to detail how the water supplier is measurably reducing reliance on the Delta and improving regional self-reliance, consistent with Water Code section 85201, through investments in local and regional programs and projects. These plans are supposed to prepare for a possible interruption of Delta water supplies up to 36 months due to catastrophic events, evaluate the regional water balance, assess vulnerability to climate change, and analyze the extent to which the supplier's rate structure promotes and sustains efficient water use.

A regional approach, such as the BARR Partnership, may provide a model for how to approach long-term drought planning. This partnership is relatively new and will require evaluation as it develops programs and strategies. Research currently underway on long-term drought in the Russian River, led by the California Water Science Center, Sonoma County Water Agency, the USGS National Research Program, and Scripps Institution of Oceanography, may help with defining long-term drought scenarios and characterizing long-term drought readiness.

OWNERS

SF Estuary Partnership (Tasks 19-1, 19-2, 19-3)

COLLABORATING PARTNERS

Association of Bay Area Governments, Bay Area Regional Reliability Partnership, Bay Area Water Agencies Coalition, NOAA Fisheries, various water supply agencies

NEXUS

Actions 1, 18, 20-24

Goals 1, 3, 4

Objectives a, g, k, l