



Vulnerability Assessment

Background

The Department of Water Resources (DWR) performs a wide range of activities to support climate change analysis and adaptation planning by local and regional water managers. DWR is also leading by example in developing its own comprehensive Climate Action Plan to guide how DWR is and will continue to address climate change for programs, projects, and activities over which it has authority.

DWR's Climate Action Plan is divided into three phases:

Phase I is DWR's Greenhouse Gas Emissions Reduction Plan (GGERP), which covers how DWR will help mitigate the future impacts of climate change by reducing the GHG emissions from its activities. Phase I was completed in June 2012; since then, DWR has reduced annual GHG emissions by more than one million metric tons since 1990. As reported in the Commission's draft 2018 Review of the State Water Project, DWR achieved its 2020 emissions reduction target five years ahead of schedule.

Phase II is DWR's framework and guidance for consistent incorporation and alignment of analysis for climate change impacts in its project and program planning activities. In 2018, DWR released its [Climate Change Analysis Guidance](#) to guide decision making and provide assistance to DWR managers as they incorporate climate change analyses into their planning for DWR activities, including strategic planning, investment decisions, risk assessments, and infrastructure development. Climate change analysis can be extremely complex, including accounting for large uncertainties about the future climate and other important future conditions. This phase ensures that all DWR planning activities meet standards for quality, scientific rigor, and consistency.

Phase III is DWR's Climate Change Vulnerability Assessment and Adaptation Plan (VA/AP). This phase of the Climate Action Plan evaluates, describes, and where possible, quantifies the vulnerabilities of DWR's assets and business activities to projected changes in temperature, wildfire, Sea Level Rise, long-term and persistent hydrologic changes (including precipitation, snowpack runoff, and flooding), and habitat and ecosystem services degradation. The Vulnerability Assessment will serve as a foundation for the development of an Adaptation Plan to help prioritize DWR resiliency efforts such as infrastructure improvements, enhanced maintenance and operation procedures, revised health and safety procedures, and improved

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habitat management. Work on Phase III began in 2014. The Vulnerability Assessment portion of Phase III was completed in 2018, with the Adaptation Plan following in 2019.

Additional information on DWR's Climate Action Plan can be found here:

<https://www.water.ca.gov/Programs/All-Programs/Climate-Change-Program/Climate-Action-Plan>

John Andrew, DWR's Assistant Deputy Director for Climate Change, will present the Vulnerability Assessment and describe DWR's process for adaptation planning.

This is an informational item.

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