

ACTION 22

Expand the use of recycled water

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Work with water agencies, municipalities, and stakeholders to reduce barriers to the broader use of recycled water. Encourage the use of the right water at the right time and in the right place.

TASK 22-1 Promote existing outreach activities educating the public about recycled water. Encourage the sharing of informational materials, resources, and program models among municipalities, wastewater agencies, and drinking water agencies.

BY 2017 Develop platform for sharing resources.

TASK 22-2 Collaborate with the Bay Area Clean Water Agencies' Recycled Water Committee and others to: expand incorporation of recycled water in local and regional water resources planning processes; identify opportunities for the broader use of recycled water; overcome funding and planning gaps; and address regulatory and permitting constraints.

BY 2018 Hold three meetings.

BACKGROUND

Recycled water refers to water treated to either non-potable or potable standards to provide a beneficial use. Recycled water is an increasingly important part of the Bay Area's water portfolio, yet ample opportunities remain to expand its use around the region according to the 2015 *State of the Estuary Report*. Until recently, most of the surface and ground water consumed in the Bay Area was treated to drinking water standards, used once, treated again to remove pollutants, and discharged to the Bay from wastewater treatment plants. Increasing competition for high quality fresh water in a time of prolonged drought, with resulting conflicts between environmental and human uses, makes water recycling more important than ever.

This CCMP action supports efforts underway to make more efficient use of the Bay Area's potable water supply by using recycled water to 1) irrigate landscapes and crops, 2) cool the processing water in refineries and power plants, 3) create wetlands and other habitats, and 4) supplement instream flow where other alternatives are not available. Recycled water can also be used to expand water supplies by recharging groundwater, as is already done in other areas of California. After it is purified, it could also be used to supplement surface storage and distribution systems.

This CCMP action endorses the "right use of the right water at the right time and in the right place" approach. This approach seeks to optimize recycled water use within existing constraints. Constraints may include a lack of infrastructure for recycled water delivery, limited funding for pumping or pipeline construction, and planning gaps.

One effort to address planning gaps has been the 2013 *Bay Area Integrated Regional Water Management Plan* (BAIRWMP). The plan projects that recycled water use will more than double over the next 20 years, to 120,000 acre-feet per year. Local wastewater agencies are working individually and through partnerships such as the Bay Area Clean Water Agencies (BACWA), the North Bay Water Reuse Authority, and the Western Recycled Water Coalition to implement projects identified in the BAIRWMP.

Recent efforts are coalescing around the concepts of indirect potable reuse (IPR) and direct potable reuse (DPR). IPR supplements drinking water supplies indirectly by recharging groundwater aquifers with highly treated or purified wastewater. DPR introduces highly purified recycled water directly into the raw water supply immediately upstream of a water treatment plant, or into the distribution system downstream of a water treatment plant. Once DPR implementation begins, there's also the challenge of how to dispose of the additional waste created by advanced recycled water purification systems, such as reverse osmosis concentrate. This waste can contain high concentrations of contaminants that have been removed from the water.

This CCMP action supports regional partnerships like BACWA in efforts to share resources and reduce barriers to the broader use of recycled water.

OWNERS

Bay Area Clean Water Agencies (Tasks 22-1, 22-2)
SF Estuary Partnership (Tasks 22-1, 22-2)

COLLABORATING PARTNERS

Association of Bay Area Governments, North Bay Water Reuse Authority, State Water Resources Control Board, WaterReuse California, WaterReuse Northern California Chapter, Western Recycled Water Coalition, participants in the Bay Area Integrated Regional Water Management Plan, and various municipalities and water and wastewater agencies

NEXUS

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