ACTION
20

Increase regional agricultural water use efficiency

Assess opportunities to expand implementation of agricultural water use efficiency practices in the region. With partners, promote modification of small, private water storage methods with the intent of reducing direct instream diversions, promoting groundwater recharge, and providing greater water supply reliability for Bay and Delta farmers.

TASK 20-1 Fund and complete a report assessing one Bay and one Delta area in the Estuary region, evaluating current practices against the range of applicable water use efficiency methods and management practices. Outline the mechanisms by which conserved water could produce greater instream flow and groundwater recharge.

BY 2019 Complete report.

TASK 20-2 Facilitate a forum to explore the challenges and opportunities associated with the development of small offstream storage and modification of small instream impoundments. Forum should include regulatory agencies, resource conservation districts, stakeholder groups, farmers, and other partners. Forum should also identify funding needs, landowner and agency constraints, and barriers to implementation.

BY 2020 Complete three new or modified storage projects.

BACKGROUND

Agriculture throughout the San Francisco Estuary region is highly variable in terms of the types of soils and crops, the acreage of farms, average rainfall, and irrigation practices and water use. Farmlands around the Estuary do share several important characteristics not found in other agricultural regions of the state: a temperate climate, powerful development pressure, and greater water supply reliability than the Central Valley.

To assess the efficiency of agricultural water use practices around the San Francisco Estuary, this CCMP action recommends determining whether significant opportunities exist to conserve water for instream uses in the region.

Conducting this assessment in two areas — a Bay Area tributary watershed with high restoration potential for salmonids and an area of the Delta — will not capture the full range of agricultural variability in the region, but will provide a foundation for future assessments. The review will compare current practices to the range of applicable water use efficiency methods and management practices available for each area, taking into account site feasibility, geographic constraints, and possible barriers to greater water

conservation. This CCMP action also supports a cost-benefit analysis to assist in the adoption of recommendations. This analysis could demonstrate the long-term cost savings of incorporating water efficiency best management practices, or "BMPs".

The resulting report will be a model for assessment of agricultural practices throughout the Estuary region and offer regionally based, vetted information on the opportunities for, and barriers to, increased agricultural water conservation.

This CCMP action also recognizes that alterations in the timing of water diversions in tributary streams can yield significant benefits to coldwater fish species like salmonids. By modifying the operation of small instream dams and developing small offstream storage as an alternative to instream impoundments, agricultural producers can not only provide greater instream flow during key periods in the life cycle of aquatic species but also protect their water supply reliability. Lack of funding and regulatory constraints often impede implementation of these kinds of projects. By providing a forum for multiple stakeholders to address these barriers, this CCMP action will facilitate successful implementation of more of these types of projects.

OWNERS

SF Estuary Partnership (Tasks 20-1, 20-2)

COLLABORATING PARTNERS

Bay and Delta Resource Conservation Districts, CA Department of Fish and Wildlife, Natural Resources Conservation Service, NOAA Fisheries, State and Regional Water Boards, US Fish and Wildlife Service, various agricultural associations

NEXUS

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Goals 1, 3, 4
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