

Background

The Safe, Clean, and Reliable Drinking Water Supply Act of 2012 (the Act) requires:

In consultation with the Department of Fish and Game, the State Water Resources Control Board, and the department, the [California Water] commission shall develop and adopt, by regulation, methods for quantification and management of public benefits described in Section 79743 by December 15, 2012. (Water Code 79744)

In March 2011, the Water Commission directed DWR to prepare work products on quantification and management of public benefits. This work included a survey of economic tools and methods to quantify the public benefits of water projects, and working drafts of potential language for inclusion in regulations and guidelines that the Commission must develop if funding is approved by voters. The postponement of the water bond to the 2012 and subsequently 2014 ballot has provided an opportunity for the Commission to look more broadly at the issue of public benefits and consider other ways in which quantifying public benefits could help advance state water policies. It is the intention of the Commission to work with other state and public agencies to advance the development of state policies on public benefits and public financing of water projects that could be applicable to a future water bond or other planning and resource management activities. From its initial work, the Commission developed a [list of questions](#) which will be the subject of deliberations and summarized in this series of Draft Concept Papers.

This paper addresses the definition and scope of Ecosystem Benefits as discussed at the Commission's December 12, 2012 meeting.

The goal of this paper is to summarize the Commission's initial discussions, and generate public comment to inform future decisions.
It does not represent a decision by the Commission.

Question

Exactly what ecosystem benefits should qualify as public benefits, as the State considers public funding for water supply projects?

See [Issue Paper 2. CWC Public Benefits Discussion: Ecosystem Benefits](#)

Discussion

The bond defines ecosystem benefits as, *"Ecosystem improvements, including changing the timing of water diversions, improvement in flow conditions, temperature, or other benefits that contribute to restoration of aquatic ecosystems and native fish and wildlife, including those ecosystems and fish and wildlife in the Delta."*

The Act also states that:

79746. (b) No project may be funded unless it provides ecosystem improvements as described in paragraph (1) of subdivision (a) of Section 79743 that are at least 50 percent of total public benefits of the project funded under this chapter.

Staff proposed two interpretations of “Ecosystem Benefits” and reviewed how those interpretations would apply to different types of example water storage projects.

Under staff’s proposed option 1, any economic benefits that result from “the restoration of aquatic ecosystems and native fish and wildlife” would qualify as an ecosystem improvement benefit. These benefits might be obtained by local water users in the form of reduced costs or more water supply.

Under staff’s proposed option 2, a benefit would be categorized based on the type of benefit obtained, regardless of whether or not it was enabled by restoration of aquatic ecosystems and native fish and wildlife.

Staff also noted the deference given to native fish and wildlife in the Act; the Commission must consider whether benefits to non-native fish and wildlife should be counted; benefits to non-native sport fish might be counted as recreation benefits. The Commission must also consider if it will treat ecosystem benefits from terrestrial habitat similarly to aquatic habitat. Finally, the Commission must decide whether additional water supply provided to wildlife refuges should be counted as a water supply, ecosystem or recreation benefit, or some combination of these.

The Commission discussed the difference between ecosystem services and ecosystem improvements. “Ecosystem services” is a concept for valuing the benefits that ecosystems provide to people; however, ecosystems provide some important benefits that are not easily linked to services for people. The Commission recognized the need to develop methods for quantifying ecosystem improvement benefits that are diffuse, qualitative, or not well-connected to economic services.

Staff noted that for each benefit category there may be a “use” benefit to humans that can be quantified in amount of use and dollars, as well as a “non-use” benefit. Both types of benefits should be counted within each public benefit category.

Some Commission members expressed support for staff option 1 due to the clear, simple link between the project and its benefits. However, full discussion of the proposed options was reserved for the upcoming workshop.

Attachments

[Issue Paper 2. CWC Public Benefits Discussion: Ecosystem Benefits](#)

[Items for Follow-up Discussion: Policy Questions](#)