Presented at 3/15/2010 Board Meeting. Oral Communications

Name: Dr. Carol Reeb. Marine biologist and fisheries geneticist with Stanford University and Hopkins Marine Station.

I would like to express my concerns over the unanimous support by this board for phase I desalination under the Regional Water Project as an "environmentally superior solution" to solve the water problem in Monterey. Less than a year ago, the National Academy of Sciences published a 300-page report criticizing desalination plants used to augment public water supply for a lack of basic science available to understand long-term impacts of brine disposal and massive seawater intake on marine life. Two weeks ago, even the Monterey Herald expressed concern that we may be moving too fast with something the public knows so little about.

In 2009, the Coastal Commission's website listed 35 desalination plants in operation or in various stages of planning for California. Nine of them rim the Monterey Bay from Santa Cruz to Cannery row. All lie within a Marine Sanctuary. To give you a sense of scale in case all 9 plants someday come online, I took water production numbers and estimated that roughly 99,000 AF of seawater will be piped onshore for desalination each year –this is equivalent to drawing in 73% of the Bay's surface area one foot deep. The volume of brine discharged, should it be discharged directly into the bay, could fill it with 7 feet of hypersaline waste in 20 years. Knowing what is on the horizon, I assumed CEQA would demand final EIRs consider impacts across the whole bay, not just a small part. Speaking on behalf of fish everywhere, this should be demanded.

In my work, I see how the ocean and fisheries it supports comprise a network of habitats for feeding, spawning, and growth that are linked by corridors of migration between them. To manage stocks, we must protect the networks. Monterey Bay serves as both end point and pathway in the life cycles of tunas, rockfish, squid, salmon, the CITES-protected white shark, and a number of other species, including endangered steelhead trout from other rivers. Unlike the Carmel River, damaging the ecosystem of the Bay has far reaching consequences on other coastal communities, not just ours.

100 yrs ago, the great-great grandfathers of this community built a series of dams to solve the water problem. Today, we talk of tearing them down. Over the last year, several folks have come to the podium to express their view that desal will save the Carmel River Steelhead. I'm not sure I agree. Steelhead spend half their lives at sea. Promoting desalination as a means to save its part-time river residence not only puts a myriad of other species at risk, but in the long run, may not work out quite the way some would imagine.