Committee on Resources

Subcommittee on Fisheries Conservation, Wildlife and Oceans

Statement

WRITTEN TESTIMONY OF GRANT DAVIS

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BEFORE THE

SUBCOMMITTEE ON FISHERIES CONSERVATION, WILDLIFE AND OCEANS

REGARDING
HR 1775, THE ESTUARY HABITAT RESTORATION PARTNERSHIP ACT OF 1999
THURSDAY, SEPTEMBER 16, 1999

Good morning Mr. Chairman and members of the Subcommittee, my name is Grant Davis. I am the Executive Director of The Bay Institute of San Francisco (TBI), a non profit organization founded in 1981 and located in San Rafael, California, just north of the Golden Gate Bridge. TBI is dedicated to the protection and restoration of the ecosystems of the San Francisco Bay, the Sacramento-San Joaquin Delta and the rivers, streams and watersheds tributary to the estuary.

On behalf of the Board of Directors of The Bay Institute, and in my capacity as Vice Chair of the San Francisco Bay Joint Venture, I appreciate the opportunity to be here before you to provide testimony in support of H.R. 1775, the Estuary Habitat Restoration Partnership Act of 1999. My observations regarding the implementation of this Act, the proposed Councils, and the coordination required from the federal, state, regional, and local levels, reflect our eighteen year-history working to protect and restore the San Francisco Bay-Delta ecosystem, one of the largest estuaries of the Western United States. These comments also represent the point of view of an organization devoted to the principal that sound science should inform the decision making process, particularly when determining what strategy will work best to restore our nation's critically important estuarine resources.

H.R. 1775 - Estuary Habitat Restoration Partnership Act of 1999:

I have been asked to focus my remarks on implementation of H.R. 1775, the structure of the Councils that are proposed -- including non-governmental participation -- and in particular the types of restoration activities that could be undertaken in San Francisco Bay if this bill is enacted. Although I am not an expert on other national estuaries there are many features common to all of them in the United States. Sadly, one feature common to all our nation's estuaries is that they have been badly abused and have suffered substantial habitat loss, between 80 to 95 percent in many cases.

When healthy, estuaries are among the most critically important and productive natural systems on earth. They provide numerous opportunities for boating and business, fishing and hunting, strolling and swimming, wildlife viewing, and teaching about the natural world. Each year over 180 million Americans

either visit or vacation in our nation's estuaries. Fishing, tourism, and recreational boating, which depend on viable estuaries, provide more than 28 million jobs for our nation. While commercial and sport fishing alone contribute $111 billion annually to our nation's economy.

Perhaps the most significant aspects of H.R. 1775 are that it reconfirms the federal government's commitment to these critically important estuarine resources, establishes a systematic approach for federal involvement regarding estuaries and coastal zones, and provides necessary funding in which to begin implementation of habitat restoration that is consistent with local plans. However, from previous experience, funding levels designated by this legislation may not be sufficient to adequately carry out such an ambitious program.

I also agree with previous testimony given by Deputy Assistant Secretary, Mike Davis that recommends adding as one of the purposes of this legislation the need to promote greater public appreciation and awareness of the value and benefits of our estuary and coastal resources.

The San Francisco Bay-Delta Ecosystem:

The Bay-Delta ecosystem is an intricate web of waterways created at the junction of the San Francisco Bay and the Sacramento and San Joaquin Rivers and the watershed that feeds them. The estuary, where fresh water from the Sacramento and San Joaquin Rivers flowing down toward the San Francisco Bay mixes with salt water from the Pacific Ocean, touches the lives of millions of Californians. Nearly two-thirds of all Californian's depend on this estuary for their water supply. Fresh water flows through the Delta - a network of natural and man-made waterways - helps to supply two thirds of the state's population with drinking water, and irrigate 200 different types of crops on the Central Valley, including 45 percent of the nation's fruits and vegetables.

The Bay-Delta is a distinctive estuary ecosystem that supports more than 750 species of fish, animals, and birds, including waterfowl migrating on the Pacific Flyway. It supplies and sustains fisheries, wildlife refuges, and 40,000 of critical wetlands. The biological health and biodiversity of the ecosystem depends upon the freshwater flows through the estuary.

However, historically the Delta was an incredibly vast region of wetlands teeming with wildlife. It was composed of huge tracts of intertidal wetlands transected by a complex network of waterways. The Delta today bears little resemblance to its historical condition. Today, over 95 percent of the original 550 square miles of tidal wetlands are gone. Many miles of tidal sloughs no longer exist, nor does most of the riparian vegetation. In its place is a patchwork on intensely farmed "islands", surrounded by elevated levees, straightened and deepened channels, permanently flooded remnants of former wetlands now too far underwater to allow the re-establishment of emergent vegetation, and the center of one of the largest man-made water delivery systems in the world. Massive Federal, State, and local agency pumping plants, and over 1,800 unscreened agricultural diversions now transfer water, fish, and drifting estuarine life out of the aquatic environment.

Pollution in the Delta is also a serious concern today, because it is the source of drinking water and occasionally toxic to aquatic organisms. Delta waters contain elevated concentrations of pathogens, pesticides, trace metals, salinity, and organic carbon. The combination of habitat loss and successful invasion by a virtual army of non-native species has almost completely destroyed the Delta's native biological community. The native resident fish fauna has been replaced by a largely introduced assemblage. Two of three historically dominant fish species are no longer found here.

Waterfowl, once extremely abundant in the Delta's tidal marshes, are now drastically reduced in numbers. Nutrient and important energy sources as well as food webs have been greatly modified.

Similarly, San Francisco Bay itself has undergone significant habitat alterations over the course of the last two centuries. About 75 percent of the estimated 242,000 acres of highly productive native tidal marshes and mudflats have been converted to a variety of urban and industrial uses. Although as a result of the Clean Water Act, raw sewage is no longer dumped in the Bay and Industry wastes are strictly regulated, agribusiness practices are not. Illegal dumping also remains a problem. We no longer see massive fish kills that accompanied unregulated dumping in the Bay, yet fish populations continue to decline.

Increasingly the problem today is non-point source pollution: the water that collects pollutants as it moves through or over the soil, runoff that is generated because either the soil is too compacted or the water is falling off an impervious surface, like a road, parking lot, or driveway. Simply stated non-point source pollution is you and me and the way we go about our everyday lives. In many ways this is a much more difficult pollution control dilemma than we faced twenty to thirty years ago and it will require a more sophisticated approach, like H.R. 1775 to help address.

The Bay Institute:

The Bay Institute was one of the three groups that signed the historic Bay-Delta Accord in 1994, which formed a multi-agency and stakeholder cooperative process known as the CALFED Bay-Delta Program to address the water management and environmental problems associated with the Bay-Delta system. The mission of the CALFED Program is to develop a long-term, comprehensive plan that will restore ecological health and improve water management for beneficial uses of the Bay-Delta system.

CALFED's ecosystem restoration program is considered to be the most comprehensive and most inclusive environmental restoration program in the United States. It provides a new perspective to restoration science by focusing on the rehabilitation, protection or restoration of ecological processes that create and maintain habitats needed by fish, wildlife and plant species dependent on the Delta and its tributary systems. By restoring the natural processes that create and maintain diverse and vital habitats, CALFED aims to meet the needs of multiple plant and animal species while reducing the amount of human intervention required to maintain habitats.

Currently The Bay Institute's Program Director, Gary Bobker, Co-chairs a stakeholder group known as the Ecosystem Roundtable, which formally advises CALFED on its Ecosystem Restoration Strategy. Gary Bobker was one of signatories to the Bay Delta Accord and has been devoting a significant amount of his energy to improving this effort. Dr. Anitra Pawley, TBI's Aquatic Ecologist is a member of something known as the Integration Panel, a technical committee that advises CALFED on how best to allocate and prioritize the millions of dollars spent on ecosystem restoration. To date CALFED has funded 195 projects for a total of approximately $228 million.

Types of projects funded include fish screens, fish ladders, land acquisition, habitat restoration, and focused research and monitoring projects designed to provide information that will improve future restoration efforts. Funding for these projects has come from the Federal Bay-Delta Act, State Proposition 204 and water user fees. In short, the CALFED Bay-Delta Ecosystem Restoration Strategy provides a good working example of how ecosystem restoration targeted toward an estuary can be performed. It provides an appropriate scientific foundation and allows for the type of coordination required for truly comprehensive

habitat restoration.

U.S. Army Corps of Engineers Ecosystem Restoration Mandate: Historically, two main objectives of the Army Corps of Engineers have been the maintenance our navigational waterways and flood protection. Increasingly, under the National Environmental policy Act of 1969 and Federal Water Pollution Control Act of 1972, known as the Clean Water Act the Corps has been given more authority to regulate the discharge of dredged or fill material into our Nation's wetlands. More recently, Congress provided additional environmental protection authority to the Corps under the Water Resources Development Act (WRD A) of 1986 and subsequent WRDAs. Clearly, one of the more notable features of this legislation is the "ecosystem restoration" authority provided to the Corps that is closely linked to economic development.

Sonoma Baylands:

Perhaps one of the best examples of the positive aspects of the expanded role of ecosystem restoration for the Corps is the 400 acre Sonoma Baylands Wetlands Restoration and Demonstration Project in Sonoma, California. This pilot wetland restoration project put to beneficial reuse material that had been dredged from the Port Oakland's harbor -- material that would otherwise have been disposed of as waste inside San Francisco Bay or the Pacific Ocean beyond the Golden Gate Bridge. This pioneering project was only made possible by a comprehensive and coordinated approach, much like those being proposed in H.R. 1775, lead by the Corps and U.S. EPA called the Long Term Management Strategy (LTMS). The LTMS was designed to find long-term solutions for the disposal of dredge material for the San Francisco Bay area on a regional basis and has been formally adopted by the responsible agencies. The LTMS had the strong support from the Bay Area Congressional delegation and required broad-based support from all levels of government. The Sonoma Baylands has proven to be a win-win solution. The long-term monitoring program, like those being proposed in this Act, has also provide useful information regarding the science behind wetland restoration using dredge material. In fact, that monitoring information obtained as part of the Sonoma Baylands project has already been used to better inform and improve upon another related Corps project authorized earlier this year, the Hamilton Army Airfield Wetland Restoration Project.

Hamilton Army Airfield Wetland Restoration Project:

This wetland restoration project being constructed on an old 700-acre cement runway in Novato, California is building upon the success of the Sonoma Baylands project. It is another good example of a Corps ecosystem restoration project that has the potential to add a significant amount of wetland habitat back to San Francisco Bay. This project also provides additional opportunities to link with other adjacent wetland restoration sites as part of a more comprehensive vision of ecosystem restoration.

San Pablo Bay Watershed Restoration Study:

The Bay Institute has been very involved in another Corps ecosystem restoration effort called the San Pablo Bay Watershed Restoration Study. This project grew out of a local planning process that included landowners in the area, much like H.R. 1775 is promoting. As part of my written testimony I am including a report entitled the San Pablo Baylands. This document describes the planning effort that led up to the Corps San Pablo Bay Watershed Restoration Study in great detail. Therefore, I will not elaborate much further about this process, except to say that I wholeheartedly agree with this approach and feel that because of the way it incorporated local landowners and numerous stakeholders, it represents the type of project that should be held up as your model.

Industrial Water Efficiency Program:

My final area of focus has to do with the efficient use of resources. This is an area that poses a promising opportunity for Congress. It is my hope that members of the Subcommittee will consider, as part of H.R. 1775, a means to provide greater incentives for innovative water conservation and recycling projects as they relate to estuaries.

The Bay Institute recently published a pilot report entitled the Industrial Water Efficiency Program targeting the City of Petaluma, California. The study is aimed at the commercial, industrial and institutional (CII) water sector and recommends the development a cost-effective public/private partnership designed to improve water efficiency and greatly reduce the mass of pollutants being discharged to the sewer system, and ultimately into San Francisco Bay.

The City of Petaluma has demonstrated true leadership with regard to water conservation over the years. This Industrial Water Efficiency Program builds upon that strong record of achievement. By implementing an Industrial Water Efficiency Program, the City has the potential to reduce water use by almost 400,000 gallons per day. This is roughly seven percent of the City's total estimated wastewater flow in the year 2010. The amount of pollutants entering the sewage treatment system will also be reduced.

As part of the Industrial Water Efficiency Program a "Case Study for Mishi Apparel, Inc." was developed. Mishi Apparel, Inc. manufacturers women's clothing and operates a dye house in Petaluma. Mishi has been in Petaluma for fifteen years and has 50 employees. The Case Study for Mishi verified that with the right combination of incentives it would be possible to reduce Mishi's demand for water by about 46% and process additives by as much as 72%. In Mishi's case, fewer materials required at the dyehouse translates into improved water quality and more dollars to invest. This program will enable the City to play a more constructive role in assisting local businesses.

I strongly urge Congress, through H.R. 1775, to continue supporting innovative water conservation measures. The most reliable new source of water in California lies with efficiency improvements among our existing users. Our Case Study of Mishi Apparel Inc, provides a wonderful opportunity to demonstrate that public investment in resource efficiency will provide highly cost-effective local economic development. The combination of pollution prevention with water conservation, particularly as it addresses the removal of metals at their source, will be especially beneficial for our nation's estuaries. The concept of approaching these goals within the context of local economic development creates additional opportunities.

Along with my original letter of support for the Estuary Habitat Restoration Partnership Act I have included two recent reports to accompany my testimony that I believe will be useful to the Subcommittee. The first report is From Sierra to the Sea, The Ecological History of the San Francisco Bay-Delta Watershed, published by the Bay Institute in 1998. The second is San Pablo Baylands, A Plan to Protect and Restore the Regions Farms and Wetlands, developed by the Partnership For The San Pablo Baylands and published earlier this year.

I believe the Subcommittee will also find useful a document called Baylands Ecosystem Habitat Goals, which I have not included today. However, this report of habitat recommendations prepared by the San Francisco Bay Area Wetlands Ecosystem Goals Project beautifully illustrates that there are numerous projects ready to be implemented in the San Francisco Bay Region. These reports also clearly demonstrate the significant amount of planning and coordination that has already taken place in the San Francisco Bay Area. What we need now is the type of financial support offered by the Estuary Habitat Restoration

Partnership Act of 1999.

On behalf of The Bay Institute of San Francisco and the San Francisco Bay Joint Venture thank you again Mr. Chairman and members of the Subcommittee for the opportunity to testify before you here today.

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