Joint Hearing
Senate Committee on Agriculture and Water Resources and
Assembly Committee on Water, Parks and Wildlife
Delta Fish Protection and Water Supply
June 22, 1999

Testimony provided by
Thomas M. Hannigan
Director
Department of Water Resources

Mr. Chairmen and Committee Members:

Thank you for inviting me to testify on the important subjects of Delta fish protection and water supply. To better understand today's concerns about reduced pumping in the Delta, let's quickly review a few events that lead us to this point, identify the current concerns and possible resolutions, and review the process necessary to get to resolution.

As you may recall, the federal Central Valley Project Improvement Act was enacted in 1992 and requires the Department of Interior to take actions to double the populations of anadromous fish within the vast Central Valley. The U.S. Fish and Wildlife Service developed a list of actions to accomplish this task and the Bureau of Reclamation implemented changes in Central Valley Project operations to accomplish the actions. The CVPIA required a reduction in the yield of the CVP by 800,000 acre-feet of water that is to be managed annually, and this reduction was redirected from rural and urban uses to the benefit of the environment. Defining the 800,000 acre-feet of yield and what it means in terms of annual water supply has been the center of controversy since the Act was signed. This year, that controversy erupted into lawsuits filed by water and environmental stakeholders in federal court.

This information is important because it helps explain some of the conflict that has occurred recently. The efficient implementation of CVPIA can only happen with the cooperation of the State of California; for example, this last spring, we agreed to participate in a series of actions designed to protect juvenile salmon migrating out of the San Joaquin River system by reducing pumping at the State Water Project and CVP facilities in the Delta. The pumping was reduced beginning April 17 during a time when additional water was released from reservoirs in the San Joaquin River system.

When the federal judge presiding over the lawsuits declared the CVPIA actions could not be implemented until an accounting for the 800,000 acre-feet of yield is done, we began to operate the two water projects to protect Delta smelt. This protection is defined in the Delta Smelt Biological Opinion for Operations of the CVP and SWP by the USFWS. The Opinion is much like a permit, it is in essence approval of the proposed project operations and it authorizes taking of a protected species incidental to those approved operations.

D-012126

D-012126

One criterion contained in the Opinion is for lower exports during a one-month period in the springtime. The one-month period, which for this year started on April 17 and continued until May 17, is to be followed by a resumption of higher exports to meet expected increases in demands for water and to refill depleted storage resulting from the earlier action. Unfortunately, salvage of Delta smelt at the export facilities increased dramatically and by May 20 the Bureau of Reclamation re-initiated consultation with USFWS as required by the incidental take statement in the Opinion.

Since May 20, and at the request of the FWS, the Department and the Bureau have jointly reduced SWP and CVP pumping by about 400,000 acre-feet due to concerns over adverse impacts to delta smelt. It was believed the reduction would be for a short period; historically, concerns over impacts to delta smelt from pumping diminish rapidly after three to four weeks as delta smelt naturally move westward out of the Delta. This year, however, a portion of the population continues to remain within the Delta. As the days of pumping reductions accumulate, the likelihood of potential water supply problems increase. Now, we face three potential problems: (1) an immediate shortage of water for meeting demands; (2) a shortage that could impact water quality and quantity by the end of the summer (this I will call the San Luis "low point"); and (3) a shortage that could reduce the amount of water available to meet next year's needs. I'll discuss each briefly:

Immediate Problem

Today's supply of water is just meeting the day-to-day deliveries. Water is available in Northern California reservoirs to meet the demand; however, neither the SWP or CVP can move that water due to pumping constraints for delta smelt. This means that most of the supply to meet current demand is coming from San Luis Reservoir. San Luis Reservoir is an off-stream storage facility near Los Banos jointly owned and operated by the Department and the Bureau. During wet periods, water is pumped from the Delta and placed into San Luis. During the summer months, releases from San Luis are combined with Delta exports to meet deliveries to the south Bay, Santa Barbara, the San Joaquin Valley and Southern California. Normally, we rely upon exports from the Delta to offset the difference between demands and releases from San Luis Reservoir. Operating so close to the margin means a mechanical failure could lead to short-term shortages.

San Luis Low Point Problem

As I stated earlier, San Luis Reservoir is normally operated in a cyclic manner; however, we try to keep the reservoir from dropping below a level that causes water quality degradation to supplies delivered directly from it. We also try to avoid drawing the reservoir down to a level that begins to jeopardize our ability to provide those supplies.

The Santa Clara Valley Water District extracts water from the western end of the reservoir to meet both municipal and industrial demands in all of Santa Clara County. Unfortunately, water quality degrades when the lake drops below about 300,000 acre-feet. In fact, the supply becomes unusable for some industrial demands at about 200,000 acre-feet. At about 100,000 acre-feet, we believe the District will be unable to withdraw water from San Luis.

Based on recent projections, San Luis Reservoir will drop to about 200,000 acre-feet by the end of August; assuming pumping is increased this week. If exports are not increased until the first of July, storage is expected to drop to about 100,000 acre-feet.

Long-term Problem

If we are unable to replace the storage being released from San Luis Reservoir now, the reduction in exports from the Delta this year could impact the amount of water available for delivery next year. Storage in San Luis Reservoir at the beginning of the water year is very significant to that year's water supply if conditions are dry. Current projections indicate the probability of full SWP water deliveries being met next year is good for most types of water years. This projection, however, does not include possible export restrictions that may be imposed in the winter for spring-run or winter-run salmon. Replacement of the storage in San Luis Reservoir this year would help to reduce the impact these potential export curtailments could have on next year's water supply.

Lower storage in San Luis Reservoir also decreases the ability of the SWP to provide interruptible water supply to its contractors during the winter and early spring. Interruptible supply is water delivered when it becomes available in the Delta. It is not stored within the SWP but delivered directly to contractors who store it within their districts. It is a way of capturing water supply during times when it is less likely to impact fish and increasing overall water supply reliability in the SWP service area. Interruptible supply is very significant to the water users. It is viewed as a way to bolster supply reliability during an era of increasing export restrictions.

There are several things we are currently doing to resolve these three problems and there are various processes we will use to complete our task. We have directed staff to identify technical solutions and the challenges associated with each. We are also meeting at the policy level to ensure effective coordination and communication among our respective agencies. Actions that are being taken include:

- Pursuing an agreement to borrow water from water users. We have begun discussions with water users south of the Delta about temporarily switching them to local supplies to reduce the demand on water from San Luis Reservoir. This could cost between $140 - $170 per acre-foot and would require that the water be replaced at a later time. We have begun exploring how these transactions would be funded.

- Increasing pumping. Yesterday, FWS approved a 500 cfs increase in pumping for the CVP. This increase will provide a small cushion against potential short-term shortages.

- Meeting daily with the experts (those who operate the projects and those who receive water). This will ensure that we have the most current information about demands. Having the ability to accurately forecast demands is critical at this point.

- Evaluating what additional flexibility may be available in the CVP and SWP systems. For example, the SWP has shifted some of the deliveries in Southern California from San Luis to SWP reservoirs in the Southland.

- Monitoring impacts of additional pumping on delta smelt. Currently, we have an extensive real-time monitoring program collecting data and evaluating and disseminating information about the status of delta smelt. With additional monitoring, we could evaluate how changes in exports affect delta smelt distribution; therefore, managing pumping increases to minimize impacts on the species.

- Working closely with stakeholders (water users, environmentalists, and in-Delta agricultural interests). By working through this in a cooperative fashion, we believe we will be able to identify additional sources of water that can relieve the pressure off using storage from San Luis Reservoir; furthermore, we're evaluating real-time data to determine when and how much Delta pumping can be increased.

Over the next several weeks, we will develop solutions for the water supply problems we face. We are optimistic that we can find a way to meet the needs of delta smelt without sacrificing water supply for CVP and SWP contractors. But as we navigate through this difficult time, it is clear the conflict we are experiencing now exemplifies the type of issue the CALFED Program is designed to resolve.