

### The Historical Level Concept

The concept was developed in the mid-1970's during negotiations between our Department, the Department of Water Resources, the U. S. Fish and Wildlife Service, and the U. S. Bureau of Reclamation. The Department of Fish and Game's position is that concepts traditionally used to define water project mitigation responsibilities are inappropriate in the Delta. The fundamental problem is that Central Valley Project (CVP) operations after completion of Shasta Dam have masked the effects of increased upstream water diversions on the Delta, and there is no way to know what decisions would have been made if the CVP had not been started.

The negotiations led to an agreement that the CVP-SWP would jointly assume responsibility for compensating for effects in the estuary of upstream diversions, but that CVP-SWP water users would not be expected to pay the cost of water in excess of that estimated to be present under "without project conditions." Without project conditions were to be a theoretical assessment based on CVP-SWP operations studies. Since the intent was to provide historical flows to the extent necessary to protect fish and wildlife, we coined the term "Historical Level" to describe the concept.

The negotiations developed the concept in considerable detail and incorporated it in a draft agreement which became Department of Fish and Game Exhibit 11 in the State Water Resources Control Board's Delta water rights hearing. The major features of the concept are:

1. The base period is 1922 to 1967. Reasonable water records started in 1922. The period was extended beyond 1944 when CVP operations started since a disproportionate number of dry and critical years occurred between 1922 and 1944. In extending the base to 1967, the fishery agencies accepted the effects of early CVP diversions from the Delta as part of the base.
2. Fish and wildlife are to be maintained at Historical Levels on the average. i.e. They would be higher in some years and lower in others, just as they fluctuated historically in relation to water supply.
3. The CVP-SWP responsibility is limited to the effects of those projects and to the effects of water depletions in the estuary caused by other projects. To do otherwise would result in any number of absurd situations. For example, several new fish species have gotten into the estuary since 1967. Their Historical Level is obviously 0. Neither the projects nor anyone else can remove them to achieve that. Under this principle, pollution, marsh reclamation, overfishing, etc. all clearly fall outside the responsibility of the CVP-SWP.

4. The obligation is limited to effects in the estuary which is defined to include the Delta and San Francisco Bay. As a result, for example, there is no obligation under this concept to restore salmon runs in the San Joaquin drainage, even though they were essentially destroyed by upstream effects of water projects. The Department of Fish and Game and the U. S. Fish and Wildlife Service, however, will continue pressing for mitigation from the upstream projects.
5. It is recognized that not every species could be maintained at Historical Levels. Therefore, the goal is to maintain overall fish and wildlife values, with the fish and wildlife agencies having responsibility for determining the acceptability of tradeoffs between species.

Within the context of the above guidelines, the expectation is that when an adverse effect of CVP-SWP operations is identified:

1. the degree to which that effect would have occurred between 1922 and 1967 will be identified based on historical flow and salinity records, and
2. management options will be evaluated to select a standard for project operations which will provide protection in the future comparable to that which existed between 1922 and 1967.