

United States Department of the Interior

OFFICE OF THE SOLICITOR 'Washington, D.C. 20240

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Memorandum

To: Deputy Secretary

From: Solicitor

Subject: Section 3406(b)(2) of the Central Valley Project Improvement Act

This is in response to your request for advice on interpreting section 3406(b)(2) of the Central Valley Project Improvement Act (CVPIA), Pub. L. No. 102-575. Specifically, you ask whether the draft policy released by the Bureau of Reclamation and the U.S. Fish and Wildlife Service on October 31, 1997, is consistent with b(2) and the other requirements of the CVPIA. For the reasons that follow, we conclude that it is.²

Background

Enacted in 1992, the CVPIA modified the priority of CVP purposes and established aggressive goals for the restoration of the fish and wildlife in California's Central Valley. The Act provided the Secretary with a number of authorities as tools to accomplish those goals. At the same time, the Act also recognized that additional management and "measurement" tools were needed and would be developed over time.³

Given the necessity to make repeated references to subsections 3406(b)(1), (2). and (3) in this memorandum, we will use the shorthand "b(l)," "b(2)" and "b(3)."

² The final administrative paper, which we understand you intend to release to the public along with this document, is based on the October 31 draft. Therefore, the final paper is also consistent with the Act.

³ For example, section 3406(g) directs Interior, working with the State, to develop readily usable and broadly available models to support the Secretary's efforts at fulfilling the requirements of the Act. Those models are to help improve scientific understanding concerning a variety of topics, including, but not limited to, measures to restore anadromous fisheries to optimum and sustainable levels; the development and use of base flows and channel maintenance flows to protect and restore natural channel and riparian habitat values; and measures to enhance the firm yield of existing CVP facilities, including improved management and operations, conjunctive use opportunities, offstream storage, levee setbacks, and riparian restoration.

Subsection b(1) directs the Secretary to develop and implement a program designed to double the natural production of anadromous fish from the average levels that prevailed in the quarter century just prior to enactment of the CVPIA. That subsection also gives general guidance as to how the Secretary is to accomplish that goal, and explains the relationship of the fishery restoration program to the Secretary's other obligations, as follows:

- (A) This program shall give first priority to measures which protect and restore natural channel and riparian habitat values through habitat restoration actions, modifications to Central Valley Project operations, and implementation of the supporting measures mandated by this subsection; shall be reviewed and updated every five years; and shall describe how the Secretary intends to operate the [Project] to meet the fish, wildlife, and habitat restoration goals and requirements set forth in this title and other project purposes.
- (B) As needed to achieve the goals of this program, the Secretary is authorized and directed to modify CVP operations to provide flows of suitable quality, quantity, and timing to protect all life stages of anadromous fish, except that such flows shall be provided from the quantity of water dedicated to fish, wildlife, and habitat restoration purposes under paragraph (2) of this subsection; from the water supplies acquired pursuant to paragraph (3) of this subsection; and from other sources which do not conflict with fulfillment of the Secretary's remaining contractual obligations to provide Central Valley Project water for other authorized purposes. Instream flow needs for all Central Valley Project controlled streams and rivers shall be determined by the Secretary based on recommendations of the United States Fish and Wildlife Service after consultation with the California Department of Fish and Game.
- (C) The Secretary shall cooperate with the State of California to ensure that, to the greatest degree practicable, the specific quantities of yield dedicated to and managed for fish and wildlife purposes under this title are credited against any additional obligations of the CVP which may be imposed by the State. . . and that, to the greatest degree practicable, the programs and plans required by this title are developed and implemented in a way that avoids inconsistent or duplicative obligations from being imposed upon CVP water and power contractors.

The CVPIA's next subsection, b(2), is identified in b(1) as providing one source of water for the fishery restoration program. It requires that the Secretary, in consultation with other State and Federal agencies, Indian tribes, and affected interests

upon enactment of this title dedicate and manage annually eight hundred thousand acre-feet of Central Valley Project yield for the primary purpose of implementing the fish, wildlife, and habitat restoration purposes and measures authorized by this title; to assist the State of California in its efforts to protect the waters of the San Francisco

Bay/Sacramento-San Joaquin Delta Estuary; and to help to meet such obligations as may be legally imposed upon the [project] under State or Federal law following the date of enactment of this title, including but not limited to additional obligations under the Federal Endangered Species Act. For the purpose of this section, the term "Central Valley project yield" means the delivery capability of the Central Valley project during the 1928-1934 drought period after fishery, water quality, and other flow and operational requirements imposed by terms and conditions existing in licenses, permits, and other agreements pertaining to the Central Valley Project under applicable State or Federal law existing at the time of enactment of this title have been met.

The subparts of b(2) further define that water:

- (A) Such quantity of water shall be in addition to the quantities needed to implement paragraph 3406(d)(l) of this title and in addition to all water allocated pursuant to paragraph (23) of this subsection for release to the Trinity River. . . ; and shall be supplemented by all water that comes under the Secretary's control pursuant to subsections 3406(b)(3), 3408(h)-(i), and through other measures consistent with subparagraph 3406(b)(l)(B) of this title.
- (B) Such quantity of water shall be managed pursuant to conditions specified by the United States Fish and Wildlife Service after consultation with the Bureau of Reclamation and the California Department of Water Resources and in cooperation with the California Department of Fish and- Game.
- (C) The Secretary may temporarily reduce deliveries of the quantity of water dedicated under this paragraph up to 25 percent of such total whenever reductions due to hydrologic circumstances are imposed upon agricultural deliveries of Central Valley Project water; <u>Provided</u>, That such reductions shall not exceed in percentage terms the reductions imposed on agricultural service contractors; <u>Provided further</u>, That nothing in this subsection or subsection 3406(e) shall require the Secretary to operate the project in a way that jeopardizes human health or safety.
- (D) If the quantity of water dedicated under this paragraph, or any portion thereof, is not needed for the purposes of this section, based on a finding by the Secretary, the Secretary is authorized to make such water available for other project purposes.

Subsection b(3) provides for other sources of water for the fishery restoration program, directing the Secretary to:

develop and implement a program in coordination and in conformance with the plan required under paragraph (1) of this subsection for the acquisition of a water supply to supplement the quantity of water dedicated to fish and wildlife purposes under paragraph (2) of this subsection and to fulfill the Secretary's obligations under paragraph 3406(d)(2) of this title. The program should identify how the Secretary intends to utilize, in particular the following options: improvements in or

modifications of the operations of the project; water banking; conservation; transfers; conjunctive use; and temporary and permanent land fallowing, including purchase, lease, and option of water, water rights, and associated agricultural land.

Interior is currently developing the long-term program called for in b(1) for doubling the natural production of anadromous fisheries.⁴ The water dedicated in b(2) provides one source of water at the Secretary's disposal to carry out that program. Congress did not, however, restrict the use of that water to anadromous fish restoration, nor did Congress want dedication and use of the water under b(2) to await completion of the long-term fish restoration program. Instead, the Act directs the Secretary to begin managing b(2) water "upon enactment." Further, while the water dedicated in b(2) is for the primary purpose of fish, wildlife, and habitat restoration, the statute also makes it available for the secondary purposes of assisting in meeting water quality standards in the Delta and in meeting the needs of endangered species listed after passage of the CVPIA. Thus, the water dedicated in b(2) is an important component of the anadromous fish restoration program, but the use of the dedicated water is not limited to that program.

Since the CVPIA became law, the Bureau of Reclamation and the Fish and Wildlife Service have been implementing b(2) through annual joint determinations of management measures to help achieve the fish and wildlife restoration goals of the Act. To improve upon this rather unsystematic implementation of this key feature of the CVPIA, the Department has been seeking to develop a more specific, overall plan for implementing b(2), pending completion of the long-term anadromous fish restoration plan. In this effort, the Department has sought extensive public and stakeholder input. That public process, which began in late 1995 and continues today, has guided and informed the Department's developing approach to b(2).

Much of the discussion regarding Interior's implementation of b(2) to date has focused on the question of how to "account" for or "measure" the 800,000 acre-feet (AF) dedicated by b(2). This question has fostered a wide range of possible interpretations and generated considerable controversy.

Some commenters have viewed b(2) as requiring that -- as a means of accounting for the water -- CVP water deliveries to farmers and other non-fishery users must be reduced by 800,000 AF in all, or at least all but the very wettest, years. We have dubbed this, for convenience, the "fish-friendly" interpretation.

⁴ On June 24, 1997, the Department released for public review and comment a Revised Draft Anadromous Fish Restoration Plan. That Plan will be revised, as necessary, and finalized following completion of the Programmatic Environmental Impact Statement mandated by section 3409 of the CVPIA.

⁵ See <u>Westlands Water District v. Natural Resources Defense Council</u>, 43 F.3d 457 (9th Cir. 1994).

At the opposite end of the spectrum, others have advocated an accounting approach that would direct the Secretary to provide water for fisheries in times of drought, but that would not result in additional water for fisheries in other years, nor result in any reduction in CVP water deliveries to non-fishery interests except in the very driest years, years that match the hydrologic conditions of the 1928 to 1934 drought. We will refer to this as the "contractor-friendly" interpretation.⁶

Despite the wide gulf between them, the "contractor-friendly" and "fish-friendly" approaches reach nearly the same result on how b(2) should be implemented during dry and critically dry years. Dedicating the 800,000 AF called for by b(2) in those severe drought years will, under either approach, have-a direct effect on contract deliveries, because it will reduce the "delivery capability" of the project by the amount dedicated. This means that the basic debate is over how b(2) will be implemented in more normal or wet water years.

The Department itself has explored the viability of various methods of addressing this very complex issue. (See, e.g., "Guidelines for Section 3406(b)(2) Water," dated May 28, 1996; "Draft CVPIA Administrative Proposal," dated July 1, 1996; "Draft CVPIA Administrative Proposal," dated October 31, 1997.) In the course of those deliberations, and based on the legislative history of early versions of the statute, the Department has even considered whether b(2) can be viewed as establishing the Fish and Wildlife Service as a contractor -- essentially vesting 800,000 AF of water annually in the U.S. Fish and Wildlife Service, much as other project water is dedicated by contract in specific quantities to specific users, such as irrigation districts.

After exhaustive deliberation, including consideration of substantial comments from stakeholder interests and the public, Reclamation and the Fish and Wildlife Service have jointly concluded that none of the approaches mentioned is genuinely and wholly faithful to the statutory design. Indeed, the agencies have concluded that the controversy over "accounting" is largely misplaced, reflecting a misguided effort to separate the measurement of b(2) water, which is an aspect of dedication, from its use; that is, its annual management to serve its primary purpose.

Consequently, in light of Congress' mandate that the Secretary "dedicate and manage annually" the water under conditions specified by the Service to help achieve, <u>inter alia</u>, the fish doubling goal, the two agencies have concluded that the most appropriate and

⁶ Admittedly, we are drawing a somewhat oversimplified description of the competing views of the statute, and the labels we have appended are not intended to suggest that all contractors favor one result and all friends of fish favor another, nor for that matter, to suggest that contractors are not "friends of fish." Our discussion is derived from comments we have received from various outside sources during the public review process and from internal deliberations.

responsible way to implement b(2) is to fuse the two concepts of dedication and use. This, in turn, has led to the agencies' proposal, as set out in the October 31 draft, that b(2) water will be "accounted for" by setting forth how that water is to be used to serve the purpose for which it was dedicated -- i.e., by creating environmental conditions needed for restoration of the anadromous fishery in the Central Valley. The question is whether the approach is consistent with the statute.

Analysis

At a superficial level, the directive from Congress appears to be simple to implement. In fact, however, implementing the directive is enormously complex.

That complexity arises from several source. First, there is the immense physical and hydrological scope of the Central Valley Project:

The grand design of the Project was to conserve and put to maximum beneficial use the waters of the Central Valley of California, comprising a third of the State's territory, and the bowl of which starts in the northern part of the State, and, averaging more than 100 miles in width, extends southward some 450 miles.

<u>Dugan v. Rank</u>, 372 U.S. 609, 612 (1962). The CVP itself embraces nearly twenty dams and reservoirs and hundreds of miles of canals and other water conveyance facilities. From those facilities, the Project delivers an average of approximately 5.8 million acre feet of water annually. Much of it is used for agricultural irrigation on more than 2.6 million acres of farmland.

Second, the federal project does not operate in isolation. It is closely associated with the State Water Project, drawing water from many of the same sources and sharing some of the same facilities:

California's water supply is physically linked from the Trinity River in the northwest comer of the State to the Imperial Valley in the far southeast. The degree of interrelationship is such that it is fair to say that almost three-quarters of the State's population lives on (and from) the same 'river.' That web of interconnection is a product of 80 years of efforts by Southern California interests to secure water supplies for that area's economic growth and Central Valley agricultural interests to secure surface water supplies to replace depleted ground water aquifers.

H.R. Rep. No. 102-576, Part I, at 15 (1992).

⁷ For a further description of the expansiveness and complexity of the Project, see U.S.-v. Gerlach Live Stock Co., 339 U.S. 725 (1950), and Ivanhoe Irrigation District v. McCracken, 357 U.S. 275 (1958).

Managing and tracking water releases and deliveries through this vast system is a challenging task. Accounting for water is complicated by, among other things, the fact that water released from upstream storage facilities may be used and reused several times for multiple purposes as it makes its way through the system.

In the specific context of implementing b(2), further complexity is introduced by the need to respond quickly to changing biological and hydrological conditions so as to meet the goals of the Act. Fishery management requires "real-time" monitoring and adjustments to accommodate and respond to the constantly changing needs of a variety of fish species as they move through or are affected by the Project.

At the same time, measuring the water dedicated by b(2), in any real world sense is extremely difficult. Unlike water deliveries to agricultural or municipal contractors, water made available for fish or for environmental restoration is typically not delivered to or diverted at a set point and on a calendar schedule. For example, fishery restoration may require water releases as necessary to keep salinity concentrations or temperatures at certain levels in certain reaches at certain critical times. Moreover, water for fish and environmental restoration is typically not consumed to the same degree as water for other uses, but rather remains in the system and available for other uses, thus further complicating the task of measuring b(2) water.

In addition, existing computer models, while essential in the operation and management of the CVP and the State Water Project in California, have certain inherent limitations. For example, the computer model that simulates the operations of the CVP and the State Water Project functions on a monthly time scale, rather than daily or weekly. This limits its ability to reflect the ever-changing needs of the fishery. In addition, implicit in the computer model is the assumption of perfect foresight as to future streamflows. Thus, the computer model assumes that the project operates much more efficiently than the real world allows, and the real-world impacts of certain actions may, or may not, be what the model predicts.

Finally, one of the biggest challenges that Interior faces in implementing the Act is the difficulty of assessing the impacts of certain actions -- including "dedicating and managing annually" the b(2) water -- when the impacts of those actions on the environment and on contractors may fall in future years. Deliveries to contractors in any given year are dependent, to a certain extent, on carryover storage. Therefore water management actions taken in one year may have impacts in future years that cannot be predicted with certainty. Likewise, the effects of environmental restoration activities may take several years to become apparent. Only as the full ramifications of operational and fishery management decisions play out over successive years can the full implications of those decisions be assessed.

Against that complexity, two competing interpretations of b(2) -- the "fish-friendly" and the "contractor-friendly" approaches -- have been proposed. Each struggles to find simplicity. But each views fragments of the statute in hermetic isolation, rather than viewing the statute as a whole and in the context of the realities of operating a complex, multifaceted project like

the CVP. While the effort to simplify is understandable, even desirable in more typical statutory settings, here it does not do justice to, or effectuate the purposes of, the statute as a whole.

In administering the CVPIA, the Department must give meaning to all parts of the statute so as to carry out the intent of Congress. In determining that intent, we start with the language of the statute. Words in the statute are to be given their ordinary meaning, unless otherwise defined in the statute.

In b(2), Congress directed the Secretary to "dedicate and manage annually" a certain quantity of "the delivery capability of the [project] during the 1928 to 1934 drought period" after certain fishery,, water quality, and other flow and operational requirements have been met. The word "dedicate" generally means to "set apart formally." Webster's New International Dictionary. In the context of land, to "dedicate" is to "appropriate and set apart one's private property to some public use; as to make a private way public by acts evincing an intention to do so." Black's Law Dictionary, 6th Ed. (1990). See also. Media General Cable of Fairfax.. Inc. v. Sequoyah Condominium Council of Co-Owners, 991 F.2d 1169, 1173 (4th Cir. 1993) ("Dedicated" is a term of art with reference to property matters," citing to the definition in Black's Law Dictionary.) "Manage annually," given its ordinary meaning, requires that the water is to be controlled or directed so as to allow its use for its intended purposes in every year.

Congress then described that quantity of water in terms of "yield," which it defined to mean the delivery capability of the project from 1928 to 1934, after certain adjustments are made. While we must attempt to give statutory language its literal, common sense meaning, a slavishly literal reading of b(2) is impossible. Construction of the Central Valley Project did not start until well after 1934; therefore, the Project had no "real" delivery capability during those years. Thus, Congress could not have intended that the provision be read literally.

The concept of "yield" is not a new one to water projects, yet the meaning can vary depending upon the context. Clark's treatise on "Waters and Water Rights" defines "project yield" as meaning "the water made available by all features of a project, including those features which could be operated independently of all other features." Waters and Water Rights, Vol. 6 at 954 (1991). In a complex, multi-reservoir project such as the CVP, any calculation of yield must of necessity incorporate the understanding that individual water particles are used and reused many times. Hence, the "project yield" might be significantly more than the "absolute" quantity of water -- assuming, of course, that such an "absolute" quantity could ever be measured.

Reclamation has stated that "estimated yield" has historically been used as "a measure of the annual quantity of water that could be delivered by the [Project] under specific operating conditions," Bureau of Reclamation, <u>Central Valley Project Estimates of Yield</u> (September 1994), at 1. Another somewhat different concept, "firm yield," is defined by Clark's treatise as "the water supply from a project that is expected to be available in every year except a

specified percentage of years." <u>Id.</u> at 953. The CVP's "firm yield" has historically been defined in terms of the water supply that would be available in the future, assuming that the critically dry hydrologic period that occurred in the Central Valley from 1928 to 1934, were to recur. Such a "firm yield" calculation would thus reflect a conservative estimate of the quantity of water that the Project could be expected to deliver at all times.

Actual calculation of the firm yield of the CVP has varied, however, affected by a number of factors that have changed over time. These have included the addition of new facilities to the project, as well as variations in hydrological conditions, such as historic rainfall patterns, the interaction between groundwater and surface water systems, and the tributary basin inflows and in-basin water uses that are assumed for the future. In addition, the hydrologic period used to estimate long-term supplies; institutional agreements and regulations that control water quality or water releases; and assumptions made concerning project operations, such as flood control; have also varied. Among the assumptions that have changed over time are those regarding how shortages are allocated over the period evaluated. Beginning in about 1967, the Bureau's calculation "assumed a deficiency in water delivery totaling 100 percent of one year's demand spread over the seven year period, or approximately 25 percent in any one critically dry year. Central Valley Project Estimates of Yield, at 1-1. This meant that a 25 percent reduction in deliveries to all project water users in the very driest ("critically dry") years was built into the yield definition.

The CVP firm yield methodology, once done manually and now by computer modeling, has long been subject to criticism for not representing actual CVP operational practices. <u>Id.</u> at 2-1. The main criticism has been that Reclamation has reduced deliveries differently in its actual operation of the project from what the "yield" analysis assumed. In addition, the need to operate the project to provide minimum instream flows in certain streams to satisfy permit conditions, to protect endangered or threatened species, and to meet water quality standards in conformity with the Clean Water Act, no longer allows CVP deficiencies to be held to a cap of 100 percent cumulative deficiency over seven consecutive years. But firm yield analysis has little to do with actual project operations. In recognition of that, in recent years Reclamation has characterized project operations in terms of average deliveries over either the period of record or historical dry periods. <u>Id.</u> at 2-2.

The "Contractor-Friendly" Approach

Proponents of what we call the "contractor-friendly" approach give the greatest weight to the statutory definition of "yield". Advocates of this view suggest that Congress, by its definition of yield in b(2), intended the Department to determine, through computer modeling, a quantity of water that would have theoretically been available during a drought similar to that of 1928 to 1934. Proponents of that reading of the statute point for support to what they characterize as the historic Reclamation practice discussed above -- in particular the Reclamation calculation of "firm yield" -- and apparently assume that Congress was adopting that practice.

As an initial matter, we note that Congress, in section 3406(b), adopted a definition of "project yield," not "firm yield," thus casting doubt on whether it intended to incorporate the assumptions inherent in Reclamation's historic firm yield calculations. Further, at the time the CVPIA was enacted, the Bureau had moved away from a strict reliance on yield analysis in describing project deliveries. This absence of a longstanding, accepted administrative practice undercuts the argument that the statute ought to be interpreted as consistent with administrative practice.

It is also relevant that, because of the Bush Administration's opposition to the bill that became the CVPIA, the Bureau of Reclamation provided no technical assistance to Congress during its drafting and consideration. The fact that the agency possessing the operating expertise did not lend its advice to the crafting of the CVPIA may help explain why the statute's terminology and fine-grained details do not entirely fit neatly together, and casts severe doubt on the assumption that Congress had some particular result in mind through its use of the concept of yield in b(2).

Equally important, such an interpretation is simply not supported by the rest of the statute. In particular, it would make the provisions of subsection 3406(b)(2)(C) superfluous. That subsection permits the Secretary to reduce temporarily the dedicated water by up to 25 percent whenever shortages are imposed on agricultural deliveries of project water because of hydrologic conditions. If, as has been argued, the water dedicated under b(2) is tied to the 1928-34 drought by the yield definition, the yield would already have been reduced by 25 percent in critically dry years, because of the assumptions that have been used in calculating firm yield for the project. Put another way, if the modeling assumes that up to a 25 percent reduction, or deficiency, is applied to all project users during the modeled 7-year drought, simply through the definition of "yield," then the provisions of § 3406(b)(2)(C) are duplicative of the definition and hence meaningless. It is unlikely Congress would have included this section as an empty gesture.

The "contractor-friendly" interpretation also would suggest that Congress was limiting the use of the water dedicated in b(2) only to fishery restoration measures that can be carried out

⁸ By contrast, in section 3406(g), Congress used the term "firm yield."

⁹ Moreover, in the CVPIA, Congress itself expressly recognized the need for more sophisticated and refined computer models. It seems unlikely that Congress would have based implementation of one of the most important provisions in the statute on such a narrowly defined modeling theory, when Congress itself questioned the adequacy of existing models. Indeed, it is significant that Congress chose to include the directive to develop better models as part of section 3406 -- the section devoted to environmental restoration measures -- rather than in sections of the statute, such as § 3408, that concern operational matters and future studies.

with water available in severely dry conditions comparable to the 1928-34 drought. This means that Congress in b(2) was merely establishing a minimum instream flow -- one that would allow fisheries to survive in times of drought, but would provide no appreciable benefit during non-drought years. That approach would be inconsistent with the fundamental design of the CVPIA, especially its broad thrust toward fish, wildlife, and habitat restoration and environmental improvement, as reflected in the specific purposes for which the b(2) water is to be dedicated and managed.

Biological and hydrological imperatives will likely require that water for fish restoration and other environmental purposes be managed in a significantly different manner in non-drought years than during droughts. For example, increased precipitation in non-drought years might well meet the needs of a fishery on a particular stream without human intervention. This would allow the Fish and Wildlife Service to specify conditions for managing the b(2) water for environmental restoration in other streams that may not benefit as fully from the precipitation. The statute should not be read to preclude this result, for such a reading would thwart some of its essential purposes.

For these reasons, we believe a single-minded focus on the definition of the word "yield" is not the best way to read the CVPIA. We have searched the limited legislative history for any indication otherwise, and what little we have found cuts against such a narrow focus. As Congressman Fazio explained during the floor debate over the final bill:

The conference report also establishes a clear limit on the amount of water that is provided for fish and wildlife purposes pursuant to this title -- 800,000 acre feet in normal water years and 600,000 acre feet in dry years. This is far better than the open ended, unlimited demand that would have been placed on the project pursuant to the earlier versions of title 34. It provides certainty on this score, which is of significant benefit to both the water users and the environment.

138 Cong. Rec. H11,515 (daily ed. Oct. 5, 1992) (emphasis added). This remark, like the use of the word "annually" in b(2) itself, underscores that Congress thought that it was providing "wet" water in all years for fish and wildlife purposes of the Act. That is contrary to the notion that Congress was in fact adopting a modeling approach to "yield" that would limit b(2) water to that available during a drought.

The "Fish-Friendly" Approach

Another approach that has been suggested for "accounting" for the b(2) water is to measure its use through direct reductions in the water supplied to project contractors. This approach relies heavily on the word "dedicate" in the text of b(2), reading it as requiring that 800,000 AF be set aside ("dedicated") for the exclusive use of the environment. If this water is to be

¹⁰ A fuller discussion of the legislative history is found below, at pp. 17-22.

devoted to the environment exclusively, it must of necessity not be delivered to irrigation districts and other traditional contractors. Hence, proponents of this approach argue, the water must be "measured" through direct reductions in contract deliveries.

Such an approach is superficially attractive; it seems simple, easy to explain, and readily measurable. But a more careful scrutiny of the statute shows serious flaws with it. First, other sections of the statute flatly contradict such a reading. In section 3408(j), Congress directed:

In order to minimize adverse effects, <u>if any</u>; upon existing Central Valley Project water contractors resulting from the water dedicated to fish and wildlife under this title, and to assist the State of California in meeting its future water needs, the Secretary shall, . . . develop and submit to the Congress, a least-cost plan to increase, within fifteen years. . . the yield of the Central Valley Project by the amount dedicated to fish and wildlife purposes under this title (emphasis added).

The underscored phrase "if any" can only be read to reflect a congressional understanding that, while there <u>might</u> be an adverse impact to existing contractors from the dedication of b(2) water, there <u>might</u> be. Such a statutory provision clearly refutes any suggestion that Congress intended to cut back contract deliveries to traditional contractors by 800,000 AF, or any other amount, in each and every year. ¹¹

Second, measuring b(2) water solely by reductions to contractors is also inconsistent with the cautious approach to fish and wildlife restoration activities that Congress set out in b(1). As that subsection makes clear, in restoring the anadromous fisheries of the Central Valley, the Secretary is to "give first priority" to habitat restoration actions, "modifications to [project] operations, and implementation of the supporting measures" set out in the remainder of section 3406(b). This means that the provision of flows, as authorized in subsection 3406(b)(l)(B) - which includes the dedicated b(2) water - is not to be the Secretary's first choice of restoration tool. Instead, b(2) water is to be provided "[a]s needed to achieve the goals of [the anadromous fish restoration] program." Id. (emphasis added). We find nothing in that carefully restrained approach to the use of the dedicated water that would support a conclusion that Congress intended the dedicated water to necessarily result in reductions to contractual deliveries.

Third, the statute does not direct the Secretary to dedicate "water," but instead to dedicate

Section 3406(b)(2)(D) allows the Secretary to make the b(2) water available for other project purposes if he finds that the quantity dedicated, or any portion thereof, is not needed for the purposes of the section. Because this authorizes reducing the b(2) water only when the fisheries do not need the water, subsection b(2)(D) provides no basis for harmonizing the "fish-friendly" approach with the Congressional desire to minimize impacts to contractors.

"yield." As discussed above, "yield" is a common concept in water projects that, among other things, recognizes complexities in operation, such that individual molecules of water may be used and reused many times between first capture and escape to the sea, the ground, or the skies.

The limited legislative history also shows no support for such an "impacts to delivery" approach. Instead, it too reflects a desire to minimize impacts to the existing contractors. In the floor debate in the Senate, Senator Wallop explained modifications in the bill that had led him to ultimately support it, including a description of his understanding of the dedicated water:

I want to emphasize that this is not a dedicated permanent supply, but a temporary commitment which will be released to other beneficial uses as soon as it is no longer needed.

With some judgment, the Secretary should be able to use portions of that water in a fashion which permits its use for agriculture or urban use at the same time it is used for fish and wildlife. Water used for pulse flows for fish can be taken up downstream for M&I. Water used for over wintering water fowl could have had a previous life for rice fields. This is not single use water.

138 Cong. Rec. S17,660 (daily ed. Oct. 8, 1992).

The concern found in both the text of the statute and the legislative history regarding possible impacts to contractors simply does not support a reading of the statute that reductions to contract deliveries is the best means of "accounting" for the use of the water dedicated by b(2).

The Federal Agencies' Approach

For all these reasons, neither the contractor-friendly nor the fish-friendly interpretations fits into the statutory text or, more broadly, its architecture. In light of the flaws identified above in each of these approaches, Reclamation and the Fish and Wildlife Service have proposed a significantly different approach to dedicating and managing the b(2) water. That approach was set out in the October 31, 1997, draft "Administrative Proposal" on management of the b(2) water.

To summarize, Reclamation and the Service have concluded that the concepts of dedicating and managing the 800,000 AF of yield cannot be separated in implementation of the statute. This has led them to the position that the most reasonable means to "account" for the b(2) water is through the description of how that water will be used. To this end, the Service, in consultation with Reclamation and others, has identified the measures that it believes should be taken to begin restoration of the Central Valley fisheries, pending completion of the

Anadromous Fish Restoration Program.¹²

The measures vary with the type of water year, and have been designed as "protective experiments" that will provide information about the biological processes at work within the ecosystem, while at the same time providing a level of protection of the resources that is consistent with the goals of the statute. In the process of satisfying b(2), Interior will maximize its operational flexibility, pursuant to section b(l), to provide flows for fishery restoration, and will also exercise its authority in sections b(1) and b(3) to acquire. water through a variety of measures. In this connection, it is important to note that, while b(3) is often referred to as authorizing water acquisition simply by purchase, it is actually much broader: "[P]urchase, lease, and option of water, water rights, and associated agricultural land" comes only at the end of a substantial list of ways to acquire more water. The first way identified is "improvements in or modifications of the operations of" the CVP. This reference to project operations thus directly links b(3) to b(l), which speaks to project operation.

Because of the complexities of the system, and the interrelationship between operational flexibility of b(1) and b(3) and the dedication of the b(2) water, the individual measures that will be taken under b(1), b(2), or b(3) cannot be readily identified by specific subsection. Instead, Interior will use the flexibility of b(1), b(2), and b(3), where appropriate, to maximize the benefit to the fisheries while minimizing the impact to contractors.

Interior's implementation of b(1), b(2), and b(3) in concert with one another will, at times, affect contractual deliveries. While impacts to contract deliveries is not the way Interior will account for or "measure" the use of the b(2) water, Interior has, through computer modeling -- to the extent it is possible to do so -- analyzed the impacts to existing contractors of meeting the matrix of measures. The measures that Interior is proposing, however, call for actions to be implemented, in many cases, based on real-time "biological triggers." For example, certain flows on the Sacramento River (Delta Action #4) would be initiated only when water temperatures were consistent with the onset of striped bass spawning, while the closure of the Delta Cross Channel (Delta Action #6) would be dependent on water quality triggers, such as closely monitored chloride levels in the Western Delta. Such measures are difficult, if not impossible, to model given the limitations of existing models. 13 Thus, the modeled impacts are, at best, only a rough approximation. Those impacts will vary, depending on water years, but the modeled average impact to project deliveries will be approximately 800,000 AF in dry years, and approximately 600,000 AF in critically dry years. In years that are not dry or critically dry, the modeled impact to contractors will be significantly less than 800,000 AF.

¹² See n. 4, supra.

¹³ See p. 7, supra.

As explained in the October 31 proposal, the agencies expect that the use of "biological triggers" will reduce actual impacts below the modeled results. Additionally, the agencies' proposal includes, as Appendix C, several measures, called the "Toolbox," which are designed to mitigate adverse effects on CVP contractors of implementing the fishery measures. We understand that the estimated impacts of the Toolbox measures will be modeled and released with the final proposal.

Finally, the proposal addresses the view by some that, if deliveries to contractors are reduced by less that 800,000 AF, then the agencies have not met the requirements of the statute despite accomplishing the environmental measures. The proposal relies on subsection 3406(b)(2)(D) and the Secretary's finding that additional fish measures (and hence water) will not be needed under certain hydrological and operational conditions during the period covered by the proposal. Thus, under the October 31 proposal, the statutory reference to 800,000 AF of project yield is implemented as a cap on the average amount that contract deliveries can be reduced, but does not mandate that or any other specific level of reduction to deliveries.

Given the complex task of managing a multifaceted project for multiple purposes, with no "real-time" means of measuring water used for fish and wildlife restoration, the approach set out in the October 31 proposal appears faithful to the responsibilities placed on the Secretary by the statute. As discussed above, b(1) directs the Secretary to provide flows of "suitable" quantity, quality, and timing to protect all life stages of anadromous fish. The statute does not define "suitable." Thus, Congress clearly left to the Secretary's scientifically informed judgment the decision as to the quantity of water that is "suitable" to "achieve the goals" of the fish restoration plan.¹⁴

Section 3406(b)(l)(B) sets out the sources from which the Secretary is to "provide" the needed flows. The water is to come from the quantity "dedicated" in b(2), from water acquired in b(3), and from "other sources" that "do not conflict with fulfillment of the Secretary's remaining contractual obligations to provide . . . [project] water for other authorized purposes." Section b(3), while authorizing purchase of water, also authorizes improvements or modifications in project operations as a means of acquiring water, as does b(1).

Congress provided the Secretary with some flexibility as to the "other sources" and the operational modifications or improvements that might be needed to meet the goals of the Act.

The Secretary's decision regarding instream flows is to be "based on recommendations of the United States Fish and Wildlife Service after consultation with the California Department of Fish and Game." §§ 3406(b)(l)(B). The water dedicated under b(2) is to be "managed pursuant to conditions specified by the [Service] after consultation with the Bureau of Reclamation and the California Department of Water Resources and in cooperation with the California Department of Fish and Game."

We see nothing on the face of the statute that would require the Secretary to specify which quantity of water might be provided through project modifications under b(1), versus project modifications under b(3) versus "other sources." Instead, it would appear from the face of the statute that the Secretary may exercise his authorities in a manner to best accomplish the fish restoration goals of the Act, and is not required to identify specifically which use of water is provided from which source.

In section 3406(b)(1), Congress placed some limits on the Secretary's authority. First, in achieving the goals of the fish restoration plan, the Secretary must place "first priority" on habitat restoration and modifications to project operations. Second, to the extent he deems it necessary to "achieve the goals" of the fishery restoration program, the Secretary must provide "flows of suitable quality, quantity, and timing", but only so long as he can provide such flows from the b(2) water or other sources that do not "conflict with fulfillment of the Secretary's remaining contractual obligations" to provide CVP water for other authorized purposes.

Two more limits are found in section 3406(b)(2). That subsection directs the Secretary to "dedicate and manage annually 800,000 AF of the yield of the project" after making certain adjustments. Thus, the amount of water available to the Secretary under b(2) is to be in addition to the water needed to comply with water quality or other operational requirements in existence when the statute was passed, and is to be managed pursuant to conditions set by the Fish and Wildlife Service (after consulting with the Bureau of Reclamation and the California Department of Water Resources, and in cooperation with the California Department of Fish and Game).

The net effect is this: Congress left to the Secretary to determine (a) the amount of water needed for fishery restoration based on the Fish and Wildlife Service's biological expertise, (b) the sources of that water in general, and (c) the order in which to use the various sources. But it also directed that water be available during even the driest years, over and above that needed for existing operational and environmental requirements.

We believe that the best reading of the statute is that Congress has, in effect, designated a unique type of project yield in b(2). This is project water whose "use" manifests itself through the accomplishment of certain conditions, such as instream flows, water temperature, or salinity levels. Therefore, we believe that it is a reasonable reading of the statute to conclude that, rather than specifying a simple measurement tool like a yardstick for the Secretary to use in identifying the environmental restoration water, or requiring that b(2) water be identified and measured through a computer modeling exercise, Congress instead established a mechanism whereby the b(2) water is to be managed pursuant to conditions specified by the Fish and Wildlife Service, in concert with flows that can be obtained through modification of project operations under b(1) and b(3). Further, Congress set an upper limit, of 800,000 AF, on the extent to which such flows provided for fish and wildlife habitat restoration could result in reduced deliveries to contractors under b(2).

For the reasons set out above, we believe the current proposal is a reasonable interpretation of the statutory text. This result is not only reasonable, but probably inevitable, in light of the complexity of the project, the impossibility of "measuring" the water in any "real" sense, and the lack of precise knowledge about the needs of the fisheries.

Nothing in the CVPIA's legislative history undercuts that approach. The enacted text of section 3406(b)(1 - 3) was finally settled on in the Conference Committee, following passage in the House and Senate of two differing bills. The House had passed H.R. 5099, "The Central Valley Project Improvement Act", which was then appended as title 34 of H.R. 429, the "Reclamation Projects Authorization and Adjustment Act of 1992." It was that bill -- H.R. 5099 -- which was the inspiration for much of what became section 3406(b)(l-3) in the finally enacted statute. In contrast, the Senate had included the text of S. 2016, "The Central Valley Project Fish and Wildlife Act," as title 34 of H.R. 429.

Thus, the history of H.R. 5099 is most helpful in shedding light on how b(2) was crafted and why the current confusion exists, for it shows that Congress itself approached the issue of providing water for fish restoration from a variety of directions -- "trying on for size" different approaches -- until finally settling on the enacted statute. The history of H.R. 5099 is especially relevant because, while the bill's provisions changed many times during its consideration, the conference committee ultimately revived the concept of dedicated water that was first introduced in the early versions of H.R. 5099.

Section 6 of H.R. 5099, as introduced, directed the Secretary to

- (1) develop and implement a program which strives to ensure that, by the year 2002, natural production of anadromous fish in Central Valley rivers and streams will be sustained, on a long-term basis, at levels not less than twice the average levels attained during the period of 1981-1990. . . .
 - B) As needed to achieve the goals of the program, the Secretary is authorized to modify Central Valley Project operations to provide from project facilities flows of suitable quality, quantity, and timing to protect all life stages of anadromous fish, except that water used to provide such flows shall be provided from the quantity of water dedicated to fish, wildlife, and habitat restoration purposes under paragraph (2) of this subsection or from other sources which do not conflict with fulfillment of the Secretary's contractual obligations to provide water for irrigation or municipal and industrial purposes

¹⁵ The Central Valley Project Fish and Wildlife Act, as passed by the Senate, did not contain a provision allocating a quantity of water for fishery restoration, nor a fish-doubling goal. Instead, that text directed the Secretary to undertake a number of specific measures to improve fish and wildlife habitat, and thus provided the inspiration for much of what became subsection 3406(b)(4-22) of the finally enacted statute.

. . . .

(2) Upon enactment of this Act, assign to 1.5 million acre-feet of project yield the primary purpose of implementing the fish, wildlife, and habitat restoration purposes and measures authorized by this Act, except that such quantity of water shall be in addition to the water required to implement b(6) and subparagraph $b(15)(A)^{16}$ of this section. If requested by the State of California within one year after enactment of this Act, the Secretary shall place such water under contract, not to exceed twenty years in length, with the State of California. The contract shall provide that such water shall be managed by the state in consultation with the Secretary and the Fish and wildlife Advisory Committee for the primary purpose of implementing the fish, wildlife, and habitat restoration purposes and measures of this Act. . . . In the event that the State of California does not enter into a contract under this paragraph, the Secretary shall manage such water The Secretary may temporarily reduce fish, wildlife, and habitat water supplies provided under this subsection, including the water required to implement paragraph b(6) and subparagraph b(15)(A) of this section, because of weather or hydrologic conditions only when reductions are imposed on deliveries of Central Valley Project water, and only by the same percentage as the smallest percentage by which the Secretary reduces deliveries.

(emphasis added).

Thus, as introduced, H.R. 5099 called for the Secretary to "assign" a "primary purpose" to a set quantity of project "yield." The bill assumed that the 1.5 million acre feet of yield would be managed under contract with the State, assuming the State agreed. If not, the Secretary was to manage the water himself as though under contract for fish and wildlife purposes. Thus, in early deliberations, Congress contemplated that the water would be treated as would other water under contract for other project purposes.

The meaning of the provision, however, generated differences in opinion, even at that early stage of drafting. At a May 14, 1992, Congressional hearing on the bill, Tom Graff, testifying on behalf of the Environmental Defense Fund, described the allocation in these terms:

... the way I read the bill with the 1.5 million acre-feet, what it is, I used the word set aside in my testimony. I'm not sure that's exactly the right word. It is an allocation of CVP yield to fish and wildlife which has the same priority as that of the prior rights and exchange contractors whom you referenced earlier. . . .

¹⁶ Section b(6) directed the Secretary to meet all flow standards and objectives and diversion limits in existing State regulatory and judicial decisions. Subparagraph b(15)(A) directed delivery of Level 2 water supplies to certain refuges, where "Level 2" had been defined in an earlier study as the existing average annual delivery of water to those refuges.

It is also true that the million and a half acre-feet is not necessarily all consumptive use. The way it is stated is that its primary use is to be for fish and wildlife but it can be used for fish and wildlife purposes and then re-diverted for other purposes.

Management and Oneration of the Central Valley Project. California: Hearing on H.R. 5099. H.R. 3876. and H.R. 4687 before the Subcommittee on Water. Power and Offshore Energy Resources of the House Committee on Interior and Insular Affairs, 102nd Cong. 219 (1992).

Following further discussion, Mr. Graff then added:

... One of the things that [a particular study] doesn't account for is that in wet years you can still deliver the full six million to contractors and 1.5 million to fish and wildlife and not short anybody. In fact, you've got water left over.

Id. at 228.

Opponents of the bill, however, had a different view of the meaning of the provision in that early version of the bill. In what is the only discussion we have found as to what Congress might have been advised the term "yield" meant, David Kennedy, Director of the California Department of Water Resources, and Congressman Dooley engaged in the following discussion:

Mr. Dooley: I'm wondering, in terms of the one and a half million acre-feet that we're talking about being allocated to fish and wildlife purposes which the secretary would sign to contract with the state, the way that I understand it, what is your interpretation of how that would impact existing contracts? Is any of that water going to be available to be used in your assessment and interpretation of the legislation?

Mr. Kennedy. I believe the legislation uses the expression one and a half million acre-feet of project yield. It specifically, I believe, uses the word yield. And, as a water supply person, I would interpret that as meaning it is a reduction in supply available for other purposes.

I know there has been some talk -- I think Mr. Graff, this morning, talked about that number this morning as though it was an aggregate of releases from different streams and you could double count it in some way. If that were the case, and I think the word yield is misapplied here. If the word yield were to stay in there then I would internret that as meaning the Bureau simply has to reduce its overall deliveries by a million and a half acre-feet and then take that water and divert it to this other purpose.

Mr. Dooley. So if we were going to fashion legislation to be consistent with what Mr. Graff indicated this morning that we would need to change the definition of the one and a half million acre-feet of yield to some other -- without the yield certainly.

Id. at 371. (emphasis added).

Thus, hearing witnesses interpreted the "assignment" of project yield to either require a direct impact to overall deliveries in even non-dry years or, on the other hand, to mean an indication of priority use that might very well have no impact on contractors at all.

The Committee did change the bill. As reported out of Committee, H.R. 5099 no longer included the directive to allocate 1.5 million acre feet of yield in a fish and wildlife contract. In its place was a new directive for the Secretary to:

(2) develop and implement a program for the acquisition of a water supply adequate to meet the purposes and requirements of this section. Such a program should identify how the secretary will secure this water supply, utilizing the following options in order of priority: improvements in or modifications of the operations of the project; conservation; transfers; conjunctive use; purchase of water; purchase and idling of agricultural land; reductions in deliveries to Central Valley Project contractors.

H.R. Rep. No. 102-576, Part I, at 6 (1992) (emphasis added).

The Committee explained this change in the following way:

The intent of this section is to make clear that the Secretary is expected to acquire a water supply for the fish and wildlife restoration program. This water supply will have to come from a variety of sources and those sources are enunciated in order of priority. The priority list has been included to make it clear that reducing deliveries to CVP contractors should be viewed as a last resort. However, it is fully anticipated that water will have to be diverted from irrigation contractors as outlined in section 4 of this Act. It is the Committee's intent that the Secretary make every effort to obtain water for fish and wildlife from conservation, modifications of project operations, transfers, conjunctive use, purchases and idling of land before reducing deliveries to contractors.

¹⁷ Section 4 of the bill provided that "Any [CVP] water service or repayment contract entered into, renewed, or amended under this section shall provide that the Secretary may, under procedures specified in this Act, allocate a portion of the water supply contained in such contract for the purposes specified in section 6 of this Act."

Id. at 31.

H.R. 5099 was further amended on the House floor, with the following provision inserted:

(2) Upon enactment of this Act, and after implementing the operational changes authorized in subsection (b)(l)(B), make available project water for the primary purpose of implementing the fish, wildlife, and habitat restoration purposes and measures authorized by this section, except that such water shall be in addition to that required to implement subsection (b)(6) and (b)(15)(A). This water may be assigned immediately to supplement instream flows. The U.S. Fish and Wildlife Service shall conduct studies and monitoring activities as may be necessary to determine the effectiveness of such flows in meeting the goal established in subsection (b)(l). At the end of the initial five year period, the Secretary shall adjust the quantity of water assigned as necessary to meet the goal.

138 Cong. Rec. H4931-4932 (daily ed. June 18, 1992)

It was this version that passed the House. Thus, the House-approved bill directed the Secretary to "make available project water" for fish and wildlife restoration purposes, but the precise quantity of water to be made available was left unstated. The provision makes no mention of project "yield," of "dedication," or of measurement methods.

The bill was then appended to H.R. 429, the omnibus water project act, which had previously been passed by the Senate, and which, as discussed above, contained a significantly different "Central Valley Project Fish and Wildlife Act," as title 34. The House then asked for a conference with the Senate to resolve differences in the bills. The result of that Conference is the statutory language ultimately enacted by Congress as the Central Valley Project Improvement Act, and in particular, the precise language of b(l), b(2), and b(3).

¹⁸ Some stakeholders have offered interpretations of the statutory text based upon their understanding of the bargaining in the conference that was called to resolve the differences between the House and Senate bills. Bargaining positions expressed in conference committees are not officially reported and do not constitute the kind of legislative history that either the agency tasked with administering the statute, or the courts, can or should rely on to determine the intent of Congress. Cf. City of Milwaukee v. Illinois and Michigan, 451 U.S. 304, 331 n. 24 (1981) ("The proposal was never introduced in either House of Congress; it does not even appear in the Congressional Record. . . . [Its] fate . , . has under our precedents dealing with statutory interpretation nothing whatever to do with Congress' intent"). On the other hand, what the official legislative history shows is that the conference revived the concept of a dedicated amount of water for environmental restoration that had first appeared in H.R. 5099, sponsored Congressman Miller. Thus, to the extent that any legislative history is relevant in understanding the provisions of subsection 3406(b)(l-3), it is

As the previous discussion shows, Congress contemplated various approaches to the dedication of water for fishery restoration. As the statutory language evolved, one consistent theme was the interplay between the provisions of b(1), b(2), and what ultimately became b(3). The statute as enacted maintains that interplay, and in fact strengthens the interconnectedness of the three provisions so as to make it difficult to separate them.

Conclusion

Congress, in enacting the CVPIA, directed the Secretary to develop and implement a program for restoring the anadromous fishery of the Central Valley. In so doing, Congress left to the Secretary, within certain limits identified within this opinion, the basic decisions about how to achieve that goal. These include determining the amount of water "suitable;" the precise mix and order of using sources for that water, including the b(2) dedication and others specified in the Act; the conditions under which to manage the water; the circumstances under which water can be used and then recaptured for other uses; and how the project operations should be modified.

The wielding of this array of tools needs to be evaluated against the statute's fundamental requirement to set aside a quantity of water that will be reliably available in all years, including periods of extreme drought, for management pursuant to conditions specified by the Fish and Wildlife Service, to the extent needed to achieve the goals of the fish restoration program. The approach Interior is proposing is faithful to the overall thrust of the CVPIA, and fits within the statutory text better than any of the alternatives. So long as Interior fully implements the measures, we believe Interior will be meeting the requirements of the Act.

This Opinion was prepared with the primary assistance of Barbara Geigle in the Division of Land and Water, Office of the Solicitor, with contributions from David Nawi, Regional Solicitor, Sacramento, and Wendy Thurm, Special assistant to the Solicitor.

John D. Leshy Solicitor

the recorded history of the development of the CVPIA, not the unofficial bargaining among members of Congress and their staffs.