



United States Department of the Interior

OFFICE OF THE SOLICITOR

Pacific Southwest Region

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Sacramento, California 95825-1890

IN REPLY
REFER TO:

November 9, 2006

Song Her
Clerk to the Board
State Water Resources Control Board
1001 "I" Street, 2nd Floor
Sacramento, CA 95814

Subject: 2006 Bay-Delta WQCP Hearing

Dear Ms. Her:

Enclosed please find comments by the U.S. Department of the Interior, regarding the 2006 Bay-Delta WQCP Hearing. We are submitting one electronic copy, one original hard copy, and 15 paper copies as requested in the Notice of Public Hearing.

Please feel free to call either Amy Aufdemberge, (916) 978-5688 or Kaylee Allen, (916) 978-5686 if you have any questions or require any additional information.

Sincerely,

Daniel G. Shillito
Regional Solicitor

Enclosures

cc: Kirk Rodgers, Bureau of Reclamation
David Harlow, U.S. Fish and Wildlife Service
Roger Givinee, U.S. Fish and Wildlife Service
Ron Milligan, Bureau of Reclamation
Ray Sahlberg, Bureau of Reclamation

United States Department of the Interior

Comments Regarding the California State Water Resources Control Board's Consideration of an Amended Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary

November 9, 2006

The United States Department of the Interior (Interior) generally supports the State Water Resources Control Board's (SWRCB or "the Board") Draft Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary, September 2006 (Draft Plan), with a few key exceptions. Over the last decade, since the 1995 Water Quality Control Plan for the Bay-Delta (1995 Plan) was first adopted, and since the implementation of that plan through Decision 1641 (D-1641) in 2000, Interior's experience in operating the Central Valley Project (CVP) through its Bureau of Reclamation (Reclamation), and in protecting Delta fish and wildlife resources through its Fish and Wildlife Service (FWS), has provided important data, new information, and a valuable perspective on the Delta's water supplies and water quality. The Draft Plan purports to make no substantive changes to the 1995 Plan objectives or beneficial uses. Yet, Interior believes that important facts have changed since the 1995 Plan, especially with respect to salinity in the southern Delta. These changes impact the underlying assumptions of the San Joaquin objectives and the environmental analyses of those objectives. In addition, consistent with Interior's comments to the Board during the 2004-05 workshops for the periodic review of the 1995 Plan, Interior believes that flexibility should be built into some of the objectives and their respective programs of implementation to account for potential conflicts between competing upstream and downstream fishery objectives, and the limited supplies to meet those objectives in some years.

Interior has reviewed the Draft Plan and the Draft Plan Amendment Report, Appendix 1 to the 2006 Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Draft Plan Report). Interior's new information and experience indicate that while many of the water quality objectives in the 1995 Plan have worked well to achieve a balance of competing demands for fishery and water quality flow needs and other consumptive, beneficial uses of water, there may be problems with the achievability of all of the objectives on the San Joaquin in certain conditions. These problems are exacerbated by the recent developments in the Board's implementation of the Southern Delta Salinity Objectives. However, Interior has reviewed each of the issues outlined in the Draft Plan Report and offers the following more specific comments for the Board's consideration in adopting an amended plan.

1. Changes to Water Quality and Baseline Monitoring Program

Interior believes that the changes made to the Water Quality and Baseline Monitoring Program are appropriate given the evidence that was provided at the workshop. Interior makes

no further recommendations regarding the Water Quality and Baseline Monitoring Program at this time.

2. Delta Cross Channel Gate Closure

Interior makes no further recommendations regarding the Delta Cross Channel Gate Closure at this time.

3. Narrative Objective for Salmon Protection

Interior supports the Board in maintaining the Narrative Objective for Salmon Protection in the 2006 Draft Plan. This objective is important in assisting Interior with meeting the anadromous fish doubling goals included in the Central Valley Project Improvement Act (CVPIA) and the Final Anadromous Fish Restoration Program (AFRP) Plan developed pursuant to CVPIA. Because accomplishment of the Narrative Objective for Salmon Protection requires a watershed or basin-wide approach, efforts in the Delta and upstream must continue to be actively coordinated to ensure that these actions are effective and consistent with the ongoing recovery processes for listed winter-run Chinook salmon, spring-run Chinook salmon and Central Valley steelhead.

In the Program of Implementation for the Narrative Objective for Salmon Protection, the Board notes that actions of other agencies are necessary to meet the Narrative Objective for Salmon Protection if implementation of the flow-dependent objectives does not result in meeting the Narrative Objective for Salmon Protection. While Interior agrees that actions of other agencies are needed, Interior believes that the Board can do more to facilitate the coordination of actions among agencies to ensure that the Narrative Objective for Salmon Protection is met. Interior proposed these actions in testimony presented at the public workshop in October 2004 (Ex. DOI-09, DOI-22¹, incorporated herein) and reiterates the recommendations below.

In order to implement the Narrative Objective for Salmon Protection and provide protection for threatened Central Valley steelhead, Interior recommends, again, that the Board coordinate with state and federal agencies when either Delta or upstream actions, including determination of flow and water quality objectives to address Chinook salmon doubling, are undertaken by the Board regarding the Plan so that such actions meet overall goals and do not conflict with each other. In addition, the Board should consider the overall goal of doubling of Chinook salmon in any other actions that come before the Board, as well as consider the specific protection needs of Central Valley steelhead and the recently listed Green Sturgeon in any actions that the Board undertakes. The Board should also provide the coordination and assistance required to improve water quality and biological monitoring and mitigation for anadromous fish populations in the Sacramento-San Joaquin Rivers/San Francisco Bay-Delta watershed.

¹ Unless otherwise stated, all exhibit references are from the "Draft Referenced Documents, Appendix 3 to the 2006 -Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary" dated September 2006.

Based on current monitoring programs, the natural production of all races of salmon in the Sacramento Valley Basin appears to be stable (and in some notable instances has improved) since the passage of the 1995 Plan. However, Interior is concerned that the natural production of fall-run Chinook salmon in the San Joaquin Basin continues to decline. In the last six years natural production estimates for the Stanislaus, Tuolumne, and Merced rivers (combined) have steadily declined from an estimated 79,000 Chinook in the year 2000 to approximately 12,000 Chinook in 2005 (data from FWS ChinookProd spreadsheet). This does not appear to be a one-year phenomenon; the five-year average production for 2001-2005 is approximately 25,000 Chinook, representing a 69 percent decrease from the year 2000. FWS is concerned because: (1) smolt survival through the south Delta has been low in the past few years; (2) the timing of installation and operation of the Head of Old River barrier is uncertain, and (3) dredging of the Port of Stockton's ship channel may result in increased salmon smolt mortality.

Interior continues to recommend the Narrative Objective for Salmon Protection be addressed through an interactive and collaborative process between state and federal agencies (including the Board) responsible for these public trust resources. The San Joaquin Chinook salmon model developed in 2005 by the California Department of Fish and Game (DFG) has been peer reviewed and revisions/improvements to the model will be incorporated in the spring of 2007. Interior anticipates that this model will prove useful in examining the relationship between San Joaquin spring flows and salmon production in subsequent years.

Interior has made operational changes to New Melones releases in an effort to meet all 1995 Plan requirements (including the Narrative Objective for Salmon Protection) as well as the needs of other beneficial uses. However, under the current regulatory requirements, releases from New Melones alone are not sufficient to meet all the flow and salinity requirements in the 2006 draft Plan. It is Interior's position that the Board should conduct a coordinated review of all the elements of the Plan that relate to the broader realities in the San Joaquin Basin, including the Narrative Objective for Salmon Protection, as well as the Vernalis Spring Flow Objectives, Vernalis Pulse Flow Objectives and Southern Delta Salinity Objectives.

The Board now has access to new information in the form of CALSIM II and the updated San Joaquin basin planning hydrology. The availability of the new information means that the D-1641 FEIR must be supplemented with new environmental analyses of the San Joaquin. The need for a new analysis of the San Joaquin Basin is critical because the Draft Plan fails to recognize the water supply issues with achieving the Vernalis Spring Flow Objectives, and fails to recognize the relationships among the Narrative Objective for Salmon Protection, the Vernalis Spring Flow Objectives, and the Southern Delta Salinity Objectives.

Recommendation. Based on the recent low fry/smolt survival estimates and the continued decline in natural production of Chinook salmon, Interior strongly recommends that the Board re-examine the entire suite of 2006 draft Plan flow and salinity objectives that pertain to the San Joaquin Basin in light of recent developments in San Joaquin Basin hydrology and the newly-revised San Joaquin Chinook salmon model. This recommendation is consistent with Interior's recommendation for a workshop regarding the Vernalis Spring Flow Objective, discussed below. Furthermore, Interior recommends that the Board conduct this workshop in the summer of 2007.

4. Chloride Objectives

Interior strongly recommends that the Board recognize in the Chloride Objectives Program of Implementation that the Projects can only control and achieve objectives related to ocean based salinity intrusion near the Holland Tract station. The Board heard testimony during the workshops from all parties that the Holland Tract salinity information best represents the Projects' influence on salinity intrusion. In order for the Draft Plan to provide for reasonable and achievable objectives, the Draft Plan should be amended to recognize the fact that the Projects can only have meaningful influence of Chloride Objectives at the Holland Tract station. The Board claims it does not have enough information to change the compliance location from PP#1 to the Holland Tract station. Yet, the Board can provide in its Program of Implementation for the Projects to achieve the Chloride Objectives at the Holland Tract station, while keeping the PP#1 objective in place, and implemented by other reasonable and achievable means.

Interior strongly disagrees with the Board's analysis in the Draft Plan Report, p. 39, that the Projects must petition for a water rights hearing and point to other responsible parties before the Board can provide for partial responsibility of a water quality objective. The Board can make such provisions in a program of implementation for any water quality objective in a water quality control plan, especially in a case such as the Chloride Objectives, where the evidence shows, and the parties agree, that CVP operations can only have a limited influence on chloride concentrations at specific locations. Otherwise, the Board would be implementing objectives through certain water rights that are not achievable through those water rights. Such is the case with the Draft Plan with respect to the Chloride Objectives. The Projects only have meaningful influence over salinity intrusion at the Holland Tract station. The Chloride Objectives in the Draft Plan may well be illusory under the Draft Plan's Program of Implementation.

5. Delta Outflow Objective

Interior supports the determination of the Board in the Draft Plan to not amend the numeric values established for the Delta Outflow Objective in the 1995 Plan. A decade ago, the Board adopted the Delta Outflow Objective to protect beneficial uses of Delta waters by the State's fishery resources. The Delta Outflow Objective formed the foundation for one of the major new concepts in the 1995 Plan. Over the last 10 years, implementation of this Objective has, in general, improved environmental conditions for a number of fish species, particularly those listed as threatened or endangered pursuant to the federal Endangered Species Act (ESA). Compliance with the Delta Outflow Objective provides important protection for the Delta's fishery resources and contributes to maintenance of Delta habitat.

During the 2004-05 periodic review workshops, Interior requested that the Board adopt further flexibility in the implementation of the Delta Outflow Objective. Interior incorporates its exhibits from the workshops by reference (Ex. DOI-23, DOI-24). Interior appreciates the Board's acknowledgement that flexibility may be appropriate and added in the future through the Program of Implementation.

Recommendation. As articulated in exhibits provided for the workshops, under certain circumstances, meeting the Delta Outflow Objective may be in conflict with and create

operational challenges in meeting upstream reservoir management objectives for fishery purposes, such as maintaining the coldwater pool or reducing reservoir release fluctuations. While the potential for such conflict is fairly limited, Interior believes it is important for the Board to acknowledge the potential for conflict between upstream and downstream fishery objectives and outline a process in the Program of Implementation to address these competing needs and develop specific operational recommendations in a timely manner.

Interior proposes an amendment to the language in the Program of Implementation acknowledging the potential for conflict under specific conditions between meeting the Delta Outflow Objective and upstream reservoir management objectives for fishery purposes. Further, Interior requests that the Board outline the process to be followed in the event such a conflict between upstream and downstream fishery objectives occurs. Interior believes that the appropriate process should be the filing of a temporary urgency change petition with the Board. The petition would contain a proposal to address significant competing needs and develop specific operational recommendations that would be supported by all agencies on the Water Operations Management Team (Reclamation, FWS, National Marine Fisheries Service, California DFG and the California Department of Water Resources).

In order to address the potential for conflict between upstream and downstream fishery objectives, Interior is proposing the following change to the Program of Implementation section of the Draft Plan. This paragraph would follow the existing paragraph under "1. Delta Outflow Objective" on page 22 of the Draft Plan:

The State Water Board recognizes that under certain limited circumstances achieving the Delta Outflow Objective may be in conflict with the Projects' ability to meet upstream fishery objectives for threatened and endangered salmonids in the upper Sacramento River, Feather River and lower American River. If DWR or USBR determines that such a conflict exists and creates an unacceptable risk of harm to threatened or endangered species, DWR or USBR may petition for a temporary urgency change order pursuant to Cal. Water Code § 1435 et seq., and the Board's regulations, to temporarily allow the Projects to implement the Delta Outflow Objective in a flexible manner to address competing needs of upstream and downstream fishery objectives. The temporary urgency change petition, in addition to the requirements for approval set forth under Cal. Water Code § 1435, shall include specific operational alternatives to address the competing needs of upstream and downstream fishery objectives, and shall be supported by all agencies on the Water Operations Management Team (U.S. Bureau of Reclamation, U.S. Fish and Wildlife Service, National Marine Fisheries Service, California Department of Fish and Game and the California Department of Water Resources). It is the intent of the Board that the Board, or its authorized delegee, will act on such a petition for temporary urgency change within five (5) days of its receipt.

Interior believes that acknowledging the potential for conflicts between upstream and downstream fishery objectives, and the potential need for temporary urgency changes, in the Program of Implementation is essential for reasonable implementation of the Delta Outflow Objective. While the potential for conflict exists, Interior finds that the circumstances of such conflict are sufficiently limited so as to not warrant an amendment to the Delta Outflow

Objective. However, in the event that competing needs between upstream and downstream fishery objectives occur, Interior believes that the statutory temporary urgency change process can be an appropriate tool for flexibility, as originally requested by Interior, provided that Interior has some assurance that such a petition will be acted upon in a timely manner.

Interior supports the Board's decision to not amend the numeric values established for the Delta Outflow Objective. Interior recommends that the Board recognize the potential for conflicts between implementation of the Delta Outflow Objective and upstream reservoir management objectives for fisheries, and provide for timely resolution of such competing needs through the use of a temporary urgency change petition. Recognition of the potential conflicts between upstream and downstream fishery objectives in the Draft Plan will allow the Board to issue a temporary urgency change order, under the appropriate circumstances, consistent with the Program of Implementation for the Delta Outflow Objective.

6. Export Limits

Interior makes no further recommendations regarding the Export Limits Objectives at this time.

7. River Flows: Sacramento at Rio Vista

Interior supports the determination of the Board in the Draft Plan to not amend the numeric values established for the Sacramento River at Rio Vista Flow Objectives in the 1995 Plan. The Sacramento River at Rio Vista Flow Objectives were adopted in the 1995 Plan to protect beneficial uses of river and Delta waters by the State's fishery resources. The Sacramento River at Rio Vista Flow Objectives apply to the fall months and are primarily intended to maintain sufficient net downstream flow in the lower Sacramento River to facilitate adult Chinook salmon upstream migration. The salmon objective reflects the minimum flows that the California DFG believes would be suitable for adult salmon migration (Bay-Delta WQCP, August, 1978). The Sacramento River at Rio Vista Flow Objectives provide concurrent benefits for federally listed adult steelhead during their upstream migration through the Delta to their spawning habitat in several Central Valley streams. Further, federally listed juvenile winter-run, and spring-run Chinook salmon, as well as late fall-run Chinook salmon, migrate downstream toward the ocean in the fall and winter months. The Sacramento River at Rio Vista Flow Objectives contribute flows for these species' downstream migration.

While Interior recognizes the benefits of the Sacramento River at Rio Vista Flow Objectives, under certain circumstances, achieving the Sacramento River at Rio Vista Flow Objectives may be in conflict with other upstream fishery objectives. Evidence of this conflict was presented at the 2004-05 periodic review workshops. Interior incorporates its exhibit from the workshops by reference. (Ex. DOI-25). Under certain dry fall conditions, meeting the Sacramento River at Rio Vista Flow Objectives may result in greater than desired flow fluctuations in the upper Sacramento River, Feather River and lower American River during the fall salmon spawning period. An alternative to meeting the Sacramento River at Rio Vista Flow Objectives by flow releases is to close the Delta Cross Channel gates. However, closure of the gates in dry fall conditions creates other conflicts, primarily a likely increase in salinity in the

Southern Delta. This option could be exercised only for short periods of time and possibly balanced with export reductions to maintain water quality objectives.

The Sacramento River at Rio Vista Flow Objectives may also affect the upstream reservoirs' fall cold-water reserves. Such conflict can arise because in order to meet the Sacramento River at Rio Vista Flow Objective, the Projects may be required to make storage releases, or to bypass flows that would otherwise be diverted into storage. Such releases, or bypasses, may result in the additional depletion of limited cold-water resources during the fall. In extreme circumstances, these releases and lowered reservoir levels may affect the Projects' ability to achieve temperature objectives for anadromous fish in the following year, including threatened or endangered salmon species. These temperature objectives have been set by the Board, and are included in the Biological Opinion issued by the National Marine Fisheries Service regarding the effects of Central Valley Project/State Water Project operations on listed salmonids. Failure to meet the temperature requirements in the Biological Opinion triggers reinitiation of Endangered Species Act (ESA), Section 7, consultation, which allows for NMFS to consider whether the failure to meet temperature requirements will cause jeopardy to the continued existence of listed species or whether additional measures are needed to minimize take. This process provides protection for species when hydrologic conditions are such that it is not possible to meet the operations analyzed in the Biological Opinion for CVP operations.

Recommendation. While the potential for such conflict between upstream and downstream fishery objectives is fairly limited to dry fall conditions, Interior believes it is important for the Board to acknowledge the potential for conflict in the Program of Implementation of the Sacramento River at Rio Vista Flow Objectives. Therefore, Interior proposes an amendment to the language in the Program of Implementation acknowledging the potential for conflict under specific conditions between meeting the Sacramento River at Rio Vista Flow Objective and other upstream fishery objectives, including requirements in the Biological Opinions for CVP operations. Interior requests that the Board outline a process to be followed in the event such a conflict between upstream and downstream fishery objectives occurs. Interior believes that the appropriate process should be the filing of a temporary urgency change petition with the Board. The petition would contain one or more proposals to address the significant competing needs and develops specific operational recommendations that would be supported by all agencies on the Water Operations Management Team (Reclamation, FWS, National Marine Fisheries Service, California DFG and the California Department of Water Resources).

In order to address the potential for conflict between meeting the upstream and downstream fishery objectives, Interior is proposing the following change to the Program of Implementation section of the Draft Plan. This paragraph would follow the existing paragraph under "2. River Flows: Sacramento River at Rio Vista" on page 22 in the Draft Plan:

The Board recognizes that under certain limited circumstances during dry fall conditions, achieving the Sacramento River at Rio Vista Flow Objective may be in conflict with the Projects' ability to meet upstream fishery objectives for threatened and endangered salmonids in the upper Sacramento River, Feather River and lower American River. If USBR, or DWR, determines that such a conflict exists and creates an

unacceptable risk of harm to threatened or endangered species, USBR, or DWR, may petition for a temporary urgency change order pursuant to Cal. Water Code § 1435 et seq., and the Board's regulations, to temporarily allow the Projects to implement the Sacramento River at Rio Vista Flow Objective in a flexible manner to address competing needs of upstream and downstream fishery objectives. The temporary urgency change petition, in addition to the requirements for approval set forth under Cal. Water Code § 1435, shall include specific operational alternatives to address the competing needs of the upstream and downstream fishery objectives, and shall be supported by all agencies on the Water Operations Management Team (U.S. Bureau of Reclamation, U.S. Fish and Wildlife Service, National Marine Fisheries Service, California Department of Fish and Game and the California Department of Water Resources). It is the intent of the Board that the Board, or its authorized delegee, will act on such a petition for temporary urgency change within five (5) days of its receipt.

Interior believes that acknowledging the potential for conflicts between upstream and downstream fishery objectives, and the potential need for temporary urgency change orders in the Program of Implementation is essential for reasonable implementation of the Sacramento River at Rio Vista Flow Objective. While the potential for conflict between upstream and downstream fishery objectives exists, Interior finds that the circumstances of such conflict are sufficiently limited so as to not warrant an amendment to the Sacramento River at Rio Vista Flow Objectives. However, in the event of those competing needs between upstream and downstream fishery objectives, Interior believes that the statutory temporary urgency change process can be an appropriate tool for flexibility, as originally requested by Interior, provided that Interior has some assurance that such a petition will be acted upon in a timely manner.

Interior supports the Board's decision to not amend the numeric values established for the Sacramento River at Rio Vista Flow Objectives. Interior recommends that the Board recognize the potential for operational challenges and ESA conflicts between implementation of the Rio Vista Flow Objectives and upstream fishery objectives, and provide for timely resolution of such competing needs through the use of a temporary urgency change petition. Recognition of the potential conflicts between upstream and downstream fishery objectives in the Draft Plan will allow the Board to issue a temporary urgency change order, under the appropriate circumstances, consistent with the Program of Implementation for the Sacramento River at Rio Vista Flow Objectives.

8. February-April 14 and May 16-June San Joaquin River Flow Objectives (Spring Flow Objectives);

9. 31-Day April 15-May 15 San Joaquin River Pulse Flow Objectives (Pulse Flow Objectives); and

10. Southern Delta Electrical Conductivity Objectives for the Protection of Agricultural Beneficial Uses (Southern Delta Salinity Objectives)

Interior would like to consolidate its comments on issues 8, 9, and 10 (the San Joaquin Spring Flow and Pulse Flow Objectives, and the Southern Delta Salinity Objectives), because while each merit individual comment, set forth below, the objectives all depend on water from the San Joaquin Basin. Interior believes that the Vernalis Spring and Pulse Flow objectives

provide important protection for emigrating salmonids and federally listed delta smelt. However, as Reclamation and FWS have previously acknowledged, compliance with the San Joaquin flow objectives may create reservoir operational challenges, fishery flow management challenges and potential conflicts with federal ESA obligations. These conflicts can be exacerbated by the fact that the formula for the San Joaquin Spring Flow Objectives is largely influenced by hydrology of the Sacramento Basin, and not the San Joaquin Basin. In addition, these conflicts are exacerbated by the “new” Southern Delta Salinity Objectives being imposed upon the CVP, as further discussed below.

While Interior believes that the Vernalis Spring and Pulse Flow Objectives are necessary to protect fish, the history is that Reclamation has agreed to be responsible, to the best of its ability, for the Vernalis Spring Flow (or baseflow) Objectives, generally for the term of the San Joaquin River Agreement (SJRA). While the Board has interpreted Reclamation’s promise on this point much more broadly than intended,² Reclamation has not challenged the Board’s interpretation in an effort to keep the SJRA in place and to achieve comity in the San Joaquin Basin. However, as originally predicted by Reclamation, there are questions of reasonableness and achievability of the Vernalis Spring Flow Objectives in dry years, in light of the entire responsibility falling on Reclamation, and especially in connection with the “new” Southern Delta Salinity Objectives, discussed below. The Board often cites to the fact that Reclamation is not required to meet either the Spring Flow or Southern Delta Salinity Objectives solely from New Melones storage water. Yet the reality remains: there is not enough water in the Basin, from purchase, from storage, from recirculation, or otherwise, to meet the Vernalis Spring Flow Objectives, and the Southern Delta Salinity Objectives, in all conditions.

Reclamation has sought temporary urgency change orders from the Board in all years from 2002-2005, to get flexibility in implementing the Vernalis Spring Flow Objectives due to dry conditions. In 2005, Reclamation’s temporary urgency change petition was denied. The order denying the petition (Order WRO 2005-0010, at page 6) states, “Delaying until a violation is imminent does not create an urgent need for a change, although it may well create an urgent need to take enforcement action.” This statement does not recognize the need for Reclamation to respond in real-time to operational conditions and conflicts between upstream and downstream fishery objectives that may change daily. Such a statement places the Board and Interior in adversarial positions. Interior believes that such adversarial approaches are not productive.

The Board has often relied on this periodic review process as the appropriate opportunity for Reclamation to achieve flexibility to deal with the operational challenges and difficulties with implementing the Vernalis Spring Flow objectives and upstream fishery objectives, yet the Draft Plan includes no such flexibility. The flexibility requested by Interior during the periodic review workshops has not been seriously considered or analyzed in the Draft Plan Report. The need for flexibility is increased due to the Southern Delta Salinity Objectives. Interior is, therefore, concerned about the future implementation of these three related objectives. However, Interior believes that if the Board acknowledges the potential for certain conflicts between upstream and downstream fishery objectives, and the Southern Delta Salinity Objectives, in the Programs of Implementation and the potential need for temporary urgency change orders, such

²See D-1641, p. 45, footnote 35.

acknowledgment in the Draft Plan will go a long way toward working together to resolve conflicts in the San Joaquin and Southern Delta inherent in the Board's objectives.

A. Vernalis Spring Flow (Baseflow) Objectives. The Board is well aware that Reclamation has a history of not fully achieving the Vernalis Spring Flow Objectives in dry conditions. (Order WRO 2005-0010, p. 4). When the objectives were originally adopted in the 1995 Plan, it was known that the Vernalis Spring Flow Objectives would be difficult for Reclamation to achieve in dry conditions. In the hearings for D-1641, Reclamation testified, as it did before the Board in 1995, that, "it may not be possible or prudent to meet all the standards under all conditions, but we will make our best effort to do so." (See D-1641, p. 45, citing to USDI 4, p. 4, Testimony of Lowell Ploss, citing 1995 testimony of Roger Patterson). Now that Reclamation has over six years of experience implementing the Vernalis Spring Flow Objective, it is clear that Reclamation's initial concerns are coming to bear, as evidenced by the history of requests for temporary urgency change orders seeking flexibility in implementing the Vernalis Spring Flow Objectives filed by Reclamation.

Reclamation sought temporary urgency change orders on March 13, 2002, (DOI Exhibit A, attached hereto and incorporated herein), on May 16, 2003 (DOI Exhibit B, attached hereto and incorporated herein), on January 30, 2004, (DOI Exhibit C, attached hereto and incorporated herein), and again on February 1, 2005 (DOI Exhibit D, attached hereto and incorporated herein). Reclamation sent a letter to the Board's Executive Director on November 18, 2004, detailing Reclamation's difficulties with achieving the Vernalis Spring Flow Objectives during dry conditions. (DOI Exhibit E, attached hereto and incorporated herein). The November 18, 2004, letter also describes Reclamation's difficulties in achieving the Vernalis Spring Flow Objectives through other means than New Melones storage water, including purchases, recirculation, south of Delta storage releases, and finally Reclamation requests flexibility in implementing the objective. In addition, Reclamation has submitted to the Board a "Summary of 1997 Analysis of PROSIM and SANJASM Results Demonstrating Instances of Failure to Meet Vernalis Base Flow Required for X2 Compliance." (DOI Exhibit F, attached hereto and incorporated herein). This document further details Reclamation's experience with implementing the Vernalis Spring Flow Objectives.

However, as previously stated, Interior believes that the Vernalis Spring Flow Objectives are important and necessary to protect fish and wildlife beneficial uses. The Vernalis Spring Flow Objectives benefit juvenile fall-run Chinook salmon, and federally listed adult steelhead during their downstream migration, and federally listed adult delta smelt during spawning, as well as larval and juvenile delta smelt. The fishery benefits afforded by the Vernalis Spring Flow Objectives are especially important in light of the recent pelagic organism decline (POD) in the Delta and the continuing decline in San Joaquin basin salmon production. Therefore, Reclamation stands by its promise to meet the Vernalis Spring Flow Objectives, to the best of its ability. However, neither Interior nor the Board should continue to ignore Reclamation's difficulties in achieving the objectives during dry conditions. Interior believes that providing flexibility in implementing the Vernalis Spring Flow Objectives will prevent further adversarial positions between Interior and the Board. At the very least, Interior believes that the Board should recognize in the Draft Plan that the Vernalis Spring Flow Objectives, during this time that they are implemented solely through water rights for the CVP, may conflict and create

operational challenges with upstream fishery objectives, and the Southern Delta Salinity Objectives, and may be difficult, if not impossible, to achieve in certain dry conditions.

Recommendation. Interior believes that the language similar to that suggested for the Delta Outflow Objective and the Sacramento River at Rio Vista Flow Objectives will also help with the San Joaquin Spring Flow issue, as follows:

The State Water Board recognizes that under certain limited circumstances during dry conditions, there are limited water resources available in the San Joaquin Basin to achieve the San Joaquin Vernalis Spring Flow Objectives, and the Objectives may be in conflict with upstream fishery objectives, and Southern Delta Salinity Objectives. If USBR determines that such circumstances exist, USBR may file a temporary urgency change petition, pursuant to Cal. Water Code § 1435 et seq., and the Board's regulations, to temporarily allow Reclamation to implement the Vernalis Spring Flow Objectives in a flexible manner to address competing needs of upstream and downstream fishery objectives, or salinity objectives. The temporary urgency petition, in addition to the requirements for approval set forth under Cal. Water Code § 1435, shall include specific operational alternatives to address the competing needs, and shall be supported by all agencies on the Water Operations Management Team (U.S. Bureau of Reclamation, U.S. Fish and Wildlife Service, National Marine Fisheries Service, California Department of Fish and Game and the California Department of Water Resources). It is the intent of the Board that the Board, or its authorized delegee, will act on such a petition for temporary urgency change within five (5) days of its receipt.

Interior believes that this recognition of the limited water supply of the San Joaquin Basin during dry conditions, and the potential for operational challenges and conflicts between upstream and downstream fishery objectives and the Southern Delta Salinity Objectives in the Program of Implementation for the San Joaquin Spring Flow Objectives is critical to reasonable and achievable implementation of the objectives.

In making the above recommendation, Interior acknowledges that conflicts between the Vernalis Spring Flow Objectives and the Southern Delta Salinity Objectives (further discussed below) may occur only in certain dry conditions, and that the use of a temporary urgency petitions process is appropriate for the short-term. However, there continues to be a need for a long-term solution to the over-allocation of San Joaquin Basin water. Therefore, Interior strongly recommends that the Board re-examine, in a workshop, the Vernalis Spring Flow Objectives in light of recent developments in San Joaquin Basin hydrology, as well as the newly revised San Joaquin Chinook salmon model. Interior recommends that the Board conduct this focused workshop in the summer of 2007, or alternatively, broaden the scope of the January, 2007, workshop on Southern Delta Salinity Objectives recently noticed by the Board.

B. Vernalis Pulse Flow Objectives (April 15-May 15). Interior supports the Draft Plan's changes to the Program of Implementation for the Vernalis Pulse Flow Objectives. The Program of Implementation now has provisions allowing a staged implementation of the Vernalis Pulse Flow Objectives until December 31, 2011. Until that time, the objectives will be implemented as set forth in the Vernalis Adaptive Management Plan (VAMP) experiment, and as

set forth in the SJRA. Interior notes that the Draft Plan commits the Board to holding a water right hearing immediately following the termination of the SJRA. Interior supports this commitment by the Board.

While Interior has no issue with the Draft Plan being made consistent with D-1641 for the Vernalis Pulse Flow Objectives, Interior strongly disagrees that the Board can rely on the *Final Environmental Impact Report for Implementation of the 1995 Water Quality Control Plan* (D-1641 FEIR) as adequate analyses of the environmental impacts of the Vernalis Pulse Flow Objectives. The D-1641 FEIR's analysis with respect to the San Joaquin River flows is fundamentally flawed. The analysis is not based upon accurate hydrologic conditions or supplies of the San Joaquin Basin. The analysis assumes water is added to the basin to meet particular objectives (the "add water" analysis), but does not account for where this water would actually come from in the Basin. The analysis is based on the DWRSIM model. The Board now has access to new information in the form of CALSIM II and the updated San Joaquin basin planning hydrology. The availability of the new information, and the need to correct the faulty assumption of the D-1641 FEIR "add water" analysis, means that the D-1641 FEIR must be supplemented with new environmental analyses of the San Joaquin. The need for new analyses of the San Joaquin Basin is critical because the Draft Plan fails to recognize the water supply issues with meeting the Vernalis Spring Flow Objectives, and fails to recognize the relationship between the Vernalis Spring Flow Objectives and the Southern Delta Salinity Objectives, as discussed below.

Recommendation. While Interior supports the changes in the Program of Implementation for the Vernalis Pulse Flow Objectives, Interior recommends that the Board supplement its analysis in the D-1641 FEIR before relying upon that analysis to support the new Program of Implementation for the Vernalis Pulse Flow Objectives.

C. Southern Delta EC Objectives for Agricultural Uses (Southern Delta Salinity Objectives). Interior fundamentally disagrees with the Board's approach in the Draft Plan that no changes have been made to the Southern Delta Salinity Objectives, or the Program of Implementation, and, therefore, the Draft Plan represents the status quo. Under the Board's "status quo" approach, no additional environmental analysis is required. However, the reality is that much has changed with respect to the Program of Implementation for the Southern Delta Salinity Objectives since the 1995 Plan. When the Southern Delta Salinity Objectives were adopted in the 1995 Plan, it was anticipated that a water rights hearing would set forth the responsibilities of water right holders concerning the objectives. That hearing was held and resulted in D-1641.

In D-1641, because of evidence showing that a permanent operable barrier program could improve salinity conditions in the Southern Delta, but still not achieve full compliance with the Southern Delta Salinity Objectives (D-1641, p. 88), the Board imposed a relaxed objective on the water rights of the CVP and SWP with respect to Southern Delta salinity. The Board found that the projects were "partially" responsible for salinity degradation in the Southern Delta. The Board imposed an objective of 1.0 EC, instead of the 0.7 EC called for in the 1995 Plan. (D-1641, p. 88). This made sense, because of the numerous other causes for salinity degradation in the Southern Delta (D-1641, p. 86), and because the Board had anticipated achieving the 0.7 EC

through its authority over other programs of implementation, such as non-point source regulation and discharge permits. (1995 Plan, pp. 29-33).

However, the Board made clear that it supported the barrier program discussed by DWR during the D-1641 hearings, and, in effect, made the water rights of the CVP and SWP conditioned upon construction of the permanent operable barriers. The Board did not directly require the barrier program, but provided an incentive to DWR and Reclamation to construct the barrier program in footnote 5, of Table 3 in D-1641. In that footnote, the Board linked Reclamation and DWR with a salinity objective of 1.0 EC (consistent with the findings in D-1641, D-1641 p. 88), until April 1, 2005. If, as of April 1, 2005, the barriers were not constructed, Interior and DWR were assigned an objective of 0.7 EC at the three Southern Delta stations below Vernalis. After the barriers are constructed, the objective, as implemented in D-1641, returns to 1.0 EC. In 2000, the Board, DWR, and Interior, were all optimistic that progress could be made on the barrier program and footnote 5 was not an issue, even throughout the 2004-05 workshops for periodic review. However, the barriers were not constructed by April 1, 2005, and now DWR and Reclamation are subject to the "new" 0.7 EC objective. The Board cannot now transform the incentive in footnote 5 into a factual finding of full responsibility on the part of the Projects.

In the D-1641 FEIR, the Board only analyzed the environmental impacts of achieving the Southern Delta Salinity Objectives in context of the barrier program.³ The Board has never analyzed the impacts of the 0.7 EC objective being implemented by Reclamation and DWR without the barriers. However, as we know the realities of today, the barrier program has experienced delays beyond the control of either DWR or Reclamation (February 14, 2005, Petition to Temporarily Change Effective Date of Condition Imposed in Water Right Decision 1641, pp. 5-7), and the barriers are not yet constructed.⁴

The Board's D-1641 FEIR never analyzed the impacts of DWR and Reclamation being fully responsible for the Southern Delta 0.7 EC objectives. The FEIR analysis assumes that Reclamation achieves the Vernalis salinity objective of 0.7 EC with dilution flows, and then shows that the permanent operable barriers improve salinity at the two Old River stations, but has little impact on the Brandt Bridge station. (D-1641 FEIR, Chapter IX, Figures IX-21 through IX-26). Evidence presented at the Delta Salinity Draft Cease and Desist Order (CDO) and Water Quality Response Plan (WQRP) Hearing shows that the degradation between Vernalis and Brandt Bridge (a distance of approximately 25 river miles) is approximately eight percent (8%) (Delta Salinity Draft CDO and WQRP Hearing, Exhibit DWR-20,⁵ p. 4). Reclamation has no

³ This omission is further complicated by the fact that the analysis for the south Delta salinity objectives in the FEIR is also flawed in that it does not accurately represent the true water supplies of the San Joaquin basin. The analysis adds water to the basin without analysis of where that water may derive.

⁴ In order for Reclamation to comply with a requirement to construct a project as a condition to a water right, it must have Congressional authorization for the project, Congress must fund the project, the project must, among other legal requirements, undergo federal Endangered Species Act consultation, National Environmental Policy Act procedures, as well as achieve all necessary approvals for construction, such as a 404 permit granted by the U.S. Army Corps of Engineers. Reclamation, as a bureau within a single executive branch agency, has little control over each of these processes.

⁵ entitled, "Investigation of the Factors Affecting Water Quality at Brandt Bridge, Middle River at Union Point, and Old River at Tracy, by Tara Smith."

facilities or means of control over water or circumstances between Vernalis and Brandt Bridge. The only feasible means for Reclamation to have a meaningful impact on water quality in the southern Delta, without the permanent operable barriers, is through dilution flow.⁶ Reclamation's only practical reservoir of water for dilution flows, at this time, is New Melones.

Recirculation or use of San Luis water could be problematic because of potential adverse impacts to fishery resources. Reclamation is conducting a feasibility study pursuant to P.L. 106-361, however, early indications are that recirculation could also be problematic due to funding for such a program, redirected impacts to other water supplies and water rights, and because the water quality dilution value of recirculation water is several fold less than the quality of New Melones water and, therefore, would require several fold quantity of water supplies to have similar dilution effectiveness. Purchase of water is difficult because Reclamation would generally need to purchase water only in times of dry conditions, and Reclamation cannot ensure agreement with any willing sellers, or Congressional appropriations to fund those agreements, at any given time.

The Board has relied solely on the barrier program on its analysis of the Southern Delta Salinity Objectives and does not include the Southern Delta Salinity Objectives in its analysis of flow, or water supply-related, objectives in the D-1641 FEIR. (D-1641 FEIR, compare Chapters V, VI, and IX). The D-1641 FEIR includes a faulty analysis of dilution flows to achieve the Vernalis Salinity Objectives, but has never analyzed the water supply impacts of the Southern Delta Salinity Objectives being implemented through dilution flows. Yet, the Board cannot point to a single feasible method of implementation by Reclamation (considering the reality that the permanent barrier program is delayed) other than dilution flows from New Melones storage water. The Board often takes refuge in the fact that it has not required Reclamation to satisfy its Southern Delta salinity obligations solely with dilution flows from New Melones. However, Reclamation has often explained why purchase, recirculation and other conceptual methods of compliance are difficult, controversial, and worse: they do not result in decreased salinity, on a real-time basis, in the southern Delta, especially in dry years. Yet, the Board has yet to acknowledge these realities. (DOI Exhibit E, attached hereto, and WRO 2005-0010).

Because the reality is that the barriers are not constructed, and because the Board cannot currently point to a reasonable, achievable, implementation method other than dilution flows, the Board must analyze this new circumstance in a supplemental analysis of its D-1641 FEIR. The Draft Plan, states at page 27, "The State Water Board has allocated responsibility to some water right holders to release dilution flows." The Board has never analyzed the environmental impacts of dilution flows for the Southern Delta Salinity Objectives. (D-1641 FEIR, Chapter IX). In addition, this objective must be analyzed in connection with the other San Joaquin flow objectives. A water rights phase would then be required to determine the responsibility of water right holders in the Basin, for the Southern Delta Salinity Objectives.

At page 63 of the Draft Plan Report, the Board states that, "Releases from reservoirs on tributaries to the San Joaquin for fish and wildlife protection, pursuant to the flow requirements

⁶ Evidence presented at the Delta Salinity Draft CDO and WQRP Hearing shows that export pumping has only negligible impact on salinity in the Southern Delta, and under certain conditions, may actually improve salinity in the Southern Delta. (Delta Salinity Draft CDO and WQRP Hearing, Exhibit DWR-20, pp. 9-13).

on the San Joaquin River at Vernalis currently contribute to achieving the salinity objectives in the southern Delta.” This statement reveals a fundamental difference in the views of Interior and the Board on this issue. From Interior’s perspective, the Vernalis Spring Flow Objectives and the Southern Delta Salinity Objectives actually compete. The more flow needed in the spring for the Spring Flow Objective, the less flow available for the April through August Southern Delta Salinity Objectives. Because the Board has not analyzed the Southern Delta Salinity Objectives as a flow objective, in concert with the other demands it has, in fact, made on New Melones, the Board does not have a full understanding of the implications of the Southern Delta Salinity Objectives on the water supplies of the San Joaquin. For example, a preliminary analysis using CALSIM II data shows that a small, incremental change in the salinity objective at Brandt Bridge (as measured by “overshooting” the 0.7 EC objective at Vernalis) can result in a need for approximately double the volume of water required for dilution flows.

The Draft Plan states, at page 22, that, “Salinity, though a water quality objective, is still implemented, **in part**, through the State Water Board’s water rights authorities.” (Emphasis added). In the Draft Plan, the Board continues a Program of Implementation for Southern Delta Salinity Objectives that includes more than just water rights. The Board plans to implement the objectives through water rights, discharge permits, Total Maximum Daily Load (TMDL) programs, funding of financial assistance programs, and other projects and actions implemented by other agencies. (Draft Plan, pp. 27-31). Interior supports this approach. However, the difficulty is that the Board has taken the position in the past that now that the barriers are not constructed, the Southern Delta Salinity Objectives are now fully implemented through Reclamation and DWR’s water rights.

The Board has taken this position despite language in D-1641 that the Projects are only “partially” responsible and language holding Reclamation and DWR responsible only for exceedances within their control (D-1641, pp. 88 and 161). In addition, the Board granted a waiver of the Southern Delta Salinity Objectives to the City of Manteca through Order WQ 2005-0005. The City of Manteca, a discharger, was granted a waiver from its effluent limitation of 0.7 EC to a 1.0 EC in March of 2005, near the same time that Reclamation and DWR were issued a draft CDO, Order WR 2006-0006, for “threatening” to violate Southern Delta Salinity Objectives. There apparently is no incentive to implement the Southern Delta Salinity Objectives through other Board programs, as called for in the Program of Implementation, so long as the Board’s view is that the objectives are fully implemented through the water rights of Reclamation and DWR.

Recommendation. The Board must supplement its analysis in the D-1641 FEIR to sufficiently analyze the impacts, and reasonableness and achievability, of the Southern Delta Salinity Objectives without the barriers. Interior supports the Board’s multi-programmatic approach to implementing the Southern Delta Salinity Objectives. However, Reclamation does not cause, and has little control over salinity degradation below Vernalis. While construction of the operable barriers would improve Delta salinity conditions, they would not consistently achieve a 0.7 EC objective at the three stations below Vernalis. The reality is that the barriers are not constructed. Dilution flows are currently a feasible means of achieving the objectives, but such may cause an unreasonable use of water. (D-1641, p. 10). Therefore, Interior proposes that the Board consider a phased implementation of the 0.7 EC objective in the Southern Delta.

The Plan should provide that Reclamation and DWR will not cause or contribute to an exceedance of 1.0 EC year round, consistent with the numerous other causes of salinity degradation below Vernalis, with their "partial" responsibility, and consistent with the Board's findings in D-1641. The April through August 0.7 EC objective should be phased in the Plan until a date that the Board expects other programs in the Draft Plan's Program of Implementation, such as discharge controls and TMDL programs, to be fully implemented.

1. Additional issues regarding the 1995 Plan

a. Suisun Objectives

1) Numeric Objectives for Suisun Marsh

The Draft Plan outlines numeric objectives (measured as EC) for protection of fish and wildlife beneficial uses in the eastern and western Suisun Marsh. As outlined below, Interior recommends changes in the Draft Plan to more accurately reflect the current status of actions being implemented by Reclamation, DWR, DFG, and the Suisun Resource Conservation District (SRCD) for protection of beneficial uses in Suisun Marsh. These four agencies are the signatories to the Suisun Marsh Preservation Agreement (SMPA), which was executed in 1987. A Revised SMPA was executed by the agencies in 2005.

During the 2004-05 periodic review workshops for the 1995 Plan, the SMPA signatories were in the process of completing an amendment to the SMPA. On June 20, 2005, the agencies executed the amendment, in the form of a Revised SMPA and its companion Revised Mitigation and Monitoring Agreements. These three agreements were revised, in part, to address changes resulting from the 1995 Plan and to implement actions that would provide equivalent or better protection than channel water salinity standards at Suisun Marsh stations S-35 (Morrow Island) and S-97 (Ibis).

During hearings on D-1641, the Board received information on the then-proposed amendment to the SMPA and concluded that actions identified for the amendment would provide equivalent protection. Such actions were incorporated in the Revised SMPA (June 20, 2005) and include: establishment of a Water Manager Program, Portable Pumps Program, and Drought Response Program; funding to improve Roaring River Distribution System turnouts; and conversion of stations S-35 and S-97 from compliance stations to monitoring stations.

Interior also recommends revisions to update sections of the draft Plan that describe the Suisun Marsh Charter Group (SMCG), including current efforts of the involved agencies to prepare a programmatic EIS/EIR for the Habitat Management, Preservation, and Restoration Plan for the Suisun Marsh (Suisun Marsh Plan).

The work of the SMCG was originally noted in the Board's September 2004 Staff Report on the Periodic Review of the 1995 Plan. As outlined on page 42 of the 2004 report, the staff recommendation was to defer changes to numeric objectives at stations S-35 and S-97 to the next period review of the Plan, with the expectation that the Suisun Marsh Plan would be completed by that time.

The Suisun Marsh Plan (being developed via the programmatic EIS/EIR) has not been completed. Accordingly, implementation of numeric objectives at S-35 and S-97 should be deferred until completion of the Suisun Marsh Plan. While Interior supports the intent of the Board to use the results of the programmatic EIS/EIR for the Suisun Marsh Plan in its next periodic review, information from the completed Suisun Marsh Plan should be used to evaluate and to determine appropriate objectives at stations S-35 and S-97, if needed.

Interior does not agree that DWR and Reclamation should be required to meet existing objectives at S-35 and S-97 if new salinity objectives at these stations have not been determined by January 1, 2015. The SMPA was revised, in part, to address changes resulting from the 1995 WQCP and to implement actions that would provide equivalent or better protection than channel water salinity standards at stations S-35 and S-97. The Revised SMPA was executed in June 2005, and the SRCD began implementation of actions (funded by DWR and Reclamation) to provide equivalent protection. Based upon implementation of these actions, supported by the substantial evidence received by the SWRCB during the D-1641 hearings and the review provided in the DWR report "Comprehensive Review of Suisun Marsh Monitoring Data, 1985-1995" (March 2001), we believe that DWR and Reclamation have mitigated for the impacts of the SWP and CVP operations on the managed wetlands.

Recommendation. Interior recommends that the second sentence in paragraph 6.ii. on page 25 be revised to read:

Due to evidence showing that implementation of the objectives at S-35 and S-97 would require an unreasonable amount of water and might freshen the western part of the Suisun Marsh more than is appropriate for certain species that require a brackish marsh, the SWRCB in Decision 1641 (D-1641) did not require Reclamation or DWR to meet the objectives at these stations (D-1641, pp. 54-55).

Interior further recommends that the Narrative Objectives for Western Suisun Marsh should be amended to remove S-97 and S-35 as compliance points for measuring EC in the Marsh. This change is consistent with D-1641 and consistent previous evidence presented to the Board. Interior believes that the Board is correct that the results of the Programmatic EIS/EIR are important to this process, and thus Interior recommends that S-97 and S-35 be removed as compliance points until analysis is completed that supports use of those stations as compliance points.

2) Narrative Objective for Brackish Tidal Marshes of Suisun Bay

Interior supports the statement that the Board will use the results of the Suisun Marsh Plan to convert the narrative objective for the brackish tidal marshes of Suisun Bay to a numeric objective, as appropriate. However, Interior believes that any changes must be based on the analysis currently being worked on in the Suisun Marsh Plan. Waiting until the Plan is completed will allow for a comprehensive strategy for addressing water quality in the Suisun Marsh and Brackish Tidal Marshes of Suisun Bay.

Recommendation. The first paragraph on page 33 incorrectly states that the Suisun Marsh Charter Group was formed as a result of the inability of Suisun Marsh Ecological Workgroup (SEW) to determine a single numeric objective for the tidal marshes. To help correct this mischaracterization, Interior recommends that the first paragraph end with the sentence: **“However, the SEW was unable to determine a single numeric objective for the tidal marshes.”**

uggested revision of the balance of the first paragraph is:

The Suisun Marsh Charter Group (SMCG) was formed in 2001 to develop a plan to balance the competing needs in Suisun Marsh. The principal agencies of the SMCG are the U.S. Fish and Wildlife Service, National Marine Fisheries Service, U.S. Bureau of Reclamation, California Bay-Delta Authority, Department of Fish and Game, Department of Water Resources, and Suisun Resource Conservation District. The SMCG is currently preparing a programmatic EIS/EIR for the Habitat Management, Preservation, and Restoration Plan for the Suisun Marsh (Suisun Marsh Plan). In preparation of the programmatic EIS/EIR, the agencies are evaluating plan alternatives with a tidal wetland habitat restoration component ranging from 3,000 to 36,000 acres.

b. Dissolved Oxygen Objective (San Joaquin River between Turner Cut & Stockton).

As stated in the Draft Plan Report, the purpose of the Dissolved Oxygen (DO) Objective at 6.0 mg/l is to protect migrating fall-run Chinook salmon in the San Joaquin River. However, all potential solutions and impacts should be evaluated using the best available science with supporting data.

The Draft Plan Report identifies three main factors (upstream nutrient loading, channel geometry, and flow) contributing to the DO impairment and further describes in detail the impacts of each contributing factor. The report did not discuss an alternative solution (such as aeration) to resolve the dissolved oxygen impairment.

A multi-agency public stakeholder process has been ongoing since the initial development of the DO TMDL and the aeration solution is the preferred stakeholder alternative. A pilot aeration study has been funded by CALFED, and construction of the aeration units will be completed by the end of 2006. The evaluation of the effectiveness of the new aeration units should begin in early 2007. Interior believes that the Board should continue to allow the stakeholder process to evaluate the effectiveness of the aeration solution.

Closing

Thank you for the opportunity to comment on the 2006 Draft Plan. Interior generally supports the Board's 2006 Draft Plan, with the exceptions noted above, and appreciates the opportunity to provide specific recommendations on certain objectives contained in the Plan. Interior looks forward to the opportunity to provide additional comments and evidence at future

workshops on Central Valley Salinity, Pelagic Organism Decline, Climate Change and San Joaquin Basin issues.