

March 26, 1992

**MEMORANDUM OF UNDERSTANDING BY AND BETWEEN THE
CALIFORNIA DEPARTMENT OF WATER RESOURCES
THE RECLAMATION BOARD
CALIFORNIA DEPARTMENT OF FISH AND GAME
AND
THE RESOURCES AGENCY
REGARDING SB 34 FISH AND WILDLIFE PROTECTION**

This Memorandum of Understanding is made and entered into by and between the California Department of Water Resources (hereinafter DWR), The Central Valley Flood Protection Board (formerly Reclamation Board) (hereinafter Board), the California Department of Fish and Game (hereinafter DFG), and The Resources Agency.

The purpose of this Memorandum of Understanding (hereinafter MOU) is to direct the implementation of the no net long-term loss of habitat policy that is mandated in the Delta Flood Protection Act of 1988 (hereinafter SB 34). Concepts agreed upon in this MOU apply both to the Delta Levee Subventions and the Special Project components of SB 34.

WHEREAS, DWR, Board and DFG desire to fulfill that obligation as stated in SB 34 to assure that no net long-term losses of riparian, fisheries, or wildlife habitat will occur as a result of SB 34 funded projects; AND

WHEREAS, Board has the responsibility for approving criteria and plans for maintenance and improvements of nonproject levees under the Subventions Program; AND

WHEREAS, DWR, Board and DFG have completed an initial estimate of impacts to riparian and wildlife habitat resulting from the proposed levee projects; AND

WHEREAS, the results of this initial analysis are the basis for initial protective measures in this MOU; AND

WHEREAS, the initial estimate may be adjusted to reflect actual habitat impacts thereby adjusting the protective requirements; AND

WHEREAS, avoidance of impacts is the most desirable approach to project protective measures; AND

WHEREAS, DWR, Board and DFG agree that protective measures for no net long-term loss of habitat should be located as close to the site of impact as practical, and off-site measures should only be explored when all on-site options are infeasible; AND

WHEREAS, should replacement of lost habitat be necessary, that replacement habitat is to be of the same type; AND

WHEREAS, DWR, Board and DFG agree that any necessary offsite protective measures should be distributed based upon ecological principles that serve to maintain or enhance the biological diversity of the Delta; AND

WHEREAS, the parties hereto desire to cooperate in replacing lost habitats by means of this MOU; AND

WHEREAS, DFG will give early consideration to supporting DWR and Board's efforts to implement wildlife management practices and subsidence control on Sherman Island and Twitchell Island consistent with other provisions of this agreement; AND

WHEREAS, DFG will give early consideration to supporting DWR and Board's effort to coordinate the SB 34 program with the Department of Parks and Recreation's Franks Tract project for riparian habitat creation as well as other purposes; AND

WHEREAS, DWR, Board and DFG agree that public ownership, protection, and management of these islands under a plan that is acceptable to DFG can preserve and enhance existing significant fish and wildlife values; AND

WHEREAS, the specific mitigation acreage, mitigation credits, if any, and other particulars of that future plan are yet to be determined; AND

WHEREAS, DFG is recognized as the management authority for fish and wildlife habitat; AND

WHEREAS, DWR, Board and DFG recognize that the Delta currently contains threatened and endangered species and that mitigation and/or avoidance measures must be taken to provide full compensation for potential adverse impacts to these species; AND

WHEREAS, DWR is recognized as the CEQA lead agency or responsible agency for Special Flood Control Projects, and the Board the responsible agency for Delta Levee Subventions, and DFG as a responsible agency for both programs; AND

WHEREAS, this MOU will be updated as new information becomes available; AND

WHEREAS, the conditions in this MOU are not intended to supersede requirements under CEQA, NEPA, State and Federal Endangered Species Acts, or Section 404 of the Clean Water Act, or Section 1600 et seq. of the Fish and Game Code.

NOW, THEREFORE, it is mutually agreed and understood as follows:

1. DFG, in consultation with DWR and the Central Valley Flood Protection Board (formerly Reclamation Board), will prepare a master environmental assessment for the SB 34 programs, to be adopted no later than June 30, 1993. The master environmental assessment will collect information on and provide an overview of Delta-wide environmental values and is intended to be used to assist in determinations of "no net long-term loss," of cumulative impacts of SB 34 projects and work, and in providing information relevant to State and federal regulatory programs to which SB 34 programs may be subject. DFG, also in consultation with DWR and The Reclamation Board, shall develop a "menu" of possible mitigation measures for use in the programs. DWR and the Board shall fully cooperate in the preparation of the MEA including, but not limited to, providing DFG with adequate funds to prepare the study.
2. For use in each levee repair or improvement project, DFG shall develop a guidance document drawing upon the master environmental assessment as appropriate and detailing information useful to the mitigation element of each project plan. Submittal of information pursuant to this guidance document shall not alter the obligations of the project proponents (DWR, The Central Valley Flood Protection Board (formerly Reclamation Board), or local agencies) under CEQA. The guidance document generally shall direct local agencies to develop a mitigation element consistent with the following principles:
 1. The mitigation element shall consider the value of the riparian and fisheries habitat and the need to provide flood protection based on sound engineering.
 2. The mitigation element shall include provision for the protection of fish and wildlife habitat determined to be necessary and not injurious to the integrity of flood control works.
 3. The mitigation element shall provide for the full mitigation of channel islands or berms with significant riparian communities if proposed for use as borrow sites for levee repair materials.
 4. The mitigation element shall ensure that the project does not result in a net long-term loss of riparian, fisheries, or wildlife habitat.
 5. The mitigation element shall consider the mitigation to be accomplished, if any, under the California Environmental Quality Act, the California Endangered Species Act, and Section 1600 et seq. of the California Fish and Game Code.
 6. The mitigation element shall provide an implementation plan which shall do the following:
 1. Describes the mitigation work to be implemented.
 2. Includes a schedule for implementation of the mitigation work which ensures that mitigation work will be accomplished prior to, or concurrent with, the construction of the project, or a written description why doing so would be impractical, which includes

a schedule detailing when mitigation would be implemented as soon thereafter as practical.

3. Includes a financing plan for the mitigation work, the share of mitigation costs attributable to each source, and a schedule of when the funds are to be provided.
3. 1. DFG, the Board, and DWR shall cooperate in the review of plans and mitigation elements. DFG approval of a specific plan shall be based upon a written determination that the plan's mitigation element achieves each of the following goals:
 1. The project does not involve the use of channel islands or berms with significant riparian communities as borrow sites for levee repair materials unless the impacts are fully mitigated.
 2. The project will not result in a net long-term loss of riparian, fisheries or wildlife habitat.
 3. The mitigation element includes an implementation plan which:
 1. Describes the mitigation work to be implemented.
 2. Includes a schedule for implementation of the mitigation work which ensures that mitigation work will be accomplished prior to, or concurrent with, the construction of the project, or a written description why doing so would be impractical, which includes a schedule detailing when mitigation would be implemented as soon thereafter as practical.
 3. Includes an adequate financing plan for the mitigation work, the share of mitigation costs attributable to each source, and a schedule of when the funds are to be provided.
 4. It is understood that mitigation elements may consist of or include participation in comprehensive regional mitigation-banking programs.
 2. Upon approval of mitigation elements by DFG, the project proponent shall be required to enter into a legally enforceable agreement with DFG to ensure that the mitigation element will be adequately implemented, DWR and the Board may encumber funds to implement the project.
 3. DWR or the Board may temporarily waive the requirements of this section if it determines that an emergency situation exists which requires immediate action, in which case these requirements shall be carried out as soon thereafter as practicable.
4. DWR, Board, and DFG will encourage and seek out the development and maintenance of measures to protect habitats throughout the Delta. With the first priority being avoidance of impacts and the second priority on-site mitigation measures, off-site measures will be explored only when on-island measures are deemed impractical. DWR, Board, and DFG will cooperatively work to provide information and guidance to local agencies developing mitigation elements consistent with this section and with sections 1, 5, and 6.
 5. DFG will use the U.S. Fish and Wildlife Service Habitat Evaluation Procedure (HEP), or a modified version thereof, to guide long-term decisions for proposed action to result in no net long-term loss of fisheries, wildlife, and riparian habitat.
 6. DWR and DFG shall implement levee stability demonstration projects which maximize fish and wildlife habitat values without using barren riprap.
 7. DWR and Board, in consultation with DFG and coordinated with direct appropriations to DFG as may be made, will reserve funds for protective measures to ensure that no net longterm loss of habitat will occur as the result of SB 34 funded projects. This account will be adjustable each year, depending upon the cost of providing the appropriate habitat protection. This money is to be spent only for fish and wildlife purposes and only by or with the concurrence of DFG. Funding for approved projects shall include sufficient funds for maintenance and operation costs necessary to sustain the long-term viability of the mitigation measure. DWR, DFG, and Board will enter into and fund a long-term maintenance and operating agreement for lands acquired for wil-dlife protection where DFG desires such responsibility, as long as Delta Flood Protection funding is available. DFG shall receive each year \$350,000 or such greater or lesser amount as The Resources Agency deems appropriate from that year's appropriation from the Delta Flood Protection Fund for the purpose of carrying out DFG's responsibilities under SB 34, SB 1065, and this MOU.

8. Any requirements under CEQA, Fish and Game Code Sections 1600 et seq. or the California Endangered Species Act will be carried out in a timely manner. DFG will provide both informal and formal consultation as needed.
9. DFG shall conduct at least one annual inspection of each levee and mitigation site for which maintenance, improvement or mitigation have been provided pursuant to this part.
10. DFG shall appoint a program manager to develop and implement a 1991-92 plan and budget for implementation of mitigation funded pursuant to Section 3600-001-176 of the 1991-92 Budget Act and under Section 6 above. The plan shall include a request for proposals for a separate contract to analyze past habitat impacts and to propose alternative measures to replace past habitat losses.
11. The Resources Agency will exercise an oversight role over all provisions of this MOU, and shall appoint an advisory committee of flood control, environmental, legislative, and governmental interests to consult in that capacity.
12. This MOU shall commence on the last date signed below and reflects revisions made to the MOU signed on November 12, 1991.

Signed, on March 26, 1992 by:

Douglas P. Wheeler
Secretary for Resources
The Resources Agency

Boyd Gibbons, Director
Department of Fish and Game

David N. Kennedy, Director
Department of Water Resources

Rodney G. Mayer for
Raymond E. Barsch
General Manager
The Central Valley Flood Protection Board (formerly Reclamation Board)

Amendment No. 1

Delta Flood Protection Program, Amendment No. 1

Memorandum of Understanding

Enclosed for your signature is Amendment No. 1 to the existing March 26, 1992 MOU which directs the implementation of mitigation for Delta Flood Protection Act programs. An amended MOU is required by SB 900 and AB 360.

The Clean, Safe, Reliable Water Supply Act of 1996 (Proposition 204) appropriates \$25 million for the Delta Flood Protection Program and requires that Program expenditures be consistent with a net long-term habitat improvement program and, specifically, a net benefit for aquatic species in the Delta. The enclosed amendment addresses the implementation of this new mandate. The amendment must be approved by the MOU signatories before Proposition 204 funds may be spent for flood protection and habitat improvement.

This amendment was drafted by DWR program and legal staff in coordination with the DFG program and legal staff, The Central Valley Flood Protection Board (formerly Reclamation Board), and The Resources Agency Advisory Committee.

Please return the signed amendment to Curt Schmutte in DWR's Central District office at 3251 S Street, Sacramento, California 95816. If you have any questions, please contact me or your staff may contact Curt Schmutte at (916) 227-7567.

AMENDMENT NO. 1
to the
MEMORANDUM OF UNDERSTANDING
by and between the
CALIFORNIA DEPARTMENT OF WATER RESOURCES
THE RECLAMATION BOARD
CALIFORNIA DEPARTMENT OF FISH AND GAME
and
THE RESOURCES AGENCY

The parties to the Memorandum of Understanding dated March 26, 1992, by and between the California Department of Water Resources (hereinafter DWR), The Central Valley Flood Protection Board (formerly Reclamation Board) (hereinafter Board), the California Department of Fish and Game (hereinafter DFG), and The Resources Agency, collectively referred to as the Parties, desire to amend the Memorandum of Understanding (hereinafter MOU) in light of the following circumstances:

WHEREAS, the MOU directs the implementation of the mandate of SB 34 of 1988 that the Delta levee maintenance subventions program (subventions program) and special Delta flood control projects (special projects) result in no net long-term loss of riparian, fisheries and wildlife habitat. These two program elements are collectively known as the Delta Flood Protection Program (Program):

WHEREAS, in 1996 the Legislature enacted SB 900 and the voters of California approved Proposition 204, the Clean, Safe, Reliable Water Supply Act of 1996 (the Act). The Act appropriates a total of \$25 million for the subventions program and for special projects. The Act requires that expenditures from this appropriation for the subventions program and special projects be consistent with a net long-term habitat improvement program, and have a net benefit for aquatic species in the Delta, and that the parties amend the MOU to include that requirement;

WHEREAS, the Parties desire to fulfill that obligation as stated in the Act to assure that net long-term habitat improvement, including that for aquatic species, will occur as a result of projects funded by the Act; AND

WHEREAS, the term "net long-term habitat improvement" is defined in Water Code Section 12310(e) as the enhancement of riparian, fisheries and wildlife habitat; AND

WHEREAS, a program for net long-term habitat improvement in the Delta is defined as an enhancement in the quality and quantity of all levee-associated habitat. The types of habitat associated with levees are described in the Master Environmental Assessment dated October 1995, prepared for the SB 34 program; AND

WHEREAS, elements of the habitat improvement program should be geographically distributed based upon ecological principles that serve to maintain or enhance the biological diversity of the Delta, and will not preclude or affect adoption or implementation of CALFED's Ecosystem Restoration Program Plan; AND

WHEREAS, the specific type, quantity and distribution of habitat associated with the habitat improvement program are yet to be determined; AND

WHEREAS, the Parties recognize that the Delta currently supports threatened and endangered species which could benefit from the habitat improvement program.

NOW, THEREFORE, it is mutually agreed and understood as follows:

1. DFG shall develop the habitat improvement program required by the Act.
2. The habitat improvement program shall consist of numerous project components associated with levee maintenance and improvements. A habitat improvement program component shall be submitted with each levee maintenance and/or improvement proposal. These components may be achieved by:
 1. Adding an incremental habitat improvement project to the proposed levee project, or
 2. Using habitat credits already established in an existing habitat area or mitigation bank.
3. DFG shall make the written determination that a habitat improvement component is consistent with the habitat improvement program.
4. The SB 34 Master Environmental Assessment, Mitigation Guidance Document and other pertinent sources shall be used to guide the implementation of habitat improvement program elements.
5. Projects consistent with the habitat improvement program shall, to the greatest extent possible:
 1. Improve and increase aquatic habitats so that they can support the sustainable production and survival of native and other desirable estuarine and anadromous fish in the estuary.
 2. Improve and increase important wetland habitats so that they can support the sustainable production and survival of wildlife species.
 3. Increase population health and population size of Delta species to levels that ensures sustained survival.
 4. Be consistent with selected, priority habitat development projects supported by DWR and DFG.
 5. Be combined with other State, federal and local programmatic efforts to achieve terrestrial and aquatic habitat improvements.
 6. Take advantage of habitat improvement opportunities associated with the beneficial reuse of dredged material and subsidence control efforts allowed by AB 360.
6. DWR and DFG may develop habitat improvement components for use by the reclamation districts in meeting the mandates of the Program.
7. Each project component of the habitat improvement program shall:
 1. Consider the value of the fisheries and wildlife habitat and the need to provide flood protection based on sound engineering.
 2. Describe the work to be implemented.
 3. Provide a schedule of project implementation.
 4. Provide a financing plan for the habitat improvement program work, and any necessary operations and maintenance requirements.
 5. Provide assurances for long-term operation and maintenance of the habitat improvement program work, as necessary.
 6. Provide documents and permits required by State, federal and local laws and regulations, such as documents required under CEQA.
8. DWR and Board, in consultation with DFG, and coordinated with any direct appropriations to DFG as may be made, will reserve funds for protective measures to ensure that the habitat improvement program mandate is satisfied. This account may be adjusted each year, depending upon the cost of providing the appropriate habitat improvements. This money may be spent only for fish and wildlife purposes and only by or with the concurrence of DFG. Funding for approved projects shall include sufficient funds for maintenance and operation costs necessary to sustain the long-term viability of the habitat improvement program elements.

9. DFG shall provide an annual report to The Resources Agency by January 15 of each year summarizing the actions, expenses and benefits associated with the habitat improvement program.
10. This Amendment No. 1 is intended to be consistent with terms and conditions of the MOU, and shall be construed toward that end. To the extent that any term or condition of this Amendment is determined to be inconsistent with the MOU, then this Amendment shall prevail.
11. The effective date of this Amendment No .1 shall be the last date signed below.

November 30, 1997

Douglas P. Wheeler, Secretary, The Resources Agency

David N. Kennedy, Director, Department of Water Resources

Jacqueline E. Schafer, Department of Fish and Game

Director Peter Rabbon, General, Manager The Central Valley Flood Protection Board (formerly Reclamation Board)