

RECORD OF DECISION

INTEGRATED RESOURCES MANAGEMENT PROGRAM FOR FLOOD CONTROL IN THE COLUSA BASIN

PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT/FINAL PROGRAMMATIC ENVIRONMENTAL IMPACT REPORT

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Approved:

Date: 12/3/01

/s/ Frank Michny
Frank Michny
Regional Environmental Officer

Date: 12/13/01

/s/ Kirk C. Rodgers
Kirk C. Rodgers
Acting Regional Director

I. Introduction

This document constitutes the Record of Decision (Decision) of the U.S. Bureau of Reclamation (Reclamation) for the Integrated Resources Management Program for Flood Control in the Colusa Basin (Program). The Program establishes the framework for an integrated resources management approach to flood control in the Colusa Basin, which is located in the northern California counties of Glenn, Colusa and northern Yolo.

The Program is the subject of a Programmatic Environmental Impact Statement/Environmental Impact Report (Programmatic EIS/R). The Draft Programmatic EIS/R was published in May 2000. The Final Programmatic PEIS/R was dated March 2001 and the subject of a Notice of Availability dated July 19, 2001. The Programmatic EIS/R was prepared by Reclamation and the Colusa Basin Drainage District (District) in accordance with the National Environmental Policy Act (NEPA), and the California Environmental Quality Act and the CEQA Guidelines (collectively, CEQA). Reclamation and the District were the lead agencies under NEPA and CEQA for purposes of preparing the Programmatic EIS/R.

II. Background

The California Legislature created the District in 1987 to address the repetitive flooding problem in the Colusa Basin. As described in detail in the Draft Programmatic EIS/R, the Colusa Basin has suffered from severe flooding 13 times in the last 60 years. Injuries have included loss of life, and millions of dollars annually in damage to public infrastructure, private property, and the environment.

The Program proposed by the District and Reclamation for reducing flood damage is based on an integrated resources management strategy. The Program will integrate facets of the entire spectrum of efforts that may reduce flooding, such as encouraging native plants with deeper roots, improving enforcement of building codes, relocating flood-prone structures (e.g., bridges) constructing setback or ring levees, and constructing detention basins.

The Programmatic EIS/R addresses flood management issues on a program level, using a Basin-wide approach. Reclamation and the District intend that it serve as a first tier document which provides the basis for and supports future Program implementation activities.

Reclamation and the District have established the overarching goal of developing a watershed management program that integrates reducing flood damage and restoring the ecosystem of the Colusa Basin for the Program. (See Draft Programmatic EIS/R, p. 1-2.) As project-level implementation proceeds, the Program will continue to be guided by this general principle.

The Programmatic EIS/R, designed to serve as a general planning document, accomplishes three goals:

Establishes the use of an integrated resources management technique as a general direction for the Program;

Establishes bookends for the range of potential flood management measures that could be applied in a watershed; and

Eliminates other general strategies.

As indicated in the Programmatic EIS/R, Reclamation and the District have consistently maintained that substantial additional work will be necessary at the watershed level to identify potential specific integrated resources measures, determine the effectiveness of those measures and select measures for implementation in a particular watershed. Reclamation and the District have always contemplated that the Program, as an integrated resources management program, will rely as heavily on nonstructural flood management resources as on structural measures.

Reclamation is the federal lead agency for purposes of NEPA for two reasons. First, Reclamation delivers water from the Central Valley Project to the 20+ agricultural irrigation districts and three national wildlife refuges located within District boundaries. As a result, it is keenly interested in any proposals to reduce impacts from repetitive flooding in the Colusa Basin. Second, Reclamation is interested in preserving and enhancing habitat and wetlands critical to Bay-Delta restoration and finding new water sources for wildlife and habitat.

The Programmatic EIS/R analyzes the Program at the programmatic level. Future project-level Program implementation activities will be analyzed in subsequent environmental documents, in accordance with NEPA and CEQA, as appropriate. That is, environmental compliance related to the development of watershed-specific projects, including a range of structural and nonstructural flood control measures, will be performed at the project level on a watershed-specific basis.

III. Recommended Decision

Reclamation and the District believe that addressing the problems associated with repetitive flooding in the Colusa Basin requires collaboration among Federal, state, and local governments, as well as individual landowners, non-profit organizations, and other interested parties. Federal law authorizes Reclamation, and other Federal agencies, to participate in such a collaborative effort. State law, as described above, authorizes the District to coordinate this effort.

However, for the reasons described in the Programmatic EIS/R, it is premature at the present time for any party to begin to implement the Program on the ground. Further

project-level analysis is needed in order to: (i) identify potential measures, (ii) determine the potential impacts of such measures on flooding and on the environment, (iii) obtain all applicable permits, and (iv) obtain funding for implementation. *Therefore, this Decision does not adopt any of the alternatives described in the Draft Programmatic EIS/R.* Instead, this Decision approves the Program described in the Final Programmatic EIS/R and herein. The Program was refined to incorporate the comments received during review of the Draft Programmatic EIS/R and, as refined, is comprised of two planning elements: establishment of an integrated resources management strategy and establishment of a planning process for implementing that strategy.

Reclamation and the District have reached the following decisions regarding the Program:

1. There is a Federal interest in addressing the repetitive flooding problem that faces the Colusa Basin. Reclamation anticipates that a number of other Federal agencies, in addition to Reclamation, may play significant roles in developing and/or implementing the Program. Those agencies may include, but are not limited to: Federal Emergency Management Agency, Natural Resources Conservation Service, U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, and U.S. Fish & Wildlife Service. In addition, Reclamation expects that the CALFED Bay-Delta Program offers a possible avenue to implement the Program. Finally, as noted above, Reclamation recognizes that collaboration among many different parties will be necessary to achieve the Federal interest. Reclamation commits to work cooperatively with these interested parties to achieve the goals of reducing flooding and improving the environment of the Colusa Basin.
2. Reclamation and the District believe that integrated resources management offers the best way to address the flooding problems confronting the Colusa Basin. The integrated resources management approach, by blending structural and nonstructural flood protection measures, represents state of the art thinking on flood management and is being used on other Federal/State efforts, such as the U.S. Army Corps of Engineers -- Sacramento San Joaquin Basin Comprehensive Study. In addition, Reclamation and District believe that the proposed strategy represents the type of sound water management that Reclamation has advanced in its Strategic Plan.
3. It is premature at the present time to make any decision regarding the construction of potential measures identified in the Programmatic EIS/R. Project-level planning, design, and environmental review must occur so that the effects of such measures are better understood. Reclamation and the District support the proposed project-level feasibility

study/environmental review process, including the procedures for selecting projects for implementation in the three early implementation watersheds, outlined in the Programmatic EIS/R and support that process as the next step in implementing the Program. The preparation of the feasibility study and the associated environmental documents will have no impacts on the environment. Any impacts on the environment that may occur from actions developed as a result of the feasibility study process will be identified and addressed in the environmental documents prepared as part of that process.

4. It is possible that there will be opportunities to implement environmental enhancement measures prior to the completion of the feasibility study process. Such implementation could involve small-scale pilot projects and could also involve planning or design for larger projects such as constructed wetlands. Reclamation and the District support accelerating the implementation of such environmental enhancement projects, subject to the need to conduct project-specific environmental review and analysis.

IV. Project Description and Other Alternatives Considered

A. Program Alternatives

At the program level, the project being considered for approval is comprised of two parts: (1) establishment of an integrated resources management strategy to address repetitive flooding in the Colusa Basin, and (2) formulation of a planning process to identify, evaluate and select specific flood control measures for implementation in three watersheds in the northern portion of the Colusa Basin. At the very beginning of Program development, alternatives were developed to facilitate evaluation of a range of actions that would promote implementation of an integrated resources management strategy.

The Draft Programmatic EIS/R analyzed three Program alternatives (Alternatives 1 through 3), each of which employed an integrated resources management approach to flood control, as well as a no action alternative. Alternative 1 contemplated the construction of 14 detention basins, Alternative 2 contemplated 8 detention basins, and Alternative 3 contemplated 5 detention basins. Each of the Program Alternatives included approximately 10,000 acres of environmental restoration measures. The potential environmental impacts associated with the detention basins were analyzed using two operating scenarios: flood control only (Alternatives 1a, 2a, and 3a), and flood control and development of an incidental water supply that would be dedicated to environmental purposes (Alternatives 1b, 2b, and 3b).

The Draft Programmatic EIS/R identified Alternative 2b, with 8 detention basins, as the Preferred Alternative. These would be located above the town of Williams in the Basin and operated for flood control and environmental water supply. Alternative 2b also

includes approximately 10,000 acres of environmental restoration. It was identified as the Preferred Alternative because modeling and engineering analyses suggested that it would result in the greatest flood reduction benefits Basin-wide. Neither Alternative 1a or 1b was the Preferred Alternative because analyses suggested that there would not be substantial Basin-wide flood reduction benefits from reservoirs constructed south of Highway 20 (e.g., below the town of Williams). The main difference between Alternatives 2a and 2b and 3a and 3b is the exclusion of three reservoirs on ephemeral streams in northern Colusa County (Funks, Hunters and Logan Creeks) from Alternatives 3a and 3b. These three streams cause substantial damage during storm events and therefore flood control measures are needed in these watersheds. In addition, as explained below, Alternative 2b also provides Reclamation and the District with the greatest flexibility to coordinate with other agencies considering development of flood control projects in the Colusa Basin. Finally, Reclamation and the District opted to include development of an incidental water supply that would be dedicated to environmental purposes as a component of the Preferred Alternative in order to retain the flexibility to consider further, during the next phase of Program development, measures that have the potential to provide maximum flexibility in terms of flood damage reduction and environmental enhancement and restoration. Based on the foregoing, Reclamation and the District identified Alternative 2b as the Preferred Alternative in the Draft Programmatic EIS/R.

With respect to coordination with other potential flood management projects in the Colusa Basin, documents issued by CALFED subsequent to circulation of the Draft Programmatic EIS/R indicated that an in-depth evaluation of a Sites/Colusa Reservoir project by the California Department of Water Resource (DWR) and CALFED would move forward sooner than reflected in the Draft Programmatic EIS/R. As discussed in the Programmatic EIS/R, Reclamation and the District are extremely interested in the status of the Sites/Colusa Reservoir project because it would obviate the need for detention basins on Funks, Hunters and Logan Creeks. Further, because the Sites/Colusa Reservoir project would be sized for water supply, it is anticipated that it would provide substantially greater flood protection to downstream areas on these streams than would the potential Funks, Hunters and Logan Creeks reservoirs described in the Draft Programmatic EIS/R. In order to avoid any potential for conflict between the Program and the Sites/Colusa project, the first phase of the next stage of the Program will be focused, as described above, on three watersheds in Glenn County, none of which would be included in the Sites/Colusa Reservoir project. If DWR or other agencies ultimately do decide to construct the Sites/Colusa Reservoir project on the schedule contemplated by CALFED, detention basins on Funks, Hunters and Logan Creeks will be dropped from further consideration. If, however, DWR or other agencies decide not to construct the Sites/Colusa Reservoir project by the end of Stage 1 of the CALFED implementation process (about 2007), the Programmatic EIS/R will be used as a basis for tiering a future project-level environmental document(s) focused on one or more of the watersheds that would be affected by the Sites/Colusa Reservoir project. In sum, Alternative 2b, with the slight modifications discussed above, offers the greatest potential flood reduction benefits and provides the District ample flexibility to

coordinate with DWR and other agencies regarding flood control measures in the Funks, Hunters and Logan Creeks watersheds.

In response to comments on the Draft Programmatic EIS/R questioning whether Reclamation and the District had sufficient information, whether hydrologic engineering, biological, or economic, to move directly to the construction of the detention basins proposed as the structural flood control element of Preferred Alternative 2b, and suggesting that the feasibility and effectiveness of less environmentally intrusive measures be examined in greater detail, Reclamation and the District refined the Program. As refined, the project under consideration in the Programmatic EIS/R is limited to the establishment of an integrated resources management strategy to address repetitive flood control problems in the Colusa Basin and a planning process to identify, evaluate and select specific flood control measures for three watersheds. The three watersheds are South Fork Willow Creek, Wilson Creek and North Fork Willow Creek, all located in the northern portion of the Colusa Basin. These three watersheds were selected for three reasons: (1) the District's analysis of flooding problems in the Basin suggests that the most cost-effective approach to flood management is to begin in the upper portion of the Basin (i.e., Glenn County), (2) they have been identified as having been the greatest contributors to the 1998 flooding that devastated the town of Willows, and (3) they do not conflict with further study of the Sites/Colusa Reservoir project.

As noted earlier, this project, which is the first stage of the Program, involves development of an integrated resources management strategy and a planning process only. No flood control measures, either structural or nonstructural measures, or environmental restoration measures, will be implemented based on this decision. Thus, this project will not result in any environmental impacts. The next stage of the Program will include identification and analysis of specific potential flood control and environmental restoration measures. In addition, environmental impacts will be identified and mitigation measures proposed, as appropriate, for the flood control and environmental restoration measures selected for implementation in the three watersheds. In other words, project-related physical implementation activity will not begin until the next round of analyses is complete.

Notwithstanding these facts, Reclamation and the District note that the Programmatic EIS/R contains a substantial amount of environmental analysis. During the next phase of the Program, as watershed-specific projects and measures are identified, analyzed and selected, those projects will tier off of the environmental analysis contained in the Programmatic EIS/R to the extent possible.

B. Environmentally Preferred Alternative

The Draft Programmatic EIS/R identified Alternative 3a as the Environmentally Preferred Alternative because it contemplated construction of the fewest reservoirs and

did not include an incidental environmental water supply. Since Alternative 3a would have resulted in the smallest total physical footprint, it would have had the least impacts on biological and environmental resources in the Basin.

As noted above, the Draft Programmatic EIS/R identified Alternative 2b as the Preferred Alternative based on technical analyses indicating that it would result in the greatest flood reduction benefits Basin-wide. Even though Alternative 2b proposed construction of three more reservoirs than Alternative 3a, it was selected as the Preferred Alternative because of its potential for greater flood damage reduction benefits and because of the flexibility it allowed regarding coordination with other agencies considering development of flood control measures in the Basin and development of an incidental environmental water supply.

Also as noted above, Reclamation and the District refined the Alternative 2b approach in response to comments received on the Draft Programmatic EIS/R. As refined, the project alternative that is the subject of this Decision is limited to the establishment of an integrated resources management strategy to address repetitive flooding problems in the Colusa Basin and a planning process to identify, evaluate and select specific flood control measures for three watersheds. Further, it identifies three early implementation watersheds, rather than the eight identified in Alternative 2b. This project, a program-level approach flood control issues in the Basin, does not involve development of any physical measures and will not result in any impacts to the environment.

C. *No Action Alternative*

The no action alternative considers the anticipated physical, operational and regulatory conditions that would be in place in 2025 if the Program is not adopted and implemented. Existing conditions were used as the basis for defining the no action alternative. The no action alternative analysis also includes significant projects, programs or activities that presently are expected to be implemented regardless of whether the Program is adopted. In the Draft Programmatic EIS/R, each of the Program alternatives (Alternatives 1a/1b - 3a/3b) were compared to the no action alternative and to existing conditions in order to identify some of the environmental changes that might occur as a result of implementation of the various alternatives. For the most part, the differences between existing conditions and the no action alternative could not be determined with much certainty at the program level. Thus, the results of comparing the Program alternatives to existing conditions and the no action alternative were essentially the same.

Formulation of the no action alternative was based on the following criteria and assumptions. The criteria used to identify projected future projects were the status of (1) authorization and funding for design; (2) environmental documents, permits and approvals; and (3) initial authorization and funding for construction. No projects which

met these criteria were identified. As a result, the projected future flooding conditions in the Basin not attributable to the Sacramento River are assumed to be much the same in 2025 as they are today. It was assumed year 2025 water supply and operational conditions will be much the same as they are today. It was also assumed that year 2025 environmental conditions would be substantially similar to today's conditions.

V. *Basis of Decision and Issues Evaluated*

A. *Ability to Meet Program Goals*

Reclamation and the District considered several significant issues in formulating this decision to adopt an integrated resources management approach to flood control in the Colusa Basin and a planning process for identification, analysis and selection of appropriate flood control measures, both structural and nonstructural, for three watersheds.

First, they determined that at this stage of the Program, it is important to focus on developing an overall strategy for flood control in the Colusa Basin. Second, Reclamation and the District recognized that it is premature at this point to select particular flood control projects. Instead, the critical early Program task is establishment of bookends for the range of flood management measures that may be applied in a watershed. Using the discussion relating to and identification of the bookends contained in the Programmatic EIS/R, Reclamation and the District will be able, at the next stage, the watershed implementation stage, to adopt an appropriate set of integrated resources management measures, up to and including a detention basin, depending on the conditions in a particular watershed and the effectiveness of the proposed measures. Third, after the Draft Programmatic EIS/R was released, the California Legislature authorized the Program and appropriated funding with the express condition that flood control activities include measures for floodplain management (i.e., nonstructural measures). Reclamation and the District want to ensure the Program is consistent with applicable legislative requirements.

The Program, as characterized in the Programmatic EIS/R, and this decision, reflects the results of Reclamation's and the District's careful consideration and balancing of these important interests. Adoption of the proposed strategy and planning process is based on this analysis and supports the conclusion that this approach the best meets Program goals of (1) establishing the use of an integrated resources management technique as a general direction for the Program; (2) establishing bookends for the range of potential flood management measures that could be applied in a watershed; and (3) eliminating other strategies.

B. *Fund Availability and Cost Evaluation*

The Draft Programmatic EIS/R included a Draft Program Financing Plan which set forth preliminary estimates of Program costs and benefits, and the bases therefor, and

identified likely sources of funds. Several commentors questioned the analyses and estimates contained in the Draft Program Financing Plan.

In the Final Programmatic EIS/R, Reclamation and the District noted that the Draft Program Financing Plan represented their initial evaluations of the costs and benefits associated with the Program. Program costs, benefits and sources of funding will undergo additional detailed analyses during preparation of the technical memoranda that will be developed to support the feasibility studies for the three watersheds selected for early implementation of the Program.

The financial feasibility of the Program is a primary concern for Reclamation and the District, and both have been successful to date in obtaining funds through federal and state legislative appropriations and grants to support initial Program development. The District has also obtained landowner input confirming a District-wide desire for the District to pursue an integrated resources management approach to flood control. In the Final Programmatic EIS/R, the District emphasized its commitment to reducing flood damage in the Colusa Basin to the greatest extent possible, while keeping costs down for District landowners. Obtaining an accurate estimate of Program costs and benefits, and identifying funding sources, will be a key component of the feasibility studies prepared during the next phase of the Program.

VI. Implementing the Decision and Environmental Commitments

Implementation of this decision involves adoption of (1) an integrated resources management approach to flood control in the Colusa Basin, and (2) a planning process for the next phase of the Program -- identification, analysis and selection of structural and nonstructural flood control measures to be implemented in three watersheds. Because this decision represents the first strategy and planning steps in a comprehensive Program, and does not implement any structural or non-structural measures, it will have no effect on the environment.

Detailed analyses of potential environmental impacts and the costs and benefits associated with specific structural and nonstructural measures will be conducted during the next stage of Program development. It would be premature and speculative to try to define any potential environmental effects that may occur in the future at the project level. Thus, at this stage of Program implementation (i.e., the strategy and planning stage, or the program level), Reclamation and the District are not proposing any mitigation measures or environmental commitments. The District, the FWS and Reclamation agreed to Principles of Cooperation designed to guide negotiation of the terms of a Program-related programmatic incidental take statement (the Guiding Principles). The Guiding Principles include protection of private property and permitting incidental take of listed species. During the next stage, there will be an analysis of specific flood control measures, potential impacts, and appropriate mitigation measures documented in additional environmental reports.

VII. Fish and Wildlife Consultations

A. Fish and Wildlife Coordination Act

Reclamation has consulted with the Fish and Wildlife Service (FWS) during the development of this environmental documentation and has provided funding for the FWS's participation. In addition, the environmental documents have been provided to FWS for their review and comment. The present decision will not result in any actions that result in construction or modification of water development projects. Thus the coordination actions undertaken thus far, pursuant to the FWCA, have satisfied any applicable requirements of that statute. If Reclamation initiates any further feasibility studies, or other activities, that may result in the construction/modification of a water development project appropriate compliance activities as required by the FWCA will be initiated.

B. Endangered Species Act

Reclamation consulted informally with the FWS pursuant to the Endangered Species Act (ESA) during the development of this environmental document. The present action being proposed is the continuation of additional studies and identification of future Federal participation. At this time Reclamation has determined that no Federal action is being proposed that would result in any physical modification of endangered species habitat nor any effect on any species. Thus no consultation is required at the present time. If Reclamation initiates any further feasibility studies, or other activities, that may result in an effect on listed species, or their critical habitat, Reclamation will complete appropriate consultation actions as required under section 7 of the ESA.

VIII. Comments on the Final Programmatic EIS/R

Reclamation and the District received one comment letter on the Final Programmatic EIS/R from the U.S. Environmental Protection Agency (USEPA). USEPA supports the approach the District has described in the Final Programmatic EIS/R to refine the Program that was proposed in the Draft Programmatic EIS/R. As recommended by USEPA, one component of that approach is the establishment of an integrated resources management strategy to address repetitive flooding in the Colusa Basin; that strategy includes consideration of a comprehensive range of nonstructural and structural measures.

USEPA also provided four detailed comments. First, USEPA restated many of the comments contained in its prior comment letter relating to the Draft Programmatic EIS/R and asked for a specific commitment from the District to provide detailed analysis of the issues raised at the project level. A detailed response to each of the comments is provided in the Final Programmatic EIS/R. In those detailed responses, it is noted that further detailed analysis will be conducted at the program level as appropriate.

Second, USEPA recommends that future environmental evaluation at the project level fully analyze potential impacts to biological resources and mitigation measures. The District reiterates its commitment to analyze potential impacts to biological resources and potential mitigation measures at the project level. USEPA also urges the District to commit to up-front mitigation at a 3:1 compensation-to-loss ratio for the direct loss of intermittent stream habitat and associated high value habitats. The District will consider this recommendation as part of the detailed project level analysis. However, until specific projects are identified and potential impacts evaluated, the District believes it is premature and speculative to commit at this point to a specific mitigation compensation-to-loss ratio.

Third, USEPA recommends that the District discuss with the FWS and the National Marine Fisheries Service (if appropriate) the option of developing a Basin-wide habitat conservation plan (HCP) in connection with the proposed negotiated programmatic incidental take agreement described in the Programmatic EIS/R or watershed-specific HCPs/incidental take agreements. As noted in the Final Programmatic EIS/R, the District is aware that the only way landowners may reasonably agree to participate in ecosystem restoration efforts is if they are protected from the potential success of those efforts. Thus, the District has proposed negotiating a programmatic incidental take agreement with USFWS that would protect participating landowners from penalties if they take members of threatened or endangered species during the course of normal and customary farming and ranching activities.

Because ecosystem restoration efforts may be implemented throughout the Basin, and will not be limited to the three early implementation watersheds, the District is presently proposing to seek a Basin-wide programmatic incidental take agreement. As part of the process of developing a Program-related programmatic incidental take agreement, the District and the other parties will analyze the potential for impacts to protected species. An HCP is one method that may be used to analyze such impacts. The District will work with USEPA and other interested agencies to design an appropriate means of analyzing impacts in connection with the development of a programmatic incidental take agreement.

Finally, USEPA notes that FWS requested that the District include a plan to reduce pesticide use and monitor agricultural drain water for water quality criteria which affect Sacramento River fisheries and aquatic ecosystems. USEPA correctly notes that the District and Reclamation responded that their missions relate to flood control and flood damage reduction and, therefore, inclusion of a pesticide reduction plan is beyond the scope of the Program. USEPA urges the District to commit to active Basin-wide efforts to improve water quality as part of the environmental enhancement/restoration component of the Program. The District reiterates that the focus of the Program is flood control and damage reduction and continues to maintain that developing and implementing a pesticide reduction plan is beyond the scope of the Program, as well as the District's mission, which is established by statute. To the extent that any flood control measures considered by the District may result in water quality impacts, the

District will evaluate mitigation measures. Evaluation of water quality impacts will also include consideration of any beneficial impacts that may result from implementation of environmental enhancement/restoration measures. While both adverse and beneficial impacts to water quality and mitigation measures will be evaluated in detail at the project level, the District does not propose to expand the Program beyond flood control to include restoration of water quality as a Program goal. Further, the District anticipates that implementation of the Program will result in net water quality benefits and will have few, if any, adverse impacts.