

Agricultural Impacts Mitigation Plan

Introduction

The CALFED Bay-Delta Program is the most ambitious and comprehensive undertaking of its kind in the United States. It embodies several program components that, when integrated together form a strategy to ensure a healthy ecosystem, reliable water supplies, good water quality, and stable levees in California's Bay-Delta. These components include the Ecosystem Restoration Program, the Water Use Efficiency Program, the Water Quality Program, the Levee System Integrity Program, the Watershed Management Program, the Water Transfers Policy, the Storage and Conveyance components, and an Assurances and Financing Package. When taken as a whole the CALFED Bay-Delta Program will meet the above-stated objectives while adhering to a set of six Solution Principles. According to these principles the solution must: 1) reduce conflicts among beneficial uses of water; 2) be equitable; 3) be affordable; 4) be durable; 5) be implementable; and 6) have no significant redirected impacts.

The CALFED Program potentially offers many benefits to agriculture. However, it is apparent that each CALFED program element contains actions that will result in significant impacts to the California agricultural resource base, particularly agricultural land, agricultural water supply and agricultural water quality; in other words, the existing environment as it is utilized for agriculture. These actions also have associated socioeconomic impacts to local communities, local jurisdictions and local economies.

These impacts must be fully disclosed at the programmatic level in the Programmatic Environmental Impact Statement/Report (PEIS/R) as required by the National Environmental Protection Act (NEPA) and the California Environmental Quality Act (CEQA). Chapters 5 and 8 of the PEIS/R address these impacts. CEQA requires a discussion at the programmatic level pertaining to the development, implementation, monitoring and reporting of appropriate avoidance and mitigation measures.

CALFED, in its Revised Phase II Report and in Chapter 8 of the PEIS/R has adopted the following policy concerning environmental impacts to the existing agricultural environment and associated mitigation requirements.

Agricultural resources are an important feature of the existing environment of the state and are recognized and protected under CEQA and state and federal policy. One of the major principles of the State's agricultural policy is to sustain the long-term productivity of the State's agriculture by conserving and protecting the soil, water, and air which are agriculture's basic resources. It is CALFED policy that adverse environmental effects to agricultural resources resulting from CALFED programs, projects, and actions will be fully assessed and disclosed under CEQA and NEPA, and avoided or mitigated as required by law. Assessment, disclosure, and avoidance and other mitigation strategies shall be developed at the programmatic and the project-specific levels in consultation with other state, federal, and local agencies with special expertise or authority over agricultural resources which may be affected by the program, such as California Department of Food and Agriculture.

Background

There is a long history of State public policy that recognizes the importance of prime and unique farmland and farmland of state-wide importance. These policies establish a solid foundation to support a CALFED action to develop a comprehensive mitigation strategy to address adverse impacts to agricultural resources. General State policies include:

- One of the major principles of the state's agricultural policy shall be to sustain the long-term productivity of the state's farms by conserving and protecting the soil, water, and air which are agriculture's basic resources. In promoting and protecting the agricultural industry, the Legislature will review actions for their effects on 13 factors, including productive agricultural land, and agricultural water supplies. (Thurman Agricultural Policy Act; FAC Sec. 821, 822)
- The preservation of a maximum amount of the limited supply of agricultural land is necessary to the conservation of the state's economic resources, and is necessary not only to the maintenance of the agricultural economy of the state, but also for the assurance of adequate, healthful and nutritious food for future residents of this state and nation. (Williamson Act; GC Sec. 51220 (a))
- The agricultural lands of the state contribute substantially to the state, national, and world food supply and are a vital part of the state's economy. (PRC Sec. 10201)
- It is the intent of the Legislature to protect farming and ranching operations in agricultural areas from non-farm or non-ranch land uses that may hinder and curtail farming or ranching operations and encourage long-term conservation of productive agricultural lands in order to protect the agricultural economy of rural communities, as well as that of the state, for future generations of Californians. (PRC Sec. 10202)
- The legislature has explicitly declared that "CEQA plays an important role in the preservation of agricultural lands." (statutes of 1993, chapter 812, section 1(d))
- The maximum amount of prime agricultural land in the coastal zone shall be maintained in production to protect the agricultural economy. (CA Coastal Act; PRC Sec. 30241)
- Lands suitable for agricultural use shall not be converted to nonagricultural uses unless continued agricultural use is not feasible or such conversion would preserve prime agricultural land. (PRC Sec. 30242)
- No agricultural activity, operation, or facility conducted for commercial purposes, in a manner consistent with proper and accepted customs shall become a nuisance due to any changed condition in or about the locality, after it has been in operation for more than 3 years. (Civil Code Sec. 3482.5)
- The goal of the California Wetlands Conservation Policy is to achieve a long term increase in wetlands acreage, functions and values in California. Steps taken to achieve this goal shall emphasize maintaining economic use (e.g., agriculture) of restored and enhanced lands and be achieved through the voluntary participation of landowners. (Executive Order W-59-93)

There is also extensive Federal policy that supports the protection of agricultural lands. The Federal Farmland Protection Policy Act of 1981 (FPPA) provided for the development and use of the LESA model to assess the impacts of Federal projects on agricultural land. The final assessment methodology was approved in June, 1994. There is additional federal intent language in the Farming for the Future Act of 1988, and the

Farmland Protection Program included in the Federal Agricultural Improvement and Reform Act of 1996. Congressional intent language includes:

...the Nation's farmland is "a unique natural resource", and that each year "a large amount of the Nation's farmland" was being "irrevocably converted from actual or potential agricultural use to non agricultural use," in many cases as a result of action taken or assisted by the federal government. The FPPA directs federal agencies to identify and take into account the adverse effects of federal programs on the preservation of farmland; consider alternative actions, as appropriate, that could lessen such adverse effects; and assure that such federal programs, to the extent practicable, are compatible with state government, local government, and private programs and policies to protect farmland. (Fed. Reg., June 17, 1994, p 31110)

CEQA Requirements for Disclosure and Mitigation of Environmental Impacts to Agricultural Resources

Significant effect: Under CEQA, a project may have a significant effect on the environment if it has the potential to degrade the quality of environment, curtail the range of the environment, cumulatively impact the environment, or cause substantial adverse effects on human beings, either directly or indirectly. The CEQA Guidelines, in Appendix G, list significant effects: "A project will normally have a significant effect on the environment if it will convert prime agricultural land to non-agricultural use or impair the agricultural productivity of prime agricultural land."

When determining if a significant effect on the environment may occur, it is necessary to carefully define the project that may cause the effects, and characterize the existing environment that may be affected. A project must be defined to include the whole of the action resulting in a physical change in the environment, and includes activities directly undertaken or financed by the government, or requiring a permit or other approval by the government. The existing environment includes both natural and man-made conditions.

Standards for mitigation at the programmatic and site-specific levels:

The fundamental standards for mitigation of significant effects on the environment under CEQA are proportionality and nexus. What is meant by proportionality is that the mitigation being proposed and implemented be in proportion to the nature and extent of the impact. Nexus means that the proposed mitigation be linked to the underlying activity which causes the impacts.

The preferred method of dealing with potential impacts is to avoid them through a reasonable range of alternatives. "The purpose of an EIR is to identify the significant effects of a project on the environment, to identify alternatives to the project, and to indicate the manner in which those significant effects can be mitigated or avoided." (PRC sec. 21002.1 (a)) "Each public agency shall mitigate or avoid the significant effects...whenever it is feasible to do so." (PRC sec. 21002.1 (b)) "Environmental impact reports (shall)...emphasize feasible mitigation measures and alternatives to projects." (PRC sec.21003 (c)) For the purpose of CEQA "feasible" is defined in section

15364 of the Guidelines as, "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." Furthermore, the CEQA Guidelines state that a major advantage of a Programmatic EIR is to allow for consideration of broad policy alternatives and program-wide mitigation measures at an early time. A primary use of a PEIR is to incorporate feasible mitigation measures and alternatives into subsequent program actions. (sec. 15168 of the Guidelines)

Mitigation is defined identically under NEPA and CEQA (sec. 15370 of the Guidelines). It includes avoidance by not taking certain actions, minimization by limiting the degree or magnitude of an action, rectification through repairing or restoring the impacted environment, reduction or elimination of impacts over time, and/or compensation by replacing or providing substitute resources or environments.

CEQA also requires that a discussion of mitigation measures shall distinguish between the measures which are proposed by project proponents to be included in the project and other measures that are not included but could reasonably be expected to reduce adverse impacts ... The Guidelines go on to state that, "Where several measures are available to mitigate an impact, each should be discussed and the basis for selecting a particular measure should be identified if one has been selected." (Sec 15126 (c))

CALFED agricultural resources mitigation policy statement

Agricultural resources are an important feature of the existing environment of the state and are recognized and protected under CEQA and state and federal policy. One of the major principles of the State's agricultural policy is to sustain the long-term productivity of the State's agriculture by conserving and protecting the soil, water, and air which are agriculture's basic resources. It is CALFED policy that adverse environmental effects to agricultural resources resulting from CALFED programs, projects, and actions will be fully assessed and disclosed under CEQA and NEPA, and avoided or mitigated as required by law. Assessment, disclosure, and avoidance and other mitigation strategies shall be developed at the programmatic and the project-specific levels in consultation with other state, federal, and local agencies with special expertise or authority over agricultural resources which may be affected by the program, such as California Department of Food and Agriculture.

Programmatic level mitigation:

To support the CALFED policy for agricultural environmental resource mitigation, CALFED has also adopted the following overarching policies.

General Policies:

CALFED has established a policy to maintain the productivity and flexibility of agricultural resources to the greatest extent practicable when implementing the CALFED Program in its entirety.

CALFED has also established a policy that to the greatest extent practicable, CALFED goals and objectives will be met through CALFED actions that maintain

land in private ownership in order to best preserve the economic and environmental productivity of that land. Rather than through the wholesale acquisition of land by Federal and State government agencies, these agencies will establish cooperative programs to work with private landowners to restore and rehabilitate the ecosystem to meet CALFED program objectives, while maintaining agricultural land and water uses.

To this end, **CALFED has also developed a policy to work with local landowners and organizations to plan and develop projects that meet CALFED objectives while also benefiting local landowners.**

CALFED will have a comprehensive environmental evaluation requirement for any CALFED funded project that may adversely impact agricultural resources. The evaluation methodology will incorporate the Land Evaluation and Site Assessment (LESA) system as referenced in sec. 21061.2 of the PRC.

CALFED is also reaffirming the state Right-to-Farm policy that protects existing agricultural operations ability to perform routine farming operations when new, potentially incompatible land uses are established near or adjacent to them. (sec. 3482.5 Civil Code)

CALFED shall establish an Agricultural Mitigation Oversight entity to assure implementation of an agricultural resources mitigation program. CDFG, the Department of Conservation and the USDA-NRCS shall be represented on the entity.

Land Use:

If a CALFED action results in agricultural land converted to another use, CALFED will protect other agricultural land of equivalent production potential. The standard of adequacy may be up to three to one, land equivalency to be determined by the Agricultural Mitigation Oversight entity. Production potential includes the quantity, quality and reliability of the resources needed to produce a crop, including but not limited to land and water, and agricultural services.

If agricultural practices are restricted on existing agricultural land due to CALFED actions, CALFED will protect other agricultural land for agricultural use without restrictions. The standard of adequacy will be one to one, to be reviewed and adjusted on a case by case basis.

Water Supply Reliability:

It is CALFED policy that before any CALFED action that requires additional water supplies is implemented, the source of water for the project will be identified and secured. If this results in a redirection of water supplies away from agricultural use, this is a significant impact that shall be mitigated. To the extent that CALFED actions result in any increase in water demand, CALFED shall develop the water supply necessary to meet that demand from mechanisms other than the permanent redirection of existing agricultural water supplies. This is similar to the approach that proponents of to new

urban developments must employ under sec. 10910 of the Water Code relating to water supply planning to support existing and planned future use.

CALFED will establish an Agricultural Water Account (AWA), similar in concept to the Environmental Water Account (EWA). The CALFED policy shall be that a portion of any newly developed CALFED water supply is identified as agricultural mitigation water, based on the amount of agricultural water redirected to other uses as a result of CALFED actions. Critical considerations include volume, quality, timing and location of availability, and affordability. Water from the EWA may be used to mitigate agricultural water supply impacts resulting from CALFED ERPP actions. The AWA may be a component of the EWA.

If agricultural water resources are acquired for other uses as a result of CALFED actions, CALFED shall provide an equivalent mitigation water supply for agricultural use on other lands. The standard of adequacy shall be one to one at the point of use, considering water quality, timing and location, cost and reliability of supply. Since water supply is a limiting factor for agricultural productivity in some areas of the State, and a CALFED fundamental objective is to improve water supply reliability, it logically follows that providing an adequate and high quality water supply to other sites or regions is a reasonable approach to mitigation. This is not a new concept. Off-site mitigation for impacts on environmental resources is standard practice in CEQA. For example the Department of Fish and Game has standards for creation, maintenance, and protection of wetlands to offset unavoidable impacts on existing wetlands, including the use of mitigation banks.

When agricultural land conversion results in reallocation of riparian or pre-1914 water rights to nonagricultural uses, CALFED shall develop a mechanism whereby this agricultural water is made available to other agricultural users. This may be a function of the Agricultural Water Account.

Project level mitigation: The following is a list of potential project-specific or site specific mitigation measures that shall be considered during the environmental review process. This list is not to be considered all-inclusive.

- Development agreements - CALFED agencies developing habitat through agricultural land conversion agree to develop agricultural infrastructure, buffers, and other tangible support for remaining agricultural lands. This may include technical and financial support for farmers to transition to less input intensive farming methods that are fully compatible with adjacent wildlife habitat.
- Buffers - Establish buffers as part of habitat restoration projects, or compensated for if on agricultural land. These buffers should have vegetation compatible with farming and habitat objectives. For example, vegetation that has the potential of harboring agricultural insect pests should be avoided. Those that provide refuge for beneficial insects should be encouraged. Any buffers required to assure the ability to continue generally accepted agricultural practices will be established as part of the CALFED project and not on the existing agricultural land. Mitigation will include

measures to reduce or eliminate conflicts due to creation of incompatible adjacent land uses. Measures to be included are initial site planning to minimize conflicts between adjacent land uses, and when necessary establishment of buffers as a part of a CALFED project.

- Easements – Establish a purchase and/or transfer of development rights programs. This mitigation alternative does not avoid or reduce the impact or offset or replace lost resources. Nevertheless, preservation of appropriate portions of the resource base could be an acceptable mitigation. This could be accomplished via easements.
- For flood-prone areas, purchase flood easements and protect future agricultural uses while repairing existing levees as the preferred flood management strategy rather than developing an extensive levee setback program. To the extent that set-back levees are needed for flood damage reduction, maintain agricultural use of the land within the set-back using a flood easement purchase program.
- Examine and implement additional structural as well non-structural alternatives to achieving project goals that would not impact the agricultural resources of the State.
- A Planned Unit Development approach to habitat development to minimize adjacent land use conflicts with remaining agriculture lands.
- Establishing exclusive agricultural zoning. While this is more of a local land-use issue, the potential to coordinate such an effort with the Delta Protection Commission and affected counties within and outside the Delta is quite real.
- Phasing of specific component implementation can provide partial mitigation, or through adaptive management result in avoiding impacts to agricultural resources.

Mitigation implementation, reporting and monitoring:

Section 21081.6 of the Public Resources Code requires that a public lead agency establish a mitigation reporting and monitoring program designed to ensure compliance during program implementation. This section describes how CALFED will comply with these CEQA provisions.

As the agency responsible for preserving and protecting agricultural resources in California, the CDFA has prepared an agricultural resources mitigation implementation, monitoring and reporting program. The proposed program embraces the adaptive management approach to mitigation of significant effects to agricultural resources.

Implementation:

CALFED will establish an agricultural mitigation consultation process involving CDFA, DOC, local government agencies, state and local agricultural organizations, local landowners, and other interested parties.

Any CALFED action that may have significant effects to the agricultural environment shall be evaluated under CEQA. The evaluation shall include the use of a LESA to determine the need for an EIR. The environmental documentation shall also include a determination of feasibility of alternatives and mitigation measures that includes a discussion of alternatives selection and which mitigation measures are feasible and will be implemented, and a discussion of other mitigation measures that were considered but determined to be infeasible and why. This may take the form of an annotated checklist.

Mitigation measures shall be fully enforceable through permit conditions, agreements or other measures.

Reporting:

Reporting of mitigation implementation shall be a part of the annual report for each CALFED program element.

Mitigation reporting requirements shall be a condition for approval for each project that requires mitigation.

A mitigation report shall include the following elements:

- A list of mitigation measures
- Standards of compliance
- Reporting schedule
- Identify responsible entity

Monitoring:

CALFED will establish and conduct a monitoring program that will track compliance with mitigation measure standards. This may be a function of the mitigation oversight entity.

CALFED shall use a combined approach to mitigation monitoring that includes a jurisdictional framework that establishes the authority and responsibility of the CALFED implementing agency or agencies and a program element on a project specific basis that triggers mitigation under sec. 21081.6 of the PRC.

Enforcement:

Mitigation reporting and monitoring shall be a responsibility of CMARP. A mitigation oversight entity will be established to assure mitigation implementation, and to resolve disputes over the need and extent of mitigation. The monitoring and reporting program shall be adopted as a condition of project approval.

Cost Recovery:

The cost for mitigation implementation, reporting and monitoring will be born by the lead agency for the project.

Mitigation of Impacts to Agricultural Resources – An Example

Example: Assume that CALFED acquires 100 acres of prime farmland with riparian water rights. This land has an historical water use of 3.5 acre-feet per acre per year. This land is converted to engineered, managed wetland habitat. In this new use, this land will have an average water demand of 6.5 acre-feet per acre per year. Adjacent land on one side remains in agricultural production.

Impacts:

1. Conversion of 100 acres of prime farmland to a non-agricultural use.
2. Loss of 350 acre-feet of low-cost high quality water with a high reliability of supply.
3. Increase in water demand on the Bay-Delta system of 300 acre-feet per year.
4. Creation of a conflict with adjacent agricultural land that could restrict typical crop management practices such as aerial and ground application of chemicals.
5. Depredation of crops by wildlife.

CALFED Mitigation Policy:

1. If CALFED acquires prime or unique farmland, or farmland of statewide importance for non-agricultural use, a proportionate area of analogous land in proximity shall be preserved in agricultural use in perpetuity by easement or other method.
2. To the extent that CALFED actions result in a change in the purpose of use of agricultural water resources, the program will provide an equivalent water supply for agricultural use, taking into account amount, reliability, quality, location of use, and cost.
3. To the extent that CALFED actions result in a net increase in water demand, this increased demand shall be met through the acquisition of new water, developed and paid for by CALFED at the time that the action is initiated.
4. When CALFED acquires land adjacent to existing farmland, CALFED shall affirm the state Right-to-Farm policy that protects the ability of existing agricultural operations to perform routine farming practices when new, potentially incompatible land uses are established near or adjacent to them. Any buffers required to assure this ability will be established as part of the CALFED project and not on the existing agricultural land. (sec. 3482.5 Civil Code) Mitigation will include measures to reduce or eliminate conflicts due to creation of incompatible adjacent land uses. Measures to be included are RTF policy, establishment of buffers as a part of the project, and initial site planning to minimize conflicts between adjacent land uses.

Actual mitigation measures:

1. Permanently conserve via easement purchase or other means, 100 to 300 acres of similar farmland in reasonable proximity to the impacted land. The exact acreage would be determined based on an analysis of crop production potential including factors such as location, soil type and water supply.
2. Provide 350 acre-feet per year of water of similar reliability, quality, and cost to the agricultural water account or through some other dedication.
3. Secure 300 acre-feet per year of new water supply (or non-agricultural water supply) to meet the additional water demand of the managed wetland.

4. Through appropriate planning and design of the managed wetland, assure the continued use of accepted agricultural practices on adjacent agricultural lands.
5. An alternative to measure 4 would be to provide technical and financial support to the adjacent landowner to implement cost-effective agricultural practices that are compatible with the recently developed habitat.
6. Monetary compensation on an on-going basis for actual crop depredation by wildlife associated with the recently developed habitat.

Implementation, Reporting and Monitoring:

1. Significant effects and associated mitigation measures would be identified in a project-specific EIR. The LESA model would be used for empirical evaluation of impacts.
2. The mitigation measures listed above would be identified and incorporated as conditions of project approval. Specific details of the mitigation measures would be determined by a mitigation oversight entity.
3. Proper documentation that mitigation is in place would be necessary for the project to commence. Commencement could include initial land or easement acquisition, or construction.
4. Project description would be reported to CMARP for tracking via GIS and other means.
5. Project status including reporting and monitoring of mitigation measures shall be conveyed via the ERP annual report. A separate report on the cumulative impacts on agricultural resources and the effectiveness of mitigation measures shall be prepared annually.
6. If and when quantifiable CALFED program benefits accrue to agriculture, the mitigation program may be modified accordingly, using the principles of adaptive management. Appropriate standards and criteria would need to be developed.