APPENDIX H

Negative Declaration and Initial Study

NEGATIVE DECLARATION

Pursuant to Sections 15070 and 15071 of the California Environmental Quality Act (CEQA) guidelines, the California Department of Fish and Game proposed to adopt this Negative Declaration.

1. Title and Short Description of Project: Yolo Bypass Wildlife Area Land Management Plan.

The California Department of Fish and Game (DFG) is proposing to adopt a Land Management Plan (LMP) for the Yolo Bypass Wildlife Area (Wildlife Area). The purpose of the Wildlife Area is to protect and enhance habitat for wildlife species, and to provide the public with compatible, wildlife-related recreational uses. The Wildlife Area has existed since the first land acquisition in 1991 and this LMP proposes continuation of an ecosystem-based approach to management of the diverse mosaic of natural communities. The Wildlife Area provides habitat for special-status species, game species, and other native and nonnative species. This LMP consists of six chapters as follows:

I. Introduction
II. Property Description and Management Setting
III. Environmental Setting
IV. Compatible Resource Management and Public Use
V. Management Goals
VI. Operations and Maintenance

This LMP provides a description of the Wildlife Area and its environment. It also includes an evaluation of public uses that are compatible with the purpose of the Wildlife Area.

The Initial Study is intended to consider the whole of the project. As such, this project and this Negative Declaration include the following components:

- The ongoing operation of the Wildlife Area including the public uses incorporated in this LMP.
- Maintenance activities (e.g., habitat management and agricultural) to sustain the biological communities that provide habitat for wildlife and fisheries resources.
- Installation of minor improvements, such as signs and trails that do not involve substantial physical disruption of the Wildlife Area.
- Installation of minor improvements to promote compatibility with adjoining property that do not involve substantial physical disruption of the Wildlife Area.
- Restoration and enhancement of seasonal and permanent wetlands, grasslands, and riparian communities.
- Maintenance of improvements to the Wildlife Area.
- Monitoring activities and scientific research.
- Ongoing coordination with public agencies and private entities consistent with the goals of this LMP.
- The provision of public information regarding the Wildlife Area that may include hardcopy and online data as well as other media.
- Update of Wildlife Area regulations.

- Enforcement of duly adopted laws and regulations.

This LMP is a general policy guide to the management of the Wildlife Area. It does not specifically authorize or make a precommitment to any substantive physical changes to the Wildlife Area. With the exception of ongoing restoration and enhancement, and operations and maintenance activities, any substantive physical changes that are not currently approved will require subsequent authorizations and approvals.

Because potential physical changes to the Wildlife Area would be a part of subsequent projects that have not yet been conceived, designed, or funded, it is not possible to reasonably evaluate the impacts of any such projects. Any such subsequent projects will be subject to CEQA review and will be considered in light of the contents of the LMP and this Initial Study. If a subsequent project is not included within the scope of this LMP (i.e., specific goals and tasks), it will require appropriate analysis and documentation pursuant to CEQA when it is conceived and proposed for approval.

2. **Location of Project:** The proposed project is located at the Yolo Bypass Wildlife Area, which occupies approximately 16,770 acres within the historic Yolo Basin of the Sacramento Valley and is part of DFG's Bay-Delta Region. It lies almost entirely within the Yolo Bypass in Yolo County, between the cities of Davis and West Sacramento.

3. **Project Proponent:** California Department of Fish and Game

4. **Said project will not have a significant effect on the environment for the following reasons:**

   The proposed project involves the adoption of a management plan, which of itself would cause no environmental impacts. Implementation of the management plan may include actions that would physically alter the environment. Possible actions that may result from the adoption and implementation of the management plan were anticipated and analyzed at a programmatic level.

   Although implementation of some elements of the plan (e.g., restoration or enhancement activities, operations, maintenance) would have the potential for environmental impacts, these impacts would not be substantial because of their small scale, because the LMP includes tasks that would require the avoidance of significant construction effects, and because many of these projects would enhance rather than degrade environmental resources. In addition, prior to implementation of any projects that are consistent with the LMP, DFG would subject them to CEQA review in light of the information in this document. Therefore, less-than-significant environmental impacts would be anticipated as a result of the adoption and implementation of this LMP.

5. As a result thereof, the preparation of an Environmental Impact Report pursuant to CEQA (Division 13 of the Public Resources Code of the State of California) is not required.

In accordance with Section 21082.1 of CEQA, DFG has independently reviewed and analyzed the Initial Study and Negative Declaration for the proposed project and finds that the Initial Study and Negative Declaration reflect the independent judgment of the DFG.

I hereby approve this project:

_____

INITIAL STUDY

PROJECT INFORMATION		
1.	Project Title:	Yolo Bypass Wildlife Area, Land Management Plan
2.	Lead Agency Name and Address:	California Department of Fish and Game Yolo Bypass Wildlife Area Headquarters 45211 County Road 32B Davis, CA 95616
3.	Contact Person and Phone Number:	Dave Feliz, Area Manager 530/757-2431
4.	Project Location:	Yolo County, California
5.	Project Sponsor's Name and Address:	Same as above
6.	General Plan Designation:	Agriculture
7.	Zoning:	Agricultural Preserve

8. Description of Project:

The project is the Land Management Plan (LMP) for the Yolo Bypass Wildlife Area (Wildlife Area). The purpose of the Wildlife Area is to protect and enhance habitat for wildlife species, and to provide the public with compatible, wildlife-related recreational uses. The Wildlife Area has existed since the first land acquisition in 1991 and this LMP proposes continuation of an ecosystem-based approach to management of the diverse mosaic of natural communities. The Wildlife Area provides habitat for special-status species, game species, and other native and nonnative species. This LMP consists of six chapters as follows:

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This Initial Study is intended to consider the whole of the project. As such, this project and this Negative Declaration include the following components:

- The ongoing operation of the Wildlife Area including the public uses incorporated in this LMP.
- Maintenance activities (e.g., habitat management and agricultural) to sustain the biological communities that provide habitat for wildlife and fisheries resources.
- Installation of minor improvements, such as signs and trails that do not involve substantial physical disruption of the Wildlife Area.
- Installation of minor improvements to promote compatibility with adjoining property that do not involve substantial physical disruption of the Wildlife Area.
- Restoration and enhancement of seasonal and permanent wetlands, grasslands, and riparian communities.
- Maintenance of improvements to the Wildlife Area.
- Monitoring activities and scientific research.
- Ongoing coordination with public agencies and private entities consistent with the goals of this LMP.

- The provision of public information regarding the Wildlife Area that may include hardcopy and online data as well as other media.
- Update of Wildlife Area regulations.
- Enforcement of duly adopted laws and regulations.

This LMP is a general policy guide to the management of the Wildlife Area. It does not specifically authorize or make a precommitment to any substantive physical changes to the Wildlife Area. With the exception of ongoing restoration and enhancement, and operations and maintenance activities, any substantive physical changes that are not currently approved will require subsequent authorizations and approvals.

Because potential physical changes to the Wildlife Area would be a part of subsequent projects that have not yet been conceived, designed, or funded, it is not possible to reasonably evaluate the impacts of any such projects. Any such subsequent projects will be subject to CEQA review and will be considered in light of the contents of the LMP and this Initial Study. If a subsequent project is not included within the scope of this LMP (i.e., specific goals and tasks), it will require appropriate analysis and documentation pursuant to CEQA when it is conceived and proposed for approval.

9.	Surrounding Land Uses and Setting: (Briefly describe the project's surroundings)	See Chapter 2 – Property Description and Chapter 3 – Environmental Setting
10:	Other public agencies whose approval is required: (e.g., permits, financing approval, or participation agreement)	No other public agency approval is required for the adoption of the Yolo Bypass Wildlife Area LMP.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology / Soils
☐ Hazards & Hazardous Materials	☐ Hydrology / Water Quality	☐ Land Use / Planning
☐ Mineral Resources	☐ Noise	☐ Population / Housing
☐ Public Services	☐ Recreation	☐ Transportation / Traffic
☐ Utilities / Service Systems	☐ Mandatory Findings of Significance	☒ None

DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial evaluation:

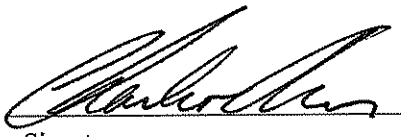
I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared. ☒

I find that although the proposed project COULD have a significant effect on the environment, there WILL NOT be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared. ☐

I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required. ☐

I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed. ☐

I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier **EIR** or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier **EIR** or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required. ☐



Signature

July 17, 2007

Date

Charles Armor

Printed Name

Acting Regional Manager

Title

Department of Fish and Game

Agency

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less-Than-Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less-than-significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

   a) Earlier Analysis Used. Identify and state where they are available for review.

   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9. The explanation of each issue should identify:
   the significance criteria or threshold, if any, used to evaluate each question; and
   the mitigation measure identified, if any, to reduce the impact to less than significance.

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I.	**Aesthetics. Would the project**				
	a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
	b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
	c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
	d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

DISCUSSION

a), b), d) No impact. Adoption and implementation of the proposed LMP would preserve existing native vegetation, agricultural, and natural visual resources, and would not involve the construction of any new buildings or outdoor lighting. Therefore, adoption of the LMP would not adversely affect scenic vistas, views, visual character, or scenic resources, nor would it create light or glare effects.

c) Less than significant impact. Implementation of some of the management tasks described in the proposed LMP would involve modifications to the existing landscape (e.g., restoration or enhancement activities, placement of signage, construction of new trail alignments). Activities that would be implemented as a result of adoption of the proposed LMP would improve aesthetic conditions in the Yolo Bypass Wildlife Area, because they involve protection, management, and enhancement of natural habitats. In addition, prior to implementation of any substantive projects that are consistent with the LMP, the DFG would subject them to CEQA review in light of the information in this document. The type of additional CEQA review completed would be determined based on CEQA Guidelines Sections 15162-15164.

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
II.	**Agricultural Resources.**				
	In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997, as updated) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland.				
	Would the project:				
	a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒	☐
	b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☒	☐
	c) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?	☐	☐	☒	☐

DISCUSSION

Proposed goals included in the LMP support continued agricultural practices (i.e., preservation of agriculture) combined with restoration or enhancement of portions of agricultural lands to natural communities. Restoration of portions of agricultural land to natural communities may represent an economic impact; however it does not represent an adverse physical environmental impact. CEQA requires lead agencies to determine "whether potential impacts to agricultural resources are significant environmental effects." A "significant effect on the environment" is defined as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, air quality, etc. An economic or social change by itself is not considered a significant effect on the environment (CEQA Guidelines Section 15382.). Section 15131(a) of the CEQA Guidelines further states that the "[e]conomic or social effects of a project shall not be treated as significant effects on the environment… The focus of the analysis shall be on the physical change."

In a memorandum to its departments, dated May 4, 2005, The Resources Agency described its policy for all departments to "recognize the importance of both permanent preservation of productive agricultural land and restoration, protection, and management of the state's natural, historic, and cultural resources." In selecting and developing resource-related projects, departments "should consider ways to reduce effects on productive agricultural land." To minimize these effects, departments should review the mitigation strategies presented in the CALFED Final Programmatic EIS/EIR (CALFED 2000a and 2000b) and incorporate those strategies or similar strategies, where appropriate. As discussed in Chapters 1 and 3 of the LMP, a review of the CALFED Programmatic EIS/EIR resulted in identification of several mitigation strategies that have been incorporated into

the LMP including five mitigation strategies specific to agricultural land and water use (see Chapter 3 of the LMP for a discussion on these mitigation strategies).

The primary function and agricultural history in the Yolo Bypass, provided in Section 3.2 and Chapter 4 of the LMP, illustrates the challenge of making agriculture successful within the Bypass. As described in the LMP, the agricultural lands of the Wildlife Area are currently subjected to regular flooding (and associated scour and sediment deposition) because they are within the Yolo Bypass Wildlife Area and cool Delta breezes because of their location in the Yolo Bypass floodway. These conditions create a challenging combination for landowners seeking to cultivate crops in the Bypass because they must perennially deal with inundation, clean-up, replanting, and weed control. Late spring flooding in the Bypass can be particularly damaging to farming operations. Floods can affect crops in a variety of ways. Floods in April–June can damage or destroy crops planted during dry periods in March–May. When this flooding happens, it is usually too late to replant those fields with a different crop resulting in complete loss of production for that year. Floods can also erode planting beds and furrows. If the ground remains too wet to work until May or June, the shortened season results in limited crop options and decreased yields (Yolo Basin Foundation 2001).

The maintenance of infrastructure, including roads, canals, drainage ditches, diversion structures, pumps, and wells is conducted on an as-needed basis, often in response to flood damage. Roads are sometimes eroded and require regrading or rebuilding. Some canals and ditches fill with sediment deposited from floods and require periodic excavation to maintain necessary flow capacity. East-west trending canals and ditches often create eddies and other hydraulic disturbances that can cause erosion and deposition of sediments and deposition of flood debris, such as tree limbs, agricultural vegetation, and irrigation pipes, in fields and canals. Such debris conditions can necessitate extensive cleanup efforts (Yolo Basin Foundation 2001).

a) Less-Than-Significant Impact. The Yolo Bypass Wildlife Area is currently owned by DFG, which purchased the land to restore and preserve native wetland and riparian habitat adjacent to the original Wildlife Area (see Exhibit 1-4 in the LMP). The Wildlife Area consists of Prime Farmland, Unique Farmland, Farmland of Local Importance, Farmland of Local Potential Importance, Grazing Land, and Other Land (see Table 3.2-1 in the LMP). Implementation of the proposed LMP would result in continued agricultural uses combined with restoration or enhancement of portions of agricultural lands to natural communities. Restoration and enhancement would change the restoration site's land use from commercial farming to non-commercial restoration/wildlife preservation. As with farming activities, much of the proposed restoration would also cultivate the soil; however, the direct benefit would include an increase in the diversity of plants and animals instead of agricultural commodities.

As discussed above and throughout the LMP, the management of farmland soils for agricultural purposes in the Yolo Bypass can expose them to some degree of degradation over time. Protection from flooding and associated sediment deposition, tilling, and the application of agricultural chemicals can adversely affect nutrient cycling, increase exposure to erosion, and inhibit natural soil microorganisms. In contrast, in restored wetlands, riparian woodlands, and grasslands, soils are improved in the nutrient values and physical composition that make them valuable for farming.

Restoration of habitat would re-establish long-term processes and functions present in natural communities, including the natural formation of soils that gave these sites their original agricultural value. Fully functioning ecosystems are also known to improve groundwater and surface water quality by removing undesirable constituents, such as pesticides (Brown and Wood 2002). Restoring portions of the Wildlife Area that are currently in agriculture could benefit onsite and adjacent agricultural lands by diminishing the volume and frequency of pesticides applied to the properties, slowing the loss of soils from the sites onto adjacent or downstream locations, and by increasing groundwater levels. Because the agricultural value of the soil is tied directly to the natural conditions and processes that existed before commercial agricultural development of the land, habitat restoration efforts would, in effect, be preserving (and possibly improving over time) the agricultural value of the soil (Cannon 2004, Tilman et al. 1996 and 2002).

While the current mission of DFG is to manage California's diverse fish, wildlife, and plant resources, and the habitats upon which they depend, for their ecological values and for their use and enjoyment by the public, there are no tasks included in the LMP that include the establishment of any facilities, structures, or land uses that would physically or economically preclude returning the land to cultivation in the future, if there were to be such a public policy decision. Implementation of the proposed LMP, which would maintain a mix of natural communities and agricultural lands on the Wildlife Area, would not be prohibitively costly to return to its present condition. Returning the land to cultivation would require removing the native vegetation and implementing some soil preparation, which is similar to the requirements of the original clearing of habitat necessary to create farmed land decades ago. Some infrastructure, such as roads and drainage, is necessary for management and maintenance of agricultural lands, as well as natural communities.

In contrast, when farmland is converted to urban uses, the resulting construction of urban infrastructure and buildings, and the compaction and paving of soils with cement or petrochemical products makes the conversion irreversible. When farmland is lost because of the encroachment of urban uses, the cost of returning these urban uses to farmed land would be prohibitive, given the necessity to demolish buildings and remove infrastructure, not to mention the consequent loss of resource values that made these soils productive in the first place when urban uses were constructed.

For the reasons provided above, implementation of the proposed LMP would not result in a permanent loss of acreage of Prime, Unique, or Statewide Important Farmlands and it would not cause damage to the physical properties of agricultural soils. Continued agricultural operations and restoration of portions of the Wildlife Area to habitat are expected to improve the physical characteristics of these lands within the Wildlife Area and downstream that originally contributed to their value as farmlands. Therefore, this impact is considered less than significant.

The proposed LMP is consistent with The Resources Agency policy memorandum concerning productive agricultural land and restoration of natural resources and with the CALFED strategy examples for minimizing effects on agricultural lands. The project "actively recognizes the importance of both permanent preservation of productive agricultural land and restoration, protection, and management of the state's natural, historic, and cultural resources." It helps DFG (in coordination with the Yolo Basin Foundation) conduct outreach and education on the importance of farmland in local and regional resource conservation and the importance of these lands for wildlife and flood control. Additionally, it provides Wildlife Area management critically necessary revenue from leases for continued operations and maintenance.

While social and economic consequences are not in of themselves environmental impacts under CEQA, socioeconomic considerations related to agricultural production resulting from implementation of the proposed LMP are briefly discussed below, in keeping with The Resources Agency policy.

Agricultural production supports considerable economic activity in Yolo County. Total agricultural revenues in Yolo County amounted to $338.1 million in 2004 and $332.1 million in 2005. Agricultural revenue associated with the Yolo Bypass Wildlife Area production amounted to $1.728 and $1.294 for the same years, respectively. Thus, the Yolo Bypass Wildlife Area represented approximately 0.45% of total revenue for the county (average of both years). While the total amount of agricultural land to be restored is currently undetermined, it is known that a large portion of existing agricultural land will remain in such use thereby reducing the potential lost agricultural production value by an even smaller proportion. Reducing agricultural production value by such a small proportion would have a minor, if not unnoticeable, economic effect in the county. Furthermore, restoration and maintenance of habitat on the Yolo Bypass Wildlife Area would be implemented using standard agricultural equipment and practices thereby continuing to support the local economy through farm equipment purchase, operation, and maintenance.

b) Less Than Significant. Before the Glide Ranch was acquired by the WCB, portions of the ranch (i.e., Tule Ranch and Causeway Ranch) were under Williamson Act contract (entered into by Peggy Glide Colby and

Thorton Glide on September 6, 1972). (The Geiberson Ranch portion of the Glide Ranch was not under Williamson Act contract.) Because the land was acquired by the State of California (i.e., WCB), a new Williamson Act contract was not required (pursuant to California Government Code Section 51295). Prior to the land acquisition, findings had to be made to allow WCB to purchase the land for the purpose of expanding the Wildlife Area. As stated in California Code Section 51292, it is the policy of the state that public agencies cannot locate public improvements in agricultural preserves unless specific findings can be made:

- The location is not based primarily on a consideration of the lower cost of acquiring land in an agricultural preserve. (Section 51292[a])

- If the land is agricultural land covered under a contract pursuant to this chapter for any public improvement, that there is no other land within or outside the preserve on which it is reasonably feasible to locate the public improvement (Section 51292[b])

The first finding was made (by Yolo County Planning and Public Works Department), as the selection of the properties was based on their historic wetland nature and their location relative to the original Yolo Bypass Wildlife Area. The properties represented an expansion of the Yolo Bypass Wildlife Area and contain interrelated water systems and accesses. This second required finding was also supported, as the purpose of the acquisition is both preservation of historic wetlands and expansion of the existing Yolo Bypass Wildlife Area, and the selected property is within the Bypass, is contiguous with the original Yolo Bypass Wildlife Area, and contains habitat acceptable for DFG's needs for species of concern. Another location would not have met these criteria (Yolo County Planning and Public Works Department 2001).

The Yolo County General Plan designates the Yolo Bypass Wildlife Area lands as agriculture zoned as A-P (Agricultural Preserve) and considers the following uses as appropriate under the "agricultural" land use designation:

- wildlife preserves;
- uses related to natural resources; and
- recreational uses.

Zoning for Agricultural Preserve states that "the purpose of the Agricultural Preserve Zone shall be to preserve land best suited for agricultural use from the encroachment of nonagricultural uses. The A-P zone is intended to be used to establish agriculture preserves in accordance with the California Land Conservation Act of 1965, as amended. Uses approved on contracted land shall be consistent and compatible with the provisions of the Act" (Yolo County Planning Department 1983). Principal uses (allowable with only site plan review and approval of facilities, infrastructure, health, and safety issues) include:

- agriculture (not dairies, stockyards, slaughterhouses, hog farms, fertilizer works, or plants for the reduction of animal matter);

- one single-family dwelling;

- parks, publicly owned, and

- rural recreation (defined as the shooting of skeet, trap, and sporting clays; archery; gun, hunting, or fishing clubs; dude ranches; health resorts, incidental and dependent upon primary agricultural use, and/or directly dependent upon a unique natural resources feature; the use of public or private lands or structures for commercial staging of rafting, hiking, backpacking, bicycling, and/or touring excursion).

Because the Yolo Bypass Wildlife Area lands are no longer under Williamson Act contract and all uses are consistent with principal uses identified in the Yolo County Agricultural Preserve designation, impacts on lands protected by the Williamson Act or zoned for agriculture would be less than significant.

c) Less Than Significant Impact. Implementation of the proposed LMP would not hinder or stop farming operations on adjacent properties. In fact, DFG is supportive of surrounding agricultural land uses and cooperatively manages and maintains shared infrastructure including water delivery and management systems with neighbors. Implementation of the proposed LMP would not involve land development activities (i.e., residential subdivisions, or commercial or industrial land uses) that would directly or indirectly induce changes in the use of surrounding agricultural land, such as the need for schools, public services, etc. Implementation of the LMP would not induce new residential, commercial, or industrial land development activities to occur in the future. Activities would be confined to the Wildlife Area and no substantial new infrastructure would be required off-site. The project would restore the plant and animal communities in keeping with the existing managed facilities in the Wildlife Area. New types of land use would not be introduced into any areas that are currently rural and is composed primarily of open space uses. Furthermore, the Yolo Bypass Wildlife Area would allow for continued and increased opportunities for agriculture-related education, experimentation and development of wildlife friendly agriculture practices (e.g., rice rotation, shorebird – rice rotation), and agroecology research.

For the reasons provided above, implementation of the proposed LMP would not involve other changes in the existing environment, which, due to their location or nature, could result in conversion of farmland to non-agricultural use. Therefore, this impact is considered less than significant.

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
III.	**Air Quality. Would the project:**				
	Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied on to make the following determinations.				
	a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
	b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
	c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
	d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
	e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

DISCUSSION

a), b), c), d), e) Less than significant impact. Although implementation of some of the management tasks described in the proposed LMP could involve the use of construction equipment (e.g., continued operations and maintenance, restoration or enhancement activities) thus increasing equipment emissions, these would be short term impacts and would not cause a considerable cumulative net increase of air pollutants. Potential restoration projects could include the excavation of wetlands, which could release objectionable odors, but it is not anticipated that these types of odors would be released in large quantities. Also, because the Yolo Bypass Wildlife Area is located in the large expansive Yolo Bypass, these odors would not be anticipated to reach a substantial number of people. In addition, prior to implementation of any projects that are consistent with the LMP, DFG would subject them to CEQA review in light of the information in this document. The type of additional CEQA review completed would be determined based on CEQA Guidelines Sections 15162-15164.

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IV.	**Biological Resources. Would the project:**				
	a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?	☐	☐	☒	☐
	b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?	☐	☐	☒	☐
	c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐
	d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
	e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
	f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

DISCUSSION

a), b), c), d) Less Than Significant Impact. Although implementation of some of the management tasks described in the proposed LMP would have the potential for temporary construction impacts to wildlife and sensitive habitats such as wetlands (e.g., restoration or enhancement activities), it is anticipated that these impacts would not be substantial and that these projects would have a net benefit to wildlife and habitat. Any of these types of activities would be implemented in conformance with regulatory requirements such as DFG regulations, U.S. Fish and Wildlife Service (USFWS) regulations, State Water Quality Control Board (SWQCB) regulations, Section 404 of the Clean Water Act (CWA), and any applicable plans or ordinances protecting biological resources.

The LMP includes habitat preservation and enhancement as primary goals for the protection of both wildlife and their habitat. It also ensures that all actions comply with federal and state Endangered Species Acts (ESA and CESA) and other applicable regulations aimed at the protection of special-status species and wildlife, including

the existing Memorandum of Understanding (MOU) with the USFWS, California Department of Water Resources (DWR), and the State Reclamation Board regarding the management of special-status species at the Yolo Bypass Wildlife Area (see Appendix D).

In addition, prior to implementation of any tasks that are consistent with the LMP, DFG could subject them to CEQA review in light of the information in this document. The type of additional CEQA review completed would be determined based on CEQA Guidelines Sections 15162-15164.

e), f) No Impact. Yolo County is currently in the process of preparing a Natural Community Conservation Plan (NCCP). No existing adopted Habitat Conservation Plan (HCP), NCCP, or other conservation plan is currently in place for Yolo County. This LMP includes tasks that direct DFG and the Yolo Bypass Wildlife Area to cooperate with the development and implementation of existing restoration plans including the forthcoming Yolo County NCCP. Therefore, adoption of the proposed LMP would not conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan.

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
V.	**Cultural Resources. Would the project:**				
	a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☐	☒	☐
	b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☐	☒	☐
	c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
	d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

DISCUSSION

a), b), c), d) Less Than Significant Impact. Although implementation of some of the management tasks described in the proposed LMP would involve ground disturbance (e.g., ongoing operations and maintenance, and restoration or enhancement activities), the LMP includes requirements for cultural resource surveys prior to major ground disturbance (e.g., excavations below normal plow depths) at undisturbed sites, and consultation with a qualified archaeologist in the case of an inadvertent discovery. The State Historic Preservation Officer consultation required by the plan would identify and protect any historic resources prior to their demolition. In addition, prior to implementation of any projects that are consistent with the LMP, DFG would subject them to CEQA review in light of the information in this document. The type of additional CEQA review completed would be determined based on CEQA Guidelines Sections 15162-15164.

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VI.	**Geology and Soils. Would the project:**				
	a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
	i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)	☐	☐	☒	☐
	ii) Strong seismic ground shaking?	☐	☐	☒	☐
	iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
	iv) Landslides?	☐	☐	☒	☐
	b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
	c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
	d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial risks to life or property?	☐	☐	☒	☐
	e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

DISCUSSION

a), b), c), d), Less Than Significant Impact. Implementation of some of the management tasks described in the proposed LMP would involve ground disturbance (e.g., restoration or enhancement activities), but these activities would be implemented using standard agricultural practices designed to minimize soil erosion and/or topsoil loss, and would be conducted in conformance with regulatory requirements regarding soil erosion. In addition, prior to implementation of any projects that are consistent with the LMP, the DFG would subject them to CEQA review in light of the information in this document. The type of additional CEQA review completed would be determined based on CEQA Guidelines Sections 15162-15164.

e) No Impact. No construction of septic tanks or alternative waste water disposal systems is proposed as part of the LMP nor would any be required as a result of the implementation of any of the LMP goals or tasks; therefore, implementation of the LMP would result in no impact.

ENVIRONMENTAL ISSUES		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. Hazards and Hazardous Materials. Would the project:					
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h)	Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

DISCUSSION

a), b) Less Than Significant Impact. Implementation of some of the management tasks described in the proposed LMP would involve a potential for exposing people or the environment to hazardous materials (e.g., ground disturbance and use of heavy equipment during restoration or enhancement activities). However, prior to ground disturbance in areas that have experienced development or disturbance and could contain hazardous materials, a hazardous materials assessment would be conducted. In addition, prior to implementation of any projects that are consistent with the LMP, DFG would subject them to CEQA review in light of the information in

this document. The type of additional CEQA review completed would be determined based on CEQA Guidelines Sections 15162-15164.

c), d), e), f), g), h) No Impact. The Wildlife Area is located within the Yolo Bypass and is not within a ¼ mile of any schools, within any airport land use plans, or in the vicinity of private airstrips. The few residences in the Wildlife Area (outside Bypass levees) are intermixed with wildlands; however, adoption and implementation of the fire management goal and accompanying tasks would decrease potential risks of loss, injury or death involving wildland fires.

ENVIRONMENTAL ISSUES		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. project:	**Hydrology and Water Quality. Would the**				
a)	Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial on- or off-site erosion or siltation?	☐	☐	☒	☐
d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in on- or off-site flooding?	☐	☐	☒	☐
e)	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f)	Otherwise substantially degrade water quality?	☐	☐	☐	☒
g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☒	☐
h)	Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☒	☐
i)	Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒	☐
j)	Result in inundation by seiche, tsunami, or mudflow?	☐	☐	☒	☐

DISCUSSION

a), c), d) Less than significant impact. Implementation of some of the management tasks described in the proposed plan (e.g. restoration or enhancement activities) would involve a potential for the discharge of sediments or pollutants and alteration of drainage patterns. However, these projects would be conducted in conformance with regulatory requirements regarding erosion and sediment control, flooding, and water quality protection, and would be implemented with a goal of a net improvement in water quality.

Additionally, during the design phase of any potential projects, DFG would be required to coordinate with DWR, the State Reclamation Board, USACE, and, where appropriate, local flood control agencies, reclamation districts, and SAFCA regarding the design and operation of restoration and enhancement projects that have the potential to conflict with necessary flood flow conveyance requirements. All projects shall continue to be designed and operated to continue to have no impact on existing flood flow conveyance requirements of the Yolo Bypass. Additionally, design and operation of habitat restoration and enhancement projects shall consider effects on the Yolo Bypass design flow as well as its current capacity and on the ability to maintain the flood control project at reasonable costs in conformance with USACE operation and maintenance manuals. Project planning may include necessary hydraulic modeling to guide design and confirm achievement of performance criteria (i.e., avoid potential adverse effects on necessary flow conveyance). All hydraulic modeling would be conducted in coordination with appropriate flood control and management agencies. (The work plan for hydraulic modeling is provided in Appendix C.)

In addition, prior to implementation of any projects that are consistent with the LMP, the department would subject them to CEQA review in light of the information in this document. The type of additional CEQA review completed would be determined based on CEQA Guidelines Sections 15162-15164.

b), e), g), h), i), j) No impact. Adoption of the proposed plan would not utilize additional surface or groundwater resources, create or contribute stormwater runoff, construct new buildings or impervious surfaces, or alter existing risks of seiche, tsunami, or muflow.

In addition, prior to implementation of any projects that are consistent with the LMP, the department would subject them to CEQA review in light of the information in this document. The type of additional CEQA review completed would be determined based on CEQA Guidelines Sections 15162-15164.

f) No Impact. The proposed LMP includes habitat restoration component that includes restoration of existing agricultural land to natural communities (e.g., seasonal and permanent wetlands, riparian woodlands, and grasslands). Restoration of natural communities and associated physical, chemical, and biological processes generally have beneficial effects on water quality. One water quality variable of concern associated with restoration of wetlands, however, is mercury (Hg).

As discussed in Section 3.4 of the LMP, mercury (Hg) results from natural and anthropogenic sources in the environment and continually cycles in the aquatic environments of the Sacramento River basin and the Sacramento-San Joaquin Delta (Delta). A significant proportion of the loads of Hg and methyl mercury (MeHg) to San Francisco Bay and the Delta are thought to come from Cache Creek via the Yolo Bypass (Domagalski et al. 2002). In-Delta methyl mercury (MeHg) formation processes may be as important a factor to ecosystem exposure and uptake in the food chain as the much larger overall riverine inputs of mineralized forms.

Methylation of Hg is the key step in the entrance of Hg into the food web. Nearly 100% of the Hg that bioaccumulates in fish tissue is methylated. The rates of methylation are influenced by the bioavailability of inorganic Hg to methylating bacteria, the concentration and form of inorganic Hg, and the distribution and activity of methylating (i.e., sulfate-reducing) bacteria (Jones and Slotten 1996; Heim et al. 2003). Solid phase MeHg concentrations vary seasonally; the highest concentrations occur during late spring and summer (Heim et al. 2003). Gill et al. (2002) found that sediments appear to be a net source of methyl mercury to the water column.

Stephenson et al. (2002), who employed a mass balance approach, suggests that the Delta is a sink for methyl mercury, due to photodemethylation or storage via bioaccumulation. Slotton et al. (2003) suggests that inorganic mercury newly delivered from upstream sources is more readily methylated and bioaccumulated than inorganic mercury stored in the Delta and lower tributaries.

Wetlands may export MeHg to surrounding channels (Heim et al. 2003); however, there is still much to learn about MeHg production and export processes from wetlands. Recent studies in the Delta indicate that some wetlands import and some export MeHg (Stephenson, personal communication). In addition, two almost identical wetlands on Twichell Island that differ only in depth produce very different amounts of MeHg (Stephenson, personal communication). These results indicate it is not possible to predict whether the wetlands proposed will increase or decrease the net MeHg in adjacent channels. The existing channels and drains in the area have been shown to have high levels of MeHG in the water and Green's Lake has fish that contain relative high levels of Hg. Evidence to suggest that the proposed wetlands would not add significantly to water bodies in the surrounding areas includes: 1) the amount of proposed acreage added is relatively small in comparison to the amount of existing acreage; and 2) the concentrations in water and fish in surrounding water bodies is currently high. Therefore, if there were exports of MeHg out of the proposed wetlands, the concentrations in the exports would have to be extremely high to result in significant additions to the adjacent watershed.

Furthermore, Hg research from the Delta and tributaries consistently indicates that sediment MeHg concentrations, MeHg formation and demethylation, organism uptake and bioaccumulation, and mass flux of MeHg transfer from sediment to water are highly dynamic processes that can vary considerably, depending on the habitat (e.g., wetlands/marsh, agriculture, open water), location in the region, and a host of other factors (e.g., hydrologic factors, salinity, pH, temperature, organic matter, temporal-seasonal conditions) (Jones and Slotten 1996, Foe 2002, Gill et al. 2002, Stephenson et al. 2002, Choe and Gill 2003, Choe et al. 2003, Davis et al. 2003, Foe et al. 2003, Heim et al. 2003, Slotten et al. 2003, Wiener et al. 2003). It is this wide diversity of processes, all of which contribute to MeHg interactions, that makes the analysis of potential impacts of restored wetlands resulting in significant increased MeHg too speculative for evaluation (14 CCR Section 15146).

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IX.	**Land Use and Planning. Would the project:**				
	a) Physically divide an established community?	☐	☐	☐	☒
	b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
	c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

DISCUSSION

a), b), c) No Impact. The proposed LMP would not require any physical changes to an established community, nor would implementation of any activity following adoption of the LMP physically divide an established community. The Wildlife Area is in conformance with State Lands Commission plans, and the LMP has been developed in conformance with land management plans (e.g., general plans) for adjacent areas. The goals of the LMP provide for natural resource protection and preservation and require that any projects implemented following adoption of the proposed LMP conform with any habitat conservation plans and natural community conservation plans that may be applicable at that time.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
X. Mineral Resources. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

DISCUSSION

a), b) No Impact. Implementation of the LMP would not result in resource extraction. The Wildlife Area is not located within a mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan (Yolo County Planning Department 1983), therefore, the proposed LMP would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state or conflict with mineral resource protection plans or result in the loss of a known mineral resource. There would be no impact.

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XI.	**Noise. Would the project result in:**				
	a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?	☐	☐	☒	☐
	b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
	c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
	d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
	e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
	f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

DISCUSSION

a), b), c), d), Less Than Significant Impact. Although implementation of some of the management tasks described in the proposed LMP would involve the use of farm equipment and could involve the use of construction equipment (e.g., restoration or enhancement activities) thus temporarily increasing ambient noise, these activities would not be anticipated to result in a substantial increase in ambient noise levels generated by existing hunting and regular agricultural activities. Furthermore, because the Wildlife Area is geographically located in the expansive Yolo Bypass, these types of short term noise impacts would not be anticipated to reach a substantial number of people.

In addition, prior to implementation of any projects that are consistent with the LMP, the department would subject them to CEQA review in light of the information in this document. The type of additional CEQA review completed would be determined based on CEQA Guidelines Sections 15162-15164.

e), f) No Impact. The Yolo Bypass Wildlife Area is not located within 2 miles of an airport land use plan or a public airport, or in the vicinity of private airport. Additionally, the proposed LMP would not result in the development of any noise-sensitive receptors, nor would the LMP result in the exposure of people residing or working in the Wildlife Area to excessive noise levels. No impact is anticipated to occur.

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XII.	**Population and Housing. Would the project:**				
	a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
	b) Displace substantial numbers of existing homes, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
	c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

DISCUSSION

a), b), c). No Impact. The proposed LMP does not involve any change in housing nor would it induce growth by the provision of new infrastructure or by the removal of any barriers to growth. Implementation of some of the management goals and tasks may require additional staff hours, but this would not be anticipated to induce a population growth that would require additional housing.

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII.	**Public Services. Would the project:**				
	a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
	Fire protection?	☐	☐	☒	☐
	Police protection?	☐	☐	☒	☐
	Schools?	☐	☐	☒	☐
	Parks?	☐	☐	☒	☐
	Other public facilities?	☐	☐	☒	☐

DISCUSSION

a) Less Than Significant Impact. Adoption of the proposed LMP would not require substantial changes to existing levels of public services. Implementation of public use, facilities, and fire management goals could require a minimal increase in staff hours per year by the fire department, the County Sheriff's department, and DFG staff, but these potential minimal increases would not be anticipated to create the need for new or altered facilities. In addition, prior to implementation of any projects that are consistent with the LMP, the DFG would subject them to CEQA review in light of the information in this document. The type of additional CEQA review completed would be determined based on CEQA Guidelines Sections 15162-15164.

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV.	**Recreation. Would the project:**				
	a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
	b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☒	☐

DISCUSSION

a), b) Less Than Significant Impact. Adoption and implementation of the proposed LMP would continue existing levels of wildlife-dependent recreational use of the Wildlife Area. The number of these recreational users would not exceed the carrying capacity of the natural resources or degrade existing natural features or recreational facilities. In addition, prior to implementation of any projects that are consistent with the LMP, the DFG would subject them to CEQA review in light of the information in this document. The type of additional CEQA review completed would be determined based on CEQA Guidelines Sections 15162-15164.

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XV.	**Transportation and Traffic. Would the project:**				
	a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☐	☐	☒
	b) Exceed, individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒
	c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
	d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
	e) Result in inadequate emergency access?	☐	☐	☐	☒
	f) Result in inadequate parking capacity?	☐	☐	☐	☒
	g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☒

DISCUSSION

a), b), c), d), e), f), g) No Impact. Levels of use at the Wildlife Area are anticipated to remain the same following adoption of the LMP. Therefore, no changes are anticipated to automobile, boat, or air traffic levels. The primary road access to the Wildlife Area is Chiles Road, which ends at the west levee of the Yolo Bypass. No design changes are proposed for current road access, nor are any changes anticipated with traffic patterns; therefore, no traffic hazards are anticipated. Because no changes to current traffic levels or patterns are anticipated, no changes to emergency access or parking are anticipated and adoption of the plan would not interfere with alternative transportation plans.

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI.	**Utilities and Service Systems. Would the project:**				
	a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
	b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
	c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
	d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
	e) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?	☐	☐	☒	☐
	f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
	g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

DISCUSSION

a), b), c), d), e), f), g) Less Than Significant Impact. Levels of use at the Wildlife Area are anticipated to remain the same following adoption of the LMP. The LMP does not include a proposal for additional storm drain facilities, additional water supplies, additional wastewater treatment, or additional solid waste disposal. All existing residences that have water treatment facilities use septic systems. Adoption of the proposed LMP and implementation of the goals and tasks contained therein would not require the construction of new residences or service-related facilities; therefore, adoption of the proposed LMP would generate no new demand for or changes to storm drain facilities, additional water supplies, additional wastewater treatment, or additional solid waste disposal. In addition, prior to implementation of any projects that are consistent with the LMP, DFG would subject them to CEQA review in light of the information in this document. The type of additional CEQA review completed would be determined based on CEQA Guidelines Sections 15162-15164.

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII.	**Mandatory Findings of Significance.**				
	a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
	b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☐	☒	☐
	c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Authority: Public Resources Code Sections 21083 and 21087.
Reference: Public Resources Code Sections 21080(c), 21080.1, 21080.3, 21082.1, 21083, 21083.3, 21093, 21094, 21151; *Sundstrom v. County of Mendocino*, 202 Cal.App.3d 296 (1988); *Leonoff v. Monterey Board of Supervisors*, 222 Cal.App.3d 1337 (1990).

DISCUSSION

a). Less than Significant Impact. Adoption of the proposed LMP and implementation of the goals and tasks contained therein would help preserve and enhance natural resources. Some activities that could be implemented as a result of adoption of the proposed LMP would have a potential for impacts to biological and cultural resources (e.g., restoration or enhancement activities), as described in Sections IV and V above. However, because activities would be conducted following all applicable regulatory requirements, because many of the goals and tasks are designed to have a net benefit to these resources, and because no large scale projects are anticipated which could threaten entire populations or communities, adoption of the proposed LMP would not be anticipated to cause a significant impact to these biological or cultural resources. In addition, prior to implementation of any projects that are consistent with the LMP, the DFG would subject them to CEQA review in light of the information in this document. The type of additional CEQA review completed would be determined based on CEQA Guidelines Sections 15162-15164.

b) Less Than Significant Impact. Adoption of the proposed LMP and implementation of the goals and tasks contained therein would not require any substantial infrastructure improvements or new construction, and any implementation activities would be conducted following all applicable regulatory requirements. In addition, most of the proposed goals and tasks are proposed to encourage a net benefit to environmental conditions. Therefore, although there is a potential for some temporary and less than significant impacts to the environment as described above, none of these impacts are anticipated to be cumulatively considerable. In addition, prior to implementation of any projects that are consistent with the LMP, the DFG would subject them to CEQA review in light of the

information in this document. The type of additional CEQA review completed would be determined based on CEQA Guidelines Sections 15162-15164.

c) Less than Significant Impact. The proposed project is a LMP, with no construction or substantive physical changes proposed. Implementation of the LMP would comply with all applicable laws and regulations. As a result, adoption of the proposed LMP and implementation of the goals and tasks contained therein is not anticipated to have any direct or indirect environmental effects which would cause substantial adverse effects on human beings.

REFERENCES

CALFED Bay–Delta Program. 2000a (July). Final Programmatic Environmental Impact Statement and Environmental Impact Report. Including portions of the Ecosystem Restoration Program Plan. Including the Multi-Species Conservation Strategy, Technical Appendix. Sacramento, CA.

———. 2000b (August 28). Final Programmatic Environmental Impact Statement and Environmental Impact Report. Programmatic Record of Decision. Sacramento, CA.

Cannon, T. R. 2004. Farmland Conversion: Should Habitat 'Mitigate' to Agribusiness. Association of Environmental Professionals. *Environmental Monitor*.

Choe, K. Y. and Gill, G. A. 2003. Distribution of particulate, colloidal, and dissolved mercury in San Francisco Bay estuary. 2. Monomethyl mercury. *Limnology and Oceanography* 48: 1547–1556.

Choe, K. Y., Gill, G. A., and Lehman, R. 2003. Distribution of particulate, colloidal, and dissolved mercury in San Francisco Bay estuary. 1. Total mercury. *Limnology and Oceanography* 48: 1535–1546.

Davis, J., Yee, D., Collins, J., Schwarzbach, S., and Luoma, S. 2003. *Potential for Increased Mercury Accumulation in the Estuary Food Web* In: Larry R. Brown, editor. Issues in San Francisco Estuary Tidal Wetlands Restoration. San Francisco Estuary and Watershed Science. Vol. 1, Issue 1 (October 2003), Article 4.

Domagalski, J. L., Alpers, C. N., Slotton, D. G., Suchanek, T. H., and S. M. Ayers. 2004. *Mercury and Methylmercury Concentrations and Loads in Cache Creek Basin, California, January 2000 through May 2001: U.S. Geological Survey Scientific Investigations Report.* 2004–5037.

Foe, C. 2002. Mercury *mass balance for the freshwater Sacramento-San Joaquin Bay-Delta Estuary*. Draft Final Report to the California Bay Delta Authority. Sacramento, CA.

Foe, C., M. Stephenson, and S. Stanish. 2003. *Pilot Transplant Studies with the Introduced Asiatic Clam,* Corbicula fluminea, *to Measure Methyl Mercury Accumulation in the Sacramento-San Joaquin Delta Estuary*. In CALFED Final Report titled "An Assessment of Human Health and Ecological Impacts of Mercury in the Bay-Delta Watershed."

Gill, G. A., Lehman, R., Choe, K. Y., and Han, S. 2002. *Sediment-water exchange and estuarine mixing fluxes in the San Francisco Bay-Delta watershed*. Draft Final Report to the California Bay Delta Authority. 139 pp.

Heim, W. A., Coale, K., and Stephenson, M. 2003. Methyl and total mercury spatial and temporal trends in surficial sediment of the San Francisco Bay-Delta. Final Report to the California Bay Delta Authority.

Jones, A. and Slotton, D. 1996. *Mercury Effects, Sources, and Control Measures. A Special Study of the San Francisco Estuary Regional Monitoring Program, San Francisco Estuary Institute.* Richmond, CA.

Marvin-DiPasquale, Mark C. Water Resource Division, U.S. Geological Survey, Menlo Park, CA. March 21, 2005—interview conversation with EDAW staff regarding recent Delta methyl mercury research.

Slotten, D. G., S. M. Ayers, T. H. Suchanek, R. D. Weyand, A. M. Liston, C. Asher, D. C. Nelson, and B. Johnson. 2003. *The Effects of Wetland Restoration on the Production and Bioaccumulation of Methyl mercury in the Sacramento-San Joaquin Delta, California.* In CALFED Final Report titled "An Assessment of Human Health and Ecological Impacts of Mercury in the Bay-Delta Watershed."

Stephenson, Mark. Marine Pollution Studies Lab, California Department of Fish and Game, Moss Landing, CA. February 16, 2006—interview conversation with EDAW and DFG regarding recent methyl mercury research.

Stephenson, M., Coale, K., Gill, G., Foe, C., Marvin-DiPasquale, M. 2002. *Conceptual model and working hypotheses of mercury cycling and transport in the Bay-Delta ecosystem and its tributaries.* Draft Final Report to the California Bay Delta Authority. 28 pp.

Tilman, D., D. Wedin and J. Knops. 1996. Productivity and sustainability influenced by biodiversity in grassland ecosystems. *Nature* 379:718-720.

Tilman, D., K. Cassman, P. Matson, R. Naylor and S. Polasky. 2002. Agricultural sustainability and intensive production practices. *Nature* 418:671-677

Wiener, J., Gilmour, C., and Krabbenhoft, D. 2003. *Mercury Strategy for the Bay-Delta Ecosystem: A Unifying Framework for Science, Adaptive Management, and Ecological Restoration.* Final Report to the California Bay-Delta Authority. Sacramento, CA.

Yolo Basin Foundation. 2001 (August). A Framework for the Future: Yolo Bypass Management Strategy. Davis, CA. Prepared by Jones & Stokes (J&S 99079). Sacramento, CA.

Yolo County Planning Department. 1983. Yolo County General Plan.