

APPENDIX B

INITIAL STUDY

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APPENDIX G Environmental Checklist Form

1. Project title: Sacramento River Restoration: Chico Landing Sub-reach RM 178-206
2. Lead agency name and address: California Bay-Delta Authority, 650 Capitol Mall, 5th Floor, Sacramento, CA 95814
3. Contact person and phone number: Rhonda Reed, CBDA; 916-445-5511
4. Project location: Three tracts of land within the Sacramento River Conservation Area: Sunset Ranch, which is a 25-acre tract south of Hwy 32 in Butte County; Capay, which is 550 acres in Glenn County southeast of Hamilton City; and Deadman's Reach, 238 acres approximately one-half mile north of Ord Ferry Road in Butte County.
5. Project sponsor's name and address: The Nature Conservancy, 500 Main St., Chico, CA 95928 office (530) 897-6370, ext. 213
6. General plan designation: Intensive agriculture (Glenn County) and Orchard and Field Crops (Butte County)
7. Zoning: The parcels in Butte County are zoned A-40; the Glenn County parcel is agricultural preserve
8. Description of project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)

Sacramento River Restoration: Chico Landing Sub-Reach RM 178-206 is a restoration project to restore approximately 813 acres of land on three tracts in Butte and Glenn Counties. Sunset Ranch (25 acres) is located in Butte County at river mile 199 east bank. Capay (550 acres) is located in Glenn County at river mile 194-193 west bank. Dead Man's Reach (238 acres) is located in Butte County at river mile 186.5-185 east bank. All three parcels are part of the US Fish and Wildlife Service Sacramento River National Wildlife Refuge.

The project will consist of vegetation removal and replacement as necessary to meet the goal of riparian habitat restoration that will improve the ecological health and long-term viability of at-risk species and biological communities of the Sacramento River while simultaneously increasing the benefits (e.g., improved water quality, flood damage reduction), that the river provides to humans. Vegetation removal will include removal of full-size almond trees (Deadmans Reach site only), mowing, tilling with tractors and application of herbicide. Some irrigation systems will be modified and eventually removed. In order to eradicate non-native plants, repeat applications of herbicides may be used. The intended replacement vegetation includes grasses, cover crops, riparian herbs and shrubs, willows, cottonwoods, and oaks. Precise footprints of plantings are not available at this time but will be developed during the planning phase of the project after completion of CEQA requirements. The project will be informed by previously approved research being undertaken by The Nature Conservancy (TNC) designed to test non-native plant eradication and native plant recruitment techniques. TNC intends to use subcontracts with local farmers to maintain the plantings at a level of 80% survival.

This project is consistent with, and would implement the CALFED Ecosystem Restoration Program plan in the Red Bluff Diversion Dam to Chico Landing and Chico Landing to Colusa Ecozones. The ERP plan is available for review at <http://calwater.ca.gov/Programs/EcosystemRestoration/Ecosystem.shtml>. As a CALFED Ecosystem Restoration Program project, the project proponents will follow the CALFED Multi-species Conservation Strategy for any necessary endangered species act compliance for the project. This project is supported by the USFWS and will conform to the USFWS Comprehensive Conservation Plan and Environmental Assessment for the Sacramento River National Wildlife Refuge and will conform to performance standards outlined in that document such as buffers, vector control, fencing, etc.

9. Surrounding land uses and setting: Briefly describe the project's surroundings: The project will occur at 3 discrete sites amid a predominantly-agricultural floodplain area. The areas around the 3 sites are either in conservation ownership, easement or continuing agriculture

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.) *The CBDA is a state agency which must comply with CEQA and the lead agency for this project. Other permitting requirements are being evaluated. It may be awarding a grant to The Nature Conservancy to carry out the project. The Nature Conservancy is authorized by the US Fish and Wildlife Service to perform habitat restoration work on the subject parcels.*

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.

- | | | |
|--|--|---|
| <input type="checkbox"/> Aesthetics | <input checked="" type="checkbox"/> Agriculture Resources | <input type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology /Soils |
| <input type="checkbox"/> Hazards/Hazardous Materials | <input checked="" type="checkbox"/> Hydrology / Water Quality | <input type="checkbox"/> Land Use / Planning |
| <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Noise | <input type="checkbox"/> Population / Housing |
| <input checked="" type="checkbox"/> Public Services | <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation/Traffic |
| <input type="checkbox"/> Utilities / Service Systems | <input checked="" type="checkbox"/> Mandatory Findings of Significance | |

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 has been (1) adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) 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 have been (1) analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (2) 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

Date

Printed name: Rhonda Reed

Title: Deputy Program Manager, ERP

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:

- a) the significance criteria or threshold, if any, used to evaluate each question; and
- b) the mitigation measure identified, if any, to reduce the impact to less than significance

Checklist text appears as plain font and project-specific responses and discussion (e.g. significance criteria) as *italics*.

	Less Than Significant		
Potentially Significant Impact	With Mitigation Incorporated	Less Than Significant Impact	No Impact

I. AESTHETICS

Significance criteria for aesthetics: A significant impact would be if changes in landform, vegetation, or structural features create substantially increased levels of visual contrast as compared to surrounding conditions.

Would the project:

- a. Have a substantial adverse effect on a scenic vista?

This floodplain area does not offer many topographic high points from which a vista can be viewed. Nevertheless, there will be some changes to the appearance of the area. Landscape will be changed from cropland and orchard to complex riparian and savanna ecosystems. The intention is for vegetation and wildlife variety to increase, making a generally positive or neutral change in aesthetics. (Reference 1, page 3)

- b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

There are no scenic highways within visual distance of the project sites. (Reference 2)

- c. Substantially degrade the existing visual character or quality of the site and its surroundings?

The project may include removal of vegetation, which will be unaesthetic for short periods of time, but the predominant change in the visual character of the site will be to replace fallow cropland and abandoned orchards with a mixture of grassland and riparian forest habitat that appears natural and undisturbed. (Reference 5, pages 7-13 and elsewhere)

- d. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

The project will not include installation of lighting. (Reference 5, page 127)

II. AGRICULTURE 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) prepared by the California Dept. 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?

Two of the three parcels involve land that is classified as prime and statewide important on the FMMP maps. The 238-acre Deadman's reach parcel in Butte County includes prime soils; the 550-acre Capay parcel in Glenn County includes prime and statewide important soils; the 25-acre Sunset parcel in Butte County includes no soils of statewide importance or local significance. The parcels have been used for agricultural production in the past, but are highly flood prone. The proposed project would permanently change the condition on the property to a non-agricultural use, however, whether this change constitutes a significant effect on the physical environment requires further evaluation.

b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?

Williamson Act contracts are no longer in effect on any of the three properties. All three properties are owned by the United States.

The Glenn County zoning code provides for use of the Capay parcel as wildlife refuge. (Reference 12)

The two Butte County sites are zoned agricultural and the zoning code does not provide for their use as publicly-accessible wildlife refuge. (See Butte County Code, especially Sections 24-20(c) and 24-90). However, the Land Use Element of the General Plan provides that "hunting and water-related recreation facilities" and "environmental preservation activities" are secondary uses allowed within the Orchard and Field Crops zone. (Reference 21) As noted above, lands are under federal ownership.

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?

CEQA requires consideration of direct and indirect effects to the environment. When wildlife habitat adjoins farmed land, there is potential for insects and animals to damage crops (foraging on adjacent fields, for instance) or for farming practices to affect wildlife (wind drift bringing chemicals into the refuge environment, for instance.) In a worst-case scenario, conflict with the adjacent land use could lead to farmland being taken out of production. For the subject project, such effects on adjoining parcels would be potential indirect effects. Based on the analysis in the Comprehensive Conservation Plan for these lands (Reference 5), these indirect impacts will be prevented or mitigated by instituting a "buffer zone" concept (not planting any habitat plants that are incompatible with standard agricultural practices at the edges of the parcel, for example). Refuge lands are managed (as with fencing, for example) to prevent trespassing of the public onto neighboring private lands, so no loss of agricultural productivity on other parcels (due to vandalism or theft, for instance), is anticipated. (Reference 5, page 119)

The proposed project will not contribute to conversion of agricultural land to more intensive use (such as commercial or residential use), because there will be no provision of infrastructure to support development.

III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

Significance Criteria – the project would be considered significant in its potential to impact air quality if it violated a standard or (if technically exempt) was equivalent to what would violate a standard.

a. Conflict with or obstruct implementation of the applicable air quality plan?

The project would include operation of tractors. Although the Northern Sacramento Valley Air Basin is being impacted by emissions from gasoline and diesel-burning agricultural equipment, operation of such equipment does not violate or obstruct implementation of any applicable air quality plan. The local program most resembling an air quality plan is: the districts and the basin are implementing the requirements of SB 700 (which regulates stationary diesel-fueled irrigation pumps) as applying to growers of more than 1,850 acres of rice or more than 7,140 acres of orchard crops; this project will not fall into that category. (Reference 3)

b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

The project will include operation of some machinery which burns fuels and produces emissions. It may also involve practices which generate relatively small amounts of dust. Dust is a significant contributor to air pollution in the particles less than 10 microns in diameter (PM10) category. However, the project will put permanent vegetative cover in place on some lands which have been plowed (wind blowing on bare soil can contribute to PM10 pollution) in the past, so the net contribution of the project to violation of air quality standards is expected to be less than significant. (Reference 1, pages 2-5)

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)?

The project will occur in Butte and Glenn Counties. Butte County is designated non attainment for ozone, PM2.5 and PM10. Glenn County is designated as non attainment-transitional for ozone and non attainment for PM10. (Reference 10) This project may have short-term impacts only during implementation of the restoration but overall will not increase any criteria pollutant.

d. Expose sensitive receptors to substantial pollutant concentrations?

The proposed project would not include any housing or lodging for humans, and therefore would not have the potential to expose sensitive receptors such as hospital patients, children, and the chronically ill. (Reference 5, pages 118-119)

e. Create objectionable odors affecting a substantial number of people?

The proposed project will occur on federal property in a sparsely-populated area. If odors are generated from time to time by application of herbicides or fertilizer or by decomposing mud or plants, such odors are not likely to be perceptible to anyone other than refuge workers directly involved in the project.

IV. BIOLOGICAL RESOURCES

Significance criteria: Substantial temporary or permanent loss of habitat (including removal of a significant food source or nesting tree), restriction of animal migration on the property, or decrease in number of individual special status plants or animals would be considered a significant effect.

-- 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 U.S. Fish and Wildlife Service?

Because the fields and ditches in these former agricultural lands are likely to be currently supporting Swainson’s hawks, giant garter snakes and burrowing owls, procedures to prevent adverse impacts to these species will have to be incorporated into restoration plans for the project. Because the riparian forest along the Sacramento River and Pine Creek could be occupied by yellow-billed cuckoo, procedures to avoid impact to this species will also have to be incorporated into the project. At a minimum, areas where work might occur must be surveyed by qualified biologists to determine the presence of special-status species before field work begins.

b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

The parcels all have been farmed and any riparian or sensitive natural communities that exist will be maintained and not be disturbed. Potential short-term implementation related impacts will require further evaluation. The project will be restoring areas to provide habitat.

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?

The parcels all have been farmed and thus do not contain any federally protected wetlands.

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?

Avoiding impact to wildlife migratory corridors and nursery sites will be a priority requirement of the restoration plans and the revegetation project.

e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The proposed project will take place on federal land.

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?

The proposed project is part of a comprehensive plan for enhancing wildlife resources along the Sacramento River and is in harmony with the CALFED multi-species conservation strategy. (Reference 5, appendix A)

V. CULTURAL RESOURCES

Significance criteria: Loss of any cultural or historic resource would be a significant impact.

Would the project:

- a. Cause a substantial adverse change in the significance of a historical resource as defined in \approx 15064.5?

The area is understood to be under the control of the US FWS, which must comply with the National Historic Preservation Act. The 2004 Comprehensive Conservation Plan for the SRNWR indicates that a Cultural Resource Overview and Management Plan will govern how the cultural resources within these parcels will be identified and protected. The California Bay-Delta Authority will require that work be performed in compliance with this Plan. (Reference 5, pages 71-72)

- b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to \approx 15064.5?

The California Bay-Delta Authority acknowledges that archaeological and cultural resources on the properties to be revegetated are protected by federal law. To prevent inadvertent damage to cultural resources, the project will be governed by the Cultural Resource Overview and Management Plan already in place.

- c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

There are no known unique paleontological resources or unique geologic features. This will be further analyzed and incorporated into the Cultural Resource Overview and Management Plan already in place.

- d. Disturb any human remains, including those interred outside of formal cemeteries?

The project will be conducted in compliance with the Cultural Resource Overview and Management Plan already in place. (Reference 5, pages 71-72)

VI. GEOLOGY AND SOILS –

Significance criteria: any erosion of soil off-site, any increase in seismic risk, inappropriate use of soil that could cause a loss of equipment or improvements would be considered a significant impact.

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 Division of Mines and Geology Special Publication 42.

Map 6, dated 1994 (Jennings) was reviewed instead of Publication 42. The Chico Monocline appears to separate the project area from any mapped earthquake activity. (Activity is to the east of the Chico Monocline, which runs roughly NW/SE.) Even if it experienced an

earthquake, the project would be unaffected because the project involves vegetation rather than people or structures.

ii. Strong seismic ground shaking?

See i, above.

iii. Seismic-related ground failure, including liquefaction?

See i, above.

iv. Landslides?

See i, above .

b. Result in substantial soil erosion or the loss of topsoil?

There is the potential for flood flows to erode these properties, with or without the project. The proposed project provides for flooding. It includes planting of species which have evolved in the Sacramento River floodplain and riparian areas. Rather than being lost, soil will be redistributed. (Reference 5, page A-12)

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?

In its environmental assessment for restoration on these properties, the US FWS concluded that the possibility of near-term erosion and sedimentation would be offset by long-term protection afforded by the cover and root systems of the permanent vegetation. (Reference 15, page 4-6)

d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

This is not an issue because the project does not include construction (Reference 1, page 3)

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?

The proposed project will not include any new septic systems or wastewater that requires treatment. (Reference 1 page 3)

VII. HAZARDS AND HAZARDOUS MATERIALS

Significance criteria: Creating new hazards or causing a negative change in existing hazards to public safety or environmental health would be a potentially significant impact.

– Would the project:

–

a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

The project will require use of regulated herbicides (Reference 1, page 5), but not on a continuous or routine basis; herbicide use is not considered disposal of hazardous material.

b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

The proposed project will comply with the USFWS policy requiring that chemicals and hazardous materials are not stored on site. (Reference 9)

c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The project is not in proximity to a school and will not involve acutely hazardous materials. (Reference 8)

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?

The Chico groundwater plume may or may not underlie portions of the project (Reference 11). There would only be short-term use of groundwater from existing agricultural wells.

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?

The project is more than two nautical miles distant from an airport. (Reference 7)

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?

The proposed project is not in the vicinity of a private airstrip. (Reference 7)

g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The proposed project will occur on sites without public roads.

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?

The proposed project will not expose people or structures to significant fire risk. It is in keeping with the comprehensive conservation plan for the Sacramento River National Wildlife Refuge. Wildland fire prevention and management is provided for in the comprehensive conservation plan. (Reference 5, page 116)

VIII. HYDROLOGY AND WATER QUALITY

Significance criteria: Any negative change to water quality off site or any re-routing or use of water which changed water availability offsite would be a significant effect.

-- Would the project:

- a. Violate any water quality standards or waste discharge requirements?

The project will be evaluated to determine if it needs to implement best management practices and requirements of the Regional Water Quality Control Board if there are any discharges.

- 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 which would not support existing land uses or planned uses for which permits have been granted)?

The project will use groundwater for short-term irrigation from existing agriculture wells.

- 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 erosion or siltation on- or off-site?

The project is restoration of three parcels that would benefit from siltation on-site.

- 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 flooding on- or off-site?

This factor will be analyzed with the appropriate hydrologic methodology.

- 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?

The project will not provide an additional source of polluted runoff in the amount that would exceed capacity of drainage systems.

- f. Otherwise substantially degrade water quality?

The project should not 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?

Although it will be located in floodplain (Reference 13), this project does not include housing, so therefore this question requires no further investigation.

- h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

This proposed project will not include construction of any structures. (Reference 1, page 3)

- 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?

This project will provide for habitat restoration on three parcels of land within the complex of properties that make up the Sacramento River National Wildlife Refuge. When the Fish and Wildlife Service examined the larger project for its potential to contribute to flood damage, it found that the net effect of converting these agricultural properties to native vegetation is a reduction in flood risk to neighboring properties. (Reference 5, A-28)

- j. Inundation by seiche, tsunami, or mudflow?

The project is not in proximity to such hazards because of its location so far inland.

IX. LAND USE AND PLANNING

Significance criteria: Actions that would conflict with existing local plans or preclude other parcels from uses that are in compliance with zoning would be a potentially significant impact.

- Would the project:

- a. Physically divide an established community?

The proposed project will occur on unoccupied land which does not divide an existing community. (Reference 4)

- b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

The "Capay" parcel is United States government land in Glenn County which is locally zoned agricultural. (Reference # 12.) The zoning law there provides that permitted uses include but are not limited to growing crops and raising animals. This indicates that there would be no conflict with local land use policy in Glenn County.

The two Butte County locations, however, may require further review. Strict reading of the zoning code indicates that the subject parcels, which are zoned A-40, are not zoned to provide for public use or non-agricultural use except if a special use permit or other exception is issued by the Board of Supervisors or zoning administrator. However, the Land Use Element of the General Plan provides that "hunting and water-related recreation facilities" and "environmental preservation activities" are secondary uses allowed within the Orchard and Field Crops zone. (Reference 21)

- c. Conflict with any applicable habitat conservation plan or natural community conservation plan?

The project will not conflict with a habitat conservation plan or natural community conservation plan. However, to avoid negative impacts to giant garter snake and Valley elderberry longhorn beetle, the US FWS has adopted mitigation measures 3 and 4 of the SRNWR CCP environmental assessment and FONSI. These mitigation measures will be incorporated by reference. (Reference 5, A-32, A-33)

X. MINERAL RESOURCES

Significance criteria: -- permanent and irreversible loss of quantifiable (without benefit of exploratory drilling) 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?

The proposed project will occur on US Fish and Wildlife Service lands, where the refuge manager already controls access to mineral resources. (Reference 5, page 12)

- 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?

The project area is not delineated as such. Although the floodplain includes some deposits of gravel because the bed of the Sacramento River has shifted over time, the fact that gravel is plentiful elsewhere combined with the awareness that significant amounts of public funds will be spent to revegetate these properties, leads to the conclusion that this mineral resource will no longer be available to be mined. This issue will be evaluated (Reference # 14.)

XI. NOISE

Significance criteria: an effect would be considered significant if it lead to a measurable increase in ambient noise levels offsite at any time of day.

– 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 applicable standards of other agencies?

The project will include some normal farming activities, such as operation of tractors, which are a less than significant source of noise. Local standards do not restrict such activities on the basis of noise-generating potential. (Reference # 6.)

- b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

The project includes vegetation removal and replanting, which are not activities which would generate excessive levels of ground-borne noise or vibration (Reference #1, page 5.)

- c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

The project will not include noise-generating activities on a long-term basis, and the short-term operation of agricultural equipment in these sites is not considered exceptional by local standards. (Reference # 6.)

- d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Because it will occur on sites surrounded by wildlife habitat and farming land uses, the project is not expected to change ambient noise levels. (Reference #5, pages A-5 – A-7.)

- 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?

The nearest airport to the sites that make up this project is Haigh Field near Orland, approximately 7 miles away. (Reference 7)

- 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?

Available information does not indicate the presence nearby of any private airstrips. (Reference 7)

XII. POPULATION AND HOUSING

Significance criterion: any change in the number of available housing units or in the local demand for housing would be significant

-- 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)?

The project will enhance a public amenity and possibly increase tourism in the area but it will not provide infrastructure that will lead to development. (Reference 1)

- b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

No housing will be displaced by the project. (Reference 1, pages 9-12)

- c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

The project will not require people to relocate, because it will not involve demolition of housing. (Reference #1, pages 9-12 .)

XIII. PUBLIC SERVICES

Significance criteria: any permanent increase in response time or any drain on public services in excess of what would be expected under a "no project" scenario or if local agencies signify an inability to serve the project, would be potentially significant.

- a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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:
- i. Fire protection?
 - ii. Police protection?
 - iii. Schools?
 - iv. Parks?
 - v. Other public facilities?

There is the potential for a significant impact to a local public road as a result of the project. This potential impact requires further study to determine its likelihood and if it can be mitigated. The proposed project could indirectly contribute to existing flooding problems in the area south of the Deadmans Reach parcel. Under normal conditions, the roots of willows, oaks, cottonwoods, and other desirable species should help hold soil in place during high water events, but there is the potential for plants to be uprooted and washed away in severe floods. When floodwaters uproot vegetation and wash it into weirs or other infrastructure which can become clogged, Ord Ferry Road is threatened by overland flooding and washout. (Reference # 16.) Ord Ferry Road traffic counts from the year 2003 indicate approximately 3400 vehicles per day (1700 each direction) use this stretch of road. (Reference 17) Ord Ferry Road provides access to Glenn County via a bridge over the Sacramento River. When the road is not passable, its function in local transportation is lost. This could in turn lead to slower response times for emergency vehicles, local traffic having to use alternate, (sometimes greater-distance) routes, and difficulty for the project proponent to access the site also.

XIV. RECREATION –

Significance criteria: interference with recreational opportunities offsite would be considered significant.

- a. Would the project 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?

The proposed project will not require use of existing neighborhood and regional parks. It will take place entirely on federally-owned land. (Reference 1, page 2)

- b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The project is intended to carry out habitat restoration on wildlife refuge lands. These lands are recreational facilities. The project will include temporary and long-term modifications to these lands, including removal of undesirable plants. Overall, the functionality of these parcels as wildlife refuge lands should be enhanced by the project. (Reference 5)

XV. TRANSPORTATION/TRAFFIC

Significance criteria – permanent net increase in traffic or increase in slow-moving vehicles on congested corridors would be a potentially significant impact.

-- 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)?

The project will not increase traffic on public roads and intersections because it will occur within parcels where access is controlled by the USFWS.

- b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?

The project will not contribute to traffic congestion.

- 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?

The proposed project will not affect air traffic.

- d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The project will not include hazards due to design feature and use of equipment is short term for restoration activities.

- e. Result in inadequate emergency access?

Emergency access should not be impaired.

- f. Result in inadequate parking capacity?

The project will not include designated parking areas because visitor parking is not one of the objectives. Parking could in the future be provided at the Capay parcel at the discretion of the FWS. For purposes of this investigation, it is assumed that such parking will not be constructed on land that has been revegetated using public funds. Visitors to the two other areas, Sunset and Deadman's Reach, will arrive by boat. (Reference # 18)

- g. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts and bicycle racks)?

No impact. No such policies are in place on the refuge. (Reference 5, page 5)

XVI. UTILITIES AND SERVICE SYSTEMS

An impact that created a need to expand utilities and have the cost subsidized by other ratepayers, or an impact that precluded other parcels from using existing utilities would be considered significant.

– Would the project:

- a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

The project will not generate wastewater that requires treatment. A spill prevention and countermeasure plan will be enforced to prevent inadvertent discharge to water. (Reference 5, page A-30)

- 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?

The project will not include expansion of existing or construction of new water treatment or wastewater treatment facilities. (Reference 1, pages 2-5)

- 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?

There will be no change in constructed storm water facilities.

d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Water needs for irrigation are short-term and available.

e. Result in a determination by the wastewater treatment provider which 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?

The project will not use a wastewater treatment provider.

f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

The project will not generate waste that requires landfill disposal. If woodwaste is generated by removal of trees, it will be used as fuel in a cogeneration facility. (Reference 19)

g. Comply with federal, state, and local statutes and regulations related to solid waste?

The project will be conducted in compliance with local, state and US FWS rules with regard to solid waste. (Reference 19)

XVII. MANDATORY FINDINGS OF SIGNIFICANCE –

a. Does the project have the potential to 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 a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

The proposed project will improve the biological diversity and habitat quality of the environment. Mitigation measures to protect existing threatened and endangered species will be incorporated into the project.

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)

Two aspects of the project require further investigation to determine their significance as a factor in a general trend. These are the contribution of the project to decreasing farmland acreage and the contribution of the project to increased likelihood of flood damage to infrastructure.

Development projects such as construction of housing and stores, are sometimes sited on farmland, contributing to urban sprawl problems in many parts of the State. The CALFED Bay-Delta Ecosystem Restoration Program (ERP) is not a land development program. It is a program to support projects that improve wildlife habitat, among other things. This is sometimes done

through supporting “wildlife-friendly” farming practices which make it possible for agricultural land to provide wildlife habitat on the same acreage that is in production, and it sometimes, as is the case with the proposed project, involves cessation of farming so that high-quality habitat can provide increased likelihood of recovery for species and communities that are endangered, threatened or otherwise ‘at-risk.’

Information from the California Department of Conservation (Reference 20) indicates that in Butte and Glenn counties, relatively little prime farmland or irrigated farmland has been converted directly to urban uses in recent years. Although urban development is occurring (the net increase in urban and built-up land between 2000 and 2002 in Butte County was 2,156 acres and in Glenn county was 342 acres), it is relatively slow compared to the conversion of farmlands to “other uses.” The amount of Butte County non-grazing farmland acreage converted from farming to urban and built-up use between 2000 and 2002 was 338 acres and the in Glenn County it was 327 acres. Therefore, in these two counties, other factors than urban development appear to be causing the decrease in farmed land. It is as yet undetermined if improvement of the SRNWR is a significant part of these other factors.

The potential for impacts associated with floods is another subject which requires more analysis in order to determine whether there could be a significant impact as a result of this project. The portion of the project which is most downstream could be in the path of floodwaters that are diverted from the Sacramento River in order to protect urban areas farther downstream. The question whether flood damage is incrementally increased by changing the vegetation in the floodpath requires further investigation.

c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

The proposed project is intended to change the vegetation on federal land that is used by humans for recreation.

Reference List

- 1) "ERP-02D-P65 Supplemental Fund Proposal: Sacramento River Restoration: Chico Landing Sub-Reach RM 178-206 (2002 ERP Directed Action #171)" prepared by The Nature Conservancy ca September 15, 2004
- 2) California Scenic Routes, published by CalTrans on the www.dot.ca.gov website; information was accessed 9/17/2004
- 3) personal communication, K. Tokunaga, Glenn County air district
- 4) US GS 7.5 minute quad maps: Ord Ferry and Rock Creek quads
- 5) Sacramento River National Wildlife Refuge draft CCP and Environmental Assessment, July 2004
- 6) Section 19.23.110, Glenn County Code, and personal communication, Gary Brown, Butte County
- 7) Airport information and map, Glenn County and U.S.G.S.
- 8) Butte County Office of Education website, www.bcoe.org
- 9) Correspondence, Kelly Moroney, refuge manager
- 10) Area designations for 2003, CalEPA, Air Resources Board
- 11) "Site Mitigation and Brownfields Reuse Program (aka Calsites) Database, accessed at www.dtsc.ca.gov
- 12) correspondence, Dan Obermeyer, Director, Glenn County Planning and Community Development Services Agency
- 13) ESRI/FEMA flood hazard map
- 14) Mining and mineral resource language from Glenn and Butte County Codes
- 15) Environmental Assessment for Proposed Restoration Activities on the Sacramento River National Wildlife Refuge, US Fish and Wildlife Service, February 2002 (cover date May 2001)
- 16) Personal communication, Stuart Edell, Butte County
- 17) 2003 Traffic counts, compiled by Traffic Research and Analysis Inc., obtained from Butte County Association of Governments
- 18) correspondence, Kelly Moroney, US FWS Sacramento River National Wildlife Refuge
- 19) correspondence, Ryan Luster, The Nature Conservancy
- 20) Land use conversion statistics, Butte County 2000-2002, available from California Department of Conservation
- 21) Butte County General Plan, Land Use Element

Other General References

Programmatic Environmental Impact Statement/Environmental Impact Report, July 2000

Ecosystem Restoration Program Plan, July 2000

Sacramento River National Wildlife Refuge Draft Comprehensive Conservation Plan and Environmental Assessment, July 2004

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