Appendix 1-B **Environmental Checklist**

1. **Project Title:** Oroville Wildlife Area Flood Stage Reduction Project

2. Lead Agency Name and Sutter Butte Flood Control Agency, PO Box M, Yuba

Address: City, CA 95991

3. Contact Person and Phone Michael Bessette (530/755-9859)

Number:

4. Project Location: Oroville Wildlife Area D-Unit, Butte County, CA

5. **Project Sponsor's Name** Sutter Butte Flood Control Agency

and Address:

General Plan Designation: Resource Conservation, Agriculture
 Zoning: Resource Conservation, Agriculture

8. Description of Project: Existing conditions in the Oroville Wildlife Area (OWA) D-Unit have caused potential fish stranding concerns, hydraulic isolation, poor water quality, and widespread invasive plant species. The purpose of the proposed project is to improve the connectivity of the Feather River to its historic floodplain, reduce flood stages within the main channel, provide more frequently inundated floodplain rearing habitat for juvenile salmonids, reduce the extent of invasive plant species, and plan for future habitat restoration at the OWA.

The proposed project consists of three components: vegetation management and restoration, hydraulic improvements, and recreation enhancement. The vegetation management component would include invasive plant species removal and installation of approximately 150 acres of riparian woodland plantings around the interior channels (approximately 70 acres of riparian woodland, 48 acres of riparian scrub and gravel understory plantings, and approximately 32 acres of riparian scrub and wetland plantings. The hydraulic improvements would include construction of a new rock gabion inflow weir, construction of a new notch connection to the Feather River, placement of rock fill along the existing outflow weir, installation of concrete road crossings, regrading sections of the existing interior canal system, construction of a fish barrier berm, replacement and installation of culverts, and the degrading of the existing Pit 2 pond berm. The recreation features would include the regrading of existing parking areas, installation of a concrete pad for existing portable restrooms, construction of an emergency vehicle canal crossing and two footbridge canal crossings, and the grading of two river access areas.

9. Surrounding Land Uses and Setting: The project area consists of the OWA D-Unit, which is on the east side of the Feather River in Butte County, just west of State Route 70 and across the river from the Thermalito Bay outlet. The project area is surrounded by OWA lands on three sides (north, west, and south) and abuts agricultural lands on the east side.

10. Other Public Agencies Whose Approval is Required:

U.S. Army Corps of Engineers U.S. Fish and Wildlife Service

National Marine Fisheries Service

Central Valley Regional Water Quality Control Board

California Department of Fish and Wildlife

Central Valley Flood Protection Board

California State Historic Preservation Officer

1.1 Environmental Factors Potentially Affected

project would not involve any impacts that are "Potentially Significant"), as indicated by the checklist on the following pages. Aesthetics Agricultural and Forestry Air Quality **Biological Resources Cultural Resources** Geology/Soils **Greenhouse Gas Emissions** Hazards and Hazardous Hydrology/Water Quality Materials Land Use/Planning Mineral Resources Noise Population/Housing **Public Services** Recreation Transportation/Traffic **Utilities/Service Systems** Mandatory Findings of Significance

None of the environmental factors below would potentially be affected by this project (i.e., the

Beneficial impacts are not shown on the CEQA checklist, so please see Chapter 3 for beneficial impacts. In addition, where project components (i.e., vegetation management, hydraulic improvements, and recreational features) had differing impacts, only the greatest impact is shown.

1.2 Aesthetics

I. A	esthetics	Potentially Significant Impact	Less-than- Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Wo	uld 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 along a 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 that would adversely affect daytime or nighttime views in the area?				

Please refer to Chapter 3 for a complete discussion of the environmental impacts on aesthetics.

1.3 Agricultural and Forestry Resources

II. A	Agricultural and Forestry Resources	Potentially Significant Impact	Less-than- Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact		
age pre on a are Dep For mea	determining whether impacts on agricultural resources are significant environmental effects, lead gencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) repared by the California Department of Conservation as an optional model to use in assessing impacts in agriculture and farmland. In determining whether impacts on forest resources, including timberland, re significant environmental effects, lead agencies may refer to information compiled by the California epartment of Forestry and Fire Protection regarding the state's inventory of forest land, including the prest and Range Assessment Project and the Forest Legacy Assessment Project, and forest carbon leasurement methodology provided in the Forest Protocols adopted by the California Air Resources pard. 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 conflict with a Williamson Act contract?						
c.	Conflict with existing zoning for, or cause rezoning of forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?						
d.	Result in the loss of forest land or conversion of forest land to non-forest use?						
e.	Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?						

Please refer to Chapter 3 for a complete discussion of the environmental impacts on agricultural and forestry resources.

1.4 Air Quality

III. A	Air Quality	Potentially Significant Impact	Less-than- Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
	en available, the significance criteria established ution control district may be relied upon to mak				
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 a nonattainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?				
d.	Expose sensitive receptors to substantial pollutant concentrations?			\boxtimes	
e.	Create objectionable odors affecting a substantial number of people?			\boxtimes	

Please refer to Chapter 3 for a complete discussion of the environmental impacts on air quality.

1.5 Biological Resources

IV.	Biological Resources	Potentially Significant Impact	Less-than- Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Wo	uld 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?				
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 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, marshes, vernal pools, coastal wetlands, 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?				

Please refer to Chapter 3 for a complete discussion of the environmental impacts on biological resources.

1.6 Cultural Resources

V. (Cultural Resources	Potentially Significant Impact	Less-than- Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Wo	uld 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 a unique archaeological resource pursuant to Section 15064.5?				
c.	Disturb any human remains, including those interred outside of formal cemeteries?		\boxtimes		

Please refer to Chapter 3 for a complete discussion of the environmental impacts on cultural resources.

1.7 Geology and Soils

VI.	Geol	ogy and Soils	Potentially Significant Impact	Less-than- Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Wo	uld tl	he project:				
a.	sub	ose people or structures to potential stantial adverse effects, including the risk oss, injury, or death involving:				
	1.	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.				
	2.	Strong seismic ground shaking?				\boxtimes
	3.	Seismic-related ground failure, including liquefaction?				
	4.	Landslides?				\boxtimes
b.		ult in substantial soil erosion or the loss opsoil?				
C.	uns resu an o	ocated on a geologic unit or soil that is table or that would become unstable as a all of the project and potentially result in onsite or offsite landslide, lateral eading, subsidence, liquefaction, or apse?				
d.	Tab (19	ocated on expansive soil, as defined in le 18-1-B of the Uniform Building Code 94), creating substantial risks to life or perty?				
e.	sup alte area	re soils incapable of adequately porting the use of septic tanks or rnative wastewater disposal systems in as where sewers are not available for the posal of wastewater?				
f.	pale	ectly or indirectly destroy a unique eontological resource or site or unique logic feature?				

Please refer to Chapter 3 for a complete discussion of the environmental impacts on geology and soils.

1.8 Greenhouse Gas Emissions

VII	. Greenhouse Gas Emissions	Potentially Significant Impact	Less-than- Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Wo a.	ould the project: Generate greenhouse gas emissions, either			\boxtimes	
	directly or indirectly, that may have a significant impact on the environment?	_	_	_	_
b.	Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				

Please refer to Chapter 3 for a complete discussion of the environmental impacts on greenhouse gas emissions.

1.9 Hazards and Hazardous Materials

VII	I. Hazards and Hazardous Materials	Potentially Significant Impact	Less-than- Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Wo	uld 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 accident conditions involving the release of hazardous materials into the environment?				
C.	Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
d.	Be located on a site that 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.	Be located within an airport land use plan area or, where such a plan has not been adopted, be within two miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project area?				
f.	Be located within the vicinity of a private airstrip and 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?				

Please refer to Chapter 3 for a complete discussion of the environmental impacts on hazards and hazardous materials.

1.10 Hydrology and Water Quality

IV 1	Hydnology and Water Ovelity	Potentially Significant	Less-than- Significant with Mitigation	Less-than- Significant	No Impost
	Hydrology and Water Quality	Impact	Incorporated	Impact	Impact
	uld the project:			\bowtie	
a.	Violate any water quality standards or waste discharge requirements?				
b.	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting 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 that would result in substantial erosion or siltation onsite or offsite?				
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 that would result in flooding onsite or offsite?				
e.	Create or contribute runoff water that 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 floodflows?				
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.	Contribute to inundation by seiche, tsunami, or mudflow?				

Please refer to Chapter 3 for a complete discussion of the environmental impacts on hydrology.

1.11 Land Use and Planning

X. 1	Land Use and Planning	Potentially Significant Impact	Less-than- Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Wo	ould the project:				
a.	Physically divide an established community?				\boxtimes
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?				

Please refer to Chapter 3 for a complete discussion of the environmental impacts on land use and planning.

1.12 Mineral Resources

XI.	Mineral Resources	Potentially Significant Impact	Less-than- Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
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?				

Please refer to Chapter 3 for a complete discussion of the environmental impacts on mineral resources.

1.13 Noise

XII	. Noise	Potentially Significant Impact	Less-than- Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Wo	ould the project:				
a.	Expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies?				
b.	Expose persons to or generate excessive groundborne vibration or groundborne noise levels?				
c.	Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				
d.	Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?				
e.	Be located within an airport land use plan area, or, where such a plan has not been adopted, within two miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels?				
f.	Be located in the vicinity of a private airstrip and expose people residing or working in the project area to excessive noise levels?				

Please refer to Chapter 3 for a complete discussion of the environmental impacts on noise.

1.14 Population and Housing

XII	I. Population and Housing	Potentially Significant Impact	Less-than- Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Wo	ould the project:				
a.	Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?				
b.	Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere?				
C.	Displace a substantial number of people, necessitating the construction of replacement housing elsewhere?				

Please refer to Chapter 3 for a complete discussion of the environmental impacts on population and housing.

1.15 Public Services

XIV	'. Public Services	Potentially Significant Impact	Less-than- Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Wo	uld the project:				
a.	Result in substantial adverse physical impacts altered governmental facilities or a need for neconstruction of which could cause significant service ratios, response times, or other perfor services:	new or physical environmental	ly altered governm impacts, in order t	ental facilities to maintain ac	s, the ceptable
	Fire protection?			\boxtimes	
	Police protection?			\boxtimes	
	Schools?			\boxtimes	
	Parks?			\boxtimes	
	Other public facilities?			\boxtimes	

Please refer to Chapter 3 for a complete discussion of the environmental impacts on public services.

1.16 Recreation

XV. Recreation	Potentially Significant Impact	Less-than- Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
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?				

Please refer to Chapter 3 for a complete discussion of the environmental impacts on recreation.

1.17 Transportation/Traffic

XV	I. Transportation/Traffic	Potentially Significant Impact	Less-than- Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Wo	uld the project:				
a.	Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?				
b.	Conflict with an applicable congestion management program, including, but not limited to, level-of-service standards and travel demand measures or other standards 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 because of a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				
e.	Result in inadequate emergency access?		\boxtimes		
f.	Conflict with adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				

Please refer to Chapter 3 for a complete discussion of the environmental impacts on transportation/traffic.

1.18 Utilities and Service Systems

XV	II. Utilities and Service Systems	Potentially Significant Impact	Less-than- Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Wo	uld 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 stormwater 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 would new or expanded entitlements be 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?				

Please refer to Chapter 3 for a complete discussion of the environmental impacts on utilities and service systems.

1.19 Mandatory Findings

XV	III. Mandatory Findings of Significance	Potentially Significant Impact	Less-than- Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
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, substantially 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?				
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?				

Please refer to Chapter 3 for a complete discussion of the environmental impacts relevant to mandatory findings of significance.