

The proposed project site is not considered to be wildlands, nor is it intermixed with urbanized areas.

IX. HYDROLOGY AND WATER QUALITY

DISCUSSION

This environmental issue focuses on the impacts of a project on surface and groundwater, including compliance with water quality standards and regulation, depletion of groundwater supplies, pollution or degrading of water quality. Additional concerns include water-related hazards such as flooding, mudflows and similar hazards. This area of environmental concern also addresses potential project impacts on area drainage, including storm water runoff.

SETTING

The project area is generally flat with minor areas of slope change throughout the service area of McConnell Lateral pipeline project, Arena Canal and Howard Lateral. The surface features in the area of the project will be placed back to current elevations.

EVALUATION

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
a) Would the project violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project will not violate any water quality standards or waste discharge requirements or otherwise substantially degrade water quality.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
b) Would the project 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The proposed McConnell Pipeline is the construction and operation of an underground irrigation pipeline that will serve to transport water that otherwise would have to spill into the Merced River. The proposed project will install a pipeline that is approximately 1,350 feet long starting at the end of the McConnell Lateral and terminating at the head of the Hammett Lateral. This water, totaling approximately 330 acre-ft. annually, can now be reused and delivered to growers in Merced County while eliminating the potential to have an impact on the Merced River which is a host to ecosystems for various fish and aquatic species.

The rehabilitation of Arena Canal and Howard Lateral will help to both increase the efficiency by lowering the friction factor within the facility, therefore raising the capacity to handle the flows from saved McConnell Lateral spills, and reduce the seepage plaguing this facility. This seepage requires more water to be taken out of the Bay-Delta system that could have otherwise been used for irrigation. With this elimination in seepage there will be more water available in the reservoirs that are part of the Bay-Delta system providing a very beneficial resource in dry or drought years.

The project will thus have a less than significant impact to 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.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
c) Would the project 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project will not alter drainage patterns of the area, including through the alteration of the course of a stream or river, which would result in substantial erosion or siltation on- or offsite.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
d) Would the project 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project would not substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
e) Would the site create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project would not create nor contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional resources of polluted runoff.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
f) Would the project otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project would not violate water quality standards.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
g) Would the project 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project does not require the construction of any housing.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
h) Would the project place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project does not propose any structures that would impede or redirect flood flows.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
i) Would the project 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project would not expose people or structures to flooding.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
j) Would the project be subject to inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project area is not susceptible to seiches, tsunamis, or mudflows.

X. LAND USE AND PLANNING

DISCUSSION

This environmental issue focuses on the impacts of a project on adopted land use, habitat conservation or natural community conservation plans. The specific focus of this area of environmental concern is potential conflicts with established plans and policies or the potential for the project to physically divide a community.

SETTING

The proposed McConnell Lateral pipeline lies in Sec. 14, T6S, R11E. The proposed pipeline alignment is adjacent to the Livingston Canal on the northeast and the Livingston Waste Water Treatment Facility on the southwest. North of the canal the land is zoned "General Agriculture." The Livingston WWTF is zoned "Public/Quasi-Public Facilities." Arena Canal and Howard Lateral lie in Sec. 2, 3, 9 & 10, T7S, R11E in Merced County, CA. The Arena Canal and Howard Lateral alignments pass through lands that are zoned, and whose usages are, Agricultural, which consist of orchards, vineyards and grain crops. See "Figure 6 – General Plan," page 35; and "Figure 7 – Zoning," page 36.

EVALUATION

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
a) Would the project physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

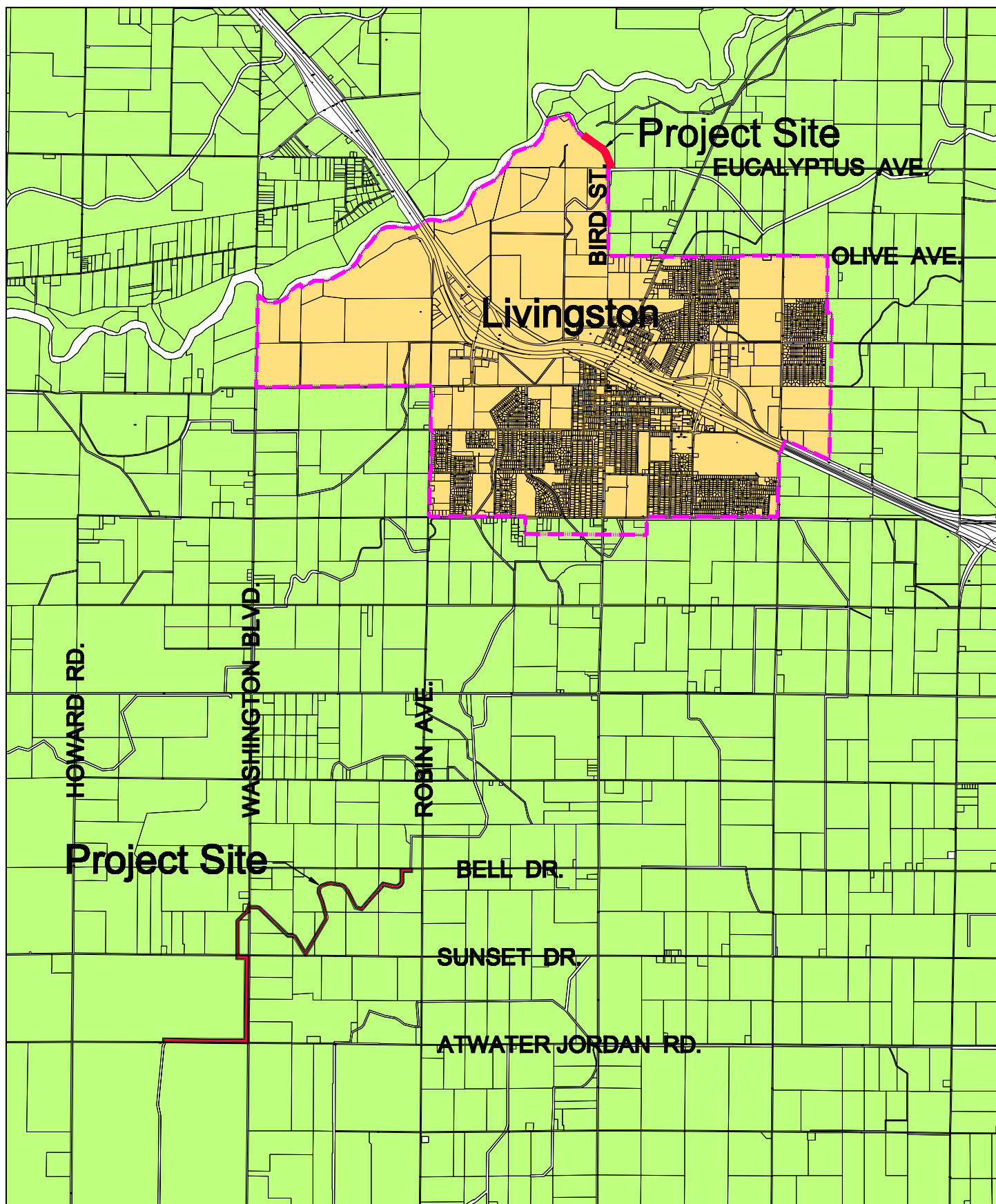
No change in surrounding land uses will occur as a result of the proposed project

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
b) Would the project 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 programs, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project does not involve any change to, or conflict with, applicable land use plans, policies or regulations.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
c) Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

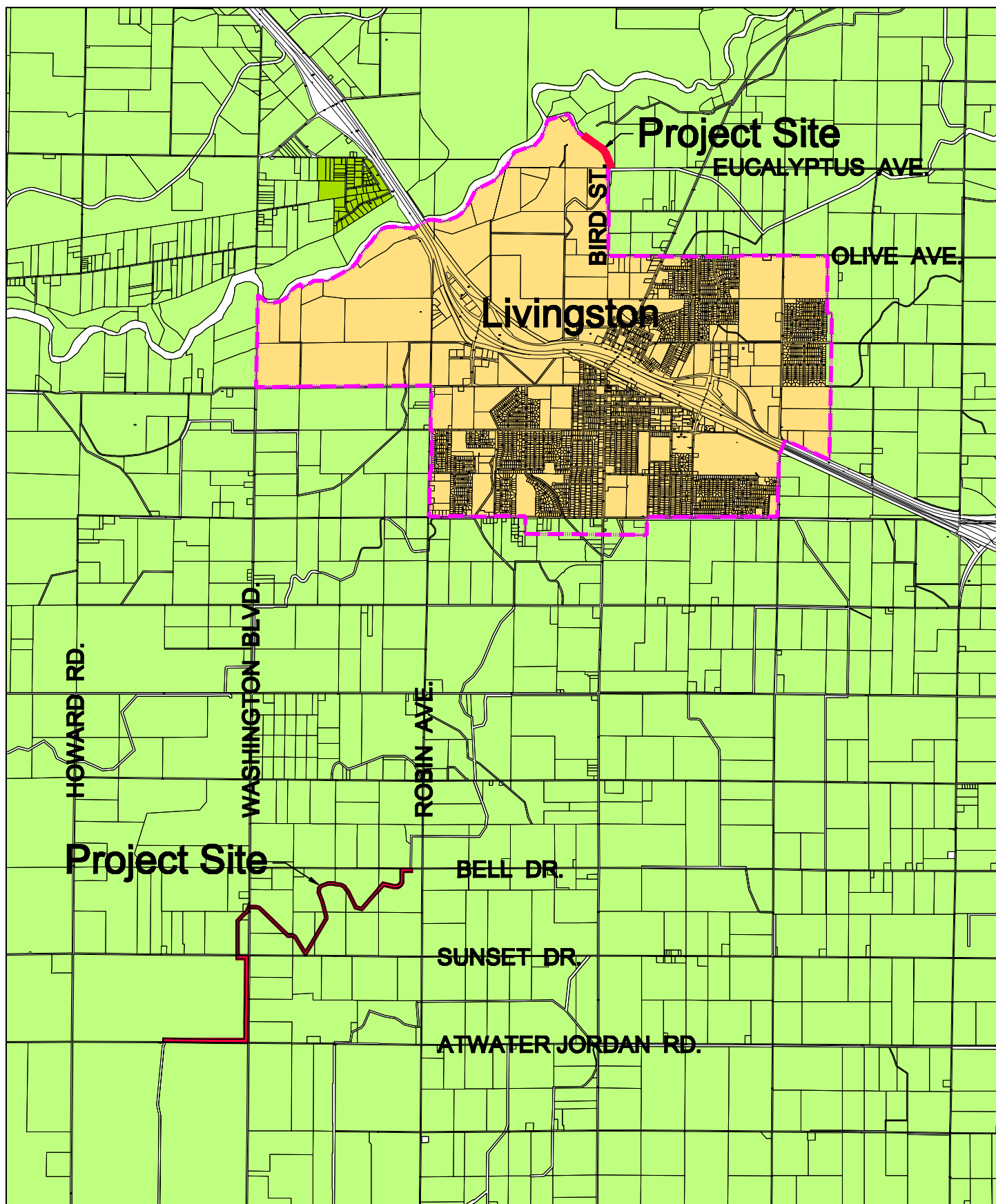
There are no habitat conservations plans within the general vicinity of the proposed project.



Merced County

- Legend:**
- A - Agriculture
 - City of Livingston
 - Area of work
 - Livingston SUDP

Figure 6: General Plan
 Source: Merced County Planning Dept., MCAG, 2007



Merced County

Legend:

- A-1 - General Agriculture
- A-R - Agricultural Residential
- City of Livingston
- Area of work
- Livingston SUDP

Figure 7: Zoning

Source: Merced County Planning Dept., MCA, 2007

XI. MINERAL RESOURCES

DISCUSSION

This environmental issue focuses on the impacts of a project on known mineral resources of commercial or otherwise documented economic value.

SETTING

The proposed project site will lie within M.I.D. easements. No zone change or land-use designation will change as a result of this project. There is no indication or evidence of known mineral resources in the area.

EVALUATION

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
a) Would the project 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

There are no known mineral resources at the site of the proposed project.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
b) Would the project 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project is not located in an area designated on the County General Plan¹⁴, or by any plan, as a locally important mineral resource recovery site.

¹⁴ <http://www.co.merced.ca.us/index.aspx?NID=436> Chapter VI: Open Space/Conservation, Figures VI-7 and VI-8 of that report.

XII. NOISE

DISCUSSION

This environmental issue focuses on the impacts of a project with respect to noise or ground-borne vibration. The creation of new noise or ground-borne vibration conditions or activities that will result in people or property being exposed to existing noise or vibrations is the primary area of focus under this environmental issue.

SETTING

Any noise produced by the proposed project will be during the construction phase.

EVALUATION

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
a) Would the project result in 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The Merced County General Plan sets a maximum exterior noise level standard for residences of 65 dBA and an interior noise level standard of 45 dBA.

There will be one period when the project will generate significant noise, the construction phase. During construction noise levels from the proposed project may exceed those standards temporarily. The short term nature of the construction noise is not seen as significant and adverse.

Construction activities will be temporary in nature and will only occur during the daytime hours. Construction noise impacts could result in annoyance or sleep disruption for nearby residents if nighttime operations were to occur or if equipment is not properly muffled or maintained. Construction noise will be temporary and will have a less than significant impact.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
b) Would the project result in exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project will not produce any excessive vibrations or noise levels.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
c) Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project will not result in a substantial permanent increase in ambient noise levels.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
d) Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The proposed project will result in temporary periodic noise increases during construction. Any noise generated by the proposed project will not contribute substantially to the noise levels from the already existing farming practices.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project site is not located within two miles of a public airport or public use airport.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project site is not located within two miles of a private airstrip.

XIII. POPULATION AND HOUSING

DISCUSSION

This environmental issue focuses on the impacts of a project on population and housing including population growth or displacement of human population and housing. Assumptions regarding population growth, housing demand and employment are the primary driving force for local governmental land use decision-making.

SETTING

The project proposes to install the McConnell Lateral pipeline (approx. 1,350' long) starting at the end of the McConnell Lateral and terminating at the head of the Hammett Lateral. This pipeline will serve to transport water that otherwise would have to spill into the Merced River. The other part of the project consists of concrete lining and/or pipelining the existing Arena Canal, and rehabilitating portions of the canal that have become dilapidated. These activities are for the benefit of the farming acreage in the service area of the irrigation facilities. The modification of these irrigation facilities maintains the current farming acreage in the service area and would not change the existing demands for housing that already exist from the current farming operations in the service area of the proposed project.

EVALUATION

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
a) Would the project 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project will not induce substantial unplanned population growth in the area either directly or indirectly.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
b) Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project does not include the development or removal of any residential structures.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
c) Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project does not result in the need to construct housing.

XIV. PUBLIC SERVICES

DISCUSSION

This environmental issue focuses on the impacts of a project on public service facility needs and the potential environmental impacts of developing and/or expanding these facilities. Facility needs can be defined by the need to maintain acceptable levels of service such as response times, or such other community service standard as may apply.

SETTING

The proposed project will not have an impact on public facilities. No additional public facilities will be developed.

EVALUATION

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
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:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project would not increase the demand for fire and police protection, schools, parks, or other public facilities.

XV. RECREATION

DISCUSSION

This environmental issue focuses on the impacts of a project on public recreation and facility needs and the potential environmental impacts of developing and/or expanding recreation facilities. Facility needs can be defined by the need to maintain acceptable levels of community recreation service in the area and region.

SETTING

This project proposes the installation of a new pipeline within a M.I.D. easement north of Livingston as well as the rehabilitation of an existing canal and lateral, this type of project presents no opportunity to create or offer any type of recreational facilities. No public services are required, including recreation.

EVALUATION

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project will not contribute to the increase use of existing parks or recreational facilities.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project does not include recreational facilities nor will it increase demand for recreational facilities.

XVI. TRANSPORTATION/TRAFFIC**DISCUSSION**

This environmental issue focuses on the impacts of a project on transportation systems including roads and highways, public transportation systems, pedestrian circulation and access, parking, and emergency access. Impacts can be in the form of new hazardous circulation or traffic conditions, conflict with existing plans or policies or creation of an unacceptable traffic level on a transportation system or facility.

SETTING

The proposed pipeline will be constructed within an existing M.I.D. easement. There is an existing siphon at Washington Boulevard as well as at Sunset Drive. Both of these locations are in rural agricultural areas and traffic will not be interrupted during the rehabilitation project.

EVALUATION

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
a) Would the project 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 ration on roads, or congestion at intersection)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The proposed project will generate a temporary and slight increase in traffic during construction due to travelling to and from the construction site.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
b) Would the project exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project has no potential to exceed a level of service standard established by the Merced County Association of Governments (MCAG), the County Congestion Management Agency, for designated roads or highways.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
c) Would the project result in change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project will not affect air traffic patterns.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
d) Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project will neither create nor alter roadways in a manner that would increase hazards or result in an incompatible use.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
e) Would the project result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project will conform to all applicable County emergency access standards.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
f) Would the project result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The site will have adequate parking capacity for M.I.D. maintenance personnel during construction. No additional parking will be required after construction is complete.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
g) Would the project conflict with adopted policies, plans or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Trips by maintenance/operations personnel would be the only traffic generated by the proposed project once it becomes operational. The proposed project would not conflict with adopted policies, plans or programs supporting alternative transportation.

XVII. UTILITIES AND SERVICE SYSTEMS

DISCUSSION

This environmental issue focuses on the impacts of a project on public utility systems or facilities such as water, wastewater, storm water drainage or other utility or service systems.

SETTING

The project proposes to install new pipelines, construct new concrete lining and rehabilitate existing canal linings. The proposed project does not propose any addition of booster pumps or other high demand electrical equipment. Any use of SCADA monitoring equipment will require a minimal electrical power usage or may be powered by solar energy.

EVALUATION

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
a) Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project has no wastewater treatment requirements.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
b) Would the project 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project will not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities that would cause significant environmental effects.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
c) Would the project 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

This proposed project will not generate storm water drainage needs of any kind.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
d) Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project will not require new or expanded entitlements.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
e) Would the project 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project will not generate additional demands for wastewater.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
f) Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Any disposal of solid waste, such as construction material or removed concrete, will be minor and short-term.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
h) Would the project comply with federal, state and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project will comply with all relevant federal, state and local statutes and regulations related to solid waste. Solid waste will only be generated during construction.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE**EVALUATION**

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	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, reduce the number or restricts the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project will not have any impacts on wildlife species, rare or endangered plant species or eliminate major periods of California history or prehistory.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
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, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

On the basis of the analysis of the project and its potential adverse physical environmental impacts, it has been determined that the proposed project does not have impacts that are individually limited but cumulatively considerable.

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporation	Less than Significant Impact	No Impact
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

A review of the potential environmental effects of the proposed McConnell pipeline and rehabilitation of Arena Canal and Howard Lateral have resulted in the determination that the project design, location or general characteristics will not result in any substantial adverse effects on human beings either directly or indirectly.

Mitigation Measures

IV. Biological Resources¹⁵:

- IV-1** Pre-construction surveys for nesting Swainson's hawks in the project area should be conducted if construction commences between March 1 and September 15. The survey should include all large trees visible from the alignment. If active nests are found, a qualified biologist should determine the need (if any) for temporal restrictions on construction.
- IV-2** Pre-construction surveys for burrowing owls in the project area should be conducted if construction commences between February 1 and August 31. The survey should include the ruderal areas along the alignment, and all areas of open grassland visible from the alignment. If occupied burrows are found, a qualified biologist should determine the need (if any) for temporal restrictions on construction.
- IV-3** Disturbance to the blue elderberry shrub should be avoided by restricting ground disturbance activities near the elderberry shrubs to the minimum needed to accomplish the project. Additionally, work should be scheduled between July 1 and April 1 to avoid potentially adverse impacts to any adult VELB that may have emerged and be present on the leaves or stems of the elderberry shrubs.
- IV-4** Orange safety fencing should be installed along the edges of the shrub facing construction activities (i.e., south and east), at a distance of 20 feet outside the dripline of the shrub. The fencing will alert workers of the environmentally sensitive area and prevent physical disturbance to the shrub cluster. If the waste water treatment plant parcel is utilized for staging or parking, the fencing would also be needed along the west side of the shrub.
- IV-5** Trees and shrubs along the alignments could be used by nesting raptors and other protected birds. Any trees that need to be removed or trimmed to facilitate the project, (if any) should be felled or trimmed outside of the general bird nesting season (February 1 through August 31) or a nesting bird survey should be conducted immediately prior to tree removal. If active nests are found, tree felling should be delayed until the young have fledged.

¹⁵ "Baseline Biological Resource Assessment" by Moore Biological Consultants, dated May 5, 2010.

V. Cultural Resources¹⁶ Recommendations:

- V-1** A professional archaeologist shall be consulted prior to initial excavation. Consultation and monitoring may be required during excavation at archaeologist's discretion.
- V-2** In accordance with Federal and State law, if any historical resources (a building, structure, object, prehistoric or historic archaeological site, or district possessing physical evidence of human activities over 45 years old) are discovered during project-related activities, all work is to stop and the lead agency and a qualified professional are to be consulted to determine the importance and appropriate treatment of the find. If Native American remains are found the County Coroner and the Native American Heritage Commission, Sacramento (916-653-4082) are to be notified immediately for recommended procedures.
- V-3** If any archaeological or cultural resource is found, the firm or individual retained is responsible for submitting any report of findings to the Central California Information Center, including one copy of the narrative report and two copies of any records that document historical resources found as a result of field work.

¹⁶ **Central California Information Center** (California Historical Resources Information System, Department of Anthropology-California State University, Stanislaus) CCIC File # 8091 I, dated November 15, 2011

Appendix A

Baseline Biological Resource Assessment

By

Moore Biological Consultants

MOORE BIOLOGICAL CONSULTANTS

January 13, 2012

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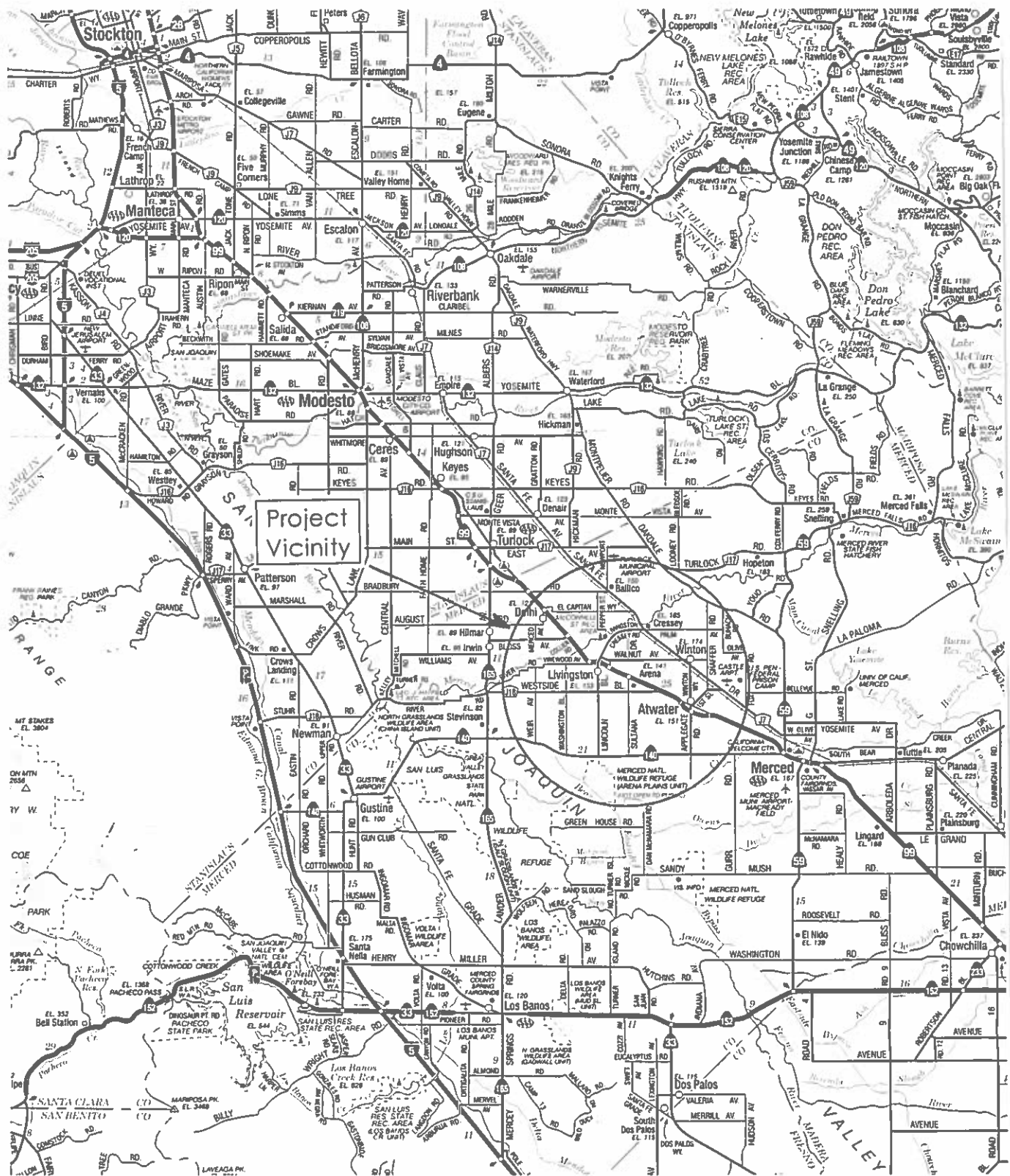
Subject: MERCED IRRIGATION DISTRICT'S "ARENA CANAL/HOWARD
LATERAL AND MCCONNELL LATERAL PIPELINE WATER
CONSERVATION PROJECT", MERCED COUNTY, CALIFORNIA:
BIOLOGICAL ASSESSMENT

Dear Garth:

Thank you for asking Moore Biological Consultants to conduct a baseline biological resources assessment of the Merced Irrigation District's (MID) Arena/Howard Lateral and McConnell Lateral Pipeline Water Conservation Project (Figures 1, 2A, and 2B). The focus of our work was to document existing biological resources along the alignments, conduct a survey to determine presence or absence of waters of the U.S. and wetlands, and search for suitable habitat for or presence of special-status species. This letter report details the methodology and results of our investigation.

Methods:

Prior to the field survey, we conducted a search of California Department of Fish and Game's (CDFG) California Natural Diversity Database (CNDDDB, 2011). The alignments are located near the intersection of the USGS 7.5-minute Turlock, Stevinson, Cressey, and Arena topographic quadrangles. Therefore the CNDDDB



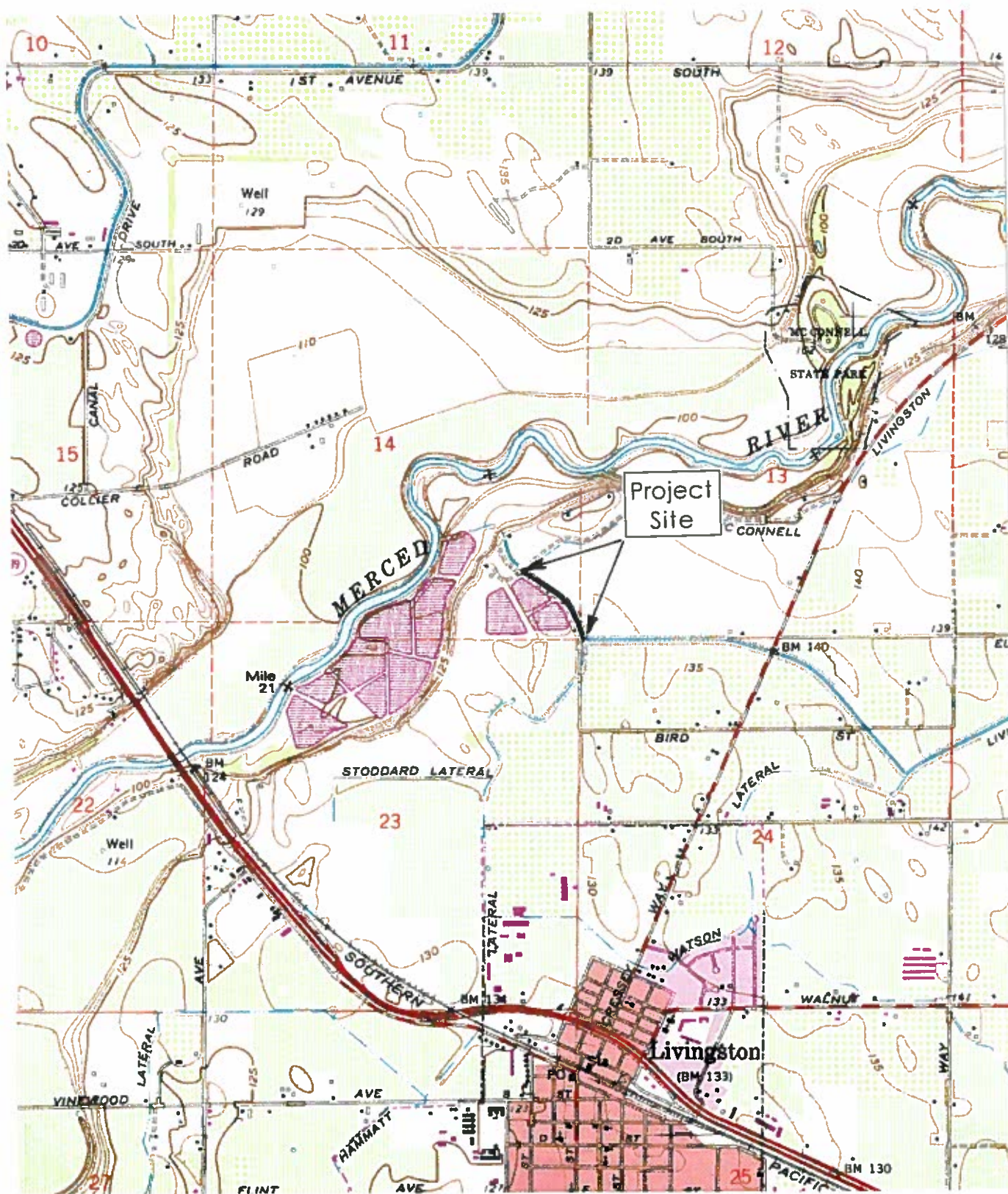
Scale: 1 inch = 9 miles

Source: Calif. State Automobile Association



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FIGURE 1
PROJECT VICINITY



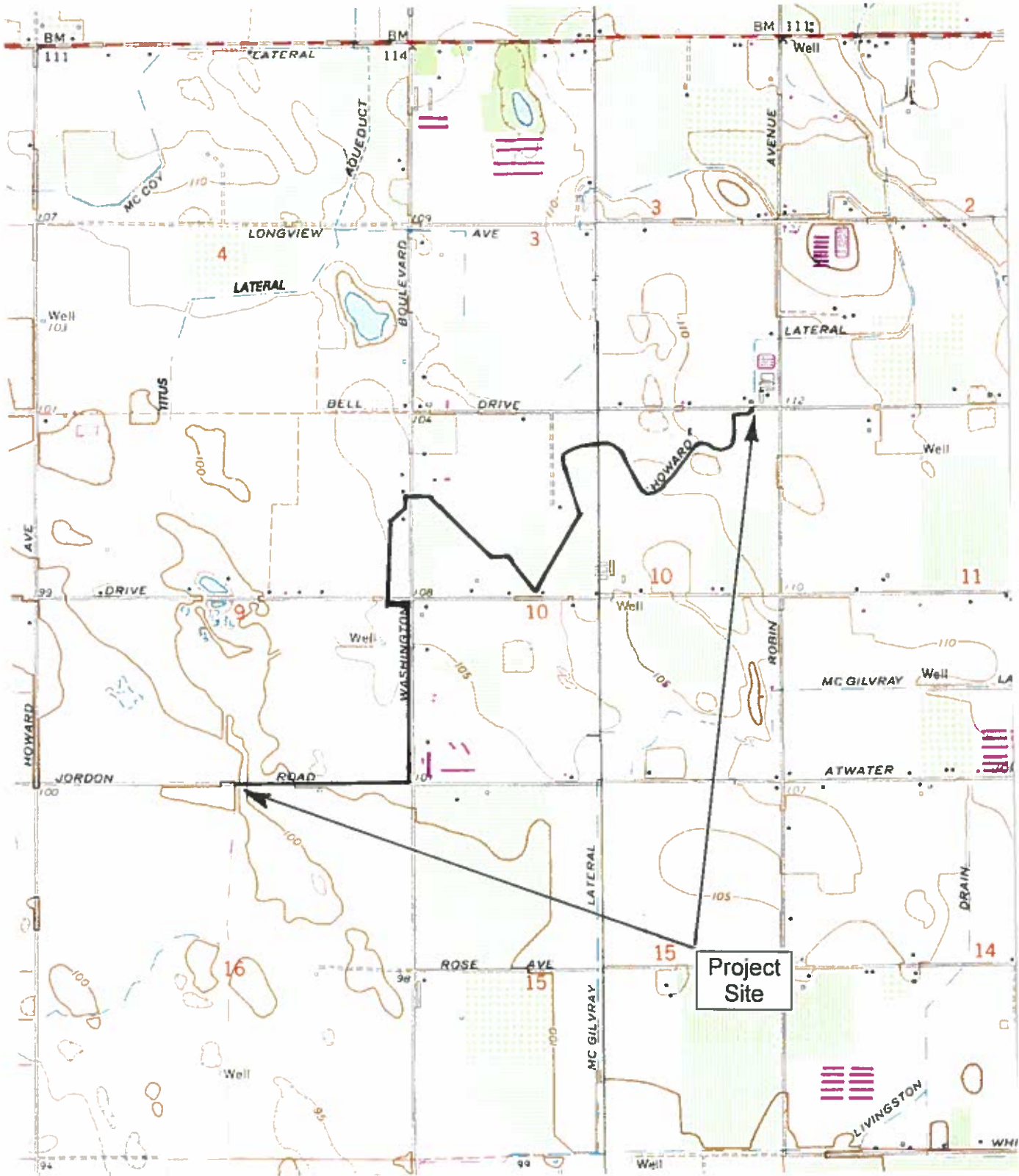
Scale: 1 inch = 2,000 feet

Source: USGS 7.5-minute Cressey
topographic quadrangle

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**FIGURE 2A
PROJECT LOCATION**



Scale: 1 inch = 2,000 feet

Source: USGS 7.5-minute Stevinson & Arena topographic quadrangles

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**FIGURE 2B
PROJECT LOCATION**

search included all of these quadrangles, which is an area of approximately 240 square miles around the alignments. The United States Fish and Wildlife Service (USFWS) list of Federally Threatened and Endangered species that may occur in or be affected by projects in the Turlock, Stevinson, Cressey, and Arena topographic quadrangles (Appendix A) was also reviewed. This information was used to identify species that have been previously documented in the greater project vicinity or have the potential to occur based on presence of suitable habitat and geographical distribution.

A field survey was conducted on December 1, 2011. The survey consisted of driving and walking along the alignments, making observations and noting habitat conditions, surrounding land uses, and plant and wildlife species. The fieldwork included an assessment of potentially jurisdictional Waters of the U.S. and wetlands as defined by the U.S. Army Corps of Engineers (ACOE, 1987; 2008), and a search for special-status species and suitable habitat for special-status species (e.g., blue elderberry shrubs, vernal pools). Additionally, trees along the alignments were assessed for the potential use by nesting raptors, especially Swainson's hawk (*Buteo swainsoni*), and burrows along the alignment were inspected for evidence of burrowing owl (*Athene cunicularia*) occupancy.

Results:

GENERAL SETTING: The alignments are located in the vicinity of Livingston, Merced County, California (Figure 1). The McConnell Lateral Pipeline alignment is located in Sections 13, 14, and 24, in Township 6 South, Range 11 East M.D.B. & M. of the USGS 7.5-minute Cressey topographic quadrangle (Figure 2A). The Arena Canal/Howard Lateral alignment is located in Sections 9 and 10, in Township 7 South, Range 11 East M.D.B. & M. of the USGS 7.5-minute Stevinson and Arena topographic quadrangles (Figure 2B). The alignments are essentially level. The McConnell Lateral Pipeline alignment is at an elevation of

approximately 135 feet above mean sea level and the Arena Canal/Howard Lateral alignment is at elevations of approximately 100 to 110 feet above mean sea level.

The project area is primarily orchards and fields farmed in alfalfa, other grain crops, and annual vegetable crops (Figures 3A and 3B and attached photographs). The McConnell Lateral Pipeline alignment follows a dirt road parallel to the Livingston Canal, bounded by almonds on the east and a waste water treatment plant on the west. The Arena Canal passes between orchards and fields; the Howard Lateral follows existing roads.

VEGETATION: Habitats along the alignments are primarily highly disturbed agricultural lands subject to routine maintenance such as disking, scraping, and spraying. The orchard floors, field edges, road shoulders, and other ruderal areas along the alignments are vegetated with various native and non-native annual grass and weed species. Grasses including oats (*Avena* sp.), Johnsongrass (*Sorghum halepense*), Bermuda grass (*Cynodon dactylon*), foxtail barley (*Hordeum murinum*), and perennial ryegrass (*Lolium perenne*) are dominant grass species in these areas. Other grassland species such as black mustard (*Brassica nigra*), wild radish (*Raphanus sativus*), common mallow (*Malva neglecta*), and filaree (*Erodium* spp.) are intermixed with the grasses. Table 1 is a list of plant species observed along the alignments.

Beyond the orchards, trees along the alignments include blue gum (*Eucalyptus* sp.), valley oak (*Quercus lobata*), coastal live oak (*Quercus agrifolia*), Fremont cottonwood (*Populus fremontii*), and a number of other ornamentals. None of these trees appear to be in potential conflict with project construction.

A single blue elderberry (*Sambucus mexicana*) shrub is growing near the north end of the McConnell Lateral Pipeline alignment (Figure 4 and attached photograph). The shrub is approximately 50 feet northwest of the point in the dirt road where the McConnell Lateral Pipeline will tie in with the McConnell Lateral,