

**Initial Study/Mitigated Negative Declaration
For the Proposed
Leininger Ranch Stock Pond Repair and Spring
Improvement Project
Tehama County, California**



Prepared by the:

**Tehama County Resource Conservation District
2 Sutter Street, Suite D
Red Bluff, CA 96080**

**The Lead Agency and Project Proponent Pursuant to Section 21082.1 of the
The California Environmental Quality Act**



March 2014

NOTE: Complete Document with all pages posted at www.tehamacountyrcd.org

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MITIGATED NEGATIVE DECLARATION AND ENVIRONMENTAL CHECKLIST FORM

Project title:

Leininger Ranch Stock Pond and Spring Development Project

Lead Agency Under CEQA:

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State of California
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Restoration and Development

Mitigated Negative Declaration

Project Description and Environmental Setting

Project Location:

The project site is located in Southeastern Tehama County approximately 4 miles east of State Route 99E and the Community of Vina, 12 miles southeast of Los Molinos and 22 mile southeast of Red Bluff, Tehama County California.

Legal Description: Section 32 T25N R1W Sections 20, 28, 31, and 33, T25N R1E. The APN numbers specific to the proposed project are 079-010-23-1 for the pond work. APN numbers related to the spring improvement portion of the overall project include 081-140-08-1, 081-140-03-1, 081-070-14-1 and 081-070-13-12.

General Plan Designation: Upland Agriculture

Project History and Land Use

The Leininger Ranch was originally included as part of Leland Stanford's 33,000-acre Vina Ranch. From that time to the present, this property has been managed primarily as a cattle ranch. Prunes had been planted on a portion of the property located adjacent to the Deer Creek corridor and these have now been removed. In addition to currently being managed as a cattle ranch, the Leininger Ranch is used for upland game and waterfowl hunting. A hunting lodge and abandoned airstrip are located on one of the ridge tops and duck blinds are located adjacent to the large bermed ponds in the southwestern portion of the property. The ranch consists of 3 contiguous properties owned separately by Todd Leininger and his two adult children, Amber and Grant. Each ranch has a conservation easement held by The Nature Conservancy (TNC) and there are various leases among the family members that result in management that is not identical to the property ownership. In a November 18, 2013 email from TNC personnel involved with the conservation easement, formal

approval of dam improvements were provided under the terms of the easement provisions. Each of the owners is interested in participating in the Wildlife Conservation Board and USFWS Partners Program funding. Grant Leininger is also applying for NRCS EQIP funding that will finance water source development on all three properties but will be in his name as an owner and lessee.

Project Description

The Leininger Ranch Stock Pond and Spring Development Project entails the development of a new stock pond to be located 1,000' southwest of the ranch's current pond that is no longer used, has been breached and is incapable of holding water. The new pond/dam infrastructure will have a storage capacity of 23.7 acre feet. The pond will be created through the construction of a 15' high 607' wide earth fill dam. A particle diaphragm filter will be installed in the centerline of the dam in order to prevent seepage around a piped spillway. Fill material for the dam will be excavated from the pond bottom. In addition, an in place pond is in need of restoration and expansion. This phase of the overall project entails moving the existing dike/fill downstream approximately 50' and rebuild it in 8" compacted lifts to a max height of 4.4'. Once this work is completed, the new storage capacity of the pond will be 17 acre feet. The location of both pond projects is shown on "**Map A**". Finally, five existing intermittent spring will be improved by clearing silt and vegetation as well as installing small storage structures. The spring sites are shown on "**Photo Map B**" and "**Map C**". These project's work scopes are more thoroughly described below.

New Stock Pond Development

The overall depth of the newly constructed pond will be 3.17'. The maximum depth will be 15' in areas where soil is removed and used as dam fill. A total 7,050 cubic yards of soil will be removed from the pond bottom to an average depth of 3.17' and used as dam fill. The normal pool volume will be 23.7 acre feet when the pond is full and no water leaves the spillway (**see Graphic A**). Initially, the pond site will be grubbed and a cutoff trench excavated at centerline of dam. Soil used as dam fill will consist of Tuscan Cobbly Loam (TuB). Overly rocky or cobbly soils will not be used as dam fill. Rather, such material would be used as dam facing. If excessively rocky or cobbly soils are encountered in a particular portion of the borrow area, material will be obtained from an adjacent portion of the pond bottom. If inadequate amounts of appropriate dam fill cannot be obtained from the pond bottom, available material found there will be screened to remove cobbles and rocks prior to placement and compacting.

Initially, the entire pond site will be grubbed of scattered grasses and forbs as there are no trees in the project's impact area. Grubbed soil containing vegetation will not be used as dam fill but will be spread on the downstream face of the dam after final grades are reached. Fill material will be placed in 8" lifts and compacted to specification. A sand diaphragm filter will be installed in the centerline of the dam to reduce seepage around a piped spillway, prevent inevitable seepage from removing soil used as dam fill and to accommodate shifting of dam fill attributable to seismic activity or settling of fill material. ASTM-33 sand will be placed in the diaphragm trench with a socked/perforated drain pipe at the bottom in order for seepage to drain out the downstream face (**see Graphic B**). When fill is at adequate height, the foundation for a pipe spillway will be excavated and rebar prepared for concrete placement installed. A corrugated steel pipe spillway with the capability of handling a 100 year run off event will be placed and fully encased in 3,000 psi concrete. Unformed cast-in-place concrete will be installed around pipes and formed cast-in-place concrete around risers and pipe junctions. Placement of fill will continue until filter diaphragm height is achieved. Rock rip rap will armor the outlet of pipe spillway and perforated pipe. A trash rack will be placed on the pipe spillway entrance and dam fill will be seeded and mulched.

In Place Pond Restoration

Presently an in place pond is in need of improvement and expansion. Project work entails moving the existing dike/fill downstream approximately 50' (**see Graphic C**) and rebuild it in 8" compacted lifts to a max height of 4.4' with very shallow 5:1 slopes on both sides (**see Graphic D**). A rock armor blanket (12" diameter) will be placed on top of the entire levy structure as it is designed to overtop in runoff events and there is no pipe or other spillway. The improvements have been designed to safely pass a 50-year, 24-hour storm over the structure and to handle larger storms by allowing the creek unrestricted access to the extended floodplain. Additional borrow material to construct the new dike will be developed as needed and will be excavated from the area indicated on **Graphic C**. Approximately 800 cubic yards of fill will be required for the improved dike most of which, will be developed at the excavation area. Once project work is completed, the pond and dam infrastructure will hold 17 acre feet of water.

Spring Development

As located on **Photo Map B**, the output and water quality of five natural springs will be improved through the installation of small stabilization, diversion or catchment structures. At the present time, water is currently allowed to seep back into the soil at spring sites where it can become contaminated. In addition, spring flows can be obstructed by erosion of sediment as well as surrounding rock and soil catchment installations. Development of appropriate structures, including small spring boxes, perforated drain pipe or shallow troughs will allow for maximum use of water by grazing stock and wildlife while at the same time allowing a portion of unused water to continue downslope movement. Current conditions at spring sites are shown in **Photo 1** through **Photo 5**. The topographic position and condition of individual springs will dictate the type of structure(s) determined to be used. Spring outlets which have been trampled or overgrown will be cleared and cleaned in the process of improvement. Where shallow troughs or other surface catchment structures are installed, the area of these features will not exceed 20 square feet. A minimal amount of native rock may be used to reinforce and protect the soil surface surrounding spring outlets and to discourage recurrent degradation of water source quality and flow. Work will be completed using hand tools, with supplies imported to the spring sites via small truck or small utility tractor. The majority of project work completed around the springs will be at soil surface with only minor surface excavation for piping or small water catchment structures.

Surrounding Land Uses and Environmental Setting

The Leininger Ranch encompasses a portion of the western foothills of the southern Cascade Range and the eastern edge of the Northern Sacramento Valley. Elevation on the property ranges from approximately 330' on the valley floor near its southern boundary to 1,820' above sea level in the Cascade Range foothills near the northeastern corner of the ranch. Topography varies from nearly level terraces on the valley floor where pond work will be completed, to vertical canyon walls on the north and south sides of Deer Creek.

The major hydrological feature of the ranch is the perennial drainage of Deer Creek. This important tributary to the Sacramento River flows several miles away from the project area through the northern and northwestern boundaries of the ranch property. The Creek reaches its confluence with the Sacramento River approximately 5 air-miles southwest of the ranch property. Deer Creek provides critical spawning and rearing habitat for many species of native salmon and trout including

the State and federally listed (Threatened) Spring-Run Chinook salmon. The Deer Creek watershed is also essential winter range for portions of the Tehama Deer Herd and many other species of mammals. Migratory birds and wintering raptors take advantage of the pristine conditions found along Deer Creek as well as within the surrounding foothill, oak woodland and grassland habitats in the surrounding area.

Numerous seasonal drainages exist on the property including those that will be utilized to fill the proposed new and expanded ponds. Due to the fact that these drainages carry only storm flows during the area's rainy season, no impacts to other diverters or resources within the Deer Creek watershed will be impacted by the water retention capability developed by this project. Other seasonal drainages include the headwaters of Brush Creek's main branch, along with its West and Middle Forks which flow west by southwest and then south through the property. These drainages provide important temporary aquatic habitat for an array of native plant, invertebrate and wildlife species. Other important natural hydrologic feature on the Leininger properties include two vernal pools which are located several miles from the project area and are not hydrologically connected to the swales that would be used to fill the ponds developed in connection with this project. These seasonal aquatic systems are associated with old weathered, poorly drained soils of the Red Bluff (upper terrace) and Modesto (middle terrace) Geological Formations. The Vernal Pools provide important habitat for a variety of native plant, invertebrate and wildlife species that are endemic to these ephemeral systems including a number of rare, threatened and endangered species that are discussed in the attached Initial Study. A small, perennially flowing groundwater spring is located within that portion of Deer Creek Canyon on the Leininger property that supports native perennial wetland plant species. A number of other small groundwater springs including the five to be improved in connection with this project are located at higher elevations on the Leininger Ranch. Other semi-natural and artificial hydrologic features on the ranch include a now breached diversion dam, irrigation ditches, and groundwater wells.

The Leininger Ranch encompasses portions of five geologic landforms including Volcanic Lava Flow, Volcanic Mudflow, High Terrace, Middle Terrace, and Low Terrace. The Volcanic Mudflow landform makes up the majority of the foothill portion of the ranch east of Brush Creek's West Fork, including most of Deer Creek canyon. A majority of the property's lower-elevation pastureland is made up of the High Terrace landform. Soils in the area consist of cobbly to fine

sandy loams. Additional information regarding the project area's geology and soils can be found in the pertinent sections of this Initial Study/Mitigated Negative Declaration.

Monitoring

See "*Appendix A Mitigation Monitoring and Reporting Plan (MMRP) for the Leininger Ranch Stock Pond and Spring Development Project Initial Study/Mitigated Negative Declaration Tehama County, California*". This project will be monitored for adherence to project Mitigation Measures and infestation of noxious plants. This phase of project work will be completed by the responsible entity shown in the Plan.

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 type="checkbox"/> Agriculture Resources | <input checked="" type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input checked="" type="checkbox"/> Geology/Soils |
| <input checked="" 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 type="checkbox"/> Public Services | <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation/Traffic |
| <input type="checkbox"/> Utilities/Service Systems | <input 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 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by Mitigation Measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or Mitigation Measures that are imposed upon the proposed project, nothing further is required.

Signature

Date

Thomas F. McCubbins/CEQA Projects Manager

Tehama County RCD

Printed Name

For

**Map A.
Project Area Map
Leininger Ranch Stock Pond and Spring
Development Project**

**Map B.
Photo Map
Leininger Ranch Stock Pond and Spring
Development Project**

**Map C.
Topographic Map of
Pond Sites
Leininger Ranch Stock Pond and Spring
Development Project**

**Graphic A.
Pond Inundation Area Footprint
(New Pond)**

**Graphic B.
Profile View of Pond Design
(New Pond)**

**Graphic C.
Pond Inundation Area Footprint
(Improved/Expanded Pond)**

**Graphic D.
Profile View of Pond Design
(Improved/Expanded Pond)**



Photo 1. Example of vegetation and topography within the area of the Leininger Ranch where ponds will be redeveloped, improving water sources for livestock and wildlife

Photo 2. Pond site showing spring development features that are currently in poor condition. Per the work scope discussed in this this Initial Study/Mitigated Negative Declaration, project work will entail clearing spring sites of soil and rocks thus improving water yield. Above ground piping and trough features will be improved or replaced in order to more efficiently transport and store water.

Photo 3. Example of poorly developed spring site. Not only is water yield poor, the spring is trampled by livestock, exacerbating poor flow conditions

Photo 4. Example of spring site with a high potential for improvement given its significant flows. The installation of a small spring box or other storage devise will greatly improve the utility of this spring as a source of livestock and wildlife water and will protect source from trampling and contamination.

Photo 5. Example of spring site in need of improved storage structure in the form of a spring box or similar devise.

Conclusion of the Mitigated Negative Declaration

Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)

California Department of Fish and Wildlife

1600 Stream Alteration Agreement

State Water Resources Control Board

An application for water rights related to storm flows within the swale that will fill the two stock ponds will need to be prepared and filed with the State Water Resource Control Board. See the discussion under XVII d) Utilities and Service Systems below

Tehama County Air Pollution Control District

Fugitive Dust Permit Application/Land Clearing Burn Permit Application

Mitigation Measures

The following Mitigation Measures will be implemented by the Tehama County Resource Conservation District and other entities as noted in Mitigation Monitoring Plan shown at the end of this document. Implementation of these Mitigation Measures will reduce the environmental impacts of the proposed project to a less than significant level.

Proposed Mitigation Measures

Mitigation Measure AQ 1: The contractor shall submit an application for and receive approval from the Tehama County Air Quality Management District of a Construction Emission/Dust Control plan prior to groundbreaking. A copy of the permit shall be maintained in the TCRCD files.

Mitigation Measure AQ 2: Exhaust emissions shall be minimized by maintaining equipment in good repair and proper tune according to the manufacturer's specifications. Proof of maintenance, repair and tuning shall be provided to the TCRCO Project Manager.

Mitigation Measure AQ 3: Construction contracts shall include language that prohibits the use of all pre-1996 heavy-duty off-road diesel equipment on forecast 'Spare the Air' days.

Mitigation Measure AQ 4: Grading operation shall be suspended when wind speeds exceed 20 miles per hour.

Mitigation Measure AQ 5: Water shall be applied at least twice daily or as needed to prevent off site dust impacts. Alternatively, non-toxic soil stabilizers shall be applied on all unpaved access roads, parking areas and staging areas at construction sites.

Mitigation Measure AQ 6: All trucks hauling soil, sand, and other loose materials shall be covered or required to maintain at least 2 ft (0.6 m) of freeboard.

Mitigation Measure AQ 7: Exposed stockpiles of soil or sand shall be enclosed, covered, watered twice daily or have non-toxic soil binders applied.

Mitigation Measure AQ 7: The party that implements the project shall be responsible for monitoring the air quality of the site during construction.

Mitigation Measure BIO 1: The following Mitigation Measures apply to all wet or dry stream courses along with swales and other low areas where storm water flows with the exception of that portion of such features within the inundation area of the new and improved ponds described in the scope of work of this Initial Study/Mitigated Negative Declaration. Such features shall be protected by a 75' or to break in slope "No Treatment Zone" unless the slopes within these features are greater than 50%. In such instances these features shall be protected by a 100' or to break in slope "No Treatment Zone". Ditches, canals and other man made water conveyance structures shall be protected by a 25' "No Treatment Zone". All buffers shall be established on both sides of flow channels and flow structures. All springs other than those to be improved in connection with this project shall be encircled by a 75' "No Treatment Zone". "No Treatment

Zones” shall be established and flagged as directed by the TCRCO Project Manager prior to the implementation of any project work. Monitoring photographs shall be taken by the TCRCO Project Manager before and after completion of project work in order to document compliance with Mitigation Measure BIO 1 and these shall be incorporated into the TCRCO project files.

Mitigation Measure BIO 2: Personnel specifically trained in the identification of List 1, List 2 and List 3 species or a professional botanist shall be required to evaluate potential habitat for these species prior to implementation of work within the project area during the appropriate blooming or identification period. Such personnel shall also evaluate potential findings of any such plants within treatment areas during the execution of project work. If any Federal or State listed threatened or endangered species are detected in the project area that may be impacted by the project work, then all project related activities shall immediately stop within that area which shall be flagged with a 25’ “No Treatment Zone”. All sightings shall be documented using the California Natural Diversity Data Base (CNDDB) field survey form a copy of which shall be submitted to the CNDDB and the USFWS. A copy shall also be incorporated into the TCRCO project files. Qualifications for personnel who shall make evaluations of sites include those found in the California Department of Fish and Game's 2009 document entitled “**Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities**” (see **Appendix C**).

Mitigation Measure BIO 3: USFWS 1999 guidelines shall be followed if valley elderberry is encountered outside the “No Treatment Zone” described in Mitigation Measures BIO 1 and BIO 2 during the implementation of project work.

Mitigation Measure BIO 4: In order to protect any species covered by the Migratory Bird Treaty Act (MBTA), no project work shall occur between March to August, unless the following is implemented: 1. A survey is conducted by a biologist or a person with knowledge of, and ability to recognize, species protected by the MBTA and it is determined that there are no occupied nests within the proposed activity area. 2. If an occupied nest is found, then a biologist or a person with knowledge of, and ability to recognize, species protected by the MBTA shall determine if the birds present are those protected by the MBTA. 3. If an MBTA species is located then no activities shall occur within 100 feet of the nest during the breeding season.

Mitigation Measure BIO 5: In order to prevent the spread of invasive plant species all heavy equipment to be used in the execution of project work shall be cleaned off site prior to use within the project area. The TCRCO Project Manager shall assure and document equipment cleaning. Documentation of cleaning shall be incorporated into the TCRCO project files.

Mitigation Measure CUL 1: Within areas of ground or vegetation disturbing activities, if project work appears to expose any previously unknown archeological, prehistoric, historic or paleontological resource sites or within 30 feet beyond such impacted areas, the site shall be avoided. Work may continue elsewhere within the overall project area. Exposed cultural or paleontological resources shall be appropriately flagged in order to immediately establish an exclusion buffer of at least 100 feet. A professional archeologist shall examine the site, evaluate found objects and make a finding of their significance. The archeologist shall also develop recommendations for the permanent protection of objects and site treatments as necessary. Identified sites shall be permanently protected through avoidance. These sites shall be made off limits to both personnel and equipment. A professional archeologist shall determine an appropriate permanent flagged exclusion zone once the site has been adequately assessed for significance. Findings of significance shall be prepared and submitted to appropriate agencies as well as appropriate Native American groups at the discretion of the professional archeologist. As appropriate, findings shall be recorded in the TCRCO project files.

Mitigation Measure CUL 2: If during the execution of project work human remains are found, the TCRCO Project Manager shall halt work at that location until a professional archaeologist visits the site in order to assess their significance and process the remains and the County coroner shall be immediately notified. If the remains are determined by the County coroner to be Native American, the Native American Heritage Commission (NAHC) and Native American groups at the discretion of the professional archeologist shall be notified within 24 hours and the guidelines of the NAHC shall be adhered to in the treatment and disposition of the remains. Findings of significance shall be prepared and submitted to appropriate agencies at the discretion of the professional archeologist. Findings shall also be recorded in the TCRCO project files by the TCRCO Project Manager. Project work may continue on other non-impacted portions of the project area.

Mitigation Measure GEO/SOILS 1: Any newly-exposed soil of over 100 square feet in area shall be mulched or seeded with an appropriate mix of grass seed to minimize the potential for erosion. Verification

of proper installation and sufficiency of mulching or seeding shall be made by the TCRC D Project Manager prior to and following the season's first precipitation event and recorded in the TCRC D project files.

Mitigation Measure HA/HAZMAT 1: Contractors or landowners providing equipment shall provide adequate fire protection equipment. This shall include a water wagon located at equipment operation areas as well as fire extinguishers attached to all mechanized equipment. In addition, fire fighting hand tools shall be made available at all areas where equipment is operated.

Mitigation Measure HYDRO-1 a Stormwater Pollution Prevention Plan (SWPPP) shall be implemented prior to initiation of project work. All construction contractors and subcontractors shall be required to implement BMPs identified in the SWPPP for controlling soil erosion and discharges of other construction-related contaminants. Such BMP's shall be in addition to the specific Mitigation Measures listed in this Initial Study/Mitigated Negative Declaration. Routine monitoring and inspection of BMPs shall be conducted by the TCRC D Project Manager to ensure that the quality of storm water discharges is in compliance with the permit. BMPs required to be incorporated into the SWPPP include:

- Soil stabilization measures, such as preservation of existing vegetation and use of mulch or temporary plantings to minimize soil disturbance;
- Sediment control measures to prevent disturbed soils from entering waterways;
- Tracking control measures to reduce sediments that leave the construction site on vehicle or equipment tires;
- Non-stormwater discharge control measures, such as monitoring water quality of dewatering operations and hazardous material delivery along with storage, and emergency spill response requirements.

The TCRC D Project Manager shall ensure that the BMPs are implemented as appropriate throughout the duration of construction and shall be responsible for contractor and subcontractor compliance with the SWPPP requirements. In addition, the SWPPP shall include information on:

- The project's Implementation schedule
- Pollutant source identification
- Storm water BMPs
- Erosion control
- Sedimentation control
- Maintenance and Inspections
- Post-construction storm water management

Mitigation Measure HYDRO 2: No equipment operations shall occur on any unstable areas, regardless of slope percentage. Slope and suitability for equipment operations shall be determined by the TCRCD Project Manager.

Mitigation Measure HYDRO 4: The TCRCD Project Manager shall select refueling and maintenance areas for equipment including power hand tools on flat sites that are away from dry or wet waterways as well as areas that could potentially flow into a stream in the event of an accidental spill. Fuel containment equipment (i.e., absorbent sheets and waddles) shall be made available and used at refueling and maintenance areas. Fuel spillage shall be minimized by conducting these operations in flat areas. Equipment shall be stored and maintained within properly cleared areas. The TCRCD Project Manager shall inspect refueling areas to assure compliance with this Mitigation Measure. These inspections shall also verify the sites' adequacy in protecting riparian and terrestrial resources as well as the availability and use of containment equipment.

Mitigation Measure HYDRO 5: Contractors or landowners providing operations equipment (dozers, etc.) shall make daily inspection of equipment for leaks, correcting and repairing any such leaks prior to resuming their use. The inspection reports shall be submitted to the TCRCD Project Manager along with evidence of any repairs required and completed before returning equipment to project work sites. Inspection reports shall be incorporated into the TCRCD project files. In the event that equipment shall need to cross live streams, a California Department of Fish and Game Stream Alteration Agreement may be required at the discretion of that agency.

Mitigation Measure HYDRO 6: Any existing drainage features shall be protected from project related impacts and shall remain free of obstruction.

Summary of Findings

This IS/MND has been prepared to assess the project's potential effects on the environment and an appraisal of the significance of those effects. Based on this IS/MND, it has been determined that the proposed project will not have any significant effects on the environment after implementation of Mitigation Measures. This conclusion is supported by the following findings:

1. The proposed project will have no effect related to Aesthetics, Agricultural and Forest Resources, Land Use and Planning, Population and Housing, Public Services, Recreation, Transportation and Traffic, along with Utilities and Service Systems as well as Public Services.
2. The proposed project will have a less than significant impact on Greenhouse Gas Emissions, Mineral Resources and Noise.
3. Mitigation is required to reduce potentially significant impacts related to Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Material as well as Hydrology and Water Quality.

The Initial Study/Environmental Checklist included in this document discusses the results of resource-specific environmental impact analyses which were conducted by the Tehama County Resource Conservation District with assistance provided by various State agencies and other organizations. This Initial Study revealed that potentially significant environmental affects that could result from the proposed project. The project's proponent, the High Sierra RC&D revised its project plans and has developed Mitigation Measures which will eliminate impact or reduce environmental impacts to a less than significant level. The Butte County Resource Conservation District has found, in consideration of the entire record, that there is no substantial evidence that the proposed project as currently revised and mitigated would result in a significant effect upon the environment. The IS/MND is therefore the appropriate document for CEQA compliance.

INITIAL STUDY/ENVIRONMENTAL CHECKLIST

PROJECT INFORMATION	
1. Project Title:	Leininger Ranch Stock Pond and Spring Development Project
2. Lead Agency Name and Address:	Tehama County Resource Conservation District 2 Sutter Street Suite D Red Bluff, CA 96080 (530)-527-3013 x120 Email: tom@tehamacountyrcd.org Attn: Tom McCubbins CEQA Project Manager
3. Contact Person and Phone Number:	Tom McCubbins (530)-527-3013 x120 Cell (530)-200-1231
4. Project Location:	4 miles east of State Route 99E and the Community of Vina, 12 miles southeast of Los Molinos and 22 Mile southeast of Red Bluff, Tehama County California. The project site includes sections: Section 32 T25N R1W Sections 20, 28, 31, and 33, T25N R1E. The APN numbers specific to the proposed project are 079-010-23-1 for the pond work. APN numbers related to the spring improvement portion of the overall project include 081-140-08-1, 081-140-03-1, 081-070-14-1 and 081-070-13-12.
5. Project Sponsor's Name and Address:	State of California Wildlife Conservation Board 1807 13th Street, Suite 103 Sacramento, CA 95811 (916) 445-8448 Email: Peter.Perrine@wildlife.ca.gov Attn: Peter. Perrine Assistant Executive Director Restoration and Development
6. General Plan Designation:	Upland Agriculture
7. Zoning:	Upland Agriculture
8. Project Description: Refer to pages 5 of this document	
9. Surrounding Land Uses and Setting:	Refer to page 7 of this document
10: Other public agencies whose approval may be required:	California Department of Fish and Wildlife 1600 Stream Alteration Agreement

	<p>State Water Resources Control Board</p> <p>An application for water rights related to swale flows that will be used to fill the two stock ponds may need to be prepared and filed with the State Water Resources Control Board. See discussion under XVII d) Utilities and Service Systems below</p> <p>Tehama County Air Pollution Control District</p> <p>Fugitive Dust Permit Application/Land Clearing Burn Permit Application</p>
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ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below are the ones which would potentially be affected by this proposed project and were more rigorously analyzed than the factors which were not checked. The results of this analysis are presented in the detailed Environmental Checklist which follows.

<input type="checkbox"/>	Aesthetics	<input type="checkbox"/>	Agriculture and Forestry Resources	<input checked="" type="checkbox"/>	Air Quality
<input checked="" type="checkbox"/>	Biological Resources	<input checked="" type="checkbox"/>	Cultural Resources	<input checked="" type="checkbox"/>	Geology / Soils
<input type="checkbox"/>	Greenhouse Gas Emissions	<input checked="" 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 type="checkbox"/>	Public Services	<input type="checkbox"/>	Recreation
<input type="checkbox"/>	Transportation / Traffic	<input type="checkbox"/>	Utilities / Service Systems	<input type="checkbox"/>	Mandatory Findings of Significance

DETERMINATION

On the basis of this initial evaluation:

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

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

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

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

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

Ernest White, President
Tehama County Resource conservation
2 Sutter Street, Suite D
Red Bluff, CA 96080

Date Signed

ANALYSIS OF POTENTIAL ENVIRONMENTAL IMPACTS

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

Discussion

a) Would the project have a substantial adverse effect on a scenic vista?

The project area is located on ranch lands within a remote portion of southeastern Tehama County. The site is approximately 4 miles east of State Route 36E and the Community of Vina which is the closest developed area. Infrastructure developed through this project will only be visible to the land owner upon whose property the ponds and springs are being developed or to others passing the project area on private ranch roads.

b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

The project area is not within the viewshed of a scenic highway nor will it damage any scenic resources.

c) Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

At the present time, similar ranch infrastructure as will be developed through this project are found on the Leininger Ranch and surrounding area of Tehama County. Consequently changes in the long term visual character of the project site and surrounding landscapes will be minimal. This construction project's most impactful activities, the development of a stock pond and dam along with the expansion and improvement of an already in place pond and dam will have short term impacts to aesthetics in the immediate vicinity through the movement of soil along with grasses and forbs. No trees will be removed. These impacts will be moderated in the long term through post construction cleanup, soil stabilization and seeding of grasses on the

dam face and construction areas. It is anticipated that the springs to be further developed outside the pond area will be small enough to have minimal impact on the project area's visual character.

d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

No new sources of light or glare would be created by the execution and completion of project work.

No impacts to Aesthetics are anticipated.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
II. Agriculture and Forest Resources.				
<p>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997, as updated) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:</p>				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of forest land (as defined in Public Resources Code §12220(g)), timberland (as defined by Public Resources Code §4526), or timberland zoned Timberland Production (as defined by Government Code §51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment, which, 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a) ***Would the project 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?***

None of the land within the project area is classified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.

b) *Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?*

Project work would not change land use within the project area or on surrounding lands and thus would not conflict with existing zoning for agricultural activities or Williamson Act contracts.

c) *Would the project conflict with existing zoning for, or cause rezoning of forest land (as defined in Public Resources Code §12220(g)), timberland (as defined by Public Resources Code §4526), or timberland zoned Timberland Production (as defined by Government Code §51104(g))?*

None of the land on which project work would be completed is classified as forest land (as defined in Public Resources Code §12220(g)), timberland (as defined by Public Resources Code §4526), or timberland zoned Timberland Production (as defined by Government Code §51104(g)).

d) *Result in the loss of forest land or conversion of forest land to non-forest use?*

See comments under II c) above.

e) *Would the project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?*

The Leininger Ranch Stock Pond and Spring Development Project will result in improved ranch operations related to stock watering thus improving conditions for more profitable agricultural production.

No impacts to Agricultural and Forest Resources are anticipated

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
III. Air Quality.				
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied on to make the following determinations. Will the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

Air Quality standards are based on provisions of the Federal and State Clean Air Acts. The Tehama County Air Quality Pollution Control District (TCAPCD) is responsible for the planning, maintenance and attainment of these standards at the local level. Tehama County has been designated as a non-attainment area for state and federal ambient ozone standards and California inhalable particulate matter (PM₁₀) standards. This project entails the development of a new stock pond to replace an abandoned improperly functioning pond located roughly 1,000 feet away to the northeast along with the expansion and improvement of another in place pond. Project work also includes the improvement of five currently functioning small springs used for cattle and wildlife watering. These water development activities will occur within a remote area of southwestern Tehama County. To accomplish this, heavy construction equipment will be used to excavate a portion of the pond bottoms, with that material being used as fill material for the new and improved pond dams. The only air pollutants that will be generated in the execution of project work will be exhaust from heavy equipment and small power hand tools along with fugitive dust generated by this equipment. Spring development will utilize only hand tools and possibly small power equipment. Standard Construction practices required by State and local air officials will be utilized in the operation of equipment and in the control or containment of fugitive dust. Mitigation Measures AQ 1 through AQ 7 will be implemented as well.

Would the Project

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

The construction activities to be conducted in connection with this project include the use of heavy equipment such as dozers and other earth moving equipment along with power hand tools which will be operated under current Californian air regulations as enforced by the TCAPCD. Best management practices related to fugitive dust and other pollutants will be enforced under the Mitigation Monitoring and Reporting Plan established for this project as enforced by the TCRCD, TCAPCD and other entities identified in the plan shown at the end of this Initial Study/Mitigated Negative Declaration. Consequently execution of project work will not conflict with or obstruct the implementation of the Tehama County Air Quality Plan nor will it conflict with any State Air Quality Plans.

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

Equipment to be used in the execution of project work will be operated under current Californian air regulations as enforced by the TCAPCD. Fugitive dust will be controlled using the measures established in the Mitigation Monitoring and Reporting Plan created by the TCRCD including Mitigation Measures AQ1 through AQ7.

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)?

See comments under III a and b) above.

d) Expose sensitive receptors to substantial pollutant concentrations?

The Leininger Ranch Stock Pond and Spring Development Project area is located in remote portion of Tehama County. The nearest sensitive receptors include the communities of Vina located 4 miles west of the project site and Los Molinos located about 12 miles to the southwest. A number of scattered residential structures are located several miles from the project's impact area. The only inhabited structure near the

project site is owned by the individual on whose property this project work would be completed. The only air pollutants that will be generated in connection with project work will be from the exhaust of equipment used in the development and expansion of the ponds. This equipment will be operated under current Californian air regulations as enforced by the TCAPCD. Fugitive dust generated by construction activities will be controlled through the mitigation measures shown in the TCRCD's Mitigation Monitoring and Reporting Plan.

e) ***Create objectionable odors affecting a substantial number of people?***

Execution of project work will result in minor releases of exhaust smoke from regulated equipment used in the completion of project work. Given that this equipment's operation will occur only within remote locations, any odors or minor pollutants generated will not affect substantial numbers of people

Measures to Reduce Impacts to Air Quality

Mitigation Measure AQ 1: The contractor shall submit an application for and receive approval from the Tehama County Air Quality Management District of a Construction Emission/Dust Control plan prior to groundbreaking. A copy of the permit shall be maintained in the TCRCD files.

Mitigation Measure AQ 2: Exhaust emissions shall be minimized by maintaining equipment in good repair and proper tuning according to the manufacturer's specifications. Proof of maintenance, repair and tuning shall be provided to the TCRCD Project Manager.

Mitigation Measure AQ 3: Construction contracts shall include language that prohibits the use of all pre-1996 heavy-duty off-road diesel equipment on forecast 'Spare the Air' days.

Mitigation Measure AQ 4: Grading operation shall be suspended when wind speeds exceed 20 miles per hour.

Mitigation Measure AQ 5: Water shall be applied at least twice daily or as needed to prevent off site dust impacts. Alternatively, non-toxic soil stabilizers shall be applied on all unpaved access roads, parking areas and staging areas at construction sites.

Mitigation Measure AQ 6: All trucks hauling soil, sand, and other loose materials shall be covered or required to maintain at least 2 ft (0.6 m) of freeboard.

Mitigation Measure AQ 7: Exposed stockpiles of soil or sand shall be enclosed, covered, watered twice daily or have non-toxic soil binders applied.

Mitigation Measure AQ 7: The party that implements the project shall be responsible for monitoring the air quality of the site during construction.

No significant adverse impacts to Air Quality are anticipated with the implementation of the above Mitigation Measures.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. Biological Resources. Will the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Potential Impacts

The Leininger Ranch Stock Pond and Spring Development Project will result in the development of a new pond and expansion of an already in place pond. Also included in the project’s work scope is the improvement of five small springs in various locations around the ranch. These improvements will include the clearing of sediment, rock and vegetative debris from spring sites and installing a primitive piping system to new or already in place spring boxes or troughs none of which will be larger than 20 sq. ft.

A review was made of the California Natural Diversity Database, the Cal Fish Database, the Wildlife Habitat Relationships System of the California Department of Fish and Game along with other sources of information in order to determine the occurrence of Candidate, Sensitive or Special Status Species within or immediately adjacent to this project’s area of impact. Those with the highest probability of occurring within the project area inhabit open grassy areas which are in abundance throughout this portion of Eastern Tehama County. Potential impacts to these species include short term construction activities along with the

inundation of several additional grassland acres once the new and redeveloped stock pond dams are fully developed. In order to reduce impacts on species inhabiting grasslands and other open areas, a survey for Burrowing Owls was completed by Natural Resources Conservation Service (NRRCS) personnel during topographic surveying of the project site. One owl site was found and identified for avoidance. In addition, habitat for a number of the listed species including the Great Blue Heron, Depauperate Milk Vetch, Shieldbract Monkey Flower and the Tehama Navarretia will be improve thought the increase in moist areas surrounding the banks of the new and redeveloped ponds. Mitigation Measures BIO 1 through BIO 5 will be implemented in order to reduce impacts on listed species found throughout the project area.

Formally Listed Species Found in the Immediate Vicinity

During the preparation of this Initial Study/Mitigated Negative Declaration, the Department of Fish and Game's California Natural Diversity Database (CNDDDB) was utilized to identify possible listed species. The review was made on January 14, 2014. The Cal Fish database along with a number of other references including the California Department of Fish and Game California Interagency Wildlife Task Group's Wildlife Habitat Relationships System and other sources were also reviewed in order to determine the possible occurrence of upland, avian, amphibian, aquatic and anadromous species. The following results relate to listed Endangered, Threatened, or Sensitive Species (List 1, List 2 and List 3) as well as those plants listed in the California Native Plant Society's **Inventory of Rare, Threatened, and Endangered Plants of California**.

California Department of Fish and Game Species of Special Concern

Under California law, Species of Special Concern are to be considered during the environmental review process. The California Environmental Quality Act (CEQA; California Public Resources Code §§ 21000-21177) requires State agencies, local governments, and special districts to evaluate and disclose impacts from "projects" in the State. Section 15380 of the CEQA Guidelines indicates that species of special concern should be included in an analysis of project impacts if they can be shown to meet the criteria of sensitivity outlined in State regulations.

1 = Federal Endangered	2 = Federal Threatened	3 = California Endangered
4 = California Threatened	5 = California Fully Protected	6 = California Protected
7 = California Species of Special Concern	8 = Federally Proposed Endangered	9 = Federally Proposed Threatened
10 = Federal Candidate	11 = BLM Sensitive	12 = USFS Sensitive
13= Cal Fire Sensitive	14 = Harvest	15 = CDFW Special Animal
16 = CDF Watch List	17 = Migratory Bird Treaty Act Protected	

Mammals

Pacific Fisher (Martens *loccos (pacifica)* DPS)^{7, 10}: The Pacific Fisher is listed as a Federal Candidate Species and State “Species of Special Concern under California law. *Martes loccos* is a specialized forest carnivore that is associated with closed-canopy, late-succession forests throughout its range. The Leininger Ranch Stock Pond and Spring Development Project area is within open grasslands well below this species normal habitat range. As a result the occurrence and impact to this species due to project implementation is not anticipated.

Fish

(No list species of fish were identified within the project area.)

Birds

Burrowing owls (*Athene cunicularia*)⁷: This species of owl live underground in burrows that have been dug out by small mammals such as ground squirrels and prairie dogs. Burrowing owls eat small mammals such as moles and mice during late spring and early summer. Later in the year they switch to insects, especially grasshoppers and beetles. Burrowing owls are also known to eat birds, amphibians and reptiles. Current burrowing owl population estimates are not well known but trend data suggests significant declines across their range. Unlike other owls, this species is active during the day, especially in the spring when they gather food for their large broods. The Burrowing Owl prefers open areas with low ground cover. They can often be found perching near their burrow on fence posts and trees. Burrowing owls often nest in loose colonies about 100 yards apart. During the nesting season, this owl will collect a wide variety of materials to line their nest, some of which are left around the entrance to the burrow. The most common material is mammal dung, usually from cattle. At one time it was incorrectly thought that the dung helped to mask the scent of the juvenile owls, but researchers now believe the dung helps to control the microclimate inside the

burrow and to attract insects, which the owls may eat. This species mating season is in the early spring. The young owls begin appearing at the burrow's entrance two weeks after hatching and leave the nest to hunt for insects on their own after about 45 days. The chicks can fly well at 6 weeks old. During topographic surveying a survey for owl sites was made by NRCS personnel. One site was found west of the proposed dam site and the area was identified for protection during construction activities. Mitigation Measures **x** related to the protection of ground born species will be implemented during project development and implementation activities as well as over the life of the improved pond and dam structure. As a result of these protection measures, impacts to the Burrowing Owl are anticipated to be less than significant.

Golden Eagle (*Aquila chrysaetos*): ^{5,11,13,16} This California fully protected species' habitat within the Northern California's interior consists of rolling foothills and mountain areas. The Golden Eagle requires open terrain for hunting including grasslands savannahs as well as early successional stage forests and shrub land habitats. Cover and nesting sites are normally located on cliffs with overhanging ledges at all heights and in large trees in open areas. This species eats mostly lagomorphs and rodents along with other mammals, birds, reptiles and some carrion. Breeding occurs from late January through August and peaks between March and July. There are no cliffs or overhanging ledges within or near the project area. These sites do exist in foothill areas four miles to the east. It is anticipated that the enlarged pond will be a water attractant for those species upon which the Golden Eagle feeds.

Great Blue Heron (*Ardea Herodias*)^{15, 16}: The Great Blue Heron lives in both fresh and salt water habitats. It forages in grasslands and agricultural fields, where they stalk frogs and mammals. Most breeding colonies are located within 2 to 4 miles of feeding areas, often in isolated swamps or on islands and near lakes and ponds bordered by forests. *Ardea Herodias* eats nearly anything within striking distance including fish, amphibians, reptiles, small mammals, insects, and other birds. Male Great Blue Herons collect much of the nest material gathering sticks from the ground and nearby shrubs and trees as well as from unguarded and abandoned nests. This material is woven into a platform and a saucer-shaped nest cup that is often lined with pine needles, moss, reeds, dry grass, mangrove leaves, or small twigs. Nest building can take from 3 days up to 2 weeks and can range in size from a simple platform measuring 20 inches across to more elaborate structures used over multiple years, reaching 4 feet across and nearly 3.5 feet deep.

Ground-nesting herons use vegetation such as salt grass to form the nest. This species generally nest in trees, but will also nest on the ground, on bushes, in mangroves, and on structures such as duck blinds, channel markers, or artificial nest platforms. This species' numbers are generally stable and in some places increasing across the U.S. They are however vulnerable to habitat loss and to impacts such as traffic, logging, motorboats, and other human intrusions that can disrupt nesting colonies. Other threats include chemical pollutants or other causes of reduced water quality. Although contaminant levels have declined in many areas, pollutants such as PCBs and DDT and newer types of industrial chemicals continue to affect heron habitats and can contribute to factors such as reduced nest site attendance. None of these materials have been used within the project site or immediately surrounding area.

At the present time, ponds and wet areas within the project area are too small to provide significant habitat area for this species' pray. Consequently no individuals have been found. With the development of addition ponded areas, it is anticipated that potential pray habitat along with nesting materials such as reeds and riparian species of shrubs will develop in greater amounts thus making the project area attractive to this species of heron in the future. In addition given the remote location of the project area, human caused threats to potential future nesting individuals is anticipated to be minimal.

Prairie Falcon (*Falco mexicanus*)¹⁶: Prairie Falcons inhabit grasslands, shrub-steppe, deserts and other open areas of the West up to about 10,000 feet in elevation. During the winter, they also reside in cultivated fields, lakeshores, desert scrub, as well as feedlots where European Starlings may provide a steady food source. During the breeding season within lower elevations, Prairie Falcons eat large numbers of ground squirrels, small rodents, lizards and insects along with birds such as Cliff Swallows, and Mourning Doves. The Prairie Falcon develops cliff nests by digging out a small scrape to hold their eggs. Most Prairie Falcons nests are on overhanging, south-facing cliffs up to 500' high. They also nest in trees, on power lines, on buildings, in caves or in stone quarries. They sometimes use abandoned nests of other species, such as ravens and Golden Eagles. Prairie Falcons forage by swooping at a low angle to surprise prey on the ground. Less often, they swoop on their prey from high above. They also hunt birds (and sometimes bats) in flight by chasing them or diving through flocks. Flight is rapid and direct with shallow, stiff wing beats. Adults are highly territorial during the breeding season and will attack intruding Prairie Falcons with frequent swoops, loud sounds, and tail chases.

No impacts to prairie falcons are anticipated in connection with this project as there are no cliffs or overhanging rocky areas within or immediately adjacent to the project's impact area. Potential prairie falcon habitat does exist roughly four miles to the east within the lower foothills of the Cascade Range. These sites however are considered too far away from the project area to be negatively impacted by construction activity. It is anticipated that an improved ponded area as well as the riparian habitat that develops around the pond's bank along with improved spring locations will be an attractant to this bird and the ground species that are its prey thus positively impacting the potential for its presence in Tehama County.

Amphibians

(No list species of amphibians were identified within the project area.)

Reptiles

(No list species of reptiles were identified within the project area.)

Insects

(No list species of Insects were identified within the project area.)

Crustaceans

Conservancy Fairy Shrimp (*Branchinecta Conservatio*)¹: The Conservancy fairy shrimp is known from a few isolated populations distributed over a large portion of California's Central Valley and in Southern California. In the Northeastern Sacramento Valley Vernal Pool Region, four populations are clustered around the Vina Plains area in Tehama County which lies a few miles south of the project site. This species is adapted to the ephemeral conditions of vernal pool habitat which are not found within the overall project area. Neither this species nor its habitat will be impacted by project work or the presence and operation of any infrastructure completed in connection with this effort.

Vernal Pool Fairy Shrimp (*Branchinecta lynchi*)²: *Branchinecta lynchi* is listed as a Federally Threatened species throughout its range. The Vernal Pool Fairy Shrimp inhabits vernal pools or similar ephemeral wetlands and grassed or mud bottomed pools or basalt flow depression pools in unplowed grasslands. Although it occurs most often in vernal pools, it also inhabits a variety of natural and artificial seasonal wetland habitats, such as alkali pools, ephemeral drainages, stock ponds, roadside ditches, vernal swales, and rock outcrop pools. Regardless of the habitat, the wetlands in which this species is found are normally small and shallow. Eggs of the Vernal Pool Fairy Shrimp hatch when the vernal pools and swales fill with rainwater and the immature stages rapidly develop into adults which have been collected from early December to early May. None of the ephemeral water features found within the project area have the size, characteristics or connectivity necessary for adequate fairy shrimp habitat. The implementation of Mitigation Measures X and X will assure that impacts to this species will be less than significant.

Vernal Pool Tadpole Shrimp (*Lepidurus packardii*)¹: This large tadpole shrimp is listed as Endangered and is found in a variety of natural and artificial, seasonally ponded habitat types including: vernal pools, swales, ephemeral drainages, stock ponds, reservoirs, ditches, backhoe pits, and ruts caused by vehicular activities. Adults are omnivorous, foraging on detritus, vegetation and other aquatic invertebrates when available. Early instar stages are most likely obligate filter feeders which later increase active prey consumption. Mitigation Measures X and X will insure impacts to this species habitat and water quality requirements related to project work will be less than significant.

Plants

Depauperate Milk Vetch (*Astragalus pauperculus*) ^{4.3CNPS Watch List Not very threatened in California}: *Astragalus pauperculus* is an uncommon species of milk vetch known by the common name Depauperate milk vetch. It is endemic to Northern California, where it is found in the northern Sacramento Valley and lowest reaches of the adjacent Cascade foothills within chaparral, cismontane woodland, as well as valley and foothill grasslands and vernal wet grassland habitats. Sites are generally found on vernal mesic and volcanic soils between 200' to 3000' in elevation. A very small annual plant, it grows in a delicate mat. This plant is endemic to California and has been identified in Butte, Placer, Shasta, Tehama and Yuba counties. The California Native Plant Society reported that although *A. pauperculus* is considered rare, it is distributed widely enough and found in sufficient numbers so that the threat of extinction is currently low. It is

anticipated that impacts to this plant will be less than significant through the implementation of Mitigation Measures #1, #2, #3 and #5.

Bidwell's knotweed (*Polygonum bidwelliae* S. Watson) ^{4.3CNPS Watch List Not very threatened in California}: This plant is endemic to California, where it is found within the northern Sacramento Valley and adjacent slopes of the southernmost Cascade Range. It grows in chaparral, woodland, and grassland habitat on volcanic soils. If this plant is sighted within the very limited area of project impact, it will be protected through the implementation of Mitigation Measures #1, #2, #3 and #5.

Shieldbract monkey flower. (*Mimulus glaucescens*) ^{4.3CNPS Watch List Not very threatened in California}: *Mimulus glaucescens* is a species of monkey flower known by the common name Shieldbract Monkey Flower. It is endemic to California, where it is found within the foothills of the southernmost Cascade Range and adjacent northernmost Sierra Nevada. It grows in moist areas, such as seeps. The only moist areas within the project site are those that will develop immediately adjacent to the pond and springs which are being developed. It is anticipated that some seepage will occur at newly developed pond banks and next to springs which will provide suitable conditions for this plant thus expanding its potential area of occurrence. During project implementation, listed plants will be protected through the implementation of Mitigation Measures #1, #2, #3 and #5.

Tehama Navarretia (*Navarretia heterandra*) ^{4.3CNPS Watch List Not very threatened in California}: *Navarretia heterandra* is an uncommon species of flowering plant in the phlox family known by the common name Tehama pincushion plant, or Tehama navarretia. It is native to northern California and southern Oregon, where it is found in moist areas on grasslands such as vernal pools. There are no vernal pools and few if any moist sites within this project's areas of impact other than those that will develop with construction of the stock pond and improved springs. If this plant does exist in the surrounding area, there is the potential for it to expand into additional wet areas created project work. It is anticipated that impacts to this plant will be less than significant through the implementation of Mitigation Measures #1, #2, #3 and #5.

Woolly Meadowfoam (*Limnanthes loccose* ssp. *Floccose*):^{CNPS 4.2 (Limited distribution Watch List)}. The California Natural Diversity Data reports *Limnanthes loccose* ssp. *Floccose* as having a Heritage Rank of G4T4/S3.2. This fairly endangered California species is found near the wet inner edges of vernal pools the closest of which are located several miles to the north and east of the project area. It is anticipated that impacts to this plant will be less than significant through the implementation of Mitigation Measures #1, #2, #3 and #5.

- a) ***Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?***

See comments under Potential Impacts shown above. It is anticipated that through the implementation of this project's Mitigation Monitoring and Reporting Plan, impacts to potential listed species will be less than significant.

- b) ***Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?***

In addition to a conservation easement and plan established for this property by The Nature Conservancy, the project area is included in those lands covered under the US Fish and Wildlife Service's *Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon (2005)*. The USFWS plan has established recovery goals for number of species that inhabit and depend upon vernal pool habitat for their survival. Three species included in the recovery plan, the Vernal Pool Tadpole Shrimp (*Lepidurus packardii*), Vernal Pool Fairy Shrimp (*Branchinecta lynchi*), and Conservancy Fairy Shrimp (*Branchinecta Conservatio*) were also identified in the California Natural Diversity Database search conducted on January 14, 2014. Although these species have been found further south in the vicinity of the Vina Plains there is no suitable vernal pool habitat within or near the project site or immediately surrounding area that would be impacted by construction and operation of the pond and springs. In addition, the swale feature that would provide storm flows to the pond structures and springs included in project work are not hydrologically connected to any vernal pools. It is anticipated that through the implementation of those specific Mitigation Measures shown in this project's Mitigation Monitoring and Reporting Plan, impacts to potential listed species and biological communities found within the project area will be rendered less than significant.

c) Would the project 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?

Although project work will entail incidental earth movement, there are no federally protected wetlands located within this project's impact area.

d) Would the project 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?

Once completed, the pond structures will be filled using storm flows from a swale that passes through the project area and provides minimal flows to Juniper Gulch, a minor tributary to Deer Creek. Mitigation Measures BIO 1, 2 and 3, and 5 will be incorporated into project implementation efforts in order to reduce potential impacts to aquatic or riparian species along with avian species and those related to upland sites to a less than significant level. Mitigation Measure BIO 4 will similarly reduce impacts on those species covered under the Migratory Bird Treaty Act.

e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

There are no local policies or ordinances protecting biological resources that affect the project area.

f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

As discussed under IV.b) above, with the exception of a conservation easement and plan developed and implemented by The Nature Conservancy and the USFWS Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon, there are no formally approved, adopted or recognized habitat conservation or natural community plans that affect the project area.

Measures to Reduce Impacts to Biological Resources

Mitigation Measure BIO 1: The following Mitigation Measures apply to all wet or dry stream courses along with swales and other low areas where storm water flow with the exception of that portion of such features within the inundation area of the new and improved ponds described in the scope of work of this Initial Study/Mitigated Negative Declaration. Such features shall be protected by a 75' or to break in slope "No Treatment Zone" unless the slopes within these features are greater than 50%. In such instances these features shall be protected by a 100' or to break in slope "No Treatment Zone". Ditches, canals and other

man made water conveyance structures shall be protected by a 25' "No Treatment Zone". All buffers shall be established on both sides of flow channels and flow structures. All springs other than those to be improved in connection with this project shall be encircled by a 75' "No Treatment Zone". "No Treatment Zones" shall be established and flagged as directed by the TCRCO Project Manager prior to the implementation of any project work. Monitoring photographs shall be taken by the TCRCO Project Manager before and after completion of project work in order to document compliance with Mitigation Measure BIO 1 and these shall be incorporated into the TCRCO project files.

Mitigation Measure BIO 2: Personnel specifically trained in the identification of List 1, List 2 and List 3 species or a professional botanist shall be required to evaluate potential habitat for these species prior to implementation of work within the project area during the appropriate blooming or identification period. Such personnel shall also evaluate potential findings of any such plants within treatment areas during the execution of project work. If any Federal or State listed threatened or endangered species are detected in the project area that may be impacted by the project work, then all project related activities shall immediately stop within that area which shall be flagged with a 25' "No Treatment Zone". All sightings shall be documented using the California Natural Diversity Data Base (CNDDB) field survey form a copy of which shall be submitted to the CNDDB and the USFWS. A copy shall also be incorporated into the TCRCO project files. Qualifications for personnel who shall make evaluations of sites include those found in the California Department of Fish and Game's 2009 document entitled "**Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities**" (see **Appendix C**).

Mitigation Measure BIO 3: USFWS 1999 guidelines shall be followed if valley elderberry is encountered outside the "No Treatment Zone" described in Mitigation Measures BIO I and BIO 2 during the implementation of project work.

Mitigation Measure BIO 4: In order to protect any species covered by the Migratory Bird Treaty Act (MBTA), no project work shall occur between March to August, unless the following is implemented: 1. A survey is conducted by a biologist or a person with knowledge of, and ability to recognize, species protected by the MBTA and it is determined that there are no occupied nests within the proposed activity area. 2. If an occupied nest is found, then a biologist or a person with knowledge of, and ability to recognize, species

protected by the MBTA shall determine if the birds present are those protected by the MBTA. 3. If an MBTA species is located then no activities shall occur within 100 feet of the nest during the breeding season.

Mitigation Measure BIO 5: In order to prevent the spread of invasive plant species all heavy equipment to be used in the execution of project work shall be cleaned off site prior to use within the project area. The TCRCO Project Manager shall assure and document equipment cleaning. Documentation of cleaning shall be incorporated into the TCRCO project files.

No significant adverse impacts to Biological Resources are anticipated with the implementation of the above Mitigation Measures.

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

Discussion

Information about Cultural Resources

In order to assess possible impacts to cultural resources attributable to the Leininger Ranch Stock Pond and Spring Development Project, the Native American Heritage Commission (NAHC) was contacted by the Western Shasta Resource Conservation District’s manger and archeologist David DeMar in order to obtain information and guidance relating to possible Native American cultural resources within the project site and immediately surrounding area. An NAHC records search failed to indicate the presence of such cultural resources. The Commission also provided a list of Native American organizations and individuals who were thought to possibly have information on cultural resources within the area of concern. These sources included

- Paskenta Bank of Nomlaki Indians**
- Redding Rancheria**
- Wintu Tribe of Northern California**
- Redding Rancheria**
- Redding Rancheria Cultural Resources.**

No additional information was provided Mr. Demar and based upon the sources of information he received, no impacts to cultural resources are anticipated. If any cultural sites are found during project implementation, they will be flagged in order to restrict equipment access. In the event that previously unidentified archaeological resources are discovered during project implementation, all work will stop and consultation with the state historic preservation office will be reinitiated. The following Mitigation Measures have been developed in the event that unknown cultural, archeological or paleontological resources are found during the implementation of project work:

Measures to Reduce Impacts to Cultural Resources

Mitigation Measure CUL 1: Within areas of ground or vegetation disturbing activities, if project work appears to expose any previously unknown archeological, prehistoric, historic or paleontological resource sites or within 30 feet beyond such impacted areas, the site shall be avoided. Work may continue elsewhere within the overall project area. Exposed cultural or paleontological resources shall be appropriately flagged in order to immediately establish an exclusion buffer of at least 100 feet. A professional archeologist shall examine the site, evaluate found objects and make a finding of their significance. The archeologist shall also develop recommendations for the permanent protection of objects and site treatments as necessary. Identified sites shall be permanently protected through avoidance. These sites shall be made off limits to both personnel and equipment. A professional archeologist shall determine an appropriate permanent flagged exclusion zone once the site has been adequately assessed for significance. Findings of significance shall be prepared and submitted to appropriate agencies as well as appropriate Native American groups at the discretion of the professional archeologist. As appropriate, findings shall be recorded in the TCRCDD project files.

Measures to Reduce Impacts to Cultural Resources

Mitigation Measure CUL 2: If during the execution of project work human remains are found, the TCRCDD Project Manager shall halt work at that location until a professional archaeologist visits the site in order to assess their significance and process the remains and the County coroner shall be immediately notified. If the remains are determined by the County coroner to be Native American, the Native American Heritage Commission (NAHC) and Native American groups at the discretion of the professional archeologist shall be notified within 24 hours and the guidelines of the NAHC shall be adhered to in the treatment and disposition of the remains. Findings of significance shall be prepared and submitted to appropriate agencies at the discretion of the professional archeologist. Findings shall also be recorded in the TCRCDD project files by the TCRCDD Project Manager. Project work may continue on other non-impacted portions of the project area.

No significant adverse impacts to Cultural Resources are anticipated with the implementation of the above Mitigation Measures.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. Geology and Soils. Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

Soil types present within the project area include Tuscan cobbly loam with a small percentage of Laniger fine sandy loam. These soils are derived from volcanic rock, are well drained and have low erosion potential. Their available water capacity rating is low which results in little if any natural surface water during summer months.

- a) ***Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving?***
 - i) ***Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)***

A review of the current Alquist-Priolo Earthquake Fault Zone Maps indicates that there are no faults located within the portion of Southeastern Tehama County where project work will be completed. In addition, there is no indication of rupturing within the project site or general project area.

ii) Strong seismic ground shaking?

See comments under VI. a) i) above

iii) Seismic-related ground failure, including liquefaction?

See comments under VI. a) i) above

iv) Landslides?

Given the flat terrain and well-drained soil types found within the pond and dam portion of the project area, the likelihood of landslides during extended periods of wet weather is minimal. There is the potential for erosion to occur on excavated soils or those used for the pond dam and berm. Spring sites have very low flow rates and are located on rocky soils or rock outcrops. Only minor soil disturbance is anticipated when springs are cleared of sediment, rocks and debris using hand tools and small power equipment. In some instances minor construction activities will occur around springs such as the construction of small spring boxes or relocating in place trough structures and piping (see photographs 1 through 5 above). The majority of this work will be completed at the soil surface with the exception of shallow trenching for pipes. Finally implementation of Mitigation Measure GEO/SOILS 1 will also help to reduce impacts to the project area's geology and soils to a less than significant level.

b) Would the project result in substantial soil erosion or the loss of topsoil?

As mentioned in the above discussion, soil types within the project area include Cobbly and fine sandy loams that are well drained and have low erosion potential. In addition, project work that entails significant excavation will be conducted on relatively flat slopes. In order to further reduce the possibility of top soil loss to a less than significant level, the Mitigation Measures related to geology and soils as well as water quality and construction practices mentioned above will be implemented during and after the execution of project work.

- c) ***Would the project 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?***

The well drained soils within the project area are not generally subject to landslide, lateral spreading, subsidence, liquefaction, or collapse. In addition, that portion of the project where the most impactful construction activities such as excavation with construction equipment will occur on flat to gentle slopes. In order to reduce the potential for soil movement, liquefaction or collapse, Mitigation Measure GEO/SOILS 1 will be implemented during and after the execution of project work.

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

There are no expansive soils as defined in Table 18-1-B of the Uniform Building Code within the project area.

- e) ***Would the project 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 project area is not zoned for urban development uses. No septic tanks or alternative waste water disposal systems are located within the project's immediate impact area and none will be developed in connection with the completion project work.

Measures to Reduce Impacts to Geology and Soils

Mitigation Measure GEO/SOILS 1: Any newly-exposed soil of over 100 square feet in area shall be mulched or seeded with an appropriate mix of grass seed to minimize the potential for erosion. Verification of proper installation and sufficiency of mulching or seeding shall be made by the TCRCD Project Manager prior to and following the season's first precipitation event and recorded in the TCRCD project files.

No significant adverse impacts related to Geology and Soils are anticipated with the implementation of the above Mitigation Measure.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. Greenhouse Gas Emissions. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

Greenhouse Gas (GHG) Emissions Related to Diesel and Gasoline Consumption

The emission factors for diesel and gasoline presented below were obtained from the California Climate Action Registry (CCAR) General Reporting Protocol Version 3.1/January 2009, (CCAR) which is available on-line at:

http://www.sfenvironment.org/sites/default/files/fliers/files/ccar_grp_3-1_january2009_sfe-web.pdf

The emission factors for diesel fuel listed in the CCAR were reported to be .26 grams per gallon for N₂O (Nitrous Oxide) and .58 grams per gallon for CH₄ (Methane). It is estimated that project work will require 300 gallons of diesel fuel for dozers and other construction equipment along with heavy equipment transportation to the project site. As result it has been determined that roughly 78 grams of N₂O and 174 grams of CH₄ will be released thought this the use of such equipment. Estimates of GHG emissions related to gasoline consumption were calculated. It is estimated that 265 gallons of gasoline will be used by vehicles transporting construction workers and small equipment as well as small hand power tool used at the same site and at spring areas. The CCAR provided emission factors of .22 grams per gallon of N₂O and .50 grams per gallon of CH₄ . As a resulted it is estimated that 58.3 grams of N₂O and 132 grams of CH₄ will be generated through the use of gasoline powered transportation and power hand tools.

- a) *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

(See comments above)

b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gas?

(See comments above)

Impacts related to Greenhouse Gas Emissions will be less than significant.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. Hazards and Hazardous Materials. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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, will it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

Project work entails the development of improved water storage capacity in the form of a newly constructed stock pond and dam along with the expansion and improvement of another pond and dam. In addition, improvements to five springs will be completed in order to improve production and storage of water. The only hazardous materials that will be used in connection with project work will be diesel fuel and lubricants for dozers, other heavy equipment and transportation vehicles. Gasoline will be used to fuel transportation equipment for construction personnel along with small power tools. There is a chance that a spill could occur if equipment overturned or during equipment fueling and maintenance operations. This is unlikely however, and the risk would not be significant with the implementation of Mitigation Measure HA/HAZMAT 1 and BIO 1. Fuel containment equipment (absorbent sheets and waddles) will be located at all refueling and maintenance sites.

a) *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

Project work poses a potential hazard related to the transport and use of fuel and lubricants. The risks related to this hazard will be reduced to a less than significant level through the implementation of Mitigation Measure HA/HAZMAT 1. In addition Mitigation Measure BIO 1 related to the establishment of no treatment buffers around wet areas, HYDRO 4 addressing the location of refueling areas and containment of hazardous materials along with HYDRO 5 related to inspection of equipment will provide additional protection to streamside habitats and water quality.

b) *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?*

See comments under VII. a) above.

c) *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

There are no existing or proposed schools within one-quarter mile of the project area.

d) *Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

The project area is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5.

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 area does not lie within an airport land use plan area or within two miles of a public airport or public use airport.

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?

There are no currently operating private air strips within or immediately adjacent to the project area. An abandoned privately owned air strip is located within several miles of the project area but it is currently inoperable.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The Leininger Ranch Stock Pond and Spring Development Project area is located within a very remote portion of southern Tehama County. The only project related impacts to traffic along public or private roads in the area that could be used as an evacuation route would be the transport of equipment and personnel to the project site. The occurrence of equipment transport would be rare however daily trips to the project site by construction personnel are anticipated. Due to the limited amount of road use expected in connection with this project, impacts to or interference with an adopted emergency response plan or emergency evacuation plan are not anticipated.

h) Would the project 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 execution of project work has the potential to ignite a fire within a wildland area. The risk to people and structures will be reduced as project work will be conducted when fuel moisture and humidity are at adequate levels as determined by Cal Fire or other local fire fighting authorities. In addition, firefighting equipment and portable fire water will be made available at work sites as per Mitigation Measures HA/HAZMAT 1.

Measures to Reduce Impacts to Hazards and Hazardous Materials

Mitigation Measure HA/HAZMAT 1: Contractors or landowners providing equipment shall provide adequate fire protection equipment. This shall include a water wagon located at equipment operation areas as well as fire extinguishers attached to all mechanized equipment. In addition, fire fighting hand tools shall be made available at all areas where equipment is operated.

No significant adverse impacts related to Hazards and Hazardous Materials are anticipated with the implementation of the above Mitigation Measures.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. Hydrology and Water Quality. Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there will 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 will drop to a level that will not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 will result in substantial on- or off-site erosion or siltation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in on- or off-site flooding?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Result in inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Project work related to pond development, expansion and improvement will be conducted on relatively flat slopes using standard Best Management Practices for construction activities. In addition, the minor amount of hand excavation and grubbing along with the development of plumbing and small water storage devices at five spring sites will improve and increase water flow, site drainage and water quality. As a result, the amount of soil erosion and sedimentation attributable to spring flows and animal use will be reduced.

a) *Would the project violate any water quality standards or waste discharge requirements?*

Project work related to pond and dam construction poses a potential for impacts to water quality standards related to soil sediments as well as the release of diesel fuel and equipment lubricants. This potential will be reduced to a less than significant level through the implementation of Mitigation Measures HYDRO 1 through HYDRO 6 along with Mitigation Measure BIO 1.

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

The only water that would be used in connection with the implementation of project work would be for dust control throughout the construction area, compaction of dam fill and for fire suppression in the event of an ignition. Only intermittent storm flows in the swales filling the ponds will be stored behind new or improved pond dams and this will only occur during the wet weather season when other diverters and the resources found within the Deer Creek watershed have little if any use for these flows. No impacts to groundwater supplies or groundwater recharge are anticipated. Spring improvements will increase by a minor amount, the volume of water delivered by five small springs. Plumbing and storage improvements will make the transport of spring water and its use by livestock and wildlife more efficient thus allowing for improved utilization of available flows.

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 on- or off-site erosion or siltation?*

In developing the stock ponds, storm flows within a shallow swale will be impounded within new or improved pond and dam infrastructure. No alteration to the swale contours will be made other than within that portion inside the footprint of the ponds' inundation area. All other portions of these sometimes wet areas will be protected by a "No Treatment Zone". The springs to be improved are small enough so that they do not create a channel. Rather, flows create small ponds which percolate back into the soil within short distance of the spring site. Mitigation Measures HYDRO 1 through HYDRO 6 have been developed in order to further protect the hydrology and water quality found within the pond sites. More specifically, Mitigation Measures HYDRO 4 relates to the use of small

power equipment in the vicinity of springs and HYDRO 6 to already in place spring infrastructure and the surrounding spring site.

- 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 on- or off-site flooding?***

Only that portion of the swale providing water to the stock ponds that is within the footprint of the structure's inundation footprint will be altered in order to generate fill for the dam. In addition, the new pond has been designed with a steel pipe spillway with the capability of handling a 100 year runoff event. It is anticipated that as the pond structure fills, the minor flows into it will be slowed as water is impounded. Spring features to be improved are very small and have low flows even during the project area's rainy season.

- e) *Would the project 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 site is within a wildland area where only individual rural residential units are found and there are no manmade storm water drainage systems in place. Also, the drainage area for the swales to be impounded has no sources of pollution that could contaminate water runoff.

- f) *Would the project otherwise substantially degrade water quality?***

The Mitigation Measures mentioned under IX.a) above will reduce potential water quality impacts to a less than significant level.

- 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?***

There will be no housing constructed in connection with project work.

- h) *Would the project place within a 100-year flood hazard area structures that would impede or redirect flood flows?***

The new or improved dam and pond structures have been designed to catch and store storm flows up to a 100 year event. No project work will be completed within the swale providing storm flows to the

new and improved ponds outside of those areas where impoundment occurs. As a result flood flows upstream and downstream of the pond area will not be redirected.

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?

The pond and dam structures will be located in a very remote area of southeastern Tehama County. The pond sites are more than five miles from any community or public roadway. The ponds shall be small, with the new pond holding 23.7 acre feet and the expanded/improved pond 17 acre feet. If a break or failure occurred on either pond, level terrain would spread water out over a very large area and a portion of this flow would make its way into Juniper Gulch and ultimately into Deer Creek.

j) Would the project result in inundation by seiche, tsunami, or mudflow?

There is no potential for seiches or tsunamis within the project area.

Measures to Reduce Impacts to Hydrology and Water Quality

Mitigation Measure HYDRO-1 a Stormwater Pollution Prevention Plan (SWPPP) shall be implemented prior to initiation of project work. All construction contractors and subcontractors shall be required to implement BMPs identified in the SWPPP for controlling soil erosion and discharges of other construction-related contaminants. Such BMP's shall be in addition to the specific Mitigation Measures listed in this Initial Study/Mitigated Negative Declaration. Routine monitoring and inspection of BMPs shall be conducted by the TCRCD Project Manager to ensure that the quality of storm water discharges is in compliance with the permit. BMPs required to be incorporated into the SWPPP include:

- Soil stabilization measures, such as preservation of existing vegetation and use of mulch or temporary plantings to minimize soil disturbance;
- Sediment control measures to prevent disturbed soils from entering waterways;

- Tracking control measures to reduce sediments that leave the construction site on vehicle or equipment tires;
- Non-stormwater discharge control measures, such as monitoring water quality of dewatering operations and hazardous material delivery along with storage, and emergency spill response requirements.

The TCRCDD Project Manager shall ensure that the BMPs are implemented as appropriate throughout the duration of construction and shall be responsible for contractor and subcontractor compliance with the SWPPP requirements. In addition, the SWPPP shall include information on:

- The project's Implementation schedule
- Pollutant source identification
- Storm water BMPs
- Erosion control
- Sedimentation control
- Maintenance and Inspections
- Post-construction storm water management

Mitigation Measure HYDRO 2: No equipment operations shall occur on any unstable areas, regardless of slope percentage. Slope and suitability for equipment operations shall be determined by the TCRCDD Project Manager.

Mitigation Measure HYDRO 4: The TCRCDD Project Manager shall select refueling and maintenance areas for equipment including power hand tools on flat sites that are away from dry or wet waterways as well as areas that could potentially flow into a stream in the event of an accidental spill. Fuel containment equipment (i.e., absorbent sheets and waddles) shall be made available and used at refueling and maintenance areas. Fuel spillage shall be minimized by conducting these operations in flat areas. Equipment shall be stored and maintained within properly cleared areas. The TCRCDD Project Manager shall inspect

refueling areas to assure compliance with this Mitigation Measure. These inspections shall also verify the sites' adequacy in protecting riparian and terrestrial resources as well as the availability and use of containment equipment.

Mitigation Measure HYDRO 5: Contractors or landowners providing operations equipment (dozers, etc.) shall make daily inspection of equipment for leaks, correcting and repairing any such leaks prior to resuming their use. The inspection reports shall be submitted to the TCRCDD Project Manager along with evidence of any repairs required and completed before returning equipment to project work sites. Inspection reports shall be incorporated into the TCRCDD project files. In the event that equipment shall need to cross live streams, a California Department of Fish and Game Stream Alteration Agreement may be required at the discretion of that agency.

Mitigation Measure HYDRO 6: Any existing drainage features shall be protected from project related impacts and shall remain free of obstruction.

No significant adverse impacts related to Hydrology and Water Quality is anticipated with the implementation of the above Mitigation Measures.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
X. Land Use and Planning. Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) 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"/>

Discussion

a) *Would the project physically divide an established community?*

The overall project area for the pond and spring improvements project is within a portion of southeastern Tehama County containing scattered rural residential and agricultural structures. The nearest community is Vina which is located approximately five miles west of the project area. As a result, no established communities will be physically divided by project work.

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, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?*

The Tehama County General Plan designates land use within the project area for farming and ranching operations and this project does not conflict with any federal, State, or County land use plan.

c) *Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?*

In addition to a conservation easement and plan established for this property by The Nature Conservancy, a portion of the project area is included in those lands covered under the US Fish and Wildlife Service’s *Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon*

(2005). This plan has established recovery goals for number of species that inhabit and depend upon vernal pool habitat for their survival. There are no vernal pools or similar types of aquatic features at the project site or immediately surrounding area. As a result none of the project work entailed for this effort will conflict with a habitat conservation plan or natural community conservation plan.

No impacts to Land Use and Planning are anticipated.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- 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?***

The Leininger Ranch Stock Pond and Spring Development Project entails the construction of a new stock/wildlife pond with a storage capacity of 23.7 acre feet and the expansion of an in place pond that will have 17 acre feet of storage capacity once project work is completed. This project also entails the minor improvement to five springs used for livestock and wildlife watering. The amount of such material used for the pond projects will be relatively small and includes 21 tons of sand, 15 tons of rock rip- rap and 1.6 tons of graded gravel. Consequently no significant impact to area mineral resources is anticipated.

- 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?***

Project work will not result in the loss of any locally important mineral resource recovery site.

Impacts to Mineral Resources will less than significant.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. Noise. Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) 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"/>
d) 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"/>
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, will 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"/>
f) For a project within the vicinity of a private airstrip, will 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"/>

Discussion

During the implementation of project work a temporary increase in ambient noise levels will be created by construction, earth hauling and other types of equipment used in the development of the pond and dam structure. Small power hand tools will be used to improve some of the springs to be included in project work. All work will be completed during daylight hours. It is anticipated that work will progress at a rapid rate with noise generating equipment on site for a very limited period of time. As a result only short term impacts to scattered area residents who own the property upon which project work is being completed are anticipated. No long term impacts to ambient noise levels or to noise standards established in the Tehama County General Plan are anticipated.

- a) ***Would the project create exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?***

During the implementation of project work, a temporary increase in ambient noise levels will be created by construction, earth moving and other types of equipment. This will be minimal and created only during daylight hours. Work is anticipated to progress at a rapid rate and as a consequence noise generating

equipment will be on site for a very limited period of time resulting in short term impacts to scattered area residents who own the property upon which project work is being completed. No long term impacts to wildlife related to noise are anticipated. No long term impacts to noise standards established in the Tehama County General Plan are anticipated as well.

b) *Would the project create exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?*

The majority of project work will be completed using mechanical construction and hauling equipment. The only occupied rural residential dwellings within the general project area are those owned by the landowner upon whose property this project is being completed. Any heavy equipment used will operate roughly a mile from any structures and only for a short period of time. Consequently impacts related to ground borne vibration or noise levels will be less than significant.

g) *Would the project create a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?*

Increases in noise levels related to project work will be minor and temporary. Once project work is complete, ambient noise levels will return to their pre-project levels.

d) *Would the project create a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?*

Within that portion of the project area immediately adjacent to where heavy construction equipment is being used, ambient noise levels will increased above existing levels but only for a short period of time. Once project work has been completed, ambient noise levels will return to their pre-project levels. Impacts to temporary ambient noise levels will be less than significant.

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?*

There are no public airports within the project area and no noise impacts related to airport operations are anticipated.

g) 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?

There are no private airstrips within or adjacent to any of the project impact sites or the overall project area.

Impacts related to Noise will be less than significant.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. Population and Housing. Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing homes, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) 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"/>

Discussion

- 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)?***

This project will not entail the development of any structures or activities that would induce population growth. No impacts related to population growth are anticipated.

- b) ***Would the project displace substantial numbers of existing homes, necessitating the construction of replacement housing elsewhere?***

Although there are homes within the project area, there will be no displacement of homes attributable to the Leininger Ranch Stock Pond and Spring Development Project which would necessitate the construction of replacement housing elsewhere. No impacts related to displacement of homes are anticipated.

- c) ***Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?***

There will be no displacement of local residents related to the implementation of this project.

No impacts to Population and Housing are anticipated.

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

Discussion

- a) ***Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:***

The overall project area is located within a very rural portion of Southeastern Tehama County where there are few public services. No negative impacts to the provision of Fire Protection Police Protection, Schools, Parks or other public facilities will occur.

Fire protection?

Police protection?

Schools?

Parks?

Other Public Facilities?

No impacts to Public Services are anticipated.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. Recreation. Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- 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?***

No increase in the use of parks or other recreational facilities will result from the execution of project work.

- b) ***Would the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?***

No recreational facilities will be construction or expanded as a result of project work.

No impacts to Recreation are anticipated.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. Transportation/Traffic. Would 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) 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"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

Project work will be conducted largely on private rangelands within a remote portion of Southeastern Tehama. State highways and other public roads will only be used to transport heavy equipment intermittently and personnel on a daily basis to the project site.

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 ratio on roads, or congestion at intersections)?

Project work will not result in an increase of traffic.

b) Would the project exceed, individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?

Project work will not result in an exceedence of any level of service standard for roads and highways.

- c) *Would the project 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?***

No impacts to air traffic patterns will result from the execution and completion of project work.

- 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)?***

This project does not affect the design of any roads.

- e) *Would the project result in inadequate emergency access?***

No negative impacts to emergency access will occur.

- f) *Would the project result in inadequate parking capacity?***

This project will not impact parking capacity.

- g) *Would the project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?***

This project will not conflict with any policies plans or programs supporting alternative transportation.

No impacts to Transportation and Traffic are anticipated.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. Utilities and Service Systems. Would the project:				
a) 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"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) 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"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) 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"/>
g) 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"/>

Discussion

a) ***Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?***

The project is located in a remote portion of Southeastern Tehama County that has no wastewater collection or treatment facilities.

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?***

No new wastewater facilities will be constructed nor will there be an expansion of highly developed municipal water facilities attributable to project work.

- 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?***

No new storm water facilities will be constructed nor will there be the necessity for expanding such infrastructure in connection with this project.

- 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?***

As proposed, both ponds would utilize sheet flow, runoff or rainfall within the project area. The new pond's maximum capacity is 23.7 acre feet of water and the improved/expanded pond has a 17 acre feet maximum capacity. State Water Resources Control Board regulation allows for a maximum impoundment of 10 acre feet per year without applying for a water right. In order to implement the pond work as originally proposed, Grant Leininger will submit an application for water rights in order to utilize the storm flows that the two ponds will impound with the assistance of TCRCB personnel. No impact to area water supplies are anticipated as the ponds would utilize only winter storm flows. These flows would be captured during those months when other users or resources supported by the Sacramento River watershed would not need this water. During the summer months when additional water would be needed for other uses, there would be no additional flow to the ponds other than a small amount of pasture irrigation tailings which may reach the improved/expanded pond.

- e) ***Would the project 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?***

There are no wastewater treatment providers operating within the project area.

- f) ***Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?***

Project work will not result in the need for a landfill.

g) Would the project comply with federal, state, and local statutes and regulations related to solid waste?

Project work will not result in the development of solid waste as defined in federal state and local statutes.

No impacts to Utilities and Service Systems are anticipated.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. Mandatory Findings of Significance.				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Authority: Public Resources Code Sections 21083 and 21083.05.				
Reference: Government Code Section 65088.4, Public Resources Code Sections 21080(c), 21080.1, 21080.3, 21083.05, 21083.3, 21093, 21094, 21095, and 21151; <i>Sundstrom v. County of Mendocino</i> , (1988) 202 Cal.App.3d 296; <i>Leonoff v. Monterey Board of Supervisors</i> (1990), 222 Cal.App.3d 1337; <i>Eureka Citizens for Responsible Government v. City of Eureka</i> (2007) 147 Cal.App.4 th 357; <i>Protect the Historic Amador Waterways v. Amador Water Agency</i> (2004) 116 Cal.App.4 th at 1109; <i>San Franciscans Upholding the Downtown Plan v. City and County of San Francisco</i> (2002) 102 Cal.App.4 th 656.				

Discussion

- a) ***Would the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?***

Based upon the preceding environmental analysis, it has been determined that the project will not result in the degradation of the environment, substantially reduce the habitat of 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, with the implementation of the mitigation measures identified above.

- b) *Would 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.)***

As discussed in this Initial Study, implementation of the proposed project would result in no significant environmental impacts following implementation of the identified mitigation measures. Based on the small size of the overall project, the fact that some of the project components will replace infrastructure already found within the area along with its location on a parcel of land currently used for such purposes, it would not be expected to contribute cumulatively considerable impacts to the local area.

- c) *Would the project have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?***

Although the techniques to be used in the development of pond and spring infrastructure will have temporary impacts to local watershed resources, these will be rendered less than significant through the implementation of Mitigation Measures and as a result, no direct long term negative impacts to area residents is anticipated.

Appendices

Appendix A
Mitigation Monitoring and Reporting Plan (MMRP)
for the
Leininger Ranch Stock Pond and Spring Development Project
Initial Study/Mitigated Negative Declaration
Tehama County, California

In accordance with CEQA Guidelines Section 15074(d), when adopting a mitigated negative declaration, the lead agency will adopt a Mitigation Monitoring and Reporting Plan (MMRP) that ensures compliance with Mitigation Measures required for project approval. The Butte County Resource Conservation District (BCRCD) is the lead agency for the **Leininger Ranch Stock Pond and Spring Development Project** and has approved this MMRP as a part of the final Initial Study/Mitigated Negative Declaration (IS/MND) supporting the project. Monitoring activities will be completed by the Project Manager listed in this IS/MND. The MMRP lists the Mitigation Measures developed in the IS/MND which were designed to reduce environmental impacts to a less-than-significant level. This MMRP also identifies the party responsible for implementing the measure, defines when the Mitigation Measure must be implemented, and which party or public agency is responsible for ensuring compliance with the measure.

Potentially Significant Effects and Mitigation Measures

The following is a list of the resources that will be potentially affected by the project and the Mitigation Measures made part of the Initial Study/Mitigated Negative Declaration. Included are Air Quality, Biological Resources, Cultural Resources, Hazards and Hazardous Materials along with Hydrology and Water Quality.

Mitigation Measure AQ 1: The contractor shall submit an application for and receive approval from the Tehama County Air Quality Management District of a Construction Emission/Dust Control plan prior to groundbreaking. A copy of the permit shall be maintained in the TCRCDD files.

Schedule:

Responsible Party:

Verification of Compliance:

Monitoring Party: Construction Contractor/TCRCDD

Initials: _____

Date: _____

Mitigation Measure AQ 2: Exhaust emissions shall be minimized by maintaining equipment in good repair and proper tuning according to the manufacturer's specifications. Proof of maintenance, repair and tuning shall be provided to the TCRCDD Project Manager.

Schedule:

Responsible Party:

Verification of Compliance:

Monitoring Party: TCRCDD

Initials: _____

Date: _____

Mitigation Measure AQ 3: Construction contracts shall include language that prohibits the use of all pre-1996 heavy-duty off-road diesel equipment on forecast 'Spare the Air' days.

Schedule:

Responsible Party:

Verification of Compliance:

Monitoring Party: TCRC

Initials: _____

Date: _____

Mitigation Measure AQ 4: Grading operation shall be suspended when wind speeds exceed 20 miles per hour.

Schedule:

Responsible Party:

Verification of Compliance:

Monitoring Party: TCRC

Initials: _____

Date: _____

Mitigation Measure AQ 5: Water shall be applied at least twice daily or as needed to prevent off site dust impacts. Alternatively, non-toxic soil stabilizers shall be applied on all unpaved access roads, parking areas and staging areas at construction sites.

Schedule:

Responsible Party:

Verification of Compliance:

Monitoring Party: TCRC

Initials: _____

Date: _____

Mitigation Measure AQ 6: All trucks hauling soil, sand, and other loose materials shall be covered or required to maintain at least 2 ft (0.6 m) of freeboard.

Schedule:

Responsible Party:

Verification of Compliance:

Monitoring Party: TCRC

Initials: _____

Date: _____

Mitigation Measure AQ 7: Exposed stockpiles of soil or sand shall be enclosed, covered, watered twice daily or have non-toxic soil binders applied.

Schedule:

Responsible Party:

Verification of Compliance:

Monitoring Party: TCRCDC

Initials: _____

Date: _____

Mitigation Measure BIO 1: The following Mitigation Measures apply to all wet or dry stream courses along with swales and other low areas where storm water flows with the exception of that portion of such features within the inundation area of the new and improved ponds described in the scope of work of this Initial Study/Mitigated Negative Declaration. Such features shall be protected by a 75' or to break in slope "No Treatment Zone" unless the slopes within these features are greater than 50%. In such instances these features shall be protected by a 100' or to break in slope "No Treatment Zone". Ditches, canals and other man made water conveyance structures shall be protected by a 25' "No Treatment Zone". All buffers shall be established on both sides of flow channels and flow structures. All springs other than those to be improved in connection with this project shall be encircled by a 75' "No Treatment Zone". "No Treatment Zones" shall be established and flagged as directed by the TCRCDC Project Manager prior to the implementation of any project work. Monitoring photographs shall be taken by the TCRCDC Project Manager before and after completion of project work in order to document compliance with Mitigation Measure BIO 1 and these shall be incorporated into the TCRCDC project files.

Schedule:

Responsible Party:

Verification of Compliance:

Monitoring Party: TCRCDC

Initials: _____

Date: _____

Mitigation Measure BIO 2: Personnel specifically trained in the identification of List 1, List 2 and List 3 species or a professional botanist shall be required to evaluate potential habitat for these species prior to implementation of work within the project area during the appropriate blooming or identification period. Such personnel shall also evaluate potential findings of any such plants within treatment areas during the execution of project work. If any Federal or State listed threatened or endangered species are detected in the

project area that may be impacted by the project work, then all project related activities shall immediately stop within that area which shall be flagged with a 25' "No Treatment Zone". All sightings shall be documented using the California Natural Diversity Data Base (CNDDDB) field survey form a copy of which shall be submitted to the CNDDDB and the USFWS. A copy shall also be incorporated into the TCRCDD project files. Qualifications for personnel who shall make evaluations of sites include those found in the California Department of Fish and Game's 2009 document entitled "**Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities**" (see **Appendix C**).

Schedule:

Responsible Party:

Verification of Compliance:

Monitoring Party: TCRCDD

Initials: _____

Date: _____

Mitigation Measure BIO 3: USFWS 1999 guidelines shall be followed if valley elderberry is encountered outside the "No Treatment Zone" described in Mitigation Measures BIO I and BIO 2 during the implementation of project work.

Schedule:

Responsible Party:

Verification of Compliance:

Monitoring Party: TCRCDD

Initials: _____

Date: _____

Mitigation Measure BIO 4: In order to protect any species covered by the Migratory Bird Treaty Act (MBTA), no project work shall occur between March to August, unless the following is implemented: 1. A survey is conducted by a biologist or a person with knowledge of, and ability to recognize, species protected by the MBTA and it is determined that there are no occupied nests within the proposed activity area. 2. If an occupied nest is found, then a biologist or a person with knowledge of, and ability to recognize, species protected by the MBTA shall determine if the birds present are those protected by the MBTA. 3. If an MBTA species is located then no activities shall occur within 100 feet of the nest during the breeding season.

Schedule:

Responsible Party:

Verification of Compliance:

Monitoring Party: TCRCD

Initials: _____

Date: _____

Mitigation Measure BIO 5: In order to prevent the spread of invasive plant species all heavy equipment to be used in the execution of project work shall be cleaned off site prior to use within the project area. The TCRCD Project Manager shall assure and document equipment cleaning. Documentation of cleaning shall be incorporated into the TCRCD project files.

Schedule:

Responsible Party:

Verification of Compliance:

Monitoring Party: TCRCD

Initials: _____

Date: _____

Mitigation Measure CUL 1: Within areas of ground or vegetation disturbing activities, if project work appears to expose any previously unknown archeological, prehistoric, historic or paleontological resource sites or within 30 feet beyond such impacted areas, the site shall be avoided. Work may continue elsewhere within the overall project area. Exposed cultural or paleontological resources shall be appropriately flagged in order to immediately establish an exclusion buffer of at least 100 feet. A professional archeologist shall examine the site, evaluate found objects and make a finding of their significance. The archeologist shall also develop recommendations for the permanent protection of objects and site treatments as necessary. Identified sites shall be permanently protected through avoidance. These sites shall be made off limits to both personnel and equipment. A professional archeologist shall determine an appropriate permanent flagged exclusion zone once the site has been adequately assessed for significance. Findings of significance shall be prepared and submitted to appropriate agencies as well as appropriate Native American groups at the discretion of the professional archeologist. As appropriate, findings shall be recorded in the TCRCD project files.

Schedule:

Responsible Party:

Verification of Compliance:

Monitoring Party: TCRCD

Initials: _____

Date: _____

Mitigation Measure CUL 2: If during the execution of project work human remains are found, the TCRCD Project Manager shall halt work at that location until a professional archaeologist visits the site in order to assess their significance and process the remains and the County coroner shall be immediately notified. If the remains are determined by the County coroner to be Native American, the Native American Heritage Commission (NAHC) and Native American groups at the discretion of the professional archeologist shall be notified within 24 hours and the guidelines of the NAHC shall be adhered to in the treatment and disposition of the remains. Findings of significance shall be prepared and submitted to appropriate agencies at the discretion of the professional archeologist. Findings shall also be recorded in the TCRCD project files by the TCRCD Project Manager. Project work may continue on other non-impacted portions of the project area.

Schedule:

Responsible Party:

Verification of Compliance:

Monitoring Party: TCRCD

Initials: _____

Date: _____

Mitigation Measure GEO/SOILS 1: Any newly-exposed soil of over 100 square feet in area shall be mulched or seeded with an appropriate mix of grass seed to minimize the potential for erosion. Verification of proper installation and sufficiency of mulching or seeding shall be made by the TCRCD Project Manager prior to and following the season's first precipitation event and recorded in the TCRCD project files.

Schedule:

Responsible Party:

Verification of Compliance:

Monitoring Party: TCRCD

Initials: _____

Date: _____

Mitigation Measure HA/HAZMAT 1: Contractors or landowners providing equipment shall provide adequate fire protection equipment. This shall include a water wagon located at equipment operation areas as well as fire extinguishers attached to all mechanized equipment. In addition, fire fighting hand tools shall be made available at all areas where equipment is operated.

Schedule:

Responsible Party:

Verification of Compliance:

Monitoring Party: TCRC

Initials: _____

Date: _____

Mitigation Measure HYDRO-1 a Stormwater Pollution Prevention Plan (SWPPP) shall be implemented prior to initiation of project work. All construction contractors and subcontractors shall be required to implement BMPs identified in the SWPPP for controlling soil erosion and discharges of other construction-related contaminants. Such BMP's shall be in addition to the specific Mitigation Measures listed in this Initial Study/Mitigated Negative Declaration. Routine monitoring and inspection of BMPs shall be conducted by the TCRC Project Manager to ensure that the quality of storm water discharges is in compliance with the permit. BMPs required to be incorporated into the SWPPP include:

- Soil stabilization measures, such as preservation of existing vegetation and use of mulch or temporary plantings to minimize soil disturbance;
- Sediment control measures to prevent disturbed soils from entering waterways;
- Tracking control measures to reduce sediments that leave the construction site on vehicle or equipment tires;
- Non-stormwater discharge control measures, such as monitoring water quality of dewatering operations and hazardous material delivery along with storage, and emergency spill response requirements.

The TCRCO Project Manager shall ensure that the BMPs are implemented as appropriate throughout the duration of construction and shall be responsible for contractor and subcontractor compliance with the SWPPP requirements. In addition, the SWPPP shall include information on:

- The project's Implementation schedule
- Pollutant source identification
- Storm water BMPs
- Erosion control
- Sedimentation control
- Maintenance and Inspections
- Post-construction storm water management

Schedule:

Responsible Party:

Verification of Compliance:

Monitoring Party: TCRCO

Initials: _____

Date: _____

Mitigation Measure HYDRO 2: No equipment operations shall occur on any unstable areas, regardless of slope percentage. Slope and suitability for equipment operations shall be determined by the TCRCO Project Manager.

Schedule:

Responsible Party:

Verification of Compliance:

Monitoring Party: TCRCO

Initials: _____

Date: _____

Mitigation Measure HYDRO 4: The TCRCO Project Manager shall select refueling and maintenance areas for equipment including power hand tools on flat sites that are away from dry or wet waterways as well as areas that could potentially flow into a stream in the event of an accidental spill. Fuel containment equipment (i.e., absorbent sheets and waddles) shall be made available and used at refueling and

maintenance areas. Fuel spillage shall be minimized by conducting these operations in flat areas. Equipment shall be stored and maintained within properly cleared areas. The TCRCO Project Manager shall inspect refueling areas to assure compliance with this Mitigation Measure. These inspections shall also verify the sites' adequacy in protecting riparian and terrestrial resources as well as the availability and use of containment equipment.

Schedule:

Responsible Party:

Verification of Compliance:

Monitoring Party: TCRCO

Initials: _____

Date: _____

Mitigation Measure HYDRO 5: Contractors or landowners providing operations equipment (dozers, etc.) shall make daily inspection of equipment for leaks, correcting and repairing any such leaks prior to resuming their use. The inspection reports shall be submitted to the TCRCO Project Manager along with evidence of any repairs required and completed before returning equipment to project work sites. Inspection reports shall be incorporated into the TCRCO project files. In the event that equipment shall need to cross live streams, a California Department of Fish and Game Stream Alteration Agreement may be required at the discretion of that agency.

Schedule:

Responsible Party:

Verification of Compliance:

Monitoring Party: Equipment Owners/Operators and TCRCO

Initials: _____

Date: _____

Mitigation Measure HYDRO 6: Any existing drainage features shall be protected from project related impacts and shall remain free of obstruction.

Schedule:

Responsible Party:

Verification of Compliance:

Monitoring Party: TCRCO

Initials: _____

Date: _____

Appendix B
California Natural Diversity Database Map Printouts
Leininger Ranch Stock Pond and Spring
Development Project

Appendix C

Protocols for Surveying and Evaluation Impacts to Special Status Native Plant Populations and Natural Communities

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