

To Preparers of Initial Study Checklists

The following ESA template for preparing CEQA Initial Study Checklists is adapted from the CEQA Guidelines, Appendix G. While the template can and should be used without substantial format modification in most cases, it should also be considered to be a flexible, working document that is subject to adjustment as necessary on a case-by-case basis, depending upon the requirements of a particular project or lead agency.

So, before you use the template for a project, please be sure it is acceptable to your lead agency client, including in particular the impact criteria it contains. As you complete the template, be sure to consider the appropriateness of its details to the project, setting, and impacts it addresses, and make any appropriate adjustments. After you have completed the checklist, but before it leaves ESA, be sure it has been reviewed in its entirety to ensure that it is coherent, correct, and internally consistent.

Instructions to Preparers

- 1) A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporation" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less-than-significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. (see Section 15063(c)(3)(D)). In this case, a brief discussion should identify the following:
 - a) Earlier Analyses Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the checklist were within the scope of, and adequately analyzed in, an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analyses.
 - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances).

Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
 - a) the significance criteria or threshold, if any, used to evaluate each question; and
 - b) the mitigation measure identified, if any, to reduce the impact to less than significant.

ENVIRONMENTAL CHECKLIST

Initial Study

- 1. Project Title:** Searsville Dam Removal & Steelhead Habitat Restoration Project
- 2. Lead Agency Name and Address:** California Dept of Fish & Game
- 3. Contact Person and Phone Number:** Martinez & Asberry, Ltd
415-283-8570
- 4. Project Location:** Jasper Ridge Biological Preserve, San Mateo County, CA
- 5. Project Sponsor's Name and Address:** Jasper Ridge Biological Preserve
- 6. General Plan Designation(s):** San Mateo County General Plan;
Santa Clara County General Plan, Stanford University
- 7. Zoning Designation(s):** **R1S/106 Unincorporated lands belonging to Stanford University**

8. Description of Project: (Describe the whole action involved, including but not limited to later Monicaimplementation. Attach additional sheets if necessary.)

The Searsville Dam Removal & Steelhead Habitat Restoration Project will undertake a phased removal of the 50' interlocking concrete-block gravity dam from the San Francisquito Creek watershed and restore the riparian habitat consistently with current best practices. [cite] Further, the project will include re-orientation of the existing research facility owned by Stanford University to focus on dam removal and endangered steelhead habitat restoration, maintenance and expansion over time. [cite]. Each phase of work will be led by stakeholder organization with specialized expertise in activities that drive it.

Phase 1 Detailed Study

Phase leader: Jasper Ridge Biological Preserve [JRBP]

Projected duration: 3 months

JRBP has been studying the watershed continuously since it became a preserve in 1974. They will have the most detailed, time-sequenced background data. Their focus will be dual; first, to create baseline data to measure changes against and second to understand critical factors and decision points in the process of stabilization, demolition, de-sedimentation, restoration and ongoing maintenance. All efforts will be joined to safeguard current ecosystem while improving steelhead access to and survival in the San Francisquito watershed. GIS database will be established designed to scale with the project over its lifetime.

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Phase 2 Site Stabilization

Phase leader: California Conservation Corps [CCC]

Projected duration: 3 months

JRBP will provide a detailed study plan to CCC at the end of Phase 1 to serve as guide in developing a workplan for implementation of stabilization of the stream bed & banks and protection of sensitive surrounding landscape prior to demolition project. CCC will facilitate staff & volunteer workers in the physical labor of insulating the downstream system from excess sediment, dust and traffic. CCC will construct water diversion routes and holding ponds in low impact manner. CCC will track parameters associated with the

work as identified in the detailed study and provide a report at the conclusion of Stabilization Phase which will identify any issues that need to be addressed before Dam Removal commences. This is also an approval point for DFG.

Phase 3 Dam Demolition, Sediment & Debris Removal

Phase leader: California Conservation Corps [CCC]

Projected duration: 3 months, including 6 weeks for demolition and removal.

Upon approval of Phase 2 site modifications and findings CCC will proceed with water diversion from Searsville Lake. When dam structure is sufficiently isolated from water flow to work sediment will be removed using small landmoving machinery (such as DitchWitch) to minimize stream bed & bank damage.

CCC will contract with commercially-licensed trucking company to remove sediment from behind the dam and transport it to nearest licensed landfill facility.

Once sediment has been removed demolition of dam structure can commence. Similarly removal will be realized by commercially-licensed company to licensed landfill facility.

Phase report will be provided to stakeholders and permitting agency.

Phase 4 Stream Restoration

Phase leader: CCC

Projected duration: 1 year

JRBP & CCC will work with staff and volunteers to recreate pristine stream conditions. Invasive species will be monitored and mitigated to levels in accordance with principle of protecting riparian corridor from erosional tendencies. Fire strategy will be developed in concert with San Mateo County and Forestry officials to minimize danger of large-scale fire destruction.

Phase 5 Ongoing Study and Monitoring

Phase leader: JRBP

Projected duration: 5 years

Ongoing site monitoring and information sharing with regard to dam removal and steelhead habitat restoration. Annual reports published to stakeholders and public including GIS datasets.

9. Surrounding Land Uses and Setting. (Briefly describe the project's surroundings.)

Searsville Dam (elevation 566') is built in the San Francisquito Creek watershed. Its tributaries include Alambique, Sausal, and Corte Madera Creeks; San Francisquito Creek flows out of the lake and down into the San Francisco Bay. The watershed includes sensitive wetlands, open water, oak woodland and riparian landcovers along the northwest aspect of Jasper Ridge in the Portola Valley near the intersection of Sandhill Rd and Woodside Rd. The closest incorporated town is Woodside (pop 5352). The watershed also includes an historic cemetery, site of the first church in San Mateo County and, under Searsville Lake, the lumber town of Searsville founded in 1853. **Historical note:** By 1883 the redwood forests had been clear cut and the sawmills closed. Spring Valley Water Company constructed Searsville Dam in 1891 to a height of fifty feet, giving a reservoir capacity of nearly 330-450 million gallons (xxx AF). The dam was designed to provide water to San Francisco via the Crystal Springs Water Project. Though the inhabited town was inundated the connecting pipeline was never built. Stanford University has owned the water rights since 1919 and held title to the land since 1960.

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement. Indicate whether another agency is a responsible or trustee agency.)

This project is co-sponsored by Stanford University, Jasper Ridge Biological Preserve, Jasper County Steelhead Stewards*, Santa Cruz Mountain Sport Fishing Association and the California Conservation Corps. The California Department of Fish & Game is the lead agency with permitting authority.

* Note that the Stewards is a fictional group devised for purposes of this document to demonstrate the likelihood of community activist stakeholder participation in such a project.

[enter text here]

9. Surrounding Land Uses and Setting. (Briefly describe the project's surroundings.)

Searsville dam, located at 37°24'25.78"N latitude, 122°14'14.88"W longitude, and at about 106 meters in elevation, in the San Francisquito Creek watershed. Its tributaries include Alambique, Sausal, and Corte Madera Creeks and is part of the Jasper Ridge Biological Preserve (JRBP 2006). This is found in Portola Valley in the eastern foothills of the Santa Cruz Mountains, at the base of the San Francisco Peninsula. It is 7 km west of the main Stanford University campus, in San Mateo County, CA (2006). Nearby towns include Woodside (population 5,324) and West Menlo Park.

The dam was built in 1891 by the Spring Valley Water Company on the site of the lumber town of Searsville. The Searsville dam controls between 20 and 35 percent of the San Francisquito Creek watershed (Softky 2000). The preserve surrounding the dam is 481 hectares (1,189 acres) in extent. It covers the northern half of Jasper Ridge, which is a long, flat topped ridge with a northwest-southeast axis within the San Francisquito Creek watershed. The preserve is owned by Stanford University (JRBP 2006).

Climate of the area is Mediterranean with an average annual precipitation of 26 inches from 1975-2004 (JRBP 2006).

Naturalist, H. Dengler describes the mixed forest and chapparal landcover of the project site:

"in the upper reaches of the watershed nurture a mixed evergreen forest principally of redwood, Douglas fir, live oaks, tan oak, and madrone. In a few places there are redwoods of great antiquity and immense diameters, which because of injury in youth, did not meet early loggers' needs and were left uncut. Tucked in above the roots of the redwoods, there may be carpets of redwood sorrel and ferns, hazelnut shrubs, and evergreen California huckleberry. Oak woodlands emerge on the drier hillsides. Containing the great oaks, both deciduous and evergreen, the California laurel or bay, the madrone, and the buckeye, singly or in groves, the woodlands shelter many animals. Acorns are a favored food of Acorn Woodpeckers, squirrels, and deer. In the fall, Western Scrub Jays are often seen with acorns in their bills, which they bury for storage. Many are placed in favorable soil and germinate; Western Scrub Jays have been called the uphill planters of oaks and California laurels.

Often an understory of shrubs mingles with the trees. Here, and throughout the woods below, poison oak is found, either as a shrub or a tree-climbing vine, with leaves that turn crimson as the dry season wears on. The ripened berries are food for many perching birds as well as chipmunks and several other types of rodents.

It was in meadows of the upland forests and in lowland open spaces that the splendor of the California spring wildflowers once delighted the eye. Remnants of this richness still may be found in protected places. Fields of poppies and blue lupines combined with goldfields, tidy tips, and owl's clover display their multi-hued palette. In most locations, native bunch grasses are suppressed by thriving non-native oat and brome grasses. Field mice, ground squirrels, rabbits, and reptiles dodge the hunting Red-tailed Hawk. Northern Harriers in winter and other day-flying raptors all year long prey upon small foragers, and at night owls silently hunt similar prey.

Chaparral

On dry, south-facing slopes the tough, hard-leaved, rough-barked chaparral shrubs thrive. Chamise with its needle-like leaves, mahogany-barked manzanita, and a Ceanothus species called buckbrush or white wild lilac are the dominants in our chaparral. Toyon is often present, but it is

not exclusively a chaparral plant. All are deep-rooted plants in rocky environments where soil is thin.

Chaparral brooks no competition. Plant toxins suppress almost all plant intruders, and between chaparral shrubs the ground is usually bare. Hummingbirds and bumblebees tap the winter bloom of the manzanita flowers for their nectar. Later, foxes will climb the manzanitas for their fruit, "little apples" as the Spanish name implies, and in the fall the foxes will stand on their hind legs and stretch as high as possible to eat the hanging toyon berries. Rodents and several species of birds are seasonal visitors to chamise bloom and seed. The Wrenit is a chaparral resident bird, its ringing accelerating song of staccato notes on the same pitch, ending in a trill, is ever to be expected in the chaparral. "

(Dengler, 1997)

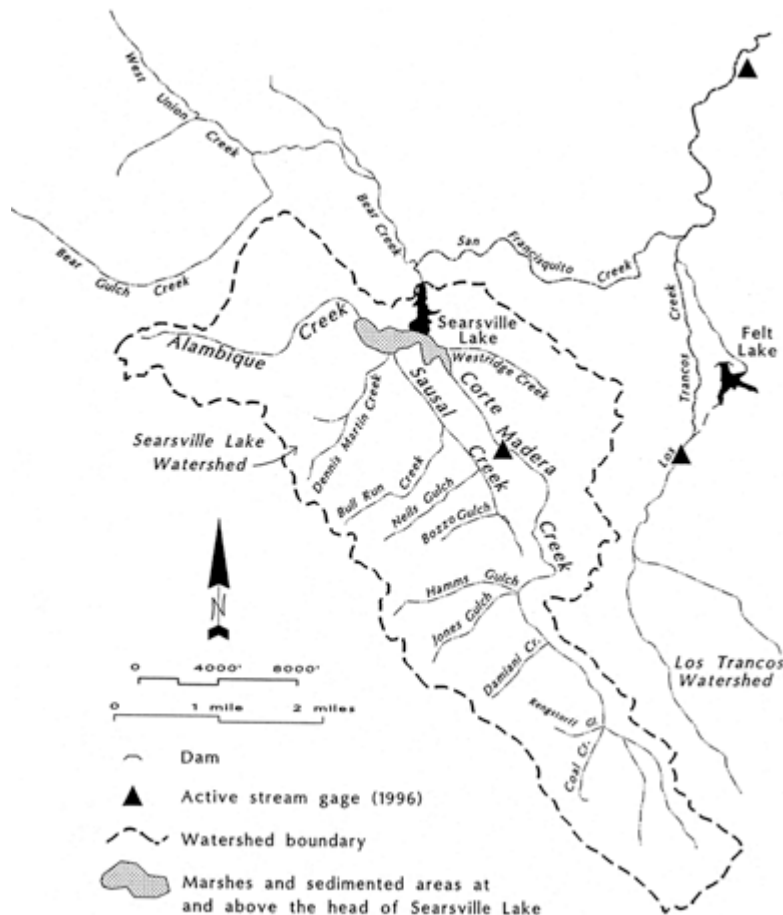


Figure 1: Overview of San Francisquito Watershed and Searsville Dam (Dengler 1997).

References

Softky, M. Should Searsville Dam go? *The Almanac*. 2000. [updated 2000 May 31; cited 2000 April 2]. Available from:

http://www.almanacnews.com/morgue/2000/2000_05_31.cover31.html

Dengler, H. *From the Mountains to the Bay: The Watershed of San Francisquito Creek. Views. Winter 1997. [Online]*. Jasper Ridge Biological Preserve (JRBP). [cited 2008 May 3].

Available from: <http://jrpbp.stanford.edu/views/watershed.php>

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement. Indicate whether another agency is a responsible or trustee agency.)

This project is co-sponsored by Stanford University, Jasper Ridge Biological Preserve, Jasper County Steelhead Stewards*, Santa Cruz Mountain Sport Fishing Association and the California Conservation Corps. The California Department of Fish & Game is the lead agency with permitting authority.

11. Regulatory setting

Clean Water Act, seq 404

It establishes a permit program administered by the Army Corp of Engineers (USACE) whereby an agency must obtain a NWP (Nationwide Permit) for any type of activity that would impact the aquatic environment. Our project will submit a deconstruction permit to USACE for the authorization of the project under NWP 3(i) for stream restoration.

Clean Water Act, seq 401

It establishes that a permit is required for any activity that results in the discharge into navigable water or their tributaries that might violate federal water quality standards. We will apply for a permit to get our project certified to the San Mateo Regional Water Quality Control Board.

California Endangered Species Act (Fish and Game Code 2050 et seq.)

The CESA required mitigation for impacts to state listed endangered, threatened, or candidate species. Any project that jeopardizes these species requires the consultation with the California Department of Fish and Game, CDFG, to come up with viable alternatives to avoid jeopardy. The Steelhead runs (listed threatened) might be impacted by the release of the remaining silt sediment deposits of the lake bank. Mitigation efforts following best management practices will be carried out to remove as much sediment out of the lake as possible before breaking the dam levy.

Migratory Bird Treaty Act (16 U.S. Code 703)

The MBTA protects and regulates the taking of migratory birds. This includes their eggs as well as their nests. Our project will relocate nests and eggs found on areas that would be prone to flooding to bird sanctuary before the levy is broken.

Native Plant Protection Act (Fish and Game Code 1900 et seq.)

Under the NPPA, an agency must use their authority to carry out programs to conserve endangered and rare native plants. Any takings of these species from the wild is prohibited, and it requires that the CDFG be notified at least 10 days in advance prior to any change in land use. A potential significant impact to native vegetation would be mitigated by replanting those of those species adversely affected.

Streambed alteration agreement (Fish and Game Code 1601 et seq.)

It requires that local and state agencies notify the CDFG before performing any activity that would change the natural flow or bed, channel, or bank of any river, stream, or lake. A streambed alteration agreement will be file with the CDFG to get approval for the change in the downstream beds.

Environmental Factors Potentially Affected

The proposed project could potentially affect the environmental factor(s) checked below. The following pages present a more detailed checklist and discussion of each environmental factor.

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

DETERMINATION: (To be completed by Lead Agency)

On the basis of this initial study:

- 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, no further environmental documentation is required.

Signature

Date

Printed Name

For

Environmental Checklist

Aesthetics

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
1. AESTHETICS—Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway corridor?	<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 would adversely affect daytime or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a) The project will have a less than a significant impact on scenic vista because the removal of the structure will occur in phases and the sediment removed from the dam will be transported off-site. Therefore, the less than significant impact that might occur in terms of in-situ road/ trail disturbance by construction vehicles and workers will be mitigated by limiting the vehicular traffic to Sandhill Road, which runs on the eastern side of the dam, by reinforcing the road prior to increased levels of service (Phase 2, Site Stabilization) projected to occur during Phase 3, Dam Demolition & Debris Removal and by restoring the road after all sediment has been removed from the dam (Phase 4, Restoration). The project will have a positive effect in the reestablishment of a natural flow regime of the downstream river, which is referred to as the seasonal, yearlong or life-time range in magnitude, regularity, and frequency of water transport down a river channel.

- Consequently, this will actually improve the scenic vista by rejuvenating downstream creeks and increasing seasonal water flow (Higgs and Maclin 2003).
- b) Even though the phases of the project will be spaced out so as not cause abrupt release of water and sediment from the dam, demolition (Phase 3) will be carried out in the least obstructive way and in the least amount of time possible so as not to diminish the scenic resources.
 - c) The sediment removal and dam demolition will occur over 6 weeks during the dry late summer, minimizing impacts related to saturated soils. Therefore, the visual character or quality of the site and its surroundings will be maintained in the long run.
 - d) Light changes produced by the lowering of the structure will occur overtime. They will be negligible and will tend to reduce rather than add to light or glare.

References

Higgs, S. and E. Maclin (ed). The ecology of dam removal: a summary of benefits and impacts. *American Rivers*. 2002 Feb. [Online]. [cited 2008 May 5]. Available from: <http://www.michigandnr.com/PUBLICATIONS/PDFS/fishing/dams/EcologyOfDamRemoval.pdf>

Agricultural Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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2. AGRICULTURAL RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland.

Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, 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"/>	X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland of Statewide Importance to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X

Discussion

a) , b), c) No agricultural uses have been permitted in the Preserve since 1960 when grazing on the watershed was discontinued. (Meehan, 1999)

References

Meehan, "Field Notes", Stanford University, 1999

Available from:

<http://www.stanford.edu/~meehan/sts90q99/ch2.htm>

Air Quality

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
3. AIR QUALITY				
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a) The project will follow the guidelines of the SFBAAQ plan that pertains to San Mateo County.
- b) The project will comply with the San Francisco Bay Area Air Quality Standards.
- c) San Mateo County is in the San Francisco Bay Area, CA nonattainment area for failing to meet the national ambient air quality standard for ozone (0.12 ppm for 1-hr avg and 0.08 ppm for a 8-hr avg). It is in attainment for the other criteria air pollutants

(carbon monoxide, nitrogen dioxide, PM-25, and PM-10). This project will not employ any ozone emitting equipment in and thus avoid contributing to cumulative emissions in the atmosphere.

d) There are not any sensitive receptors subject to Air Quality concerns in the project site.

e) With the rise in sedimentation Searsville Lake has been noted for its noxious odor (Meehan, 1999). This will be mitigated by removal of the sediment and restoral of the natural discharge from the area by dam removal.

References

Score Card-The pollution information site. Criteria air pollutant report: San Mateo County, CA. [updated 2005; accessed 2008 May 2]. Available from: http://www.scorecard.org/env-releases/cap/county.tcl?fips_county_code=06081

Biological Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
4. BIOLOGICAL RESOURCES—				
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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"/>

Discussion

- a) The removal of the dam structure and sediment will substantially change environmental conditions in San Francisquito Creek to favor indigenous biological patterns. Searsville Lake, currently impounded by the dam, is characterized by deep, highly-stratified and slow flowing water which lacks adequate oxygen for anadrymous species including the steelhead (Bednarek 2001). Instead, the lake harbors non-native species such as large-mouth bass, bullfrogs, sunfish, and exotic crayfish, which attack native steelheads (Softky 2000).The dam removal will benefit

the native steelhead by allowing adult steelhead to reach spawning habitats up the dam in Bear Creek and its tributaries in Woodside as well as in Los Trancos Creek on the border of San Mateo and Santa Clara county (2000). It will also restore the natural, turbid seasonal flow regime, with its low summer flows and large spring flows, allowing the transport of sediment down the river. The variation of sediments and boulders' size transported by the latter contributes to a variety of habitats for feeding, spawning, maturation and protection from predation by the creation of riffles and pools where salmonid fish concentrate (Bednarek, 2001). Dam removal will both increase the population of steelheads, whose reproductive success will benefit from the increase in spawning habitat as well as a myriad of the other organisms that depend on a seasonal river flow fluctuations (Bednarek, 2001). Uncertain short term impacts on the habitat include the length of time required for adjustment between populations of native fish and released non-natives in downstream reaches. Since we lack information about how long this adjustment will take or the cumulative impact of non natives on the native population, we believe there is the potential for a significant impact have therefore included long-term monitoring as a significant element of the project (Phase 5, five years duration).

b) JRBP is considered a sensitive area under the San Mateo General Plan (SMCGP, 198) primarily because of the potential presence of the Bay Checkerspot Butterfly, *Euphydryas editha bayensis*, listed as endangered, which has serpentine grassland as primary habitat although it was declared extinct at JPRP in 1998 (Wikipedia 2008). The project will be located away from the main serpentine grassland habitat, so there will not be a significant impact to potential presence of the species.

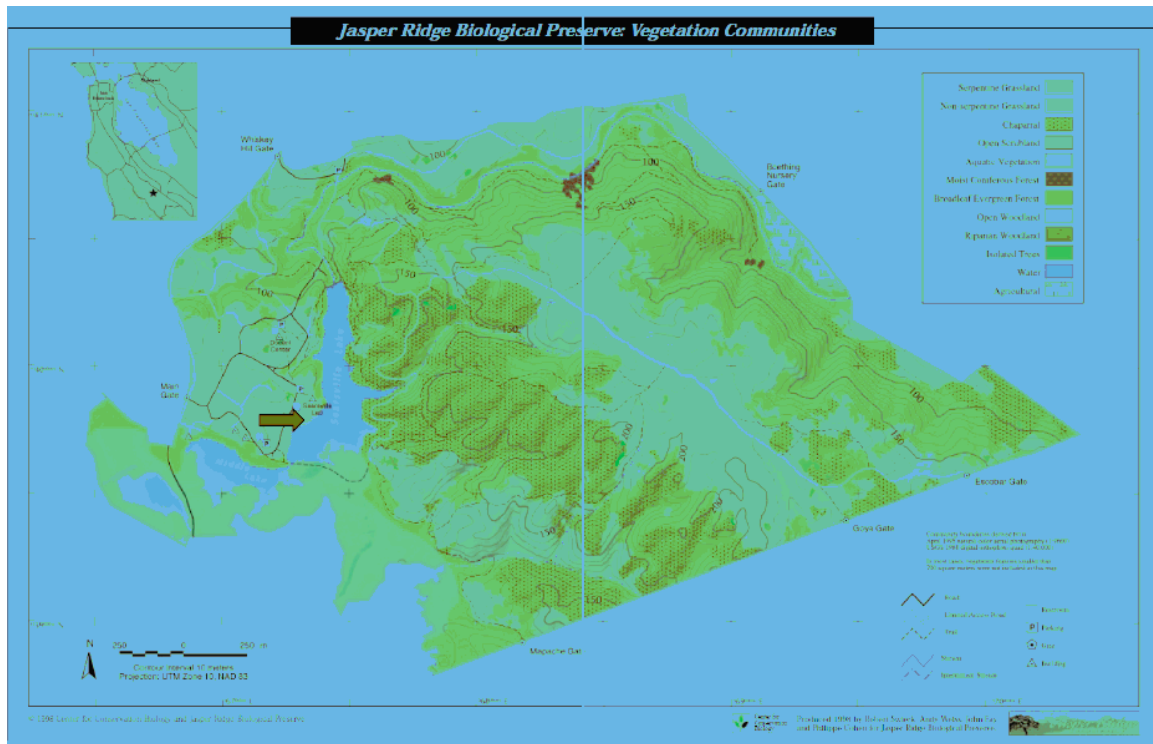


Figure 2: Map showing serpentine grassland areas at JRBP and location of the project site.

- c) The wetland areas surrounding Searsville Lake will be away from the site where dredging of sediment will occur. Our work site will be concentrated on the southwestern edge of the lake nearby the Searsville lab (See arrow above map).
- d) Since the project is designed to increase the movement of native resident or migratory fish and of wildlife species there will be no impact.
- e) No trees will be removed in this project so there is no conflict with the Heritage Tree or Significant Tree Ordinances delineated in the San Mateo General Plan.
- f) Jasper Ridge, and by extension Searsville Lake, is considered a sensitive habitat area and a scientific study area. The only development in the area is a lab owned and operated by Stanford University, so there is not a Habitat Conservation Plan in the area.

References

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- Planning and Building Department. San Mateo County General Plan 1985: Vegetative, Water, Fish, and Wildlife resources. [cited 2008 May 1]. Available from: http://www.sforoundtable.org/P&B/pb_general_plan.html

Cultural Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
5. CULTURAL RESOURCES—				
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	x	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	x	<input type="checkbox"/>

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	x	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	x

Discussion

- a) The Searsville Dam and Lake have been in use since its construction in 1891, primarily by Stanford University students and staff. Removal of the Dam and restoration of the watershed does change the character of the area but since recreational uses were discontinued in 1974 this project does not disturb continuous human use of this type. (Meehan, 1999) Rather this restoration project is in keeping with the spirit of its uses as a research facility and conservation preserve. Mitigation of a break in the historical record will be achieved by placement of an historic display in the lobby of the laboratory onsite.
- b) There are no known archaeological resources on this site. However, should any resources be revealed during earth moving and dam demolition work would immediately be halted while archaeologists investigate and document such resources and while alternatives are investigated to prevent any destruction. All workers onsite will be given training in recognition of signs of such resources and what action to take should they be revealed.
- c) This site has been studied intensively for almost a hundred years. There are no known paleontological resources, however workers will be trained as above to recognize signs and what action to take in the event they should be discovered.
- d) There is a historic, clearly designated cemetery nearby on the Preserve lands. This area will not be affected by stabilization, demolition, removal, release of dammed

waters or vegetation restoration. Should any unknown burial sites be revealed all work will stop while appropriate measures are taken to preserve such areas.

References

Geology, Soils, and Seismicity

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
6. GEOLOGY, SOILS, AND SEISMICITY—				
Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
c) Be located on 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?	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X

Discussion

- a.i) The San Francisquito Creek watershed courses through a seismically active area but there are many pressure transfer points throughout. Removal of the silted in Searsville Dam will considerably reduce localized water weight and any secondary threat from sudden unplanned release of dammed waters during earthquake events.
- a.ii) The project will not increase seismicity.
- a.iii) No fill will be added to the site which is the primary source of liquefaction. As above the project will reduce any risks to humans from seismic activity in the area.
- a.iv) The streambed and banks will be reinforced with vegetation and human-made materials such as netting. Any landslide risks will be managed through careful planning, design and implementation during all phases of the project, undertaken with active expert overview and clearly identified decision points.

- b) The streambed and banks will be reinforced with vegetation and human-made materials such as netting. Any erosion risks will be managed through careful planning, design and implementation during all phases of the project, undertaken with active expert overview and clearly identified decisionpoints.
- c) Soil stability will be increased and pressures reduced as a result of the phased approach to dam and sediment removal and site stabilization.
- d) There will be no building upon the project site.
- e) No septic tanks are or will be located in this sensitive watershed.

References

Hazards and Hazardous Materials

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
7. 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 type="checkbox"/>	X	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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"/>	X
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
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"/>	X
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"/>	X
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"/>	X
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"/>	X	<input type="checkbox"/>

Discussion

- a) This area is known to contain some naturally occurring serpentine soils which require particular care in removal and transport particularly among workers to prevent unsafe exposures. However, the California Conservation Corps is well-experienced in management of such risks so that it is routine in training regime. Oversight will be managed by geologists expert in identifying and mitigation of associated risks.

- b) Emergency management plans will be incorporated into overall planning effort and thoroughly reviewed by all project stakeholders.
- c) There is no school within 2 miles of the project site. This distance exceeds required safety zone. There are no hazardous emissions included in this project.
- d) This site is not listed as a hazardous materials site.
- e) There is no airport, airstrip or any air travel facility of any kind within 5 miles of the project site.
- f) There is no airport, airstrip or any air travel facility of any kind within 5 miles of the project site.
- g) This project is not in conflict with any emergency response plan.
- h) This project will not increase the risk to people or property from wildland fires. Fire prevention is managed by Stanford safety systems and this will not change under this project. (JRBP, 2008)

References

JRBP Fire Protection

<http://jrbp.stanford.edu/fire.php>

Hydrology and Water Quality

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
8. HYDROLOGY AND WATER QUALITY—				
Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river, or by other means, in a manner that would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river or, by other means, substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
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"/>	X
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input 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 authoritative flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X

Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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"/>	X
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"/>	X	<input type="checkbox"/>
j) Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X

Discussion

- a) No water quality standards or waste discharge requirements will be subject to violation in this project.
- b) This project will improve groundwater recharge by restoration of the watershed's functionality.
- c) This project will remove sources of siltation.
- d) This project in reconstruction of the pristine condition of the stream course will substantially reduce the risk of calamitous runoff.
- e) This project will substantially improve water quality in the San Francisquito watershed.
- f) This project will not build or replace any housing.
- g) No permanent structures will be erected in the flood plain.
- h) No permanent structures will be erected in the flood plain as a part of this project.

- i) This project will reduce risk of injury or damage from flooding due to dam failure by removing the aging dam and restoring the watercourse to functionality.
- j) There is no risk of tsunami or seiche in the Portola Valley due to distance from shore.

References

Land Use and Land Use Planning

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
9. LAND USE AND LAND USE 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 the 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) The project area is not populated. It is strictly used for research purposes by the Jasper Ridge Biological Preserve and Stanford University.
- b) The Stanford Land Use Plan stipulates “temporary activities of a limited nature that are in keeping with the open space character are... permitted..” This project falls under this category. However, a Streambed Alteration Agreement will be obtained

through the U.S. Department of Fish and Game stipulating what will and will not be done in the riparian zone.

c) The project will not conflict with the Stanford's Special Conservation Plan for the Special Conservation Areas, which includes areas south of Junipero Serra Boulevard. Activities are limited to those supporting conservation efforts. These areas, designated SCP-LU 30, include riparian areas extending 150 feet from the top of creek banks and sensitive habitat areas.

References

Sanford University Planning Office. Land Use: Stanford Community Plan Issues and Policies-Chapter Summary. [Online]. Available from.
[[http://www.sccgov.org/SCC/docs%2FPlanning,%20Office%20of%20\(DEP\)%2Fattachm ents%2F631490pl_stanford02_final_CP_landuse.pdf](http://www.sccgov.org/SCC/docs%2FPlanning,%20Office%20of%20(DEP)%2Fattachm ents%2F631490pl_stanford02_final_CP_landuse.pdf)]

Stanford University Community Plan. Santa Clara County Planning Office [Online]. [cited 2008, May 6]. Available from:
<http://www.clerkrecorder.org/portal/site/planning/planningchp?path=%2Fv7%2FPlanning%2C%20Office%20of%20%28DEP%29%2FPlans%20%26%20Programs%2FGeneral%20Plan%2FStanford%20University%20Comm unity%20Plans>

Dengler, H. From the Mountains to the Bay: The Watershed of San Francisquito Creek. Views. Winter 1997. [Online]. Jasper Ridge Biological Preserve (JRBP). [cited 2008 May 3]. Available from:
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Mineral Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
10. 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 type="checkbox"/>	X
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"/>	X

Discussion

- a) Because this area was first inhabited by Europeans during the Gold Rush in California any mineral deposits of any value would have been discovered and exploited over a hundred years ago. No impacts are expected. (Cady, 1948)
- b) As above no impacts are expected.

References

Cady, Theron G. "Tales of the San Francisco Peninsula", 1948.
http://www.sfgenealogy.com/sanmateo/history/smcady_k.htm

Noise

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
11. NOISE—Would the project:				
a) Result in exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
b) Result in exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
d) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan area, or, where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
f) For a project located in the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X

Discussion

- a) This project will not generate noise in excess of acceptable levels as established in the Stanford General Plan, 2005 or the SMCGP, 1985.
- b) No excessive groundborne noise levels will be generated in this project due to use of only light earthmoving and demolition tools and machinery in order to reduce risk of excessive compaction of streambed and bank surfaces.

- c) No permanent noise levels will exist in excess of current existing levels. Noise levels will return to existent background levels after the completion of Phase 4 work.
- d) Very intermittent and rare noise levels will exist in excess of current existing levels during removal of sediment and demolition and site stabilization. Noise levels will return to existent background levels after the completion of Phase 4 work.
- e) This project area is not subject to an airport land use plan.
- f) This project is not subject to an private airstrip land use plan.

References

Population and Housing

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
12. 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"/>	X
b) Displace substantial numbers of existing housing units, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X

Discussion

- a) This project area is not used for temporary or permanent human housing.
- b) As above.
- c) As above.

References

Public Services

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
13. PUBLIC SERVICES— Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of, 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 following public services:				
i) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
ii) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
iii) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
iv) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
v) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X

Discussion

a.i) – a.v) Since the character of the landuse in the project area will not change, that is, it will remain a limited access research facility there are no impacts expected from population growth or housing. (Stanford, 2008)

References

Stanford Fire Protection Plan

Available from: <http://jrpbp.stanford.edu/fire.php>

Recreation

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
14. 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 facilities would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
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"/>	X

Discussion

a) – b) There is no recreational access to the project area.

References

JRBP Tour Information

Available from: <http://jrpb.stanford.edu/tours.php>

Transportation and Traffic

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
15. TRANSPORTATION AND TRAFFIC—				
Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location, that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
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"/>	X
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., conflict with policies promoting bus turnouts, bicycle racks, etc.)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X

Discussion

- a) This project area will only be impacted by any increase in truck traffic during removal of sediment, demolition and removal of debris. This period will last a maximum of 6 -12 weeks in the life of the project.

b) – g) The patterns of use and levels of service will not be altered in any substantial manner by this project.

References

Utilities and Service Systems

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
16. UTILITIES AND SERVICE SYSTEMS—Would the project:				
a) Conflict with wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
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"/>	X
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"/>	X
d) Require new or expanded water supply resources or entitlements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
e) Result in a determination by the wastewater treatment provider that would 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"/>	X

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	X	<input type="checkbox"/>	<input 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"/>	X

Discussion

- a) – e) No impacts will be induced to the project area with regard to wastewater or runoff.
- f) Sediment and debris will be removed by licensed purveyors to the nearest licensed landfill available.
- g) This project will operate in compliance with Stanford General Plan and SMCGP with regard to solid waste disposal.

References

Pejchar, L. and K. Warner. 2001.

Mandatory Findings of Significance

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
17. MANDATORY FINDINGS OF SIGNIFICANCE—				
Would the project:				
a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
b) Have impacts that would be 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 type="checkbox"/>	X
c) Have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X

Discussion

a)- c) The purpose of this project is focused upon improving habitat of endangered steelhead fish, increasing opportunities to study dam removal and habitat restoration without negative impact to humans.

However since this project is comprised of many uncertain results ongoing, in-depth study is required so that an EIR would be an important element of the public record concerning this project’s contribution to knowledge of anadromous species habitat restoration.

References

Napa County Resource District
<http://www.naparcd.org/steelheadtrout.htm>

Optional topics

Communications Interference

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
COMMUNICATIONS INTERFERENCE—				
Would the project:				
a) Cause substantial interference to existing television and radio reception at residences in the vicinity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
b) Interfere with existing navigational systems operated by the Federal Aviation Administration (FAA) or the U.S. military?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
c) Obstruct or prevent point-to-point microwave relay station transmissions that traverse the project site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X

Discussion

a) – c) No impacts expected.

References

Energy

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
ENERGY—Would the project:				
a) Result in a substantial increase in overall per capita energy consumption?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
b) Result in wasteful or unnecessary consumption of energy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
c) Require or result in the construction of new sources of energy supplies or additional energy infrastructure capacity the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
d) Conflict with applicable energy efficiency policies or standards?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X

Discussion

- a) – e) The dam that will be removed in this project does not generate or consume hydropower. Removal of the dam and restoration of the watershed will not effect the minimal energy use in the research facility.

References

Wind

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
WIND—Would the project:				
a) Cause wind speeds to exceed established comfort criteria?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
b) Cause wind speeds that exceed established hazard criteria or that could result in a safety hazard to project occupants or pedestrians?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X

Discussion

a)- b) No impacts expected.

References

Shadow

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
SHADOW—Would the project:				
a) Cause shadowing of public open space that would conflict with established local criteria?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
b) Cause substantial shadowing of operating solar collectors for electricity generation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X

Discussion

- a) This project will not erect any structure causing shadow.
- b) No solar energy resources will be subject to effects.

References