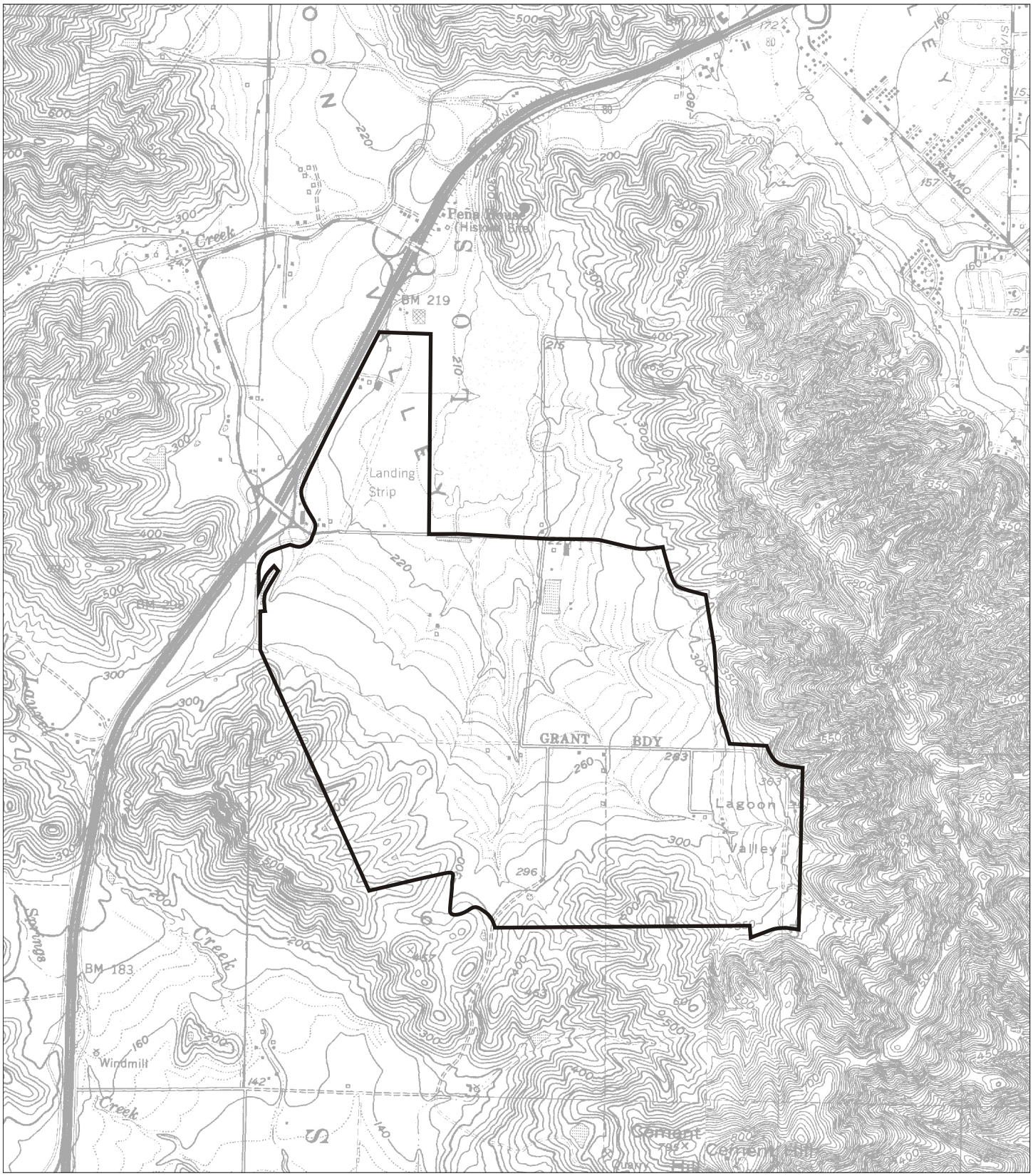

LSA

FIGURE 2

Lagoon Valley
Site Location

N

0 2000
FEET

SOURCE: USGS 7.5' QUADS - FAIRFIELD NORTH, ELMIRACALIF.

P:\TRI330\g\SiteLoc.cdr (9/22/03)

REGULATORY FRAMEWORK

FEDERAL ENDANGERED SPECIES ACT

The federal Endangered Species Act (FESA) protects listed species from harm or "take" which is broadly defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in any such conduct. Take can also include habitat modification or degradation that results in death or injury to a listed species. An activity can be defined as a "take" even if it is unintentional or accidental. Listed plant species are provided less protection than listed wildlife species. Listed plant species are legally protected from take under FESA if they occur on federal lands or if the project requires a federal action, such as a wetland fill permit.

The U.S. Fish and Wildlife Service (USFWS) has jurisdiction over federally-listed threatened and endangered species under the FESA. The USFWS also maintains a list of 'proposed' species and candidate species that are not legally protected under the FESA, but which may become listed in the near future and are often included in their review of a project.

Pursuant to the requirements of the FESA, a federal agency reviewing a proposed project within its jurisdiction must determine whether any federally-listed threatened or endangered species may be present in the project area and determine whether the proposed project could impact such species. Any activities that could result in the take of a federally-listed species will require consultation with the USFWS under either Section 7 or Section 10 of FESA before project activities commence.

CALIFORNIA ENDANGERED SPECIES ACT

The California Endangered Species Act (CESA) prohibits the take of any plant or animal listed or proposed for listing as rare (plants only), threatened, or endangered. In accordance with the CESA, California Department of Fish and Game (CDFG) has jurisdiction over state-listed species (California Fish and Game Code 2070). Additionally, the CDFG maintains lists of "species of special concern" that are defined as species that appear to be vulnerable to extinction because of declining populations, limited ranges, and/or continuing threats. Pursuant to the requirements of CEQA, an agency reviewing a proposed project within its jurisdiction must determine whether any state-listed or proposed endangered or threatened species may be present in the project area and determine whether the proposed project will have a potentially significant impact on such species.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

Section 15380(b) of the California Environmental Quality Act (CEQA) Guidelines provides that a species not listed on the federal or state list of protected species may be considered rare or endangered

if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definitions in FESA and CESA and the section of the California Fish and Game Code dealing with rare or endangered plants or animals. This section was included in the guidelines primarily to deal with situations in which a public agency is reviewing a project that may have a significant effect on a species that has not yet been listed by either the USFWS or CDFG. Thus, CEQA provides an agency with the ability to protect a species from a project's potential impacts, if it finds that the species meets the criteria of a threatened or endangered species.

CLEAN WATER ACT

Under Section 404 of the Clean Water Act, the U.S. Army Corps of Engineers (Corps) is responsible for regulating the discharge of fill material into waters of the United States (U.S.). Waters of the U.S. and their lateral limits are defined in 33 CFR Part 328.3 (a) and include streams that are tributary to navigable waters and their adjacent wetlands. Wetlands that are not adjacent to waters of the U.S. are termed “isolated wetlands” and, depending on the circumstances, may be subject to Corps jurisdiction.

In general, a Corps permit must be obtained before placing fill in wetlands or other waters of the U.S. The type of permit depends on the acreage involved and the purpose of the proposed fill. Minor amounts of fill can be covered by a Nationwide Permit. An Individual Permit is required for projects that result in more than a “minimal” impact on jurisdictional areas. Individual Permits require evidence that jurisdictional fill has been avoided to the extent possible and a review of the project by the public.

CALIFORNIA WATER QUALITY AND WATERBODY REGULATORY PROGRAMS

Pursuant to Section 401 of the federal Clean Water Act and the state’s Porter-Cologne Act, projects that are regulated by the Corps must obtain water quality certification from the Regional Water Quality Control Board (RWQCB). This certification ensures that the project will uphold state water quality standards. The RWQCB may impose mitigation requirements even if the Corps does not.

The CDFG also exerts jurisdiction over the bed and banks of watercourses and waterbodies according to provisions of Section 1601 to 1603 of the Fish and Game Code. The Fish and Game Code requires a Streambed Alteration Agreement for the fill or removal of material within the bed and banks of a watercourse or waterbody.

OTHER STATUTES, CODES, AND POLICIES

The federal Migratory Bird Treaty Act (16 U.S.C., Sec. 703, Supp. I, 1989) prohibits killing, possessing, or trading in migratory birds except in accordance with regulations prescribed by the

Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs. Most native bird species on the project site are covered by this Act.

The federal *Bald and Golden Eagle Protection Act* prohibits persons within the United States (or places subject to U.S. jurisdiction) from "possessing, selling, purchasing, offering to sell, transporting, exporting or importing any bald eagle or any golden eagle, alive or dead, or any part, nest, or egg thereof." Additionally, birds of prey (hawks, eagles, falcons, and owls) are protected in California under the State Fish and Game Code, Section 3503.5). Section 3503.5 states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "taking" by the CDFG and would be considered a significant impact.

The California Native Plant Society (CNPS), a non-governmental conservation organization, has developed lists of special-status plant species of concern in California (CNPS 2001). Vascular plants included on these lists are defined as follows:

List 1A	Plants considered extinct.
List 1B	Plants rare, threatened, or endangered in California and elsewhere.
List 2	Plants rare, threatened, or endangered in California but more common elsewhere.
List 3	Plants about which more information is needed - review list.
List 4	Plants of limited distribution - watch list.

Although the CNPS is not a regulatory agency and plants on these lists have no formal regulatory protection, plants appearing on List 1B or List 2 are, in general, considered to meet CEQA's Section 15380 criteria and adverse effects to these species are considered "significant."

METHODS

Prior to conducting field work, LSA searched the *California Natural Diversity Data Base* (CNDDB 2003) and the California Native Plants Society *Electronic Inventory* (CNPS 2003) to locate records of special-status species and sensitive communities/habitats in the general region of the Lagoon Valley property. The database queries were based on occurrence records for the following USGS 7.5 minute quadrangles: Fairfield North, Fairfield South, Cordelia, Allendale, Elmira, Denverton, Mt. Vaca, Capell Valley, and Mt. George. Using information from the CNDDB and CNPS databases, available literature, and LSA's knowledge of plants and animals in Solano County, lists of special-status plant and animal species potentially occurring at the site were generated. Species on these lists were the target species during the reconnaissance survey.

LSA botanist Tim Milliken, wildlife biologist Dan Sidle, and wetlands scientists Sean Lohmann and Chip Bouril visited the Lagoon Valley property on August 5, 2003. Additionally, LSA wetlands scientists Sean Lohmann and Chip Bouril visited the site on July 17, 2003. Chip Bouril also visited the site on August 14, 2003. The LSA team walked throughout the site to locate areas of biological interest and sensitive plant communities/habitats, evidence of special-status species, and/or habitats that could support such species. Plants and animals observed during the survey were recorded in field notes. Plant communities/habitats, and potentially jurisdictional wetlands and drainages were mapped.

RESULTS

PROJECT SITE DESCRIPTION

Elevations on the Lagoon Valley project site range from about 212 feet in the northern and central parts of the site to over 457 feet on the ridges that line the southern and southwestern boundaries of the site. The steep hills that form the southern and the southwestern portions of the site are known collectively as Cement Hill. The south-central portion of the valley is drained to the north by Lagoon Lake Creek. This intermittent stream flows from the south to Lagoon Valley Road, where it becomes two roadside channels that flow adjacent to the road and exit the site into a culvert and Lagoon Valley Lake. An unnamed intermittent stream drains from the southeast of the site to the northwest, where it joins with the two roadside channels and Lagoon Lake Creek. The Hines Nurseries occupy a large part of the eastern portion of the site. PG&E transmission lines cross the property along Lagoon Valley Road and in the vicinity of the orchards south of the Hines Nurseries. The old Vacaville Gliderport, a fill-covered, 2,000-foot long asphalt runway is located in the northern corner of the site. Site vegetation includes a mosaic of oak woodland, grassland, and riparian woodland. The orchards in the southeastern portion of the site have been disced, but have not been recently harvested. The site contains a stockpond and several fenced pastures that are currently being used for livestock grazing.

VEGETATION

Plant communities have a relatively consistent floristic composition and are characterized by their dominant species, *i.e.*, the species that give the plant community its distinctive appearance. Micro-habitats are typically present within a plant community as a result of combinations of physical factors such as soil type, exposure to sun and wind, disturbance, and availability of water; all influencing the species present at a given location. The different plant community/habitat types identified at the Lagoon Valley project site are:

- Non-Native Grassland
- Oak Woodland / Savanna
- Riparian Woodland
- Emergent Wetland
- Other Features

The spatial distribution of these on-site habitats is shown in Figure 3, and brief descriptions including predominant plant species are provided below. Plant species observed during the reconnaissance survey are listed in Appendix A.