the project. Section 15065 of the CEQA Guidelines requires a finding of significance if a project has the potential to "reduce the number or restrict the range of a rare or endangered plant or animal." Species that are eligible for listing as rare, threatened, or endangered, but are not so listed, are given the same protection as those species that are officially listed with the State. Once significant effects are identified, the lead agency has the option to require mitigation for effects through changes in the project or to decide that overriding considerations make mitigation infeasible. In the latter case, projects may be approved that cause significant environmental damage, such as destruction of endangered species or their habitat. The protection of threatened and endangered species through CEQA is, therefore. dependant upon the discretion of the lead agency involved and, in practice, statements of overriding considerations are commonly prepared.

Three of the species occur at Edgewood County Park in San Mateo County. The park was designated on May 5, 1992, as a natural preserve; however, this designation was revoked in August of the same year. The park, subsequently, was considered as a site for construction of a golf course, although this plan has been rejected and the park will continue to be managed as public open space (Richard Silver, San Mateo County Board of Supervisors, pers. comm., 1993).

Section 404 of the Clean Water Act regulates the placement of dredge and fill materials into waters of the United States (including small acreages above the headwaters of streams). The U.S. Army Corps of Engineers (Corps) is the agency responsible for administering the section 404 program. The Service, as part of the section 404 review process, provides advisory comments on both pre-discharge notices for nationwide permits and public notices for individual permits.

Under section 404, nationwide permits, which undergo minimal public and agency review, can be issued for projects involving less than 10 acres of waters of the United States and adjacent wetlands, unless a listed species may be adversely affected. Individual permits, which are subject to more extensive review, are required for projects that affect greater than 4.1 ha (10 acres). A project proponent planning to fill less than 0.4 ha (1 acre) is only required to notify the Corps of their intent to fill wetlands. Compensatory mitigation generally is not required for projects affecting less than 0.4 ha (1 acre). Additionally, the loss of upland

watersheds, which are not protected, may result in altered wetland hydrology and may adversely affect the plants. In practice, the Corps' actions under section 404 would not adequately protect *Cirsium fontinale* var. *fontinale*, which occurs in riparian serpentine seep areas.

Most projects within the range of *Cirsium fontinale* var. *fontinale* may require approval from the Corps, as currently described in section 404 of the Clean Water Act. Federal listing of this species would ensure greater consideration of the effects of permitted actions during the review process as well as provide the protections of section 7 of the Act.

E. Other natural or manmade factors affecting its continued existence. As discussed in the "Background" section, the large and still increasing numbers of people in the San Francisco Bay area place a great strain on undeveloped wildlands, through activities such as pedestrian and off-road vehicle traffic, hiking and bicycle trails, and unauthorized garbage dumping. Disturbance may directly impact plants; it can increase erosion and allow the invasion of alien species such as the many introduced annual grasses common in California. Competition with introduced species is a serious threat to serpentine natives (McCarten 1987b). Edaphic specialists (plants restricted to a certain soil type) with small populations such as the serpentine species discussed herein, may have low genetic variability (Menges 1991). As a result, populations that become subdivided by alterations in habitat from road construction and urbanization or from natural catastrophes such as disease, fire, or drought, may be at high risk of genetic changes that decrease the ability of the populations to survive (Menges 1991).

Cordylanthus tenuis ssp. capillaris growing along roadsides is threatened by roadside maintenance such as mowing and spraying (Lynn Lozier, pers. comm., 1992). Vehicular traffic threatens plants in and near the parking area at the Harrison Grade Reserve, which is poorly defined and close to the plant population (McCarten 1987a). Unauthorized dumping of large items such as bottles, furniture, appliances, and cut wood is also a threat. Light disturbance at the Harrison Grade Reserve, such as infrequent grading of dirt roads, appears to increase the numbers of C. tenuis ssp. capillaris (Lynn Lozier, pers. comm., 1992), but higher levels of disturbance may facilitate the invasion of alien species (McCarten 1987a) and result in a decline of C. tenuis ssp. capillaris. The limited

number and isolated condition of these populations make this species susceptible to stochastic extinction (Menges 1991).

Calochortus tiburonensis is threatened, by virtue of its occurrence in a single population, with chance events such as fire, severe drought, pest or disease outbreak, landslides, or other natural or human-caused disasters. The proximity of the plant to a large human population increases the likelihood that human-caused disasters or acts of vandalism could affect the plants or their habitat. The preserve is fenced to reduce the incidence of off-road vehicle use, but is still accessible to bicycles, motorbikes, and pedestrians, and it is not patrolled. Pedestrian traffic threatens both of the Streptanthus niger populations.

The Presidio, which contains one of the two populations of C. franciscana, represents a significant natural and cultural resource within San Francisco city limits, and is expected to be heavily used by visitors since its transfer to the National Park Service (T. Thomas, pers. comm., 1992). The heavy use will increase the negative impact of traffic on C. franciscana. The species presently is threatened by road maintenance (mowing) at the Presidio. Mowing of grasslands before the C. franciscana has set seed also threatens the populations. Populations at the Presidio also are threatened by the encroachment of alien plant species, including Senecio mikanioides (German ivy), Carpobrotus sp. (iceplant), Rubus spp. (blackberries), and by natives planted outside their natural range, such as Pinus radiata (Monterey pine) (California Department of Fish and Game 1988). The population size at the type locality increased following removal of alien plant species in the late 1980s. Constant vigilance and effort is needed to prevent reinvasion.

At latest report, the largest population of Clarkia franciscana, occurring at Redwood Regional Park in Alameda County, consisted of 4,000 to 5,000 plants (Gottlieb and Edwards 1992, Olson 1991a). The East Bay Regional Park District is aware of the Clarkia franciscana population and has been taking it into account in their management plans (Ray Budzinski, East Bay Regional Park District, pers. comm., 1992). The habitat is threatened by competition with annual grasses (Ray Budzinski, pers. comm., 1992) and other alien plants, including Cortaderia selloana (pampas grass) and Cytisus monspessulanus (French broom) (Olson 1991a). The two smaller populations in Alameda County, consisting of 200 plants (Olson 1991b) and 30 plants (Olson 1991c), respectively, also are