Attachment 1 – Agency Correspondence

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825

IN REPLY REFER TO:
1-1-03-SP-0162

October 28, 2002

Thomas R. Grim, Document Manager
Department of Energy
National Nuclear Security Administration
Livermore Site Office
1301 Clay Street
Oakland, California 94612-5208

Subject: Species List for Lawrence Livermore National Laboratory Site-Wide Environmental Impact Statement, Livermore-Tracy Area, Alameda and San Joaquin Counties, California

Dear Mr. Grim:

We are sending the enclosed list in response to your October 21, 2002, request for information about endangered and threatened species (Enclosure A). This list fulfills the requirement of the Fish and Wildlife Service (Service) to provide species lists under section 7(c) of the Endangered Species Act of 1973, as amended (Act).

The animal species on the Enclosure A quad list are those species we believe may occur within, *or be affected by projects within*, the following USGS quads, where your project is planned: Midway and Altamont Quads.

Any plants on the quad list are ones *that have actually been observed* in the project quad(s). Plants may occur in a quad without having been observed there. Therefore we have included a species list for the whole county in which your project occurs. We recommend that you survey for any relevant plants shown on this list.

Fish and other aquatic species appear on your list if they are in the same watershed as your quad or if water use in your quad might affect them. Amphibians will be on the list for a quad or county if pesticides applied in that area may be carried to their habitat by air currents.

Executive Order 13186, January 17, 2001, directs Federal agencies to take specific steps to conserve migratory birds. *Species of Concern* (see below) are specifically included in this Executive Order. (The Order can be found at www.nara.gov/fedreg/eo.html) Birds are shown on

our species lists regardless of whether they are resident or migratory. Relevant birds on the county list should be considered regardless of whether they appear on a quad list.

If a species has been listed as threatened or endangered by the State of California, but not by us nor by the National Marine Fisheries Service, it will appear on your list as a Species of Concern.

However you must contact the California Department of Fish and Game for official information about these species. Call (916) 322-2493 or write Marketing Manager, California Department of Fish and Game, Natural Diversity Data Base, 1416 Ninth Street, Sacramento, California 95814.

Some of the species listed in Enclosure A may not be affected by the proposed action. A trained biologist or botanist, familiar with the habitat requirements of the listed species, should determine whether these species or habitats suitable for them may be affected. For plants, we recommend using the enclosed Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Species (Enclosure C).

Some pertinent information concerning the distribution, life history, habitat requirements, and published references for the listed species is available upon request. This information may be helpful in preparing the biological assessment for this project, if one is required. Please see Enclosure B for a discussion of the responsibilities Federal agencies have under section 7(c) of the Act and the conditions under which a biological assessment must be prepared by the lead Federal agency or its designated non-Federal representative.

Formal consultation, under 50 CFR § 402.14, should be initiated if you determine that a listed species may be affected by the proposed project. If you determine that a proposed species may be adversely affected, you should consider requesting a conference with our office under 50 CFR § 402.10. Informal consultation may be utilized prior to a written request for formal consultation to exchange information and resolve conflicts with respect to a listed species. If a biological assessment is required, and it is not initiated within 90 days of your receipt of this letter, you should informally verify the accuracy of this list with our office.

When a species is listed as endangered or threatened, areas of habitat considered essential to its conservation may be designated as *critical habitat*. These areas may require special management considerations or protection. They provide needed space for growth and normal behavior; food, water, air, light, other nutritional or physiological requirements; cover or shelter; and sites for breeding, reproduction, rearing of offspring, germination or seed dispersal. Although critical habitat may be designated on private or State lands, activities on these lands are not restricted unless there is Federal involvement in the activities or direct harm to listed wildlife.

If any species has proposed or designated critical habitat within a quad, this will be noted on the species list. Maps and boundary descriptions of the critical habitat may be found in the *Federal Register*. The information is also reprinted in the *Code of Federal Regulations* (50 **CFR** 17.95).

Candidate species are being reviewed for possible listing. Contact our office if your biological assessment reveals any candidate species that might be adversely affected. Although they currently have no protection under the Endangered Species Act, one or more of them could be proposed and listed before your project is completed. By considering them from the beginning, you could avoid problems later.

Your list may contain a section called *Species of Concern*. This term includes former *category 2 candidate species* and other plants and animals of concern to the Service and other Federal, State and private conservation agencies and organizations. Some of these species may become candidate species in the future.

If the proposed project will impact wetlands, riparian habitat, or other jurisdictional waters as defined by the U.S. Army Corps of Engineers (Corps), a Corps permit will be required, under section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act. Impacts to wetland habitats require site specific mitigation and monitoring. You may request a copy of the Service's General Mitigation and Monitoring Guidelines or submit a detailed description of the proposed impacts for specific comments and recommendations. If you have any questions regarding wetlands, contact Mark Littlefield at (916) 414-6580.

Please contact Dan Buford at (916) 414-6625, if you have any questions about the attached list or your responsibilities under the Endangered Species Act. For the fastest response to species list requests, address them to the attention of Species Lists at this address. You may fax requests to 414-6712 or 414-6713. You may also email them to harry_mossman@fws.gov.

Sincerely,

for

Jan C. Knight
Chief, Endangered Species Division

Enclosures

ENCLOSURE A

Endangered and Threatened Species that May Occur in or be Affected by Projects in the Area of the Following California Counties

Reference File No. 1-1-03-SP-0162

October 28, 2002

ALAMEDA COUNTY

Listed Species

Mammals

San Joaquin kit fox, *Vulpes macrotis mutica* (E)

riparian (San Joaquin Valley) woodrat, *Neotoma fuscipes riparia* (E) *

riparian brush rabbit, *Sylvilagus bachmani riparius* (E) *

salt marsh harvest mouse, *Reithrodontomys raviventris* (E)

Birds

California brown pelican, *Pelecanus occidentalis californicus* (E)

California clapper rail, *Rallus longirostris obsoletus* (E)

California least tern, *Sterna antillarum (=albifrons) browni* (E)

bald eagle, *Haliaeetus leucocephalus* (T)

Reptiles

Alameda whipsnake, *Masticophis lateralis euryxanthus* (T)

Critical habitat, Alameda whipsnake, *Masticophis lateralis euryxanthus* (T)

Amphibians

California red-legged frog, *Rana aurora draytonii* (T)

California tiger salamander, *Ambystoma californiense* (C/E)

Critical habitat, California red-legged frog, *Rana aurora draytonii* (T)

Fish

Central California Coastal steelhead, *Oncorhynchus mykiss* (T) NMFS

Central Valley spring-run chinook salmon, *Oncorhynchus tshawytscha* (T) NMFS

Critical habitat, winter-run chinook salmon, *Oncorhynchus tshawytscha* (E) NMFS

Sacramento splittail, *Pogonichthys macrolepidotus* (T)

coho salmon - central CA coast, *Oncorhynchus kisutch* (T) NMFS

delta smelt, *Hypomesus transpacificus* (T) *

tidewater goby, *Eucyclogobius newberryi* (E)

winter-run chinook salmon, *Oncorhynchus tshawytscha* (E) NMFS

Invertebrates

bay checkerspot butterfly, *Euphydryas editha bayensis* (T)

callippe silverspot butterfly, *Speyeria callippe callippe* (E)

longhorn fairy shrimp, *Branchinecta longiantenna* (E)

vernal pool fairy shrimp, *Branchinecta lynchi* (T)

vernal pool tadpole shrimp, *Lepidurus packardi* (E)

Plants

California sea blite, *Suaeda californica* (E) *

Contra Costa goldfields, *Lasthenia conjugens* (E)

Presidio clarkia, *Clarkia franciscana* (E)

Santa Cruz tarplant, *Holocarpha macradenia* (T) *

large-flowered fiddleneck, *Amsinckia grandiflora* (E)

pallid manzanita (=Alameda or Oakland Hills manzanita), *Arctostaphylos pallida* (T)

palmate-bracted bird's-beak, *Cordylanthus palmatus* (E)

robust spineflower, *Chorizanthe robusta var. robusta* (E) *

showy Indian clover, *Trifolium amoenum* (E) *

Proposed Species

Birds

mountain plover, *Charadrius montanus* (PT)

Invertebrates

Critical habitat, vernal pool invertebrates, *See Federal Register 67:59883* (PX)

Plants

Critical habitat, vernal pool plants, *See Federal Register 67:59883* (PX)

Candidate Species

Fish

Central Valley fall/late fall-run chinook salmon, *Oncorhynchus tshawytscha* (C) NMFS

Critical habitat, Central Valley fall/late fall-run chinook, *Oncorhynchus tshawytscha* (C) NMFS

Species of Concern

Mammals

Alameda Island mole, *Scapanus latimanus parvus* (SC)

Berkeley kangaroo rat, *Dipodomys heermanni berkeleyensis* (SC) *

Pacific western big-eared bat, *Corynorhinus (=Plecotus) townsendii townsendii* (SC)

San Francisco dusky-footed woodrat, *Neotoma fuscipes annectens* (SC)

San Joaquin pocket mouse, *Perognathus inornatus* (SC)

Yuma myotis bat, *Myotis yumanensis* (SC)

fringed myotis bat, *Myotis thysanodes* (SC)

greater western mastiff-bat, *Eumops perotis californicus* (SC)

long-eared myotis bat, *Myotis evotis* (SC)

long-legged myotis bat, *Myotis volans* (SC)

salt marsh vagrant shrew, *Sorex vagrans halicoetes* (SC)

small-footed myotis bat, *Myotis ciliolabrum* (SC)

Birds

Alameda (South Bay) song sparrow, *Melospiza melodia pusillula* (SC)
Aleutian Canada goose, *Branta canadensis leucopareia* (D)
Allen's hummingbird, *Selasphorus sasin* (SC)
American bittern, *Botaurus lentiginosus* (SC)
American peregrine falcon, *Falco peregrinus anatum* (D)
Bell's sage sparrow, *Amphispiza belli belli* (SC)
California thrasher, *Toxostoma redivivum* (SC)
Costa's hummingbird, *Calypte costae* (SC)
Lawrence's goldfinch, *Carduelis lawrencei* (SC)
Lewis' woodpecker, *Melanerpes lewis* (SC)
Vaux's swift, *Chaetura vauxi* (SC)
bank swallow, *Riparia riparia* (CA)
black rail, *Laterallus jamaicensis coturniculus* (CA)
common loon, *Gavia immer* (SC)
ferruginous hawk, *Buteo regalis* (SC)
grasshopper sparrow, *Ammodramus savannarum* (SC)
hermit warbler, *Dendroica occidentalis* (SC)
little willow flycatcher, *Empidonax traillii brewsteri* (CA)
loggerhead shrike, *Lanius ludovicianus* (SC)
long-billed curlew, *Numenius americanus* (SC)
oak titmouse, *Baeolophus inornatus* (SLC)
olive-sided flycatcher, *Contopus cooperi* (SC)
rufous hummingbird, *Selasphorus rufus* (SC)
saltmarsh common yellowthroat, *Geothlypis trichas sinuosa* (SC)
short-eared owl, *Asio flammeus* (SC)
tricolored blackbird, *Agelaius tricolor* (SC)
western burrowing owl, *Athene cunicularia hypugaea* (SC)
white-faced ibis, *Plegadis chihi* (SC)
white-tailed (=black shouldered) kite, *Elanus leucurus* (SC)

Reptiles

California horned lizard, *Phrynosoma coronatum frontale* (SC)
San Joaquin coachwhip (=whipsnake), *Masticophis flagellum ruddocki* (SC)
northwestern pond turtle, *Clemmys marmorata marmorata* (SC)
silvery legless lizard, *Anniella pulchra pulchra* (SC)
southwestern pond turtle, *Clemmys marmorata pallida* (SC)

Amphibians

foothill yellow-legged frog, *Rana boylii* (SC)

western spadefoot toad, *Spea hammondii* (SC)

Fish

Pacific lamprey, *Lampetra tridentata* (SC)

green sturgeon, *Acipenser medirostris* (SC)

longfin smelt, *Spirinchus thaleichthys* (SC)

river lamprey, *Lampetra ayresi* (SC)

Invertebrates

Bridges' Coast Range shoulderband snail, *Helminthoglypta nickliniana bridgesi* (SC)

California linderiella fairy shrimp, *Linderiella occidentalis* (SC)

Fairmont (=Lum's) microblind harvestman, *Microcina lumi* (SC)

Opler's longhorn moth, *Adela oplerella* (SC)

Ricksecker's water scavenger beetle, *Hydrochara ricksecker*i (SC)

San Francisco lacewing, *Nothochrysa californica* (SC)

curved-foot hygrotus diving beetle, *Hygrotus curvipes* (SC)

Plants

Ben Lomond buckwheat (= naked buckwheat), *Eriogonum nudum var. decurrens* (SC)

Choris's (=artist's) popcorn-flower, *Plagiobothrys chorisianus var chorisianus* (SLC) *

Congdon's tarplant, *Hemizonia parryi ssp. congdonii* (SC)

Diablo helianthella (=rock-rose), *Helianthella castanea* (SC)

Hall's bush mallow, *Malacothamnus hallii (=M. fasciculatus)* (SLC)

Hoover's button-celery, *Eryngium aristulatum var. hooveri* (SC)

Hoover's cryptantha, *Cryptantha hooveri* (SLC)

Kellogg's horkelia, *Horkelia cuneata ssp. sericea* (SC) *

Lemmon's jewelflower, *Caulanthus coulteri var lemmonii* (SLC) *

Livermore tarplant, *Deinandra bacigalupii* (SC)

Loma Prieta hoita, *Hoita strobilina* (SC) *

Mason's lilaeopsis, *Lilaeopsis masonii* (SC)

Mt. Hamilton coreopsis, *Coreopsis hamiltonii* (SC)

Mt. Hamilton thistle, *Cirsium fontinale var. campylon* (SC)

Napa western flax, *Hesperolinon serpentinum* (SC)

Pacific cordgrass (=California cordgrass), *Sparina foliosa* (SLC)

San Francisco Bay spineflower, *Chorizanthe cuspidata var. cuspidata* (SC) *

San Francisco popcornflower, *Plagiobothrys diffusus* (CA)

San Joaquin spearscale (=saltbush), *Atriplex joaquiniana* (SC)

Sharsmith's onion, *Allium sharsmithae* (SC)

South Bay clarkia (=Santa Clara red ribbons), *Clarkia concinna ssp. automixa* (SC)
Tiburon buckwheat, *Eriogonum caninum* (SLC)
adobe sanicle, *Sanicula maritima* (SC) *
alkali milk-vetch, *Astragalus tener var. tener* (SC)
bent-flowered fiddleneck, *Amsinckia lunaris* (SLC)
big tarplant, *Blepharizonia plumosa ssp. plumosa* (SC)
big-scale (=California) balsamroot, *Balsamorhiza macrolepis var macrolepis* (SLC)
brittlescale, *Atriplex depressa* (SC)
caper-fruited tropidocarpum, *Tropidocarpum capparideum* (SC) *
chaparral harebell (=bellflower), *Campanula exigua* (SLC)
delta tule-pea, *Lathyrus jepsonii var. jepsonii* (SC)
diamond-petaled California poppy, *Eschscholzia rhombipetala* (SC)
fragrant fritillary (= prairie bells), *Fritillaria liliacea* (SC)
hairless allocarya (=popcornflower), *Plagiobothrys glaber* (SC) **
heartscale, *Atriplex cordulata* (SC)
hispid bird's-beak, *Cordylanthus mollis ssp. hispidus* (SC)
interior California (Hospital Canyon) larkspur, *Delphinium californicum ssp. interius* (SC)
large-flowered (=flower) linanthus, *Linanthus grandiflorus* (SC)
little mousetail, *Myosurus minimus ssp. apus* (SC)
most beautiful (uncommon) jewelflower, *Streptanthus albidus ssp. peramoenus* (SC)
northcoast (=Point Reyes) bird's-beak, *Cordylanthus maritimus ssp. palustris* (SC) *
prostrate navarretia (=prostrate pincushionplant), *Navarretia prostrata* (SC) *
recurved larkspur, *Delphinium recurvatum* (SC)
robust monardella (=robust coyote mint), *Monardella villosa ssp globosa* (SLC)
salt marsh owl's clover (=johnny-nip), *Castilleja ambigua ssp. ambigua* (SLC)
serpentine bedstraw, *Galium andrewsii ssp. gatense* (SLC)
stinkbells, *Fritillaria agrestis* (SLC)
talus fritillary, *Fritillaria falcata* (SC)
water sack (=saline) clover, *Trifolim depauperatum var. hydrophilum* (SC)
western leatherwood, *Dirca occidentalis* (SLC)

SAN JOAQUIN COUNTY

Listed Species

Mammals

San Joaquin kit fox, *Vulpes macrotis mutica* (E)
riparian (San Joaquin Valley) woodrat, *Neotoma fuscipes riparia* (E)
riparian brush rabbit, *Sylvilagus bachmani riparius* (E)

Birds

bald eagle, *Haliaeetus leucocephalus* (T)

Reptiles

Alameda whipsnake, *Masticophis lateralis euryxanthus* (T)

Critical habitat, Alameda whipsnake, *Masticophis lateralis euryxanthus* (T)

giant garter snake, *Thamnophis gigas* (T)

Amphibians

California red-legged frog, *Rana aurora draytonii* (T)

California tiger salamander, *Ambystoma californiense* (C/E)

Critical habitat, California red-legged frog, *Rana aurora draytonii* (T)

Fish

Central Valley steelhead, *Oncorhynchus mykiss* (T) NMFS

Critical habitat, delta smelt, *Hypomesus transpacificus* (T)

Critical habitat, winter-run chinook salmon, *Oncorhynchus tshawytscha* (E) NMFS

Sacramento splittail, *Pogonichthys macrolepidotus* (T)

delta smelt, *Hypomesus transpacificus* (T)

winter-run chinook salmon, *Oncorhynchus tshawytscha* (E) NMFS

Invertebrates

Conservancy fairy shrimp, *Branchinecta conservatio* (E)

longhorn fairy shrimp, *Branchinecta longiantenna* (E)

valley elderberry longhorn beetle, *Desmocerus californicus dimorphus* (T)

vernal pool fairy shrimp, *Branchinecta lynchi* (T)

vernal pool tadpole shrimp, *Lepidurus packardi* (E)

Plants

Critical habitat, large-flowered fiddleneck, *Amsinckia grandiflora* (E)

Greene's tuctoria (=Orcutt grass), *Tuctoria greenei* (E) *

large-flowered fiddleneck, *Amsinckia grandiflora* (E)

palmate-bracted bird's-beak, *Cordylanthus palmatus* (E) *

succulent (=fleshy) owl's-clover, *Castilleja campestris ssp. succulenta* (T)

Proposed Species

Birds

mountain plover, *Charadrius montanus* (PT)

Invertebrates

Critical habitat, vernal pool invertebrates, *See Federal Register 67:59883* (PX)

Plants

Critical habitat, vernal pool plants, *See Federal Register 67:59883* (PX)

Candidate Species

Birds

Western yellow-billed cuckoo, *Coccyzus americanus occidentalis* (C) *

Fish

Central Valley fall/late fall-run chinook salmon, *Oncorhynchus tshawytscha* (C) NMFS

Critical habitat, Central Valley fall/late fall-run chinook, *Oncorhynchus tshawytscha* (C) NMFS

Species of Concern

Mammals

Merced kangaroo rat, *Dipodomys heermanni dixoni* (SC)

Pacific western big-eared bat, *Corynorhinus (=Plecotus) townsendii townsendii* (SC)

San Joaquin pocket mouse, *Perognathus inornatus* (SC)

Yuma myotis bat, *Myotis yumanensis* (SC)

fringed myotis bat, *Myotis thysanodes* (SC)

greater western mastiff-bat, *Eumops perotis californicus* (SC)

long-eared myotis bat, *Myotis evotis* (SC)

long-legged myotis bat, *Myotis volans* (SC)

small-footed myotis bat, *Myotis ciliolabrum* (SC)

Birds

Aleutian Canada goose, *Branta canadensis leucopareia* (D)

American bittern, *Botaurus lentiginosus* (SC)

American peregrine falcon, *Falco peregrinus anatum* (D)

Bell's sage sparrow, *Amphispiza belli belli* (SC)

California thrasher, *Toxostoma redivivum* (SC)

Lawrence's goldfinch, *Carduelis lawrencei* (SC)

Lewis' woodpecker, *Melanerpes lewis* (SC)

Nuttall's woodpecker, *Picoides nuttallii* (SLC)

Swainson's hawk, *Buteo Swainsoni* (CA)

bank swallow, *Riparia riparia* (CA)

black rail, *Laterallus jamaicensis coturniculus* (CA)

black tern, *Chlidonias niger* (SC)

common loon, *Gavia immer* (SC)

ferruginous hawk, *Buteo regalis* (SC)

grasshopper sparrow, *Ammodramus savannarum* (SC)

greater sandhill crane, *Grus canadensis tabida* (CA)

little willow flycatcher, *Empidonax traillii brewsteri* (CA)

loggerhead shrike, *Lanius ludovicianus* (SC)

long-billed curlew, *Numenius americanus* (SC)
oak titmouse, *Baeolophus inornatus* (SLC)
olive-sided flycatcher, *Contopus cooperi* (SC)
rufous hummingbird, *Selasphorus rufus* (SC)
short-eared owl, *Asio flammeus* (SC)
tricolored blackbird, *Agelaius tricolor* (SC)
western burrowing owl, *Athene cunicularia hypugaea* (SC)
white-faced ibis, *Plegadis chihi* (SC)
white-tailed (=black shouldered) kite, *Elanus leucurus* (SC)

Reptiles

California horned lizard, *Phrynosoma coronatum frontale* (SC)
San Joaquin coachwhip (=whipsnake), *Masticophis flagellum ruddocki* (SC)
northwestern pond turtle, *Clemmys marmorata marmorata* (SC)
silvery legless lizard, *Anniella pulchra pulchra* (SC)
southwestern pond turtle, *Clemmys marmorata pallida* (SC)

Amphibians

foothill yellow-legged frog, *Rana boylii* (SC)
western spadefoot toad, *Spea hammondii* (SC)

Fish

Kern brook lamprey, *Lampetra hubbsi* (SC)
Pacific lamprey, *Lampetra tridentata* (SC)
green sturgeon, *Acipenser medirostris* (SC)
longfin smelt, *Spirinchus thaleichthys* (SC)
river lamprey, *Lampetra ayresi* (SC)

Invertebrates

Antioch Dunes anthicid beetle, *Anthicus antiochensis* (SC)
California linderiella fairy shrimp, *Linderiella occidentalis* (SC)
Midvalley fairy shrimp, *Branchinecta mesovallensis* (SC)
Sacramento anthicid beetle, *Anthicus sacramento* (SC)
curved-foot hygrotus diving beetle, *Hygrotus curvipes* (SC)
moestan blister beetle, *Lytta moesta* (SC)
molestan blister beetle, *Lytta molesta* (SC)

Plants

Boggs Lake hedge-hyssop, *Gratiola heterosepala* (CA)
Hoover's cryptantha, *Cryptantha hooveri* (SLC)
Lemmon's jewelflower, *Caulanthus coulteri var lemmonii* (SLC)
Livermore tarplant, *Deinandra bacigalupii* (SC)

Mason's lilaeopsis, *Lilaeopsis masonii* (SC)

San Joaquin spearscale (=saltbush), *Atriplex joaquiniana* (SC) *

Suisun Marsh aster, *Aster lentus* (SC)

alkali milk-vetch, *Astragalus tener var. tener* (SC) *

big tarplant, *Blepharizonia plumosa ssp. plumosa* (SC) *

caper-fruited tropidocarpum, *Tropidocarpum capparideum* (SC) *

delta coyote-thistle (=button-celery), *Eryngium racemosum* (CA) *

delta tule-pea, *Lathyrus jepsonii var. jepsonii* (SC)

heartscale, *Atriplex cordulata* (SC) *

interior California (Hospital Canyon) larkspur, *Delphinium californicum ssp. interius* (SC)

showy (=golden) madia, *Madia radiata* (SC) *

slough thistle, *Cirsium crassicaule* (SC)

valley sagittaria (=Sanford's arrowhead), *Sagittaria sanfordii* (SC)

KEY:

(E)	*Endangered*	Listed (in the Federal Register) as being in danger of extinction.
(T)	*Threatened*	Listed as likely to become endangered within the foreseeable future.
(P)	*Proposed*	Officially proposed (in the Federal Register) for listing as endangered or threatened.
(PX)	*Proposed Critical Habitat*	Proposed as an area essential to the conservation of the species.
(C)	*Candidate*	Candidate to become a *proposed* species.
(SC)	*Species of Concern*	Other species of concern to the Service.
(SLC)	*Species of Local Concern*	Species of local or regional concern or conservation significance.
(D)	*Delisted*	Delisted. Status to be monitored for 5 years.
(CA)	*State-Listed*	Listed as threatened or endangered by the State of California.
NMFS	NMFS species	Under jurisdiction of the National Marine Fisheries Service. Contact them directly.
*	*Extirpated*	Possibly extirpated from the area.
**	*Extinct*	Possibly extinct
	Critical Habitat	Area essential to the conservation of a species.

ENCLOSURE A

Endangered and Threatened Species that May Occur in
or be Affected by Projects in the Selected Quads Listed Below
Reference File No. 1-1-03-SP-0162
October 28, 2002

QUAD: 445A MIDWAY

Listed Species

Mammals

riparian (San Joaquin Valley) woodrat, *Neotoma fuscipes riparia* (E) *

riparian brush rabbit, *Sylvilagus bachmani riparius* (E) *

San Joaquin kit fox, *Vulpes macrotis mutica* (E)

Birds

bald eagle, *Haliaeetus leucocephalus* (T)

Reptiles

Alameda whipsnake, *Masticophis lateralis euryxanthus* (T)

Critical habitat, Alameda whipsnake, *Masticophis lateralis euryxanthus* (T)

giant garter snake, *Thamnophis gigas* (T)

Amphibians

California tiger salamander, *Ambystoma californiense* (C/E)

California red-legged frog, *Rana aurora draytonii* (T)

Critical habitat, California red-legged frog, *Rana aurora draytonii* (T)

Fish

Critical habitat, delta smelt, *Hypomesus transpacificus* (T)

delta smelt, *Hypomesus transpacificus* (T)

Central Valley steelhead, *Oncorhynchus mykiss* (T) NMFS

Sacramento splittail, *Pogonichthys macrolepidotus* (T)

Invertebrates

longhorn fairy shrimp, *Branchinecta longiantenna* (E)

vernal pool fairy shrimp, *Branchinecta lynchi* (T)

valley elderberry longhorn beetle, *Desmocerus californicus dimorphus* (T)

vernal pool tadpole shrimp, *Lepidurus packardi* (E)

Plants

Critical habitat, large-flowered fiddleneck, *Amsinckia grandiflora* (E)

large-flowered fiddleneck, *Amsinckia grandiflora* (E)

showy Indian clover, *Trifolium amoenum* (E) *

Proposed Species

Birds

mountain plover, *Charadrius montanus* (PT)

Candidate Species

Fish

Central Valley fall/late fall-run chinook salmon, *Oncorhynchus tshawytscha* (C) NMFS

Species of Concern

Mammals

Pacific western big-eared bat, *Corynorhinus (=Plecotus) townsendii townsendii* (SC)

greater western mastiff-bat, *Eumops perotis californicus* (SC)

small-footed myotis bat, *Myotis ciliolabrum* (SC)

long-eared myotis bat, *Myotis evotis* (SC)

fringed myotis bat, *Myotis thysanodes* (SC)

long-legged myotis bat, *Myotis volans* (SC)

Yuma myotis bat, *Myotis yumanensis* (SC)

San Francisco dusky-footed woodrat, *Neotoma fuscipes annectens* (SC)

San Joaquin pocket mouse, *Perognathus inornatus* (SC)

Birds

tricolored blackbird, *Agelaius tricolor* (SC)

grasshopper sparrow, *Ammodramus savannarum* (SC)

Bell's sage sparrow, *Amphispiza belli belli* (SC)

short-eared owl, *Asio flammeus* (SC)

western burrowing owl, *Athene cunicularia hypugaea* (SC)

oak titmouse, *Baeolophus inornatus* (SLC)

ferruginous hawk, *Buteo regalis* (SC)

Costa's hummingbird, *Calypte costae* (SC)

Lawrence's goldfinch, *Carduelis lawrencei* (SC)

Vaux's swift, *Chaetura vauxi* (SC)

black tern, *Chlidonias niger* (SC)

white-tailed (=black shouldered) kite, *Elanus leucurus* (SC)

little willow flycatcher, *Empidonax traillii brewsteri* (CA)

American peregrine falcon, *Falco peregrinus anatum* (D)

greater sandhill crane, *Grus canadensis tabida* (CA)

loggerhead shrike, *Lanius ludovicianus* (SC)

Lewis' woodpecker, *Melanerpes lewis* (SC)

long-billed curlew, *Numenius americanus* (SC)

rufous hummingbird, *Selasphorus rufus* (SC)

Allen's hummingbird, *Selasphorus sasin* (SC)

California thrasher, *Toxostoma redivivum* (SC)

Reptiles

silvery legless lizard, *Anniella pulchra pulchra* (SC)

northwestern pond turtle, *Clemmys marmorata marmorata* (SC)

southwestern pond turtle, *Clemmys marmorata pallida* (SC)

San Joaquin coachwhip (=whipsnake), *Masticophis flagellum ruddocki* (SC)

California horned lizard, *Phrynosoma coronatum frontale* (SC)

Amphibians

foothill yellow-legged frog, *Rana boylii* (SC)

western spadefoot toad, *Spea hammondii* (SC)

Fish

green sturgeon, *Acipenser medirostris* (SC)

river lamprey, *Lampetra ayresi* (SC)

Pacific lamprey, *Lampetra tridentata* (SC)

longfin smelt, *Spirinchus thaleichthys* (SC)

Invertebrates

curved-foot hygrotus diving beetle, *Hygrotus curvipes* (SC)

California linderiella fairy shrimp, *Linderiella occidentalis* (SC)

Plants

big tarplant, *Blepharizonia plumosa ssp. plumosa* (SC)

Lemmon's jewelflower, *Caulanthus coulteri var lemmonii* (SLC)

Livermore tarplant, *Deinandra bacigalupii* (SC) ?

diamond-petaled California poppy, *Eschscholzia rhombipetala* (SC)

showy (=golden) madia, *Madia radiata* (SC) *

caper-fruited tropidocarpum, *Tropidocarpum capparideum* (SC) **

QUAD: 445B ALTAMONT

Listed Species

Mammals

riparian (San Joaquin Valley) woodrat, *Neotoma fuscipes riparia* (E) *

riparian brush rabbit, *Sylvilagus bachmani riparius* (E) *

San Joaquin kit fox, *Vulpes macrotis mutica* (E)

Birds

bald eagle, *Haliaeetus leucocephalus* (T)

Reptiles

Alameda whipsnake, *Masticophis lateralis euryxanthus* (T)

Critical habitat, Alameda whipsnake, *Masticophis lateralis euryxanthus* (T)

Amphibians

California tiger salamander, *Ambystoma californiense* (C/E)

California red-legged frog, *Rana aurora draytonii* (T)

Critical habitat, California red-legged frog, *Rana aurora draytonii* (T)

Fish

delta smelt, *Hypomesus transpacificus* (T)

Central California Coastal steelhead, *Oncorhynchus mykiss* (T) NMFS

Central Valley steelhead, *Oncorhynchus mykiss* (T) NMFS

Sacramento splittail, *Pogonichthys macrolepidotus* (T)

Invertebrates

longhorn fairy shrimp, *Branchinecta longiantenna* (E)

vernal pool fairy shrimp, *Branchinecta lynchi* (T)

Plants

palmate-bracted bird's-beak, *Cordylanthus palmatus* (E)

Proposed Species

Birds

mountain plover, *Charadrius montanus* (PT)

Invertebrates

Critical habitat, vernal pool invertebrates, *See Federal Register 67:59883* (PX)

Plants

Critical habitat, vernal pool plants, *See Federal Register 67:59883* (PX)

Candidate Species

Fish

Central Valley fall/late fall-run chinook salmon, *Oncorhynchus tshawytscha* (C) NMFS

Species of Concern

Mammals

Pacific western big-eared bat, *Corynorhinus (=Plecotus) townsendii townsendii* (SC)

greater western mastiff-bat, *Eumops perotis californicus* (SC)

small-footed myotis bat, *Myotis ciliolabrum* (SC)

long-eared myotis bat, *Myotis evotis* (SC)

fringed myotis bat, *Myotis thysanodes* (SC)

long-legged myotis bat, *Myotis volans* (SC)

Yuma myotis bat, *Myotis yumanensis* (SC)

San Francisco dusky-footed woodrat, *Neotoma fuscipes annectens* (SC)

San Joaquin pocket mouse, *Perognathus inornatus* (SC)

Birds

tricolored blackbird, *Agelaius tricolor* (SC)

grasshopper sparrow, *Ammodramus savannarum* (SC)

Bell's sage sparrow, *Amphispiza belli belli* (SC)

short-eared owl, *Asio flammeus* (SC)

western burrowing owl, *Athene cunicularia hypugaea* (SC)

oak titmouse, *Baeolophus inornatus* (SLC)

ferruginous hawk, *Buteo regalis* (SC)

Costa's hummingbird, *Calypte costae* (SC)

Lawrence's goldfinch, *Carduelis lawrencei* (SC)

Vaux's swift, *Chaetura vauxi* (SC)

black tern, *Chlidonias niger* (SC)

white-tailed (=black shouldered) kite, *Elanus leucurus* (SC)

little willow flycatcher, *Empidonax traillii brewsteri* (CA)

American peregrine falcon, *Falco peregrinus anatum* (D)

greater sandhill crane, *Grus canadensis tabida* (CA)

loggerhead shrike, *Lanius ludovicianus* (SC)

Lewis' woodpecker, *Melanerpes lewis* (SC)

long-billed curlew, *Numenius americanus* (SC)

rufous hummingbird, *Selasphorus rufus* (SC)

Allen's hummingbird, *Selasphorus sasin* (SC)

California thrasher, *Toxostoma redivivum* (SC)

Reptiles

silvery legless lizard, *Anniella pulchra pulchra* (SC)

northwestern pond turtle, *Clemmys marmorata marmorata* (SC)

southwestern pond turtle, *Clemmys marmorata pallida* (SC)

San Joaquin coachwhip (=whipsnake), *Masticophis flagellum ruddocki* (SC)

California horned lizard, *Phrynosoma coronatum frontale* (SC)

Amphibians

foothill yellow-legged frog, *Rana boylii* (SC)

western spadefoot toad, *Spea hammondii* (SC)

Fish

green sturgeon, *Acipenser medirostris* (SC)

river lamprey, *Lampetra ayresi* (SC)

Pacific lamprey, *Lampetra tridentata* (SC)

longfin smelt, *Spirinchus thaleichthys* (SC)

Invertebrates

curved-foot hygrotus diving beetle, *Hygrotus curvipes* (SC)

California linderiella fairy shrimp, *Linderiella occidentalis* (SC)

Plants

bent-flowered fiddleneck, *Amsinckia lunaris* (SLC)

alkali milk-vetch, *Astragalus tener var. tener* (SC) *

heartscale, *Atriplex cordulata* (SC)

brittlescale, *Atriplex depressa* (SC)

San Joaquin spearscale (=saltbush), *Atriplex joaquiniana* (SC)

big-scale (=California) balsamroot, *Balsamorhiza macrolepis var macrolepis* (SLC)

big tarplant, *Blepharizonia plumosa ssp. plumosa* (SC)

hispid bird's-beak, *Cordylanthus mollis ssp. hispidus* (SC)

Livermore tarplant, *Deinandra bacigalupii* (SC)

little mousetail, *Myosurus minimus ssp. apus* (SC)

hairless allocarya (=popcornflower), *Plagiobothrys glaber* (SC) **

water sack (=saline) clover, *Trifolim depauperatum var. hydrophilum* (SC)

caper-fruited tropidocarpum, *Tropidocarpum capparideum* (SC) **

KEY:

(E)	*Endangered*	Listed (in the Federal Register) as being in danger of extinction.
(T)	*Threatened*	Listed as likely to become endangered within the foreseeable future.
(P)	*Proposed*	Officially proposed (in the Federal Register) for listing as endangered or threatened.
(PX)	*Proposed Critical Habitat*	Proposed as an area essential to the conservation of the species.
(C)	*Candidate*	Candidate to become a *proposed* species.
(SC)	*Species of Concern*	May be endangered or threatened. Not enough biological information has been gathered to support listing at this time.
(SLC)	*Species of Local Concern*	Species of local or regional concern or conservation significance.
(MB)	*Migratory Bird*	Migratory bird
NMFS	NMFS species	Under the jurisdiction of the National Marine Fisheries Service. Contact them directly.
(D)	*Delisted*	Delisted. Status to be monitored for 5 years.
(CA)	*State-Listed*	Listed as threatened or endangered by the State of California.
(*)	*Extirpated*	Possibly extirpated from this quad.
(**)	*Extinct*	Possibly extinct.
	Critical Habitat	Area essential to the conservation of a species.

Enclosure B

FEDERAL AGENCIES' RESPONSIBILITIES UNDER SECTIONS 7(a) and (c) OF THE ENDANGERED SPECIES ACT

SECTION 7(a) Consultation/Conference

Requires: (1) Federal agencies to utilize their authorities to carry out programs to conserve endangered and threatened species; (2) Consultation with FWS when a Federal action may affect a listed endangered or threatened species to insure that any action authorized, funded, or carried out by a Federal agency is not likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat. The process is initiated by the Federal agency after determining the action may affect a listed species; and (3) Conference with FWS when a Federal action is likely to jeopardize the continued existence of a proposed species or result in destruction or adverse modification of proposed critical habitat.

SECTION 7(c) Biological Assessment-Major Construction Activity[1]

Requires Federal agencies or their designees to prepare a Biological Assessment (BA) for major construction activities. The BA analyzes the effects of the action[2] on listed and proposed species. The process begins with a Federal agency requesting from FWS a list of proposed and listed threatened and endangered species. The BA should be completed within 180 days after its initiation (or within such a time period as is mutually agreeable). If the BA is not initiated within 90 days of receipt of the list, the accuracy of the species list should be informally verified with our Service. No irreversible commitment of resources is to be made during the BA process which would foreclose reasonable and prudent alternatives to protect endangered species. Planning, design, and administrative actions may proceed; however, no construction may begin.

We recommend the following for inclusion in the BA: an on-site inspection of the area affected by the proposal which may include a detailed survey of the area to determine if the species or suitable habitat is present; a review of literature and scientific data to determine species' distribution, habitat needs, and other biological requirement; interviews with experts, including those within FWS, State conservation departments, universities and others who may have data not yet published in scientific literature; an analysis of the effects of the proposal on the species in terms of individuals and populations, including consideration of indirect effects of the proposal on the species and its habitat; an analysis of alternative actions considered. The BA should document the results, including a discussion of study methods used, and problems encountered, and other relevant information. The BA should conclude whether or not a listed or proposed species will be affected. Upon completion, the BA should be forwarded to our office.

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[1]A construction project (or other undertaking having similar physical impacts) which is a major federal action significantly affecting the quality of the human environment as referred to in NEPA (42 U.S.C. 4332(2)C).

[2]"Effects of the action" refers to the direct and indirect effects of an action on the species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action.

Enclosure C

GUIDELINES FOR CONDUCTING AND REPORTING BOTANICAL INVENTORIES FOR FEDERALLY LISTED, PROPOSED AND CANDIDATE PLANTS

(September 23, 1996)

These guidelines describe protocols for conducting botanical inventories for federally listed, proposed and candidate plants, and describe minimum standards for reporting results. The Service will use, in part, the information outlined below in determining whether the project under consideration may affect any listed, proposed or candidate plants, and in determining the direct, indirect, and cumulative effects.

Field inventories should be conducted in a manner that will locate listed, proposed, or candidate species (target species) that may be present. The entire project area requires a botanical inventory, except developed agricultural lands. The field investigator(s) should:

1. Conduct inventories at the appropriate times of year when target species are present and identifiable. Inventories will include all potential habitats. Multiple site visits during a field season may be necessary to make observations during the appropriate phenological stage of all target species.

2. If available, use a regional or local reference population to obtain a visual image of the target species and associated habitat(s). If access to reference populations(s) is not available, investigators should study specimens from local herbaria.

3. List every species observed and compile a comprehensive list of vascular plants for the entire project site. Vascular plants need to be identified to a taxonomic level which allows rarity to be determined.

4. Report results of botanical field inventories that include:

   a. a description of the biological setting, including plant community, topography, soils, potential habitat of target species, and an evaluation of environmental conditions, such as timing or quantity of rainfall, which may influence the performance and expression of target species.

   b. a map of project location showing scale, orientation, project boundaries, parcel size, and map quadrangle name.

   c. survey dates and survey methodology(ies).

   d. if a reference population is available, provide a written narrative describing the target species reference population(s) used, and date(s) when observations were made.

   e. a comprehensive list of all vascular plants occurring on the project site for each habitat type.

   f. current and historic land uses of the habitat(s) and degree of site alteration.

g. presence of target species off-site on adjacent parcels, if known.

h. an assessment of the biological significance or ecological quality of the project site in a local and regional context.

5. If target species is(are) found, report results that additionally include:

   a. a map showing federally listed, proposed and candidate species distribution as they relate to the proposed project.

   b. if target species is (are) associated with wetlands, a description of the direction and integrity of flow of surface hydrology. If target species is (are) affected by adjacent off-site hydrological influences, describe these factors.

   c. the target species phenology and microhabitat, an estimate of the number of individuals of each target species per unit area; identify areas of high, medium and low density of target species over the project site, and provide acres of occupied habitat of target species. Investigators could provide color slides, photos or color copies of photos of target species or representative habitats to support information or descriptions contained in reports.

   d. the degree of impact(s), if any, of the proposed project as it relates to the potential unoccupied habitat of target habitat.

6. Document findings of target species by completing California Native Species Field Survey Form(s) and submit form(s) to the Natural Diversity Data Base. Documentation of determinations and/or voucher specimens may be useful in cases of taxonomic ambiguities, habitat or range extensions.

7. Report as an addendum to the original survey, any change in abundance and distribution of target plants in subsequent years. Project sites with inventories older than 3 years from the current date of project proposal submission will likely need additional survey. Investigators need to assess whether an additional survey(s) is (are) needed.

8. Adverse conditions may prevent investigator(s) from determining presence or identifying some target species in potential habitat(s) of target species. Disease, drought, predation, or herbivory may preclude the presence or identification of target species in any year. An additional botanical inventory(ies) in a subsequent year(s) may be required if adverse conditions occur in a potential habitat(s). Investigator(s) may need to discuss such conditions.

9. Guidance from California Department of Fish and Game (CDFG) regarding plant and plant community surveys can be found in Guidelines for Assessing the Effects of Proposed Developments on Rare and Endangered Plants and Plant Communities, 1984. Please contact the CDFG Regional Office for questions regarding the CDFG guidelines and for assistance in determining any applicable State regulatory requirements.