APPENDIX D

USFWS OFFICIAL SPECIES LIST FOR CHARLES M. SCHULZ
SONOMA COUNTY AIRPORT
Document Number: 110503052814

George Molnar
LSA Associates
157 Park Place
Point Richmond, CA 94801

Subject: Species List for Charles M. Schulz Sonoma County Airport - Runway Safety Enhancement Project

Dear: Senior Wetland Biologist

We are sending this official species list in response to your May 3, 2011 request for information about endangered and threatened species. The list covers the California counties and/or U.S. Geological Survey 7½ minute quad or quads you requested.

Our database was developed primarily to assist Federal agencies that are consulting with us. Therefore, our lists include all of the sensitive species that have been found in a certain area and also ones that may be affected by projects in the area. For example, a fish may be on the list for a quad if it lives somewhere downstream from that quad. Birds are included even if they only migrate through an area. In other words, we include all of the species we want people to consider when they do something that affects the environment.

Please read Important Information About Your Species List (below). It explains how we made the list and describes your responsibilities under the Endangered Species Act.

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be August 01, 2011.

Please contact us if your project may affect endangered or threatened species or if you have any questions about the attached list or your responsibilities under the Endangered Species Act. A list of Endangered Species Program contacts can be found at www.fws.gov/sacramento/es/branches.htm.

Endangered Species Division

U.S. Fish & Wildlife Service
Sacramento Fish & Wildlife Office

Federal Endangered and Threatened Species that Occur in or may be Affected by Projects in the Counties and/or U.S.G.S. 7 1/2 Minute Quads you requested

Document Number: 110527015052
Database Last Updated: April 29, 2010

Quad Lists

Listed Species

Invertebrates

Syncaris pacifica
California freshwater shrimp (E)

Fish

Oncorhynchus kisutch
coho salmon - central CA coast (E) (NMFS)
Critical habitat, coho salmon - central CA coast (X) (NMFS)

Oncorhynchus mykiss
Central California Coastal steelhead (T) (NMFS)
Central Valley steelhead (T) (NMFS)
Critical habitat, Central California coastal steelhead (X) (NMFS)

Oncorhynchus tshawytscha
California coastal chinook salmon (T) (NMFS)
Central Valley spring-run chinook salmon (T) (NMFS)
Critical habitat, California coastal chinook salmon (X) (NMFS)
winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians

Ambystoma californiense
California tiger salamander, central population (T)
California tiger salamander, Sonoma Co. pop (E)

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

Birds

Strix occidentalis caurina
northern spotted owl (T)

Plants

Alopecurus aequalis var. sonomensis
Sonoma alopecurus (E)

Astragalus clarianus
Clara Hunt's milk-vetch (E)

Blennosperma bakeri
Baker's stickyseed [=Sonoma Sunshine] (E)
**Carex albida**  
white sedge (E)

**Clarkia imbricata**  
Vine Hill clarkia (E)

**Lasthenia burkei**  
Burke's goldfields (E)

**Lilium pardinum ssp. pitkinense**  
Pitkin Marsh lily (E)

**Limnanthes vinculans**  
Sebastopol meadowfoam (E)

**Navarretia leucocephala ssp. plieantha**  
many-flowered navarretia (E)

**Proposed Species**

**Amphibians**

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

**Quads Containing Listed, Proposed or Candidate Species:**

SANTA ROSA (501B)
SEBASTOPOL (502A)
MARK WEST SPRINGS (517C)
HEALDSBURG (518D)

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**County Lists**

No county species lists requested.

**Key:**

(E) *Endangered* - Listed 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.

(NMFS) Species under the Jurisdiction of the National Oceanic & Atmospheric Administration Fisheries Service. Consult with them directly about these species.

**Critical Habitat** - Area essential to the conservation of a species.

(PX) *Proposed Critical Habitat* - The species is already listed. Critical habitat is being proposed for it.

(C) *Candidate* - Candidate to become a proposed species.

(V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.

(X) *Critical Habitat* designated for this species

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**Important Information About Your Species List**

**How We Make Species Lists**

We store information about endangered and threatened species lists by U.S. Geological Survey 7½ minute quads. The United States is divided into these quads, which are about the size of San Francisco.

The animals on your species list are ones that occur within, or may be affected by projects

http://www.fws.gov/sacramento/es/spp_lists/auto_list.cfm
within, the quads covered by the 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.
- Birds are shown 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.

Plants

Any plants on your list are ones that have actually been observed in the area covered by the list. Plants may exist in an area without ever having been detected there. You can find out what's in the surrounding quads through the California Native Plant Society's online Inventory of Rare and Endangered Plants.

Surveying

Some of the species on your list may not be affected by your project. A trained biologist and/or botanist, familiar with the habitat requirements of the species on your list, should determine whether they or habitats suitable for them may be affected by your project. We recommend that your surveys include any proposed and candidate species on your list. See our Protocol and Recovery Permits pages.

For plant surveys, we recommend using the Guidelines for Conducting and Reporting Botanical Inventories. The results of your surveys should be published in any environmental documents prepared for your project.

Your Responsibilities Under the Endangered Species Act

All animals identified as listed above are fully protected under the Endangered Species Act of 1973, as amended. Section 9 of the Act and its implementing regulations prohibit the take of a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such animal.

Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures:

- If a Federal agency is involved with the permitting, funding, or carrying out of a project that may result in take, then that agency must engage in a formal consultation with the Service.

  During formal consultation, the Federal agency, the applicant and the Service work together to avoid or minimize the impact on listed species and their habitat. Such consultation would result in a biological opinion by the Service addressing the anticipated effect of the project on listed and proposed species. The opinion may authorize a limited level of incidental take.

- If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then you, the applicant, should apply for an incidental take permit. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project.

Should your survey determine that federally listed or proposed species occur in the area and are likely to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that minimizes the project’s direct and indirect impacts to listed species and compensates for project-related loss of habitat. You should

include the plan in any environmental documents you file.

Critical Habitat
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, there will be a separate line for this on the species list. 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). See our Map Room page.

Candidate Species
We recommend that you address impacts to candidate species. We put plants and animals on our candidate list when we have enough scientific information to eventually propose them for listing as threatened or endangered. By considering these species early in your planning process you may be able to avoid the problems that could develop if one of these candidates was listed before the end of your project.

Species of Concern
The Sacramento Fish & Wildlife Office no longer maintains a list of species of concern. However, various other agencies and organizations maintain lists of at-risk species. These lists provide essential information for land management planning and conservation efforts. More info

Wetlands
If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defined by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, you will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield of this office at (916) 414-6520.

Updates
Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be August 25, 2011.
APPENDIX E

OBSERVED PLANT SPECIES
APPENDIX C
Plant Species Observed within the Sonoma County Airport
Botanical Surveys 2003-2004 and 2009-2010

Achyrachaena mollis
Blow-wives
Aira caryophyllea
Air grass
Alisma plantago-aquatica
Water-plantain
Allium vineale
Wild garlic
Alopecurus saccatus
Pacific foxtail
Alopecurus aequalis var. aequalis
Short-awn foxtail
Amaranthus retroflexus
Pigweed
Amaryllis belladonna
Naked lady
Ammannia sp.

Amsinckia menziesii var. intermedia
Fiddleneck
Anagallis arvensis
Scarlet pimpernel
Anthemis cotula
Mayweed
Anthoxanthum aristatum
Vernal grass
Arundo donax
Giant reed
Atriplex triangularis
Fat Hen
Avena fatua
Wild oats
Avena barbata
Slender wild oats
Baccharis pilularis
Coyote-brush
Bellardia trixago
Bellardia

Blennosperma nanum var. nanum
Common Blennosperma
Brassica nigra
Black mustard
Brassica rapa
Spring mustard
Briza maxima
Rattlesnake-grass
Briza minor
Quaking-grass
Brodiaea elegans
 Harvest brodiaea
Bromus catharticus
Rescue grass
Bromus diandrus
Ripgut brome
Bromus hordeaceus
Soft chess
Bromus madritensis ssp. rubus
 Foxtail chess
Bromus tectorum var. tectorum
Cheat grass
Bromus carinatus
California brome
Callitriche heterophylla var. bolanderi
Bolander’s water-starwort
Callitriche sp.
Water starwort
Calochortus luteus
Yellow mariposa lily
Camissonia ovata
Suncup
Capsella bursa-pastoris
Shepherd’s purse
Cardamine oligosperma
Milkmaids
Carduus pycnocephalus
Italian thistle

Carex sp.
Sedge
Carex obnuta
Slough sedge
Castilleja attenuata
Valley tassels
Castilleja campestris
Castilleja densiflora
Owl’s-clover
Centaura solstitialis
Yellow starthistle
Centaurium muehlenbergii
Canchalagua
Centromadia parryi var. parryi
Pappose tarplant
Cerastium glomeratum
Mouse-ears
Chamaesyce maculata
Spotted spurge
Chamomilla suaveolens
Pineapple weed
Chlorogalum pomeridianum
Soaproot
Cicendia quadrangularis
Cicendia
Cichorium intybus
Chicory
Cirsium vulgare
Bull-thistle
Conium maculatum
Poison hemlock
Convolvulus arvensis
Bindweed
Conyza canadensis
Horseweed
Conyza bonariensis
Mare’s tail
Cortaderia jubata
Pampas grass
Cotula coronopifolia
Brass buttons
Crassula connata  
Pygmyweed

Crassula aquatica  
Pygmyweed

Crataegus sp.  
Hawthorn

Crepis occidentalis  
Hawk’s-beard

Crypsis schoenoides  
Swamp timothy

Cynodon dactylon  
Bermuda-grass

Cynosurus echinatus  
Dogtail grass

Cyperus eragrostis  
Umbrella sedge

Dactylus glomeratus  
Orchard grass

Danthonia californica  
California oatgrass

Deschampsia danthonioides  
Annual hairgrass

Deschampsia cespitosa ssp. holciformis

Pacific hairgrass

Dipsacus sativus  
Common teasel

Downingia concolor var. concolor

maroon-spot downingia

Echinochloa crus-galli  
Barnyard grass

Echinochloa muricata  
Barnyard grass

Eleocharis macrostachya  
Common spikeweed

Eleocharis acicularis  
Least spikerush

Epilobium ciliatum  
Northern willowherb

Epilobium pygmaeum  
Pygmy-willowherb

Epilobium brachycarpum  
Willowherb

Eremocarpus setigerus  
Turkey mullein

Eriogonum sp.  
Buckwheat

Erodium botrys  
Broad-leaved filaree

Erodium cicutarium  
Redstem filaree

Eryngium armatum  
Armed coyote-thistle

Eschscholzia californica  
California poppy

Eucalyptus globulus  
Blue-gum

Festuca arundinacea  
Tall fescue

Filago gallica  
Filago

Filago californica

Foeniculum vulgare  
Sweet fennel

Fraxinus latifolia  
Oregon ash

Galium aparine  
Bedstraw

Geranium molle  
Dove’s foot geranium

Geranium dissectum  
Cut-leaf geranium

Glyceria declinata  
Mannagrass

Gnaphalium luteo-album  
Weedy cudweed

Gratiola ebracteata  
Bractless hedge-hyssop

Grindelia camporum  
Great Valley gumweed

Hemizonia congesta ssp. luzulifolia  
Hayfield tarweed

Hemizonia congesta ssp. congesta  
Yellow hayfield tarweed

Hemizonia fitchii  
Fitch’s tarweed

Hemizonia sp.  
Tarweed

Hesperoxax caulescens var. hesperoxax  
Hogwallow starfish

Heterotheca grandiflora  
Telegraph weed

Hirschfeldia incana  
Mediterranean mustard

Holcus lanatus  
Velvet grass

Holocarpus heermannii  
Heermann’s tarweed

Hordeum brachyantherum  
Meadow barley

Hordeum marinum ssp. gussoneanum  
Mediterranean barley

Hordeum murinum ssp. leporinum  
Hare barley

Hypericum perforatum  
Klammath-weed

Hypocharis radicata  
Hairy cat’s-ear

Hypocharis glabra  
Smooth cat’s-ear

Juglans californica var. hindsii  
Northern California black walnut (or hybrid)

Juncus patens  
Blue rush

Juncus bufonius  
Toadrush

Juncus capitatus  
Headrush

Juncus effusus  
Soft rush
APPENDIX C
Plant Species Observed within the Sonoma County Airport
Botanical Surveys 2003-2004 and 2009-2010

Juncus occidentalis
Western rush

Juncus phaeocephalus
Brownhead rush

Juncus tenuis
Slender rush

Juncus uncialis
Dwarf rush

Juncus xiphioides
Iris-leaved rush

Juncus balticus
Baltic rush

Kickxia sp.

Fluellen

Lactuca serriola
Prickly lettuce

Lactuca saligna
Narrow-leaved lettuce

Lasthenia glaberrima
Smooth goldfields

Lasthenia fremontii
Fremont’s goldfields

Lasthenia glabrata
Yellowray goldfields

Lasthenia burkei (FE, SE)
Burke’s goldfields

Lathyrus sp.
Vetch

Layia platyglossa
Tidy-tips

Leontodon taraxacoides
Hawkbit

Lepidium latifolium
Perennial pepperweed

Lessingia sp.

Leymus triticoides
Creeping wildrye

Lilaea scillioides
Flowering quillwort

Limnanthes douglasii
Douglas’s meadowfoam

Linum perenne
Flax

Lolium multiflorum
Italian wildrye

Lolium perenne
Perennial wildrye

Lotus micranthus
Small-flowered lotus

Lotus purshianus
Spanish clover

Lotus corniculatus
Bird’s-foot trefoil

Ludwigia peploides
Floating seedbox

Lupinus nanus
Sky-lupine

Lupinus bicolor
Miniature lupine

Lythrum hyssopifolium
Hyssop loosestrife

Madia sativa
Coast tarweed

Malva neglecta
Common mallow

Medicago polymorpha
burclover

Medicago lupulina
Burclover

Mentha pulegium
Penny-royal

Microseris sp.
Microseris

Mimulus guttatus
Marsh monkey-flower

Mimulus tricolor

Muilla maritima
Common muilla

Nassella pulchra
Purple needle-grass

Navarretia tagetina
Navarretia

Navarretia intertexta
Needle-leaf navarretia

Oxalis corniculata
Creeping oxalis

Panicum capillare
Witchgrass

Parentucellia viscosa
Parentucellia

Paspalum dilatatum
Dallis grass

Perideridia kelloggii
Kellogg’s yampah

Perideridia gairdneri ssp.
gairdneri (List 4)
Gardner’s yampah

Petrophagia sp.

Phalaris aquatica
Harding-grass

Phalaris arundinacea
Harding grass

Phleum pratense
Cultivated timothy

Picris echioidea
Prickly ox-tongue

Plagiobothrys stipitatus
Slender popcorn-flower

Plantago elongata
Elongate plantain

Plantago erecta
California plantain

Plantago lanceolata
English plantain

Plantago major
Common plantain

Plantago coronopus
Cut-leaf plantain

Pleuropegon californicus
Semaphore grass

Po a annua
Blue-grass

Pogogyne douglasii
Douglas’s pogogyne
APPENDIX C
Plant Species Observed within the Sonoma County Airport
Botanical Surveys 2003-2004 and 2009-2010

Polygonum arenastrum  
Common knotweed

Polygonum persicaria  
Lady’s thumb

Polypogon monspeliensis  
Rabbit’s foot grass

Populus alba  
White poplar

Populus nigra var. italica  
Lombardy poplar

Populus fremontii ssp. fremontii  
Fremont’s poplar

Portulaca oleracea  
Common purselane

Prunus cerasifera  
Cherry Plum

Prunus cerasifera Plum rootstock

Psilocarphus oregonus  
Oregon woolly-heads

Psilocarphus brevissimus  
Dwarf woolly-heads

Quercus douglasii  
Blue oak

Quercus garryana  
Oregon oak

Quercus lobata  
Valley oak

Quercus agrifolia  
Coast live oak

Ranunculus arvensis  
Corn buttercup

Ranunculus sp.  

Ranunculus lobbii (List 4)  
Lobb’s buttercup

Ranunculus muricatus  
Spiny-fruit buttercup

Ranunculus pusillus  
Low buttercup

Raphanus sativus  
Wild radish

Rorippa curvisiliqua  
Curve-pod yellow-cress

Rosa californica  
California rose

Rubus ursinus  
California blackberry

Rubus discolor  
Himalayan blackberry

Rumex acetocella  
Sheep sorrel

Rumex crispus  
Curly dock

Rumex pulcher  
Fiddle-dock

Salix laevigata  
Red willow

Salix lasiolepis  
Arroyo willow

Salix lutea  
Yellow willow

Salix exigua  
Sandbar willow

Sambucus mexicana  
Blue elderberry

Scandix pecten-veneris  
Shepherd’s needle

Scirpus microcarpus  
Small-flowered rush

Scirpus acutus  
Common tule

Senecio vulgaris  
Common groundsel

Silybum marianum  
Milk-thistle

Sisyrinchium bellum  
Blue-eyed grass

Soliva sessilis  
South American soliva

Sonchus asper  
Prickly sowthistle

Spergula arvensis  
Stickwort

Spergularia rubra  
Sand-spurrey

Symphoricarpos sp.  
Snowberry

Taeniatherum caput-medusae  
Medusa-head

Taraxacum officinale  
Dandelion

Teesdalia coronopifolia  
Teesdalia

Torilis arvensis  
Hedge parsley

Toxicodendron diversilobum  
Poison-oak

Tragopogon porrifolius  
Salsify

Trichostema sp.  
Bluecurls

Trifolium hydrophilum (?)  
(List 1B)

Saline clover

Trifolium dubium  
Shamrock

Trifolium fucatum  
Bull clover

Trifolium gracilentum  
Pinpoint clover

Trifolium hirtum  
Rose clover

Trifolium hybridum  
Alsike clover

Trifolium microdon  

Trifolium microcephalum  
Small-headed clover

Trifolium pratense  
Red clover

Trifolium subterraneum  
Subterranean clover

03/11/11 (P:\RSQ0901\BA\Final BA Draft\Appendix C Plant List.doc)
Trifolium variegatum
  Variegated clover
Trifolium willdenovii
  Tomcat clover
Trifolium wormskioldii
  Cow clover
Triphysaria pusilla
  Small owl’s-clover
Triphysaria veriscolor ssp. faucibarbata
Trithysaria eriantha
  Johnny-tuck
Triteleia laxa
  Ithuriel’s spear
Triteleia hyacinthina
  White brodiaea
Typha domingensis
  Southern cattails
Typha latifolia
  Broad-leaved cattails
Ulmus pumila
  Siberian elm
Veronica anagallis-aquatica
  Water speedwell
Veronica americana
  American speedwell
Vicia sativa
  Spring vetch
Vicia americana
  American vetch
Vicia benghalensis
  Vetch
Vicia lutea
  Yellow vetch
Vicia villosa
  Hairy vetch
Vitis californica
  Wild grape
Vulpia myuros
  Foxtail fescue
Vulpia bromoides
  Annual fescue
Wyethia angustifolia
  Narrow-leaved mule’s-ears
Xanthium strumarium
  Cocklebur
APPENDIX F

OBSERVED ANIMAL SPECIES
LSA biologists have observed the following species of vertebrates on the Sonoma County Airport Property study area. The list is based on multiple site visits conducted in 2003 through 2010.

<table>
<thead>
<tr>
<th>COMMON NAME</th>
<th>SCIENTIFIC NAME</th>
<th>SEASONAL OCCURRENCE/NESTING CODES¹</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FISH</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Threespine stickleback</td>
<td>Gasterosteus aculeatus</td>
<td>R</td>
</tr>
<tr>
<td>Western mosquitofish</td>
<td>Gambusia affinis</td>
<td>R</td>
</tr>
<tr>
<td>Largemouth bass*</td>
<td>Micropterus salmoides</td>
<td>R</td>
</tr>
<tr>
<td>Bluegill*</td>
<td>Lepomis macrochirus</td>
<td>R</td>
</tr>
<tr>
<td><strong>AMPHIBIANS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American bullfrog*</td>
<td>Lithobates catesbeiana</td>
<td>R</td>
</tr>
<tr>
<td>Sierra treefrog</td>
<td>Pseudacris sierra</td>
<td>R</td>
</tr>
<tr>
<td>California slender salamander</td>
<td>Batrachoseps attenuatus</td>
<td>R</td>
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<tr>
<td><strong>REPTILES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Western pond turtle</td>
<td>Actinemys marmorata</td>
<td>R</td>
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<tr>
<td>Western fence lizard</td>
<td>Sceloporus occidentalis</td>
<td>R</td>
</tr>
<tr>
<td>Southern alligator lizard</td>
<td>Elgaria multicarinata</td>
<td>R</td>
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<tr>
<td>Racer</td>
<td>Coluber constrictor</td>
<td>R</td>
</tr>
<tr>
<td>Gopher snake</td>
<td>Pituophis catenifer</td>
<td>R</td>
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<tr>
<td><strong>BIRDS</strong></td>
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<tr>
<td>Canada goose</td>
<td>Branta canadensis</td>
<td>R/W</td>
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<td>Cackling goose</td>
<td>Branta hutchinsii</td>
<td>W</td>
</tr>
<tr>
<td>Mallard</td>
<td>Anas platyrhynchos</td>
<td>R</td>
</tr>
<tr>
<td>American wigeon</td>
<td>Anas americana</td>
<td>W</td>
</tr>
<tr>
<td>Northern shoveler</td>
<td>Anas clypeata</td>
<td>W</td>
</tr>
<tr>
<td>Green-winged teal</td>
<td>Anas crecca</td>
<td>W</td>
</tr>
<tr>
<td>Canvasback</td>
<td>Aythya valisineria</td>
<td>W</td>
</tr>
<tr>
<td>Lesser scaup</td>
<td>Aythya affinis</td>
<td>W</td>
</tr>
<tr>
<td>Bufflehead</td>
<td>Bucephala albeola</td>
<td>W</td>
</tr>
<tr>
<td>Common goldeneye</td>
<td>Bucephala clangula</td>
<td>W</td>
</tr>
<tr>
<td>Ruddy duck</td>
<td>Oxyura jamaicensis</td>
<td>W</td>
</tr>
<tr>
<td>California quail</td>
<td>Callipepla californica</td>
<td>R</td>
</tr>
<tr>
<td>Pied-billed grebe</td>
<td>Podilymbus podiceps</td>
<td>R, W</td>
</tr>
<tr>
<td>American white pelican</td>
<td>Pelecanus erythrorhynchos</td>
<td>W</td>
</tr>
<tr>
<td>Great blue heron</td>
<td>Ardea herodias</td>
<td>R</td>
</tr>
<tr>
<td>Great egret</td>
<td>Ardea alba</td>
<td>R</td>
</tr>
<tr>
<td>Green heron</td>
<td>Butorides virescens</td>
<td>R</td>
</tr>
<tr>
<td>Black-crowned night heron</td>
<td>Nycticorax nycticorax</td>
<td>R</td>
</tr>
<tr>
<td>Turkey vulture</td>
<td>Cathartes aura</td>
<td>R</td>
</tr>
<tr>
<td>White-tailed kite</td>
<td>Elanus leucurus</td>
<td>R</td>
</tr>
</tbody>
</table>
## Animal Species Observed on and Adjacent to the Sonoma County Airport Property

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Seasonal Occurrence/Nesting Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern harrier</td>
<td>Circus cyaneus</td>
<td>R/W</td>
</tr>
<tr>
<td>Cooper’s hawk</td>
<td>Accipiter cooperii</td>
<td>R</td>
</tr>
<tr>
<td>Red-shouldered hawk</td>
<td>Buteo lineatus</td>
<td>R</td>
</tr>
<tr>
<td>Red-tailed hawk</td>
<td>Buteo jamaicensis</td>
<td>R</td>
</tr>
<tr>
<td>Ferruginous hawk</td>
<td>Buteo regalis</td>
<td>W</td>
</tr>
<tr>
<td>Golden Eagle</td>
<td>Aquila chrysaetos</td>
<td>R</td>
</tr>
<tr>
<td>American kestrel</td>
<td>Falco sparverius</td>
<td>R</td>
</tr>
<tr>
<td>Peregrine falcon</td>
<td>Falco peregrinus</td>
<td>R/W</td>
</tr>
<tr>
<td>American coot</td>
<td>Fulica americana</td>
<td>T</td>
</tr>
<tr>
<td>Killdeer</td>
<td>Charadrius vociferos</td>
<td>R</td>
</tr>
<tr>
<td>Greater yellowlegs</td>
<td>Tringa melanoleuca</td>
<td>W/T</td>
</tr>
<tr>
<td>Wilson’s snipe</td>
<td>Gallinago delicata</td>
<td>W/T</td>
</tr>
<tr>
<td>Rock Pigeon*</td>
<td>Columba livia</td>
<td>R</td>
</tr>
<tr>
<td>Eurasian collared dove*</td>
<td>Streptopelia decaocto</td>
<td>R</td>
</tr>
<tr>
<td>Mourning dove</td>
<td>Zenaida macroura</td>
<td>R</td>
</tr>
<tr>
<td>Barn owl</td>
<td>Tyto alba</td>
<td>R</td>
</tr>
<tr>
<td>Burrowing owl</td>
<td>Athene cunicularia</td>
<td>T (rare)</td>
</tr>
<tr>
<td>Anna’s hummingbird</td>
<td>Calypte anna</td>
<td>R</td>
</tr>
<tr>
<td>Acorn woodpecker</td>
<td>Melanerpes formicivorus</td>
<td>R</td>
</tr>
<tr>
<td>Nuttall’s woodpecker</td>
<td>Picoides nuttallii</td>
<td>R</td>
</tr>
<tr>
<td>Northern flicker</td>
<td>Colaptes auratus</td>
<td>R</td>
</tr>
<tr>
<td>Black phoebe</td>
<td>Sayornis nigricans</td>
<td>R</td>
</tr>
<tr>
<td>Say’s phoebe</td>
<td>Sayornis saya</td>
<td>W</td>
</tr>
<tr>
<td>Western kingbird</td>
<td>Tyrannus verticalis</td>
<td>S</td>
</tr>
<tr>
<td>Western scrub jay</td>
<td>Aphelocoma Californica</td>
<td>R</td>
</tr>
<tr>
<td>American crow</td>
<td>Corvus brachyrhynchos</td>
<td>R</td>
</tr>
<tr>
<td>Common raven</td>
<td>Corvus corax</td>
<td>R</td>
</tr>
<tr>
<td>Violet-green swallow</td>
<td>Tachycineta thalassina</td>
<td>S</td>
</tr>
<tr>
<td>Cliff swallow</td>
<td>Petrochelidon pyrrhonota</td>
<td>S</td>
</tr>
<tr>
<td>Barn Swallow</td>
<td>Hirundo rustica</td>
<td>S</td>
</tr>
<tr>
<td>Oak titmouse</td>
<td>Baeolophus inornatus</td>
<td>R</td>
</tr>
<tr>
<td>Bushtit</td>
<td>Psaltriparus minimus</td>
<td>R</td>
</tr>
<tr>
<td>White-breasted nuthatch</td>
<td>Sitta carolinensis</td>
<td>R</td>
</tr>
<tr>
<td>Bewick’s wren</td>
<td>Thryomanes bewickii</td>
<td>R</td>
</tr>
<tr>
<td>Ruby-crowned kinglet</td>
<td>Regulus calendula</td>
<td>W</td>
</tr>
<tr>
<td>Western bluebird</td>
<td>Sialia mexicana</td>
<td>R</td>
</tr>
<tr>
<td>American robin</td>
<td>Turdus migratorius</td>
<td>RW</td>
</tr>
<tr>
<td>Northern mockingbird</td>
<td>Mimus polyglottos</td>
<td>R</td>
</tr>
<tr>
<td>Yellow-rumped warbler</td>
<td>Dendroica coronata</td>
<td>T/W</td>
</tr>
<tr>
<td>Wrentit</td>
<td>Chamaeza fasciata</td>
<td>R</td>
</tr>
<tr>
<td>European starling*</td>
<td>Sturnus vulgaris</td>
<td>R</td>
</tr>
<tr>
<td>American pipit</td>
<td>Anthus rubescens</td>
<td>T/W</td>
</tr>
<tr>
<td>Cedar waxwing</td>
<td>Bombycilla cedrorum</td>
<td>T/W</td>
</tr>
</tbody>
</table>
## Animal Species Observed on and Adjacent to the Sonoma County Airport Property

<table>
<thead>
<tr>
<th>COMMON NAME</th>
<th>SCIENTIFIC NAME</th>
<th>SEASONAL OCCURRENCE/NESTING CODES¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spotted towhee</td>
<td>Pipilo maculatus</td>
<td>R</td>
</tr>
<tr>
<td>California towhee</td>
<td>Pipilo crissalis</td>
<td>R</td>
</tr>
<tr>
<td>Savannah sparrow</td>
<td>Passerculus sandwichensis</td>
<td>W</td>
</tr>
<tr>
<td>Fox sparrow</td>
<td>Passerella iliaca</td>
<td>W</td>
</tr>
<tr>
<td>Song sparrow</td>
<td>Melospiza melodia</td>
<td>RW</td>
</tr>
<tr>
<td>Lincoln’s sparrow</td>
<td>Melospiza lincolnii</td>
<td>T/W</td>
</tr>
<tr>
<td>White-crowned sparrow</td>
<td>Zonotrichia leucophrys</td>
<td>W</td>
</tr>
<tr>
<td>Golden-crowned sparrow</td>
<td>Zonotrichia atricapilla</td>
<td>W</td>
</tr>
<tr>
<td>Dark-eyed junco</td>
<td>Junco hyemalis</td>
<td>R</td>
</tr>
<tr>
<td>Red-winged blackbird</td>
<td>Agelaius phoeniceus</td>
<td>SW</td>
</tr>
<tr>
<td>Western meadowlark</td>
<td>Sturnella neglecta</td>
<td>RW</td>
</tr>
<tr>
<td>Brewer’s blackbird</td>
<td>Euphagus cyanocephalus</td>
<td>R</td>
</tr>
<tr>
<td>Bullock’s oriole</td>
<td>Icterus bullockii</td>
<td>S</td>
</tr>
<tr>
<td>House finch</td>
<td>Carpodacus mexicanus</td>
<td>R</td>
</tr>
<tr>
<td>Lesser goldfinch</td>
<td>Spinus psaltrias</td>
<td>R</td>
</tr>
<tr>
<td>American goldfinch</td>
<td>Spinus tristis</td>
<td>RT</td>
</tr>
</tbody>
</table>

### Mammals

<table>
<thead>
<tr>
<th>COMMON NAME</th>
<th>SCIENTIFIC NAME</th>
<th>SEASONAL OCCURRENCE/NESTING CODES¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black-tailed jackrabbit</td>
<td>Lepus californicus</td>
<td>R</td>
</tr>
<tr>
<td>Dusky-footed woodrat</td>
<td>Neotoma fuscipes</td>
<td>R</td>
</tr>
<tr>
<td>Botta’s pocket gopher</td>
<td>Thomomys bottae</td>
<td>R</td>
</tr>
<tr>
<td>California vole</td>
<td>Microtus californicus</td>
<td>R</td>
</tr>
<tr>
<td>Raccoon</td>
<td>Procyon lotor</td>
<td>R</td>
</tr>
<tr>
<td>Coyote</td>
<td>Canis latrans</td>
<td>R</td>
</tr>
<tr>
<td>Mule deer</td>
<td>Odocoileus hemionus</td>
<td>R</td>
</tr>
</tbody>
</table>

¹ The codes refer to the species presumed seasonal occurrence on the site and probable breeding/nesting status (breeding was not confirmed in most cases).

- **M** = Migrant: Uses the site for brief periods of time, primarily during the spring and fall months.
- **R** = Year-round resident: resident/expected to nest/breed on-site or in the vicinity.
- **S** = Spring/summer resident: May nest on-site or in the vicinity.
- **T** = Transient: May use the site regularly but unlikely to nest on-site.
- **W** = Winter visitor: Regularly present during winter; does not nest locally.
- ***** = Non-native species.
APPENDIX G

LETTERS FROM THE NATIONAL MARINE FISHERIES SERVICE
April 13, 2011

Camille Garibaldi
Environmental Protection Specialist
Federal Aviation Administration
San Francisco Airports District Office
831 Mitten Road, Room 210
Burlingame, California 94010

Dear Ms. Garibaldi:

This letter responds to the Federal Aviation Administration’s (FAA) request for a list of threatened and endangered species and associated critical habitat under the Endangered Species Act that are present near the Charles M. Schultz – Sonoma County Airport Proposed Runway Safety Enhancement Project (Project) in Santa Rosa, California. The FAA also requested that NOAA’s National Marine Fisheries Service (NMFS) advise whether any essential fish habitat (EFH), as defined by the Magnuson-Stevens Fishery Conservation and Management Act, is sufficiently close to the airport to be potentially affected by the Project.

Federally threatened Central California Coast (CCC) steelhead (Oncorhynchus mykiss) and its designated critical habitat are present within Mark West Creek, Windsor Creek, Pool Creek, and Pruitt Creek. Central California Coast steelhead are not found in Redwood and Airport creeks, and critical habitat was not designated within those two streams. No EFH is found within any of the creeks mentioned above.

NMFS appreciates the opportunity to provide technical assistance to the Federal Aviation Administration on projects that may affect threatened steelhead. Please contact Rick Rogers at rick.rogers@noaa.gov, or (707) 578-8552, if you have any questions concerning this letter or if you require additional information.

Sincerely,

Dick Butler
North Central Coast Office Supervisor
Protected Resources Division

cc: copy to file: 151422SWR2011SR00202
May 24, 2011

Camille Garibaldi
Environmental Protection Specialist
Federal Aviation Administration
San Francisco Airports District Office
831 Mitten Road, Room 210
Burlingame, California 94010

Dear Ms. Garibaldi:

This letter amends the previous species list we provided to your agency on April 13, 2011, regarding the Federal Aviation Administration’s (FAA) proposed modification and extension of the Sonoma County Airport runway configuration (Project). In that letter, we neglected to mention that although instream habitat conditions within Redwood and Airport creeks appear to be severely degraded and likely do not currently support coho salmon (*Oncorhynchus kisutch*) spawning or rearing, the two creeks are nevertheless listed as designated critical habitat for endangered Central California Coast (CCC) coho salmon. In fact, all accessible reaches of the Mark West Creek watershed are listed as critical habitat for CCC coho salmon. Furthermore, although the April 13, 2011, species list noted that steelhead (*O. mykiss*) have not been reported as occurring in Redwood Creek or Airport Creek, there is a paucity of fisheries data for these two creeks. Given the significant impact to both creek channels that will likely arise from your Project (as presented at the May 18, 2011 agency meeting), and considering that steelhead and coho salmon have been documented within Mark West Creek (CDFG 2006), NOAA’s National Marine Fisheries Service (NMFS) recommends the FAA hire a qualified aquatic biologist to conduct a survey to examine whether steelhead or coho salmon are present in these streams and to document aquatic habitat conditions. Finally, since coho salmon have been documented within mainstem Mark West Creek and upper-watershed tributaries, there may be Essential Fish Habitat (EFH) located within the Project area. EFH is defined by the 1996 amendments to the Magnuson-Stevens Fishery Conservation and Management Act as those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity. The Pacific Fisheries Management Council has delineated EFH for Pacific Coast Salmon (see PFMC 1999).
NMFS appreciates the opportunity to provide technical assistance to the Federal Aviation Administration on projects that may affect threatened steelhead and endangered coho salmon. Please contact Rick Rogers at rick.rogers@noaa.gov, or (707) 578-8552, if you have any questions concerning this letter or if you require additional information.

Sincerely,

Dick Butler
North Central Coast Office Supervisor
Protected Resources Division

Literature Cited


Pacific Fishery Management Council (PFMC). 1999. Description and identification of essential fish habitat, adverse impacts and recommended conservation measures for salmon. Amendment 14 to the Pacific Coast Salmon Plan, Appendix A. PFMC, Portland, OR.