# **APPENDIX A – References Cited**

Agee, James K. 1993. Fire Ecology of Pacific Northwest Forests. Island Press, Washington, D.C.

Bekker, M.F. and A. H. Taylor. 2001. Gradient analysis of fire regimes in montane forests of the southern Cascade Range, Thousand Lakes, Wilderness, California, USA. *Plant Ecology* 155:15-28.

Brown, J.K. and J.K. Smith (eds.). 2000. Wildland Fire in Ecosystems: Effects of Fire on Flora. United States Department of Agriculture, Forest Service, Rocky Mountain Research Station. Ogden, Utah. General Technical Report. RMRS-GTR-42-Vol. 2.

Keeley, J.E. and S.C. Keeley. 1993. Chaparral. Pages 165–208 *in* M. G. Barbour and W. D. Billings, editors. North American terrestrial vegetation. Cambridge University Press, Cambridge, UK.

Keeley, J.E. and C.J. Fotheringham 2001. The historic fire regime in southern California shrublands. Conservation Biology, 15:1536-1548.

Kilgore, B.M. 1971. The role of fire in managing red fir forests. Trans. North American Wildlife and Natural Resource. Conf. 36:405-16.

Koenig, S., 2004. United States Department of the Interior, National Park Service. 18 June 2004. Personal communication with Sara Koenig.

(NPS 2003a). United States Department of the Interior, National Park Service. Lassen Volcanic National Park General Management Plan. On file at the Division of Resource Management, Lassen Volcanic National Park. xxx p.

Parker, A.H. 1991. Forest environment relationships in Lassen Volcanic and Yosemite National Parks, California, USA. *Journal of Biogeography* 18:543-552

Stuart, J.D. 1983. Stand structure and development of a climax lodgepole pine forest in south- central Oregon. Ph.d diss., University of Washington, Seattle.

Pinder, J.E., G.C. Kroh, J.D. White, and A.M.B. May. 1997. The relationships between vegetation type and topography in Lassen Volcanic National Park. *Plant Ecology* 131:17-29.

Stuart, J.D., J.K. Agee, and R.I. Gara. 1989. Lodgepole pine regeneration in an old, self-perpetuating foest in south- central Oregon. Can. J. For. Res. 19:1096-1104

Taylor, A.H., and C.B. Halpern. 1991. The structure and dynamics of *Abies magnifica* forests in the southern Cascade Range, USA. *Journal of Vegetation Science* 2:189-200.

Appendix A - 1 - References Cited

Taylor, A.H. 1990. Habitat segregation and regeneration patterns of red fir and mountain hemlock in ecotonal forests, Lassen Volcanic National Park, California. *Physical Geography* 11:36-48.

Taylor, A.H. 1990. Tree invasion in meadows of Lassen Volcanic National Park, California. *Professional Geographer* 4:457-470.

Taylor, A.H. 1995. Forest expansion and climate change in the mountain hemlock (Tsuga mertensiana) zone, Lassen Volcanic National Park, California, USA. *Arctic and Alpine Research* 27:207-216.

Taylor, A.H. 2000. Fire regimes and forest changes in the mid and upper montane forests of the southern Cascades, Lassen National Park, California, USA. *Journal of Biogeography* 27:87-104.

Taylor, A.H. and M.N. Solem. 2001. Fire regimes and stand dynamics in an upper montane forest landscape in the southern Cascades, Caribou Wilderness, California. Journal of the Torrey Botanical Society 128(4):350-361.

United States Department of the Interior, National Park Service. Lassen Volcanic National Park Resources Management Plan. On file at the Division of Resource Management, Lassen Volcanic National Park. xxx p.

United States Department of the Interior and the United States Department of Agriculture, Interagency Federal Wildland Fire Policy Review Working Group. 2001. Review and update of the 1995 federal wildland fire management policy.

White, J.D., G.C. Kroh, and J.E. Pinder III. 1995. Mapping forest species at Lassen Volcanic National Park, California using Landsat Thematic Mapper data and a geographical information system. Photogrammetric Eng. & Remote Sensing 61:299-305

Appendix A - 2 - References Cited

## **APPENDIX B – Definitions**

Active Crown Fire- When the main surface fire and the fire burning in the crowns are moving together across the fire front.

Adaptive Management- A type of natural resource management that implies making decisions as part of an on- going process. Monitoring the results of actions will provide a flow of information that may indicate the need to change a course of action. Scientific findings and the needs of society may also indicate the need to adapt resource management to new information.

Appropriate Management Response- The response to a wildland fire is based on an evaluation of risks to firefighter and public safety, the circumstances under which the fire occurs, including weather and fuel conditions, natural and cultural resource management objectives, protection priorities and values to be protected. The evaluation must also include an analysis of the context of the specific fire within the overall local, geographic area, or national wildland fire situation.

**Appropriate Management Strategy-** A plan or direction selected by an agency administrator which guide wildland fire management actions intended to meet protection and fire use objectives.

**Aspect**- The direction a slope faces. For example, a hillside facing east has an eastern aspect.

**Buffer**- Used in the context of GIS; a buffer is a zone of a specified distance around a feature in a coverage.

**Burned Area Rehabilitation**- The full range of post- fire activities to rehabilitate and restore fire damaged lands, including protection of public health and safety.

**Canopy**- The part of any stand of trees represented by the tree crowns. It usually refers to the uppermost layer of foliage, but it can be used to describe lower layers in a multistoried forest.

Chain- A traditional forestry term equal to 66' or approximately 20 m.

Confine- A strategy employed in suppression where a fire perimeter is managed by a combination of direct and indirect action and use of natural topographic features, fuels, and weather factors.

Control Line- A line in which fuels have been removed. A control line may be dug by a fire crew (a hand line) or by machinery such as a bulldozer (a dozer line). Sometimes a control line is established by wetting fuels using engine and fire hoses (a wet line). A control line may also consist of a road, river, snowbank, rock outcropping or other barrier to fire spread.

Appendix B - 1 - Definitions

Cooperators- Federal, state and local agencies that participate in planning and conducting fire management projects and activities.

**Desired Future Conditions** (Target Conditions)- Land or resource conditions that are expected to result if goals and objectives are fully achieved.

**Drip Torch**- An ignition tool which drips a flaming mixture of diesel and gasoline onto the ground.

**Ecology**- The interrelationships of living things to one another and to their environment, or the study of these interrelationships.

**Ecosystem**- An arrangement of living and non-living things and the forces that move them. Living things include plants and animals. Non-living parts of ecosystems may be rocks and minerals. Weather and wildland fire are two of the forces that act within ecosystems.

**Ecosystem Sustainability-** The capacity to maintain ecosystem health, productivity, diversity, and overall integrity, in the context of human activity and use.

Endangered Species- Those plant or animal species that are in danger of extinction throughout all or a significant portion of their range. Endangered species are identified by the Secretary of the Interior in accordance with the Endangered Species Act of 1973.

Fauna- The animal life of an area.

Fine Fuels- Fuels that ignite readily and are consumed rapidly by fire (ex. cured grass, fallen leaves and needles, small twigs less than 1/4 inch diameter, also referred to as 1-hour fuels).

Fire, Creeping- A low intensity fire with a low rate of spread.

Fire, Crown- A fire the burns through the canopy of a forest.

**Fire Extent-** The area burned per time period or event.

**Fire Frequency**- A general term referring to the recurrence of fire in a given area over time.

**Fire, Ground-** Fire burning on the ground or through the understory and not reaching into the canopy. Also called surface fire.

**Fire Intensity**- Energy release per unit length of flame front (kW/m or BTU/ft-s). Flame lengths of about 4' (1.2 m) correspond roughly to 100 BTU/ft-s (29 kW/m), and is the approximate limit of control by direct attack by a hand crew.

**Fireline**- A narrow line, typically ranging from two to ten feet wide, from which all vegetation is removed down to mineral soil.

Appendix B - 2 - Definitions

Fire Management Activities- Including fire planning, fire management strategies, tactics, and alternatives, prevention; preparedness, education, and addresses the role of mitigation, post- fire rehabilitation, fuels reduction, and restoration activities in fire management.

Fire Management Unit (FMU)- A land management area definable by objectives, management constraints, topographic features, access, values- to- be- protected, political boundaries, fuel types, or major fire regime types that sets it apart from management characteristics of an adjacent unit.

**Fire Management Plan**- A strategic plan that defines a program to manage wildland fires and prescribed fires and documents the Fire Management Program in the approved land management plan.

**FIREPRO**- A process for analyzing wildland fire management used by the NPS and justifying spending authority based upon Normal Fire Year Programming. FIREPRO is scheduled to be replaced by Fire Program Analysis (FPA) beginning ins FY05.

Fire Regime- The combination of fire frequency, predictability, intensity, seasonality, and extent characteristic of fire in an ecosystem.

Fire Return Interval- The average amount of time between successive fires.

Flame Length- The average length of the flame front from the ground to the flame tips.

Flora- The plant life of an area.

Fuel- All material (whether in the ground, on the surface, or in the air) that may be burned, including duff, logs, branches, needles, twigs. Fuel is divided into four size classes:

```
I hour time lag - < 1/4 inch (grass, litter, duff)
IO hour time lag - 1/4 inch - I inch (twigs and small stems)
IOO hour time lag - I inch - 3 inch (branches)
IOOO hour time lag - >3 inch (large branches and stems)
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**Fuelbreak**- A system of linear or mosaic patch treatments of forest or shrub vegetation designed and treated to reduce fire spread, intensity, and create carriers to fire spread.

**Fuel Load-** The amount of available fuel(dead plats and trees, litter and duff) that is found in an area (tons/acre).

**Fuel Model**- A standardized description of fuel potentially available to a fire. Fuel load is based on te dominant vegetation and the amount, distribution and continuity of wood and other combustible material.

Appendix B - 3 - Definitions

**Fuel Moisture**- The amount of water in a fuel sample. The proportion of water to dry material.

Fuels- Plants and woody vegetation, both living and dead, that are capable of burning.

**Fuels Management**- The planned manipulation and/or reduction of living and dead forest fuels for forest management and other land use objectives.

**Fuels Treatment**- The treatment of fuels that left untreated, would otherwise interfere with effective fire management or control. For example, prescribed fire can reduce the amount of fuels that accumulate on the forest floor.

Geographic Information Systems (GIS)- A computer system capable of storing, manipulating, analyzing, and displaying geographic information.

Hazard Fuels- Fuels posing a threat to people or property in the event of a wildland fire.

**Hazard Fuel Reduction**- In fuels management, the planned treatment or manipulation of naturally growing vegetation or any other flammable material for the purpose of reducing the rate of spread and the output of heat energy from any wildland fire occurring in the treated area.

**Initial Attack**- The aggressive response to a wildland fire based on values to be protected, benefits of response, and reasonable cost of response.

Interagency- Coordination, collaboration, communication among cooperating agencies.

**Ladder Fuels**- Fuels such as branches, shrubs or an understory layer of trees which allow a fire to spread from the ground to the forest canopy.

**Landscape**- A large land area composed of interacting ecosystems that are repeated due to factors such as geology, soils, climates and human impacts.

Mechanical Treatment- The use of mechanical equipment (chainsaw, dozer, rubbertired skidders, etc.) to cut, remove, or prepare woody fuels for burning. Prescribed Fire- Generally a management ignited fire that is allowed to burn within a prescription of weather and safety considerations in order to meet specific objectives.

**Preparedness-** Activities that lead to safe, efficient, and cost- effective fire management programs in support of land and resource management objectives through appropriate planning and coordination.

**Prescribed Fire-** any fire intentionally set under specific conditions in order to accomplish resource objectives. A written, approved prescribed fire burn plan must exist, and NEPA requirements must be met, prior to ignition.

Appendix B - 4 - Definitions

**Prescription**- Measurable criteria which define the conditions under which a prescribed fire will be ignited or allowed to burn. Prescription criteria may include safety, weather, environmental, geographic, social or legal considerations.

Rate of Spread- The speed a flame front travels.

**Relative Humidity**- The ratio of absolute to saturation vapor pressure. Fire behavior is dependent on, and can be predicted from relative humidity.

**Snag-** A standing dead tree. Snags are important as habitat for a variety of wildlife species and their prey but can be a hazard for firefighters.

**Stand-** A group of trees that occupies a specific area and is similar in species, age and condition.

**Suppression**- A management action intended to protect identified values from a fire, extinguish a fire, or alter a fire's direction of spread.

Threatened Species- Those plant and animal species likely to become endangered throughout all or a specific portion of their range within the foreseeable future as designated by the U.S. Fish and Wildlife Service under the Endangered Species Act of 1973.

**Treatment Area**- The site- specific location of a resource improvement activity.

**Understory**- The trees and woody shrubs growing beneath branches and foliage formed collectively by the upper portions of adjacent trees.

Values to be Protected/Values at Risk- Include property, structures, natural and cultural resources, and environmental values.

Wildland- Any area under fire management jurisdiction of a land management agency.

Wildland Fire- Any non- structure fire, other than prescribed fire, that occurs in the wildland.

Wildland Fire Situation Analysis (WFSA)- A decision- making process that evaluates alternative management strategies against selected safety, environmental, social, political, economic, and resource management objectives as selection criteria.

Wildland Fire Use Fire- Naturally ignited fires that are allowed to burn within prescription and managed to meet resource benefits.

**Wildland Urban Interface**- Defined as the line, area or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels.

Appendix B - 5 - Definitions

# **APPENDIX C - Species List**

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: 040823125840 Database Last Updated: July 19,2004

## **Quad Lists**

# **RED CINDER (6248)**

# **Listed Species**

Fish

Hypomesus transpacificus - delta smelt (T)

Amphibians

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

Birds

Haliaeetus leucocephalus - bald eagle (T)

# **Candidate Species**

Fish

Acipenser medirostris - green sturgeon (C)

Mammals

Martes pennanti - fisher (C)

# **Species of Concern**

## Invertebrates

Desmona bethula - amphibious caddis fly (SC)

Fish

Cottus asperrimus - rough sculpin (CA)

Lavinia symmetricus mitrulus - Pit roach (SC)

Oncorhynchus (=Salmo) mykiss aquilarum - Eagle Lake rainbow trout (SC)

Pogonichthys macrolepidotus - Sacramento splittail (SC)

Spirinchus thaleichthys - longfin smelt (SC)

# **Amphibians**

Rana cascadae - Cascades frog (SC)

#### **Birds**

Accipiter gentilis - northern goshawk (SC)

Athene cunicularia hypugaea - western burrowing owl (SC)

Baeolophus inornatus - oak titmouse (SLC)

Cinclus mexicanus - American dipper (SLC)

Cypseloides niger - black swift (SC)

Empidonax traillii brewsteri - little willow flycatcher (CA)

Falco peregrinus anatum - American peregrine falcon (D)

Grus canadensis tabida - greater sandhill crane (CA)

Lanius ludovicianus - loggerhead shrike (SC)

Melanerpes lewis - Lewis' woodpecker (SC)

Numenius americanus - long- billed curlew (SC)

Otus flammeolus - flammulated owl (SC)

Selasphorus rufus - rufous hummingbird (SC)

Strix occidentalis occidentalis - California spotted owl (SC)

#### Mammals

Corynorhinus (=Plecotus) townsendii pallescens - pale Townsend's big- eared bat (SC)

Euderma maculatum - spotted bat (SC)

Gulo gulo luteus - California .wolverine (CA)

Lepus americanus tahoensis - Sierra Nevada snowshoe hare (SC)

Martes americana - American (=pine) marten (SC)

Myotis ciliolabrum - small- footed myotis bat (SC)

Myotis evotis - long- eared myotis bat (SC)

Myotis thysanodes - fringed myotis bat (SC)

Myotis volans - long- legged myotis bat (SC)

Myotis yumanensis - Yuma myotis bat (SC)

Vulpes vulpes necator - Sierra Nevada red fox (CA)

#### MT. HARKNESS (625A)

#### **Listed Species**

#### *Invertebrates*

Pacifastacus fortis - Shasta crayfish (E)

## Fish

Hypomesus transpacificus - delta smelt (T)

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

Oncorhynchus tshawytscha - winter- run chinook salmon (E) {NMFS)

### **Amphibians**

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

#### **Birds**

Appendix C - 2 - Species List

Species List

Haliaeetus leucocephalus - bald eagle (T)

# **Candidate Species**

#### Fish

Acipenser medirostris - green sturgeon (C) Oncorhynchus tshawytscha - Central Valley fall/late fall- run chinook salmon (C) (NMFS)

#### Mammals

MaTtes pennanti - fisher (C)

## **Species of Concern**

## Invertebrates

Desmona bethula - amphibious caddis fly (SC) Ecclisomyia bilera - King's Creek ecclisomyian caddis fly (SC) Parapsyche extensa - King's Creek parapsyche caddis fly (SC)

## Fish

Cottus asperrimus - rough sculpin (CA) Lavinia symmetricus mitrulus - Pit roach (SC) Pogonichthys macrolepidotus - Sacramento splittail (SC) Spirinchus thaleichthys - longfm smelt (SC)

# **Amphibians**

Rana cascadae - Cascades frog (SC)

## Reptiles

Clemmys marmorata marmorata - northwestern pond turtle (SC)

#### Birds

Accipiter gentilis - northern goshawk (SC)
Baeolophus inornatus - oak titmouse (SLC)
Cinclus mexicanus - American dipper (SLC)
Cypseloides niger - black swift (SC)
Empidonax traillii brewsteri - little willow flycatcher (CA)
Falco peregrinus anatum - American peregrine falcon (D)
Grus canadensis tabida - greater sandhill crane (CA)
Lanius ludovicianus - loggerhead shrike (SC)
Melanerpes lewis - Lewis' woodpecker (SC)

Numenius americanus - long- billed curlew (SC)

Appendix C - 3 -

Otus jlammeolus - flammulated owl (SC) Selasphorus rufus - rufous hummingbird (SC) f Strix occidentalis occidentalis - California spotted owl (SC)

#### Mammals

Corynorhinus (=Plecotus) townsendii pallescens - pale Townsend's big- eared bat (SC)

Euderma maculatum - spotted bat (SC)

Gulo gulo luteus - California wolverine (CA)

Lepus americanus tahoensis - Sierra Nevada snowshoe hare (SC)

MaTtes americana - American (=pine) marten (SC)

Myotis ciliolabrum - small- footed rnyotis bat (SC)

Myotis evotis - long- eared rnyotis bat (SC)

Myotis thysanodes - fringed rnyotis bat (SC)

Myotis volans - long- legged myotis bat (SC)

Myotis yumanensis - Yuma myotis bat (SC)

Vulpes vulpes necator - Sierra Nevada red fox (CA)

## **READING PEAK (6258)**

## **Listed Species**

### *Invertebrates*

Pacifastacus fortis - Shasta crayfish (E)

## Fish

Hypomesus transpacificus - delta smelt (T)

Oncorhynchus mykiss - Central Valley steelhead (T) (NMFS)

Oncorhynchus tsha»ytscha - Central Valley spring- run chinook salmon (T) {NMFS)

Oncorhynchus tsha»ytscha - winter- run chinook salmon (E) {NMFS)

# **Amphibians**

Rana aurora dray ton ii - California red- leggedfrog (T)

#### **Birds**

Haliaeetus leucocephalus - bald eagle (T)

## **Candidate Species**

#### Fish

Appendix C - 4 - Species List

Acipenser medirostris - green sturgeon (C) Oncorhynchus tshawytscha - Central Valley fall/late fall- run chinook salmon (C) {NMFS}

## Mammals

Martes pennanti - fisher (C)

## **Species of Concern**

#### *Invertebrates*

Desmona bethula - amphibious caddis fly (SC) \ Ecclisomyia bilera - King's Creek ecclisomyian caddis fly (SC) Parapsyche extensa - King's Creek parapsyche caddis fly (SC)

#### Fish

Cottus asperrimus - rough sculpin (CA) Lavinia symmetricus mitrulus - Pit roach (SC) Pogonichthys macrolepidotus - Sacramento splittail (SC) Spirinchus thaleichthys - longfm smelt (SC)

# **Amphibians**

Rana cascadae - Cascades frog (SC)

# Reptiles

Clemmys marmorata marmorata - northwestern pond turtle (SC)

### **Birds**

Accipiter gentilis - northern goshawk (SC)

Agelaius tricolor - tricolored blackbird (SC)

Baeolophus inornatus - oak titmouse (SLC)

Chaetura vauxi - Vaux's swift (SC)

Cinclus mexicanus - American dipper (SLC)

Cypseloides niger - black swift (SC)

Empidonax traillii brewsteri - little willow flycatcher (CA)

Falco peregrinus anatum - American peregrine falcon (D)

Lanius ludovicianus - loggerhead shrike (SC)

Melanerpes lewis - Lewis' woodpecker (SC)

Numenius americanus - long- billed curlew (SC)

Otus flammeolus - flammulated owl (SC)

Selasphorus rufus - rufous hummingbird (SC)

Strix occidentalis occidentalis - California spotted owl (SC)

Appendix C - 5 - Species List

#### Mammals

Corynorhinus (=Plecotus) townsendii pallescens - pale Townsend's big- eared bat (SC)

Euderma maculatum - spotted bat (SC)

Gulo gulo luteus - California wolverine (CA)

Lepus american~s tahoensis - Sierra Nevada snowshoe hare (SC)

Martes americana - American (=pine) marten (SC)

Myotis ciliolabrum - small- footed myotis bat (SC)

Myotis evotis - long- eared myotis bat (SC)

Myotis thysanodes - fringed myotis bat (SC)

Myotis volans - long- legged myotis bat (SC)

Myotis yumanensis - Yuma rnyotis bat (SC)

Vulpes vulpes necator - Sierra Nevada red fox (CA)

#### **Plants**

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Oreostemma elatum - tall alpine- aster (= Plumas alpine aster) (SLC)
Smelowskia ovalis ssp. congesta - Mt. Lassen (=Lassen Peak) smelowskia (SC)
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## **LASSEN PEAK (626A)**

## **Listed Species**

## Invertebrates

Pacifastacus fortis - Shasta crayfish (E)

### **Fish**

Hypomesus transpacificus - delta srnelt (T)

Oncorhynchus mykiss - Central Valley steelhead (T) {NMFS)

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

Oncorhynchus tshawytscha - winter- run chinook salmon (E) {NMFS)

# **Amphibians**

Rana aurora dray ton ii - California red-legged frog (T)

#### Birds

Haliaeetus leucocephalus - bald eagle (T)

# **Candidate Species**

## Fish

Appendix C - 6 - Species List

Acipenser medirostris - green sturgeon (C) Oncorhynchus tshawytscha - Central Valley fall/late fall- run chinook salmon (C) (NMFS)

#### Mammals

Martes pennanti - fisher (C)

# **Species of Concern**

## Fish

Cottus asperrimus - rough sculpin (CA) Lavinia symmetricus mitrulus - Pit roach (SC) Pogonichthys macrolepidotus - Sacramento splittail (SC) Spirinchus thaleichthys - longfm smelt (SC)

# **Amphibians**

Rana boylii - foothill yellow- legged frog (SC) Rana cascadae - Cascades frog (SC)

# Reptiles

Clemmys marmorata marmorata - northwestern pond turtle (SC)

#### Birds

Agelaius tricolor - tricolored blackbird (SC)

Baeolophus inornatus - oak titmouse (SLC)

Carduelis lawrencei - Lawrence's goldfmch (SC)

Chaetura vauxi - Vaux's swift (SC)

Cinclus mexicanus - American dipper (SLC)

Cypseloides niger - black swift (SC)

Empidonax trai[[ii brewsteri - little willow flycatcher (CA)

Falco peregrinus anatum - American peregrine falcon (D)

Lanius ludovicianus - loggerhead shrike (SC)

Melanerpes lewis - Lewis' woodpecker (SC)

Numenius americanus - long- billed curlew (SC)

Otus flammeolus - flammulated owl (SC)

Selasphorus rufus - rufous hummingbird (SC)

Strix occidentalis occidentalis - California spotted owl (SC)

#### Mammals

Corynorhinus (=Plecotus) townsendii pallescens - pale Townsend's big- eared bat (SC)

Appendix C - 7 - Species List

Euderma maculatum - spotted bat (SC)

Gulo gulo luteus - California wolverine (CA)

Lepus americanus tahoensis - Sierra Nevada snowshoe hare (SC)

Martes americana - American (=pine) marten (SC)

Myotis ciliolabrum - small- footed myotis bat (SC).

Myotis evotis - long- eared myotis bat (SC)

Myotis thysanode.s: - fringed myotis bat (SC)

Myotis volans - long- legged myotis bat (SC)

Myotis yumanensis - Yurna myotis bat (SC)

Vulpes vulpes necator - Sierra Nevada red fox (CA)

## Plants

Botrychium crenulatum - scalloped moonwort (SC) Smelowskia ovalis ssp. congesta - Mt. Lassen (=Lassen Peak) smelowskia (SC)

## **MINERAL (6260)**

# **Listed Species**

#### Fish

Hypomesus transpacificus - delta smelt (T)

Oncorhynchus mykiss - Central Valley steelhead (T) (NMFS)

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

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

## **Amphibians**

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

#### Birds

Haliaeetus leucocephalus - bald eagle (T)

# **Candidate Species**

#### Fish

Acipenser medirostris - green sturgeon (C) Oncorhynchus tshawytscha - Central Valley falVlate fall- run chinook salmon (C) (NMFS)

## Mammals

Martes pennanti - fisher (C)

# **Species of Concern**

#### Fish

Pogonichthys macrolepidotus - Sacramento splittail (SC) Spirinchus thaleichthys - longfin smelt (SC)

# **Amphibians**

Rana boylii - foothill yellow- legged frog (SC) Rana cascadae - Cascades frog (SC)

# Reptiles

Clemmys marmorata marmorata - northwestern pond turtle (SC)

#### **Birds**

Agelaius tricolor - tricolored blackbird (SC)

Baeolophus inornatus - oak titmouse (SLC)

Carduelis lawrencei - Lawrence's goldfmch (SC)

Chaetura vauxi - Vaux's swift (SC)

Cinclus mexicanus - American dipper (SLC)

Cypseloides niger - black swift (SC)

Empidonax traillii brewsteri - little willow flycatcher (CA)

Falco peregrinus anatum - American peregrine falcon (D)

Lanius ludovicianus - loggerhead shrike (SC)

Melanerpes lewis - Lewis' woodpecker (SC)

Numenius americanus - long- billed curlew (SC)

Otus flammeolus - flammulated owl (SC)

SelasphoruS rufus - rufous hummingbird (SC)

Strix occidentalis occidentalis - California spotted owl (SC)

#### Mammals

Corynorhinus (=Plecotus) townsendii pallescens - pale Townsend's big- eared bat (SC)

Euderma maculatum - spotted bat (SC)

Gulo gulo luteus - California wolverine (CA)

Lepus americanus tahoensis - Sierra Nevada snowshoe hare (SC)

Myotis ciliolabrum - small- footed myotis bat (SC)

Myotis evotis - long- eared myotis bat (SC)

Myotis thysanodes - fringed myotis bat (SC)

Myotis volans - long- legged myotis bat (SC)

Myotis yumanensis - Yuma myotis bat (SC)

Vulpes vulpes necator - Sierra Nevada red fox (CA)

## **Plants**

Silene occidentalis ssp. longistipitata - Butte County catchfly (=long- stiped campion) (SC)

# **BOGARD BUTTES (642C)**

# **Listed Species**

## *Invertebrates*

Critical habitat, vernal pool invertebrates (X)

## **Fish**

Hypomesus transpacificus - delta smelt (T)

#### Birds

Haliaeetus leucocephalus - bald eagle (T)

## **Plants**

Critical habitat, vernal pool plants (X)

# **Candidate Species**

## Mammals

Martes pennanti - fisher (C)

# **Species of Concern**

## Fish

Cottus asperrimus - rough sculpin (CA) Lavinia symmetricus mitrulus - Pit roach (SC) Oncorhynchus (=Salmo) mykiss aquilarum - Eagle Lake rainbow trout (SC) Pogonichthys macrolepidotus - Sacramento splittail (SC) Spirinchus thaleichthys - longfin smelt (SC)

# **Amphibians**

Rana cascadae - Cascades frog (SC)

## **Birds**

Accipiter gentilis - northern goshawk (SC)

Baeolophus inornatus - oak titmouse (SLC)

Cinclus mexicanus - American dipper (SLC)

Cypseloides niger - black swift (SC)

Empidonax traillii brewsteri - little willow flycatcher (CA)

Falco peregrinus anatum - American peregrine falcon (D)

Grus canadensis tabida - greater sandhill crane (CA)

Melanerpes lewis - Lewis' woodpecker (SC)

Numenius americanus - long- billed curlew (SC)

Otusflammeolus - flammulated owl (SC)

Selasphorus rufus - rufous hununingbird (SC)

Strix occidentalis occidentalis - California spotted owl (SC)

### Mammals

Corynorhinus (=Plecotus) townsendii p~l/escens - pale Townsend's big- eared bat (SC)

Euderma maculatum - spotted bat (SC)

Gulo gulo luteus - California wolverine (CA)

Martes americana - American (=pine) marten (SC)

Myotis ciliolabrum - small- footed myotis bat (SC)

Myotis evotis - long- eared myotis bat (SC)

Myotis thysanodes - fringed myotis bat (SC)

Myotis volans - long- legged myotis bat (SC)

Myotis yumanensis - Yuma myotis bat (SC)

Vulpes vulpes necator - Sierra Nevada red fox (CA)

#### **Plants**

Astragalus pulsiferae var. suksdorfii - Suksdorfs rnilk- vetch (SC)

#### **WEST PROSPECT PEAK (643C)**

## **Listed Species**

### Invertebrates

Critical habitat, vernal pool invertebrates (X) Pacifastacus fortis - Shasta crayfish (E)

#### Fish

Hypomesus transpacificus - delta smelt (T) Oncorhynchus mykiss - Central Valley steelhead (T) (NMFS)

# **Amphibians**

Appendix C - 11 - Species List

Rana aurora dray ton ii - California red- legged frog (T)

### **Birds**

Haliaeetus leucocephalus - bald eagle (T)

### **Plants**

Critical habitat, vernal pool plants (X) Orcuttia tenuis - slender Orcutt grass (T)

# **Candidate Species**

### Mammals

Martes pennanti - fisher (C)

# **Species of Concern**

## **Fish**

Cottus asperrimus - rough sculpin (CA) Lavinia symmetricus mitrulus - Pit roach (SC) Pogonichthys macrolepidotus - Sacramento splittail (SC) Spirinchus thaleichthys - longfm smelt (SC)

# **Amphibians**

Rana cascadae - Cascades frog (SC)

# Reptiles

Clemmys marmorata marmorata - northwestern pond turtle (SC)

# Birds

Accipiter gentilis - northern goshawk (SC)

Agelaius tricolor - tricolored blackbird (SC)

Baeolophus inornatus - oak titmouse (SLC)

Chaetura vauxi - Vaux's swift (SC)

Cinclus mexicanus - American dipper (SLC)

Cypseloides niger - black swift (SC)

Empidonax traillii brewsteri - little willow flycatcher (CA)

Palco peregrinus anatum - American peregrine falcon (D)

Grus canadensis tabida - greater sandhill crane (CA)

Lanius ludovicianus - loggerhead shrike (SC)

Melanerpes lewis - Lewis' woodpecker (SC)

Numenius americanus - long- billed curlew (SC)

Otus flammeolus - flammulated owl (SC)

Selasphorus rufus - rufous hummingbird (SC)

Strix occidentalis occidentalis - California spotted owl (SC)

## Mammals

Brachylagus idahoensis - pygmy rabbit (SC)

Corynorhinus (=Plecotus) townsendii pallescens - pale Townsend's bigeared bat (SC)

Euderma maculatum - spotted bat (SC)

Gulo gulo luteus - California wolverine (CA)

Martes americana - American (=pine) marten (SC)

Myotis ciliolabrum - small- footed myotis bat (SC)

Myotis evotis - long- eared myotis bat (SC)

Myotis thysanodes - fringed myotis bat (SC)

Myotis volans - long- legged myotis bat (SC)

Myotis yumanensis - Yuma myotis bat (SC)

Vulpes vulpes necator - Sierra Nevada red fox (CA)

## **Plants**

Smelowskia ovalis ssp. congesta - Mt. Lassen (=Lassen Peak) smelowskia (SC)

## **PROSPECT PEAK (6430)**

## **Listed Species**

## Invertebrates

Pacifastizcus fortis -Shasta crayfish (E)

#### Fish

Hypomesus transpacificus -del~ smelt (T)

# **Amphibians**

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

#### Birds

Haliaeetus leucocephalus -bald eagle (T)

# **Candidate Species**

#### Mammals

Martes pennanti - fisher (C)

# **Species of Concern**

## Fish

Cottus asperrimus - rough sculpin (CA) Lavinia symmetricus mitrulus - Pit roach (SC) Pogonichthys macrolepidotus - Sacramento splittail (SC) Spirinchus thaleichthys - longfm smelt (SC)

# **Amphibians**

Rana cascadae - Cascades frog (SC)

# Reptiles

Clemmys marmoratd marmorata - northwestern pond turtle (SC)

## Birds

Accipiter gentilis - northern goshawk (SC)

Baeolophus inornatus - oak titmouse (SLC)

Chaetura vauxi - Vaux's swift (SC)

Cinclus mexicanus - American dipper (SLC)

Cypselqides niger - black swift (SC)

Empidonax traillii brewsteri - iittle willow flycatcher (CA)

Falco peregrinus anatum - American peregrine falcon (D)

Grus canadensis tabida - greater sandhill crane (CA)

Lanius ludovicianus - loggerhead shrike (SC)

Melanerpes lewis - Lewis' woodpecker (SC)

Numenius americanus - long- billed curlew (SC)

Otus flammeolus - flammulated owl (SC)

Selasphorus rufus - rufous hummingbird (SC)

Strix occidentalis occidentalis - California spotted owl (SC)

## Mammals

Brachylagus idahoensis - pygmy rabbit (SC) Corynorhinus (=Plecotus) townsendii pallescens - pale Townsend's big- eared bat (SC) Euderma maculatum - spotted bat (SC)

Gulo gulo luteus - California wolverine (CA)

Martes americana - American (=pine) marten (SC)

Myotis ciliolabrum - srnall- footed myotis bat (SC)

Myotis evotis - long- eared myotis bat (SC)

Myotis thysanodes - fringed myotis bat (SC)

Myotis volans - long- legged myotis bat (SC)

Myotis yumanensis - Yuma myotis bat (SC)

Vulpes vulpes necator - Sierra Nevada red fox (CA)

# **MANZANITA LAKE (644D)**

## **Listed Species**

#### *Invertebrates*

Pacifastacus fortis - Shasta crayfish (E)

## **Fish**

Hypomesus transpacificus - delta smelt (T)

Oncorhynchus mykiss - Central Valley steelhead (T) (NMFS)

Oncorhynchus tshawytscha - Central Valley spring- ron chinook salmon (T) (NMFS)

Oncorhynchus tshawytscha - winter- ron chinook salmon (E) (NMFS)

# Amphibians

Rana aurora dray ton ii - California red- legged frog (T)

#### Birds

Haliaeetus leucocephalus - bald eagle (T)

# **Candidate Species**

#### Fish

Acipenser medirostris - green sturgeon (C) Oncorhynchus tshawytscha - Central Valley faWlate fall- ron chinook salmon (C) (NMFS)

#### Mammals

Martes pennanti - fisher (C)

# **Species of Concern**

#### Fish

Cottus asperrimus - rough sculpin (CA) Lavinia symmetricus mitrulus - Pit roach (SC) Pogonichthys macrolepidotus ;. Sacramento splittail (SC) Spirinchus thaleichthys - longfm smelt (SC)

# **Amphibians**

Rana boylii - foothill yellow- legged frog (SC) Rana cascadae - Cascades frog (SC)

## Reptiles

Clemmys marmorata marmorata - northwestern pond turtle (SC)

### **Birds**

Accipiter gentilis - northern goshawk (SC)

Agelaius tricolor - tricolored blackbird (SC)

Baeolophus inornatus - oak titmouse (SLC)

Chaetura vauxi - Vaux's swift (SC)

Cinclus mexicanus - American dipper (SLC)

Cypseloides niger - black swift (SC)

Empidonax traillii brewsteri - little willow flycatcher (CA)

Falco peregrinus anatum - American peregrine falcon (D)

Lanius ludovicianus - loggerhead shrike (SC)

Melanerpes lewis - Lewis' woodpecker (SC)

Numenius americanus - long- billed curlew (SC)

Otus jlammeolus - flammulated owl (SC)

Selasphorus rufus - rufous hummingbird (SC).

Strix occidentalis occidentalis - California spotted owl (SC)

#### Mammals

Corynorhinus (=Plecotus) townsendii pallescens - pale Townsend's big- eared bat (SC)

Euderma maculatum - spotted bat (SC)

Gulo gulo luteus - California wolverine (CA) -

Martes americana - American (=pine) marten (SC)

Myotis ciliolabrum - small- footed myotis bat (SC)

Myotis evotis - long- eared myotis bat (SC)

Myotis thysanodes - fringed myotis bat (SC)

Myotis volans - long- legged myotis bat (SC)

Myotis yumanensis - Yuma myotis bat (SC)

Vulpes vulpes necator - Sierra Nevada red fox (CA)

#### **Plants**

Astragalus pulsiferae var. suksdorfii - Suksdorfs rnilk- vetch (SC)

# **County Lists**

No county species lists requested.

# Key:

- (E) Endangered Listed (in the Federal Register) as being in danger of extinction.
- (f) 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 Marine 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.
- (CA) Listed by the State of California but not by the Fish & Wildlife Service.
- (D) Delisted- Species will be monitored for 5 years.
- (SC) Species of Concern/(SLC) Species of Local Concern Other species of concern to the Sacramento Fish & Wildlife Office.
- (X) Critical Habitat designated for this species Important Information About Your Species List

Appendix C - 17 - Species List