

City of Rocklin
General Open Space Management Plan



May 2015

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Acknowledgements

This General Open Space Management Plan was created with the strategic and professional assistance of Johnson-Marigot Consulting LLC.

Agency – Partner Approval

The following Agencies have approved (by signature) the implementation of the City of Rocklin General Open Space Management Plan. This endorses the overall approach to management of Open Space holdings, but does not diminish State or Federal jurisdiction, or relieve the City of Rocklin from any obligations pursuant to State or Federal laws regarding natural resource management.

<p>Preserve Manager City of Rocklin Public Works Director 4081 Alvis Court Rocklin, CA 95677-2720 916-625-5162</p> <p>Approved By: <u></u> Title: <u>City Manager</u> Date: <u>6-10-15</u></p>	<p>U.S. Army Corps of Engineers Sacramento District 1325 J Street, Room 1350 Sacramento, CA 95841 Attn: Nancy Haley, Chief, California North Branch Telephone: 916-557-7731</p> <p>Approved By: <u></u> Title: <u>Chief, Regulatory Division</u> Date: <u>1 May 2015</u></p>
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1.0 Open Space Preserve Overarching Management Plan

The City of Rocklin General Open Space Management Plan (Plan) was established to conserve and protect jurisdictional waters of the U.S. and State of California, and the functions and values of existing riparian corridors, and adjacent upland habitats within established open space preserves. The City currently owns or manages over 586 acres of open space preserves, including preserves dedicated primarily to the preservation of wetland resources and riparian corridors.

Open Space Preserve Management (background)

The City of Rocklin is currently working with the US Army Corps of Engineers to establish a General Open Space Management Plan for the active and passive management of all of its open space holdings. This document provides an overall plan by which these preserves will be funded and managed in perpetuity, and intends to allow the city to add additional holdings as they become available by appending them to this management plan. This document describes the methodology by which preserves will be managed, funded, and appended. This Plan uses the template of the *City of Roseville Open Space Preserve Overarching Management Plan* at the direction of the U.S. Army Corps of Engineers. This template has been previously approved by the Regulatory Agencies.

The City of Rocklin has existing Open Space holdings totaling over 586 acres that are currently being managed as biological / open space preserve areas. These parcels are managed with individual Long Term Operation and Management Plans, and are legally protected with real estate instruments designed to preserve the overall functions and values of the preserves. The City intends to append all of the existing preserves to this General Open Space Management Plan (Long Term Management Plan, or Plan), upon approval of this plan by the Regulatory Agencies.

The City of Rocklin currently owns and maintains five Open Space Preserves: Claremont, Orchard Creek, Stanford Ranch, Sunset West, and Whitney Ranch. (Figure 1 – Existing Preserves)

The Claremont Preserve is approximately 13 acres and consists of three parcels:

- Preserve Parcel A, located near the south end of the property, acts as a detention basin for urban runoff.
- Preserve Parcel B is located in the southwestern area and preserves a pond and seasonal wetland as well as a significant amount of open grassland.
- Preserve Parcel C is located in the eastern corner of the project site and contains a detention/retention basin, native oaks, native plantings, rock wall, an access road, and a foot path around existing preserved rock formations.

The Orchard Creek Preserve is approximately 22 acres and contains riverine seasonal wetland habitat areas, vernal pools, and intermittent drainage swales surrounded by upland annual grassland dominated by exotic invasive grasses and forbs.

The Stanford Ranch Preserve is approximately 227 acres and consists of annual grassland, riparian, oak woodland, vernal pools and seasonal wetland habitats. A portion of Pleasant Grove Creek flows through the preserve.

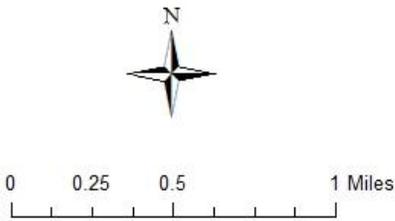
Figure 1: Existing Open Space Preserves



Existing Open Space Preserves



Legend	
	Claremont (13 acres)
	Orchard Creek (22 acres)
	Stanford Ranch (227 acres)
	Sunset West (140 acres)
	Whitney Ranch (184 acres)



The Sunset West Preserve is approximately 140 acres and consists of annual grassland, wetland and riparian habitats. The preserve contains a portion of Pleasant Grove Creek, intermittent drainages, drainage swales, season wetlands, riverine wetlands and vernal pools. The preserve also consists of vernal pools, seasonal wetlands and riverine wetlands that were constructed as partial mitigation for impacts to Waters of the United States.

The Whitney Ranch Preserve is approximately 184 acres and consists of multiple corridors separated by transecting streets. The Preserve is made up of two types of areas. They are passive open space areas, which account for the majority of the preserve, and wetland compensation areas.

Regulatory Agencies

The City of Rocklin recognizes the authority of the State of California and the U. S. Government to regulate activities pursuant to state and federal laws. It is anticipated that lands appended to this document may be encumbered by conditions of Regulatory Agencies that specify specific management practices. The City will manage appended preserve areas in accordance with the requirements of the Regulatory Agencies, and will calculate management costs accordingly. The Army Corps of Engineers shall be the Regulatory Agency and may retain oversight and enforcement requirements for properties managed pursuant to this Plan.

1.1 Purpose of the Plan

The purpose of this long-term management plan is to ensure the open space holdings of the City of Rocklin are managed, monitored, and maintained in perpetuity as wildlife habitat. This Plan establishes objectives, priorities and tasks to monitor, manage, maintain and report on the waters of the U.S., covered species and covered habitat on the lands appended to this Plan. This management plan is a binding and enforceable instrument, implemented by City of Rocklin (the Preserve Manager), and legally enforced by the deed restrictions covering the properties appended to this Plan.

All properties appended to this Plan will be encumbered with deed restrictions, recorded with the County of Placer, to be granted to the City of Rocklin. The deed restrictions will limit land uses and management of the preserves to ensure protection of the biotic resources (i.e. protect conservation values). A copy of the Deed Restriction template is included in Appendix 1. All properties appended to this Plan will be included in Appendix 2.

1.2 Existing Open Space Documents and Related Guidelines

1.2.1 City of Rocklin General Plan

This Plan is consistent with relevant portions of the existing City of Rocklin *General Plan* (City of Rocklin, 2012). Provided for reference are the most relevant sections of the City of Rocklin General Plan including Land Use Element, Open Space, Circulation Element, Community Safety, and Public Services & Facilities (Appendix 3). The City of Rocklin General Plan provides a framework for the goals associated with promoting habitat protection while also promoting public land use. This Plan recognizes this balance and outlines mechanisms for achieving this goal including, but not limited to, land use designations,

management guidelines and responsibilities, preservation mechanisms, monitoring plans, and public education programs.

1.2.2 The City of Rocklin "Planning for the Future of Rocklin's Urban Forest"

The City of Rocklin's *Planning for the Future of Rocklin's Urban Forest* provides an overall framework for managing Rocklin's urban and natural resources (City of Rocklin, 2006). The goals and actions outlined in this Plan are intended to be complementary to the management techniques and goals of *Planning for the Future of Rocklin's Urban Forest*. The document recognizes the importance of forest habitat within a city for its aesthetic value, monetary value, as well as its importance to local wildlife (Appendix 4).

1.2.3 The City of Rocklin Oak Tree Preservation Guidelines

The City of Rocklin's *Oak Tree Preservation Guidelines* (City of Rocklin, 2006) recognizes the importance of oak woodlands. This guide provides an outline of oak tree health, maintenance, plantings, and other preservation guidelines which have been incorporated into this plan (Appendix 5).

1.3 Individual Open Space Preserves Combined Under the Plan

This Plan currently includes over 586 acres of open space preserves located within the City of Rocklin, Placer County, California, and proposes to add additional properties by appending them to this Plan. The properties appended to this Plan are expected to occur only within the boundaries of the City of Rocklin, and will be described using appropriate legal description (Assessor's parcel information), as well as standardized Site and Vicinity maps. The majority of expected holdings will occur within Township 11 North, Range 6 East of the Roseville, California 7.5-minute quadrangle (U.S. Department of the Interior, Geological Survey).

1.4 Operations and Management Plans Superseded by this Plan

Upon final approval of this Plan by the regulatory agencies, the following existing open space preserves will be appended to this plan. These open space areas are already governed and managed by existing operations and management plans. This plan would supersede the existing (in place) plans for the individual preserves, including the following:

Orchard Creek Open Space Preserve Operations and Management Plan

Whitney Ranch (Sunset Ranchos Phase I) Open Space Conservation Easement Operations and Management Plan

Use Plan Addendum to the Operations and Management Plan/Conservation Easement for Stanford Ranch Open Space Preserve

Operations and Management Plan For Claremont (A.K.A. Parcel K) Open Space Preserve

1.5 Private Open Space Preserves

A number of privately owned Open Space Preserves are present within the City. These areas may or may not be zoned as open space. Typically, the City does not have any responsibility with respect to these areas and they are not covered under this Plan. However, a map showing the privately held open space preserves will be developed and added to the Plan when available. Additionally, the Preserve Manager will make all reasonable efforts to cooperate with owners of private, undeveloped lands, in order to support the overall management goals for each preserve parcel.

2.0 Open Space Description

The City currently owns or manages existing open space preserves, including preserves dedicated primarily to the preservation of wetland resources and riparian corridors. These spaces consist of a range of lot sizes, which include a range of existing and managed uses. The overall goal of the City is to continue to manage the Open Space to conserve and protect the biological integrity of the sites. It is anticipated that new properties appended to this Plan will also primarily be managed for wildlife habitat, however some may be otherwise encumbered by additional uses (such as trails, utility easements, etc.). All properties appended to this plan will provide a survey of the existing baseline condition present at the time the property is appended; this will include a description of the biological components, as well as other factors such as cultural concerns, legal descriptions, existing and proposed infrastructure, etc. The overriding management goal for all preserves will be the maintenance and improvement of open space for the protection of biological resources.

2.1 Surrounding Land Uses

Historically, the majority of the City of Rocklin open spaces may have been used for agriculture such as hay production, livestock grazing, and crop production. The primary purpose of this Plan is to promote and sustain the biological integrity of the properties appended to this Plan; grazing is expected to be utilized as a land management practice to achieve this goal, but grass production for agricultural use is not a goal of this Plan. The preserves may be surrounded by residential development, adjacent open spaces, and/or associated infrastructure such as schools, parks, residential, industrial, or commercial development. Each appended property, as a part of the baseline assessment description, will include a description of historic adjacent land uses, as well as current condition and current land uses. The City of Rocklin, by appending properties to this Plan, intends to manage such properties with the specific goal of maintenance (or improvement) of biological functions and values. All properties appended to this plan are subject to changes in active and passive land use in order to meet this goal. Some properties may have existing land management practices that are consistent with the goals of this Plan. The Preserve Manager will also be responsible for management of preserve properties in light of adjacent properties and in order to balance the maximization of biological functions and values with health and safety concerns of the public.

2.2 Topography and Soils

Typical topography within the City of Rocklin, Placer County, California includes gently rolling to hilly topography with periodic pronounced slopes and flat floodplains. Elevations within these areas range from approximately 120 feet above mean sea level (MSL) to 350 MSL. Each appended preserve site will include a site-specific evaluation of topography as a requirement of the baseline survey prior to acceptance. Sites are not expected to be appended to this plan that have active mitigation or restoration requirements outstanding until such time that the mitigation or restoration requirements are completed to the satisfaction of the involved Regulatory Agencies. As such, descriptions of topography are intended to provide a project site “baseline” that the Preserve Manager will use as a management goal, and topography is not expected to have significant change / variation after sites have been appended to the Plan. The primary land management goal pursuant to this Plan is expected to be maintenance of the Baseline condition.

Soil types within the Rocklin area of Placer County include 104—Alamo-Fiddymont complex, 0 to 5 percent slopes, 105—Alamo variant clay, 2 to 15 percent slopes, 106—Andregg coarse sandy loam, 2 to 9 percent slopes, 107—Andregg coarse sandy loam, 9 to 15 percent slopes, 108—Andregg coarse sandy loam, 15 to 30 percent slopes, 109—Andregg coarse sandy loam, rocky, 2 to 15 percent slopes, 110—Andregg coarse sandy loam, rocky, 15 to 30 percent slopes, 111—Andregg coarse sandy loam, rocky, 30 to 50 percent slopes, 113—Andregg-Shenandoah complex, 2 to 15 percent slopes, 132—Caperton-Rock outcrop complex, 2 to 30 percent slopes, 133—Caperton-Rock outcrop complex, 30 to 50 percent slopes, 140—Cometa sandy loam, 1 to 5 percent slopes, 141—Cometa-Fiddymont complex, 1 to 5 percent slopes, 142—Cometa-Ramona sandy loams, 1 to 5 percent slopes, 144—Exchequer very stony loam, 2 to 15 percent slopes, 145—Exchequer-Rock outcrop complex, 2 to 30 percent slopes, 147—Fiddymont-Kaseberg loams, 2 to 9 percent slopes, 152—Inks cobbly loam, 2 to 30 percent slopes, 153—Inks cobbly loam, 30 to 50 percent slopes, 154—Inks-Exchequer complex, 2 to 25 percent slopes, 162—Kilaga loam, 173—Pits and dumps, 180—Rubble land, 184—Sierra sandy loam, 9 to 15 percent slopes, 193—Xerofluvents, occasionally flooded, 194—Xerofluvents, frequently flooded, 196—Xerorthents, cut and fill areas, and 197—Xerorthents, placer areas (See Appendix 6 - NRCS report).

Each appended preserve site will include a site-specific evaluation of soils as a requirement of the baseline survey prior to acceptance, and an NRCS map detailing approximate soil distribution and type.

2.3 Biological Resources

The properties appended to this plan may support typical vegetative communities found within Placer County that in turn support a variety of wildlife species. Many open space areas that contain wetland features or other jurisdictional waters of the United States are likely to represent habitat for sensitive or protected species, including rare plants and wildlife. Each preserve appended to this plan will include a baseline biological condition that describes vegetative communities, wetlands and waters, and additionally include analysis of the known and potential of the site to represent habitat for sensitive species. Preserve areas will be managed to conserve sensitive species as a primary goal. Any specific preserve management techniques that have been identified (or directed by agencies) that are designed to conserve sensitive species will be identified as a part of the baseline condition, and will be implemented by the Preserve Manager.

Vegetative distribution, and distribution of habitat for sensitive species, will be represented in the baseline condition for each appended Preserve parcel by maps.

2.4 Vegetation Communities and Associated Wildlife

Properties appended to this Plan are expected to typically consist of vegetative types including annual grassland, riparian woodland, wetland, and vernal pool plant species of Placer County. Each appended property, as a part of the baseline assessment description, will include a description of general baseline conditions, which details the vegetative composition of the site and includes vegetative distribution maps.

The general vegetative type distribution is presented in Figure 2.

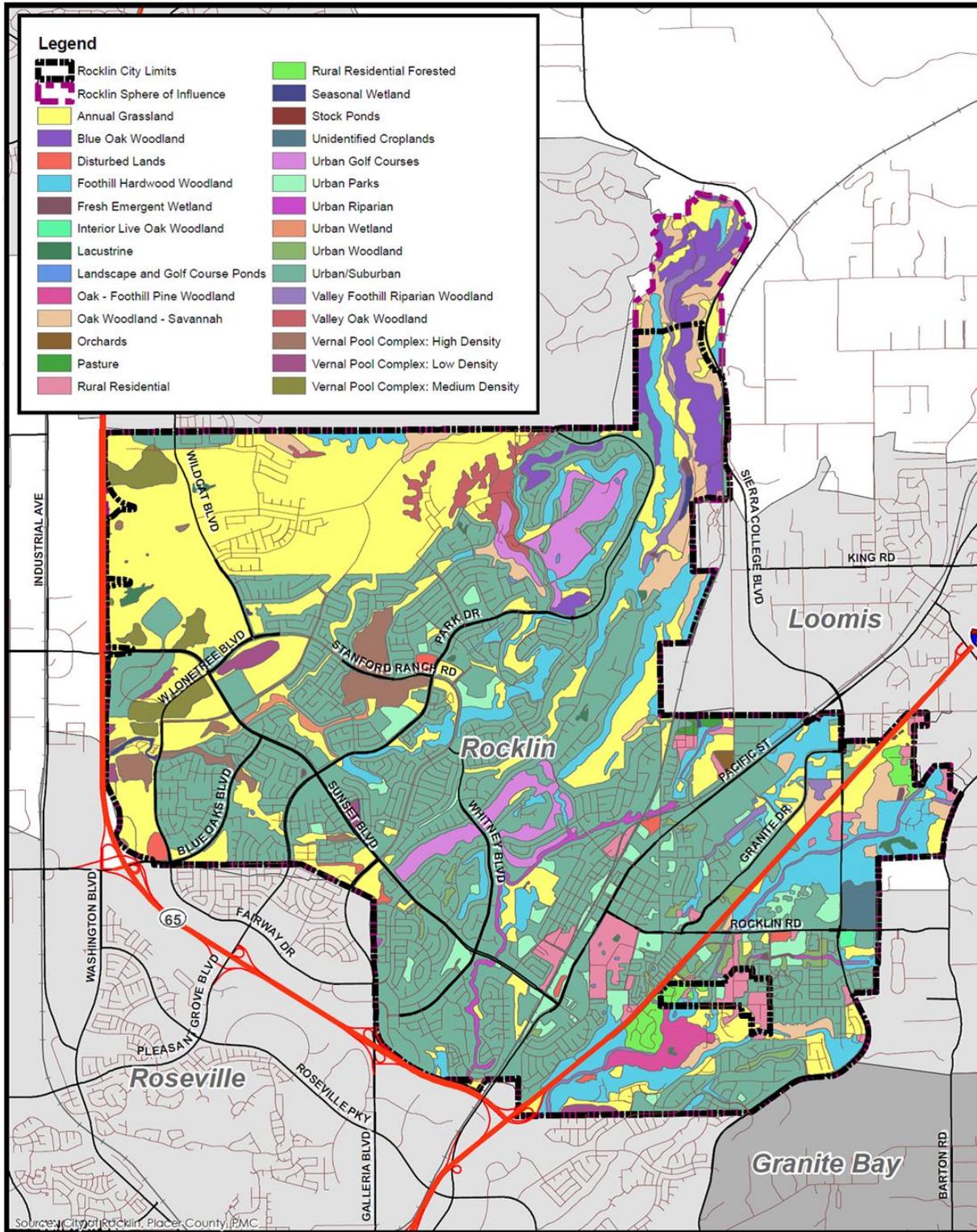
2.4.1 Grasslands

Typical vegetation within grasslands of Placer County include non-native grass species such as Italian ryegrass (*Lolium multiflorum*), medusa head (*Taeniatherum caput-medusae*), ripgut brome (*Bromus diandrus*), soft chess brome (*Bromus hordeaceus*), and wild oat (*Avena* sp.); and weedy herbaceous species such as Fitch's tarweed (*Hemizonia fitchii*), prickly lettuce (*Lactuca serriola*), rose clover (*Trifolium hirtum*), vetch (*Vicia* sp.), and yellow star-thistle (*Centaurea solstitialis*). Typical ruderal species include grasses such as annual bluegrass (*Poa annua*), rabbit-foot grass (*Polypogon monosplendis*), perennial ryegrass (*Lolium perenne*), ripgut brome, soft brome, barley (*Hordeum marinum*), and wild oat. Other weedy species included mustard (*Brassica nigra*), yellow star-thistle, bull thistle (*Cirsium vulgare*), miner's lettuce (*Claytonia perfoliata*), prickly lettuce, common mallow (*Malva neglecta*), wild radish (*Raphanus sativus*), and curly dock (*Rumex crispus*). The grassland community may support wildlife species such as California vole (*Microtus californicus*), black-tailed jackrabbit (*Lepus californicus*), deer mouse (*Peromyscus maniculatus*), and pocket gopher (*Thomomys bottae*).

2.4.2 Riparian Woodlands/Wetlands

Typical riparian woodlands/wetlands within Placer County may include black willow (*Salix goodingii*), blackberry (*Rubus discolor*), wild rose (*Rosa californica*), wild grape (*Vitis californica*), and button willow (*Cephalanthus occidentalis*). Additional typical riparian species include live oak (*Quercus wislizenii*), Valley oak (*Quercus lobata*), and blue oak (*Quercus douglassii*), as well as cottonwood (*Populus fremontii*), willow (*Salix lasiolepis*), California black walnut (*Juglans hindsii*), fig (*Ficus carica*), mulberry (*Morus* sp.), stinging nettle (*Urtica dioica*), poison hemlock (*Conium maculatum*) and poison oak (*Toxicodendron diversilobum*). This stratified community may provide migration corridors, forage, and cover habitats for a variety of wildlife. The riparian community may support wildlife species such as Bewick's wren (*Thryomanes bewickii*), downy woodpecker (*Picoides pubescens*), red-shouldered hawk (*Buteo lineatus*), and great horned owl (*Bubo virginianus*). The understory scrub community may support wildlife species such as fox sparrow (*Passerella iliaca*), spotted towhee (*Pipilo maculatus*), song sparrow (*Melospiza melodia*), and striped skunk (*Mephitis mephitis*).

Figure 2: Habitat Map (Vegetative Type Distribution)



Habitat Map

2.4.3 Vernal Pool Grasslands

Typical vegetation found within vernal pools of Placer County may include coyote thistle (*Eryngium vaseyi*), double-horned downingia (*Downingia bicornuta*), Fremont's goldfields (*Lasthenia fremontii*), popcorn flower (*Plagiobothrys stipitatus*), spikerush (*Eleocharis macrostachya*), and vernal pool buttercup (*Ranunculus bonariensis*). Seasonal wetlands with extended hydroperiods may include smartweed (*Polygonum hydropiperoides*), California bulrush (*Scirpus californicus*), and broad leaf cattail (*Typha latifolia*). When inundated or saturated, wetlands and vernal pools may provide habitat for aquatic invertebrates and amphibians.

2.4.4 Oak Woodland/Savannah

Typical oak woodland/savannah vegetative communities within Placer County may include blue oak (*Quercus douglasii*), Valley oak (*Quercus lobata*), interior live oak (*Quercus wislizenii*), hoary coffeeberry (*Rhamnus tomentella*) coyote brush (*Baccharis pilularis*), toyon (*Heteromeles arbutifolia*), and poison oak (*Toxicodendron diversilobum*). Herbaceous understory species within this community may include non-native grasses such as riggut brome, medusa head grass, soft brome, wild oats, Mediterranean barley, and Italian ryegrass. This community may serve as habitat for species such as the acorn woodpecker (*Melanerpes formicivorus*), western scrub-jay (*Aphelocoma californica*), American kestrel (*Falco sparverius*), and the western gray squirrel (*Sciurus griseus*).

2.5 Waters of the U.S.

A variety of waters of the U.S. occur throughout the City of Rocklin within the vegetation communities listed above. Drainage within the City of Rocklin is dominated by a variety of watersheds flowing westward from the Sierra Nevada foothills east of Rocklin. The watersheds drain into five major stream systems flowing through the Rocklin area. Secret Ravine (with the Aguilar Tributary) and Sucker Ravine drain the eastern side of the Loomis basin, and Antelope Creek and the Clover Valley Creek drain the central areas. These two systems all discharge ultimately into Dry Creek. Pleasant Grove Creek drains the Stanford Ranch area in the northern and western portion of the City, and ultimately flows westward into Sutter County where it discharges into the Sacramento River. Antelope Creek, Secret Ravine, and Sucker Ravine are perennial streams, which provide riparian habitat for a variety of animals. Both Antelope Creek and Secret Ravine are known to be salmon spawning areas and are closed to fishing by the state during spawning season. Watersheds and area hydrology for the City of Rocklin are shown in figure 3 below.

2.5.1 Intermittent Drainages/Creeks

Intermittent drainages are characterized by the presence of an ordinary high water mark that can have a defined bed and bank. These drainage features convey flows during storm events and through the wet season, but standing water generally does not persist except in areas where deeper pools form. These types of drainages are largely unvegetated due to the scouring effects of fast flowing water, but hydrophytic vegetation may be prevalent at the upper edges of the drainage.

2.5.2 Vernal Pools

Vernal pools are poorly drained depressions that occur within the annual grassland community. The vernal pools are inundated for several weeks at a time during the rainy season and may dry between storm events. Vernal pools are fed by direct rainfall and/or surface run-off.

In the Mediterranean climate of California's Central Valley, fall rains initiate the "wetting" stage during which seeds germinate and dormant perennials re-sprout. As soils saturate and standing water accumulates, the pool enters the "aquatic" phase. Inundation may be periodic or continuous, and this variability supports a diverse plant and animal community. As water levels recede, thought to be primarily through evaporation, the "drying" phase begins. During this time, pool basins begin drying and plant flowering reaches its peak followed by the setting of seeds. The final phase is the "drought" phase and is characterized by dry soils and dead or dormant vegetation.

Preserved vernal pools throughout the City range from well-defined basins with distinct boundaries to those with indistinct boundaries that may have been affected by historic land practices such as agriculture. Additionally, vernal pools have been constructed as mitigation in several Open Space Preserve areas. Vernal pools are dominated by native plants such as slender popcorn-flower (*Plagiobothrys stipitatus*), annual hairgrass (*Deschampsia danthonioides*), downingia (*Downingia species*), and Vasey's coyote-thistle (*Eryngium vaseyi*). Typical wildlife associated with vernal pools includes various aquatic invertebrates and amphibians such as the Pacific chorus frog. On occasion, waterfowl or wading bird species may forage and/or rest within vernal pools during the wet season. Vernal pools provide habitat for a variety of endemic and often special-status plant and animal species (see Section 2.6). As such, vernal pools are remnant patches of the native landscape within a grassland community dominated by non-native species.

2.5.3 Seasonal Wetland/Drainage Swales

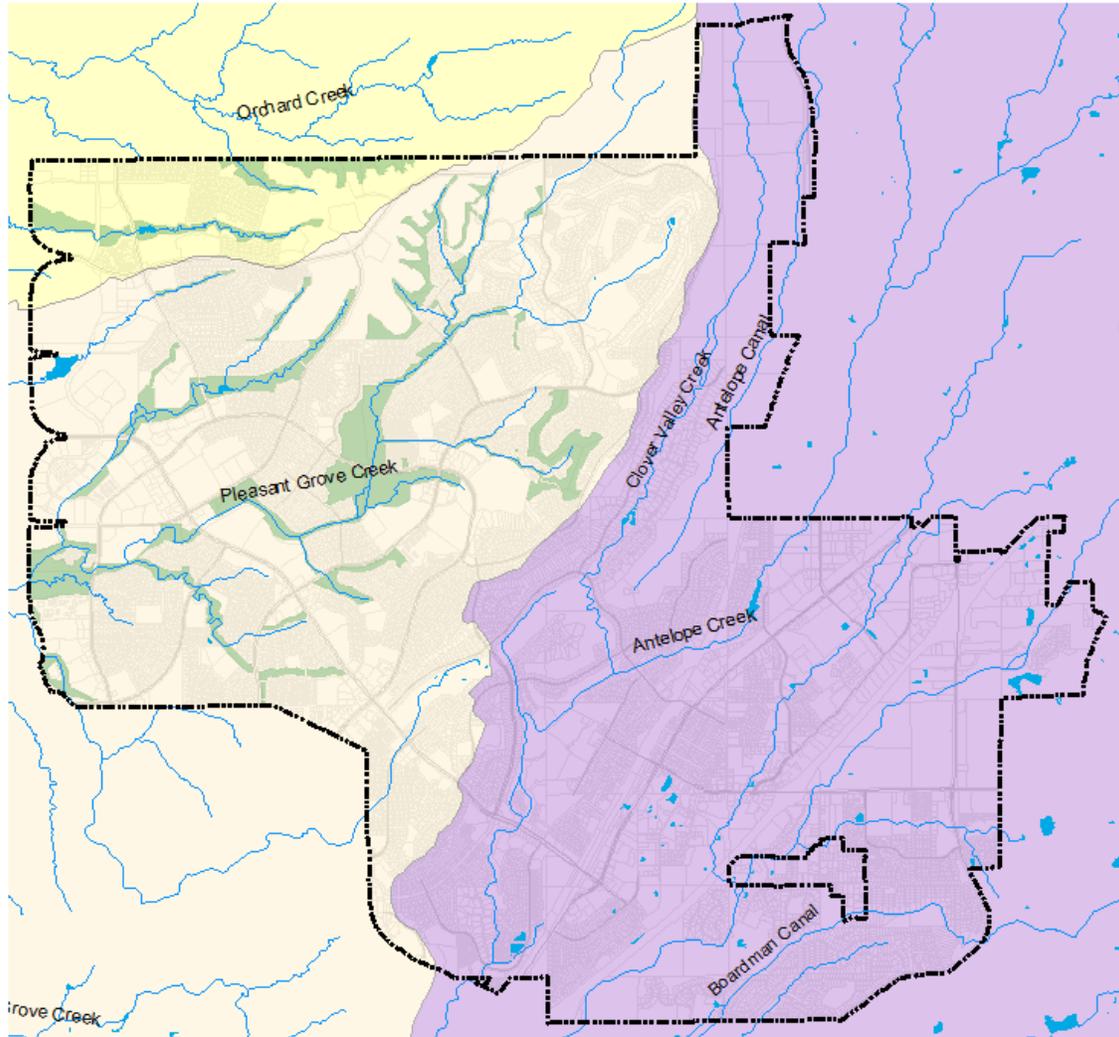
Within the Open Space, seasonal wetlands and drainage swales occur within the annual grassland and occasionally the oak woodland. A representative photo of seasonal wetland and a drainage swale is included on Figure 2-13. Seasonal Wetland and Drainage Swale. Seasonal wetland depressions follow a similar hydrological cycle to that of vernal pools but may be shallower, less well-defined, and/or dominated by non-native generalist plant species. Some of these depressions/swales may support saturated soil only during the wet season.

A variety of plants and wildlife can be found within seasonal wetlands and drainage swale communities. The "drier" seasonal wetlands/drainage swales may be dominated by grasses and annual herbs including Italian ryegrass, Mediterranean barley, and hyssop loosestrife (*Lythrum hyssopifolium*). The "wetter" seasonal wetlands/drainage swales are potentially dominated by species such as baltic rush (*Juncus balticus*), annual rabbit-foot grass (*Polypogon monspeliensis*), Bermuda grass (*Cynodon dactylon*), and creeping spikerush (*Eleocharis macrostachya*). When inundated, these seasonal wetlands and drainage swales provide habitat for aquatic invertebrates and amphibians. For most of the remainder of the year, wildlife usage is similar to that of typical Central Valley non-native annual grassland habitat.

Figure 3 Watersheds and Area Hydrology

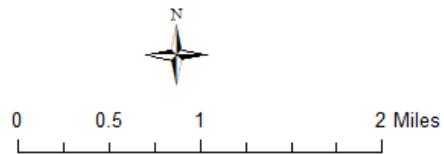


Watersheds and Area Hydrology



Legend

- Rocklin Open Space
- Auburn Ravine Watershed
- Pleasant Grove Watershed
- Dry Creek Watershed



2.5.4 Marsh

The emergent marshes in the City’s Open Space are typically perennial systems within or adjacent to riparian areas. They support wetland species such as cattail (*Typha species*), bulrush (*Scirpus species*), tail flatsedge, soft rush (*Juncus effusus*), annual rabbit-foot grass, curly dock (*Rumex crispus*), and willows. Individual parcels appended to this plan may include tributary waters to these stream systems, including adjacent and abutting wetland features. Each site will include a current Jurisdictional Determination map (pursuant to the Clean Water Act) at the time the site is proposed to be appended to this Plan, as a part of the Baseline Condition report.

2.6 Endangered and Threatened Species

Vegetation communities existing within the properties appended by this Plan may provide habitat to various common species of wildlife and may provide suitable habitat for special-status species. If the preserve area is occupied, or becomes occupied, by any listed species, this information will be included in the annual monitoring report to the agencies, and such data will be recorded with the State of California for inclusion in the California Natural Diversity Database (CNDDDB). Listed species within Placer County are found in Table 1-1. For complete species descriptions please refer to Appendix 6. Some species documented to occur within Placer County are not expected to occur within the boundaries of the City of Rocklin, however the County List is provided for a greater understanding of regional biological concerns. Each property proposed to be appended to this Plan must include an analysis of the known or potential for each site to represent habitat for protected species as a part of the baseline condition report.

Table 1-1: Listed and Special- Status Species Potentially Occurring Within Preserves

Special-Status Species	Regulatory Status (Federal; State; Local; CNPS) ¹	Species Habitat ²
Invertebrates		
<i>Branchinecta conservatio</i> Conservancy fairy shrimp	FE	Large, cool-water vernal pools with moderately turbid water. <i>May occur in Rocklin area.</i>
<i>Branchinecta lynchi</i> Vernal pool fairy shrimp	X, FT	Variety of vernal pools including small, clear, sandstone rock pools to large, turbid, alkaline, grassland valley floor pools. <i>Likely to occur in Rocklin area.</i>
<i>Desmocerus californicus dimorphus</i> Valley elderberry longhorn beetle	X, FT	The species is nearly always found on or close to its host plant, elderberry (<i>Sambucus species</i>). Females lay their eggs on the bark. Larvae hatch and burrow into the stems. It appears that in order to serve as habitat, the shrubs must have stems that are 1.0 inch or greater in diameter at ground level. <i>Likely to occur in Rocklin area.</i>
<i>Lepidurus packardii</i> Vernal pool tadpole shrimp	X, FE	Vernal pools containing clear to highly turbid water. <i>May occur in Rocklin area.</i>
Fish		
<i>Hypomesus transpacificus</i> Delta smelt	SE, ST, FT	Estuarine waters up to 14 ppt salinity. <i>Highly unlikely to occur in Rocklin area.</i>

<i>Onorhynchus (=Salmo) clarki henshawi</i> Lahontan cutthroat trout	FT, FE	Cutthroat trout have the most extensive range of any inland trout species of western North America, and occur in anadromous, non-anadromous, fluvial, and lacustrine populations. <i>Unlikely to occur in Rocklin area.</i>
<i>Onorhynchus mykiss</i> Central valley steelhead	T, X, NMFS	Steelhead often live in swift streams flowing out of the mountains. <i>May occur in some larger creeks in Rocklin area.</i>
<i>Oncorhynchus tshawytscha</i> Central valley spring-run chinook salmon	T, NMFS	Freshwater streams and estuaries provide important habitat for chinook salmon. Estuaries and their associated wetlands provide vital nursery areas for the chinook prior to its departure to the open ocean. Wetlands not only help buffer the estuary from silt and pollutants, but also provide important feeding and hiding areas. <i>May occur in larger creeks in Rocklin area.</i>
<i>Oncorhynchus tshawytscha</i> Central valley winter run chinook salmon	E, NMFS	Freshwater streams and estuaries provide important habitat for chinook salmon. Estuaries and their associated wetlands provide vital nursery areas for the chinook prior to its departure to the open ocean. Wetlands not only help buffer the estuary from silt and pollutants, but also provide important feeding and hiding areas. <i>May occur in larger creeks in Rocklin area.</i>
Amphibians		
<i>Ambystoma californiense</i> California tiger salamander	ST, FE, FT	California tiger salamanders exhibit a biphasic life cycle and as a result require two distinct habitats. These are vernal pools or seasonal ponds within the grasslands or oak savannah, or even stock ponds that mimic seasonal ponds. <i>May occur in Rocklin area.</i>
<i>Rana draytonii</i> California red-legged frog	FT, X	Adults need dense, shrubby or emergent riparian vegetation closely associated with deep (greater than 2 1/3-foot deep) still or slow moving water. <i>Although habitat for this species occurs in the greater Rocklin area, the species has not been recorded in recent history.</i>
Reptiles		
<i>Thamnophis gigas</i> Giant garter snake	ST, FT	Habitat requirements consist of (1) adequate water during the snake's active season (early-spring through mid-fall) to provide food and cover; (2) emergent, herbaceous wetland vegetation, such as cattails and bulrushes, for escape cover and foraging habitat during the active season; (3) grassy banks and openings in waterside vegetation for basking; and (4) higher elevation uplands for cover and refuge from flood waters during the snake's inactive season in the winter. <i>Low potential to occur in regional wetlands and drainage features.</i>

Birds		
<i>Coccyzus americanus occidentalis</i> Western yellow-billed cuckoo	SE, FT	Western yellow-billed cuckoos breed in large blocks of riparian habitats (particularly woodlands with cottonwoods and willows). Western yellow-billed cuckoos appear to require large blocks of riparian habitat for nesting. Species have been recorded to occur along the Sacramento River. <i>May occur in Rocklin area.</i>
Mammals		
<i>Martes pennant</i> Fisher	C	Fishers inhabit upland and lowland forests, including coniferous, mixed, and deciduous forests. They occur primarily in dense coniferous or mixed forests, including early successional forest with dense overhead cover. <i>Highly unlikely to occur in Rocklin area.</i>
Plants		
<i>Calystegia stebbinsii</i> Stebbins's morning-glory	SE, FE	Clearings in the distinctive chaparral that develops on gabbro. This species is particularly evident after a chaparral fire when most shrub canopies have been killed. Fires appear to stimulate germination of the seed in the soil. <i>Unlikely to occur in Rocklin area as chaparral habitat is not locally common.</i>
<i>Ceanothus roderickii</i> Pine Hill ceanothus	SR, FE	Pine Hill ceanothus grows on gabbro soils. Gabbro soils originate from volcanic rocks (gabbro diorite) that are mildly acidic, rich in iron and magnesium, and often contain other heavy metals such as chromium. <i>Unlikely to occur in Rocklin area as Gabbro soils are not locally common.</i>
<i>Galium californicum ssp. Sierra</i> El Dorado bedstraw	SR, FE	El Dorado bedstraw grows in oak woodland areas, including sites with ponderosa pine and gray pine, on gabbro soils. Gabbro soils originate from volcanic rocks (gabbro diorite) that are mildly acidic, rich in iron and magnesium, but low in calcium. They often contain other heavy metals such as chromium. <i>This species unlikely to occur as it is not known to have a distribution within the City of Rocklin.</i>
<i>Rorippa subumbellata</i> Tahoe yellow-cress	SE, FC	Coarse sand and sandy soils (often among cobbles or boulders) of active beaches, stream inlets, beach dunes, and backshore depressions, generally within a few feet of the local water table, in the shore zone of Lake Tahoe at elevations of 6223-6230 ft. <i>Unlikely to occur, this species is not known to have a local distribution within Rocklin.</i>

<p><i>Orcuttia viscida</i> Sacramento Orcutt grass</p>	<p>X, SE, FE</p>	<p>Sacramento Orcutt grass is found in a limited elevation range of approximately 100–350 feet (30–100 meters) and grows in deep vernal pools that remain flooded for relatively long periods of time. It is associated with ancient alluvial soils, such as prehistoric floodplains. <i>May occur in associated wetland habitat within Rocklin.</i></p>
<p><i>Senecio layneae</i> Layne’s butterweed (=ragwort)</p>	<p>SR, FT</p>	<p>The species grows on dry pine or oak woodland, on serpentine soil. Serpentine-derived soils are formed through a process similar to formation of gabbro soils. Serpentine soils tend to have high concentrations of magnesium, chromium, and nickel, and low concentrations of calcium, nitrogen, potassium, and phosphorus. Most plants do not grow well on gabbro or serpentine soils. <i>May occur in associated habitat within Rocklin.</i></p>

¹(E) Endangered- Listed as being in danger of extinction, (FC) Federal Candidate- Federal candidate to become a proposed species (FE) Federally Endangered- Listed as being in danger of extinction by Federal Regulations, (SE) State Endangered- Listed as being in danger of extinction by the state of California, (FT) Federally Threatened- Listed as likely to become endangered within the foreseeable future by Federal Regulations, (T) Threatened- Listed as likely to become endangered within the foreseeable future, (NMFS) Species under the Jurisdiction of the National Oceanic & Atmospheric Administration Fisheries service- Consult with them directly about these species, (PX) Proposed Critical Habitat- The species is already listed. Critical habitat is being proposed for it, (SR) State rare- Listed as being rare by the state of California, (X) Critical habitat designated for this species.

²See Appendix 7 - Species habitat description provided by USFWS

2.7 Rare Species and Species of Special Concern

Vegetation communities existing within the properties appended by this Plan may provide habitat to various common species of wildlife and may provide suitable habitat for special-status species. If the preserve area is occupied, or becomes occupied, by any listed species, this information will be included in the annual monitoring report to the agencies, and such data will be recorded with the State of California for inclusion in the California Natural Diversity Database (CNDDDB). As defined by CDFW, a Species of Special Concern (SSC) is a species, subspecies, or distinct population of an animal or plant native to California that currently satisfies one or more of the following criteria: is extirpated from the State or, in the case of birds, in its primary seasonal or breeding role; is listed as Federally-, but not State-, threatened or endangered; meets the State definition of threatened or endangered but has not formally been listed; is experiencing, or formerly experienced, serious (nonscyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status; has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for State threatened or endangered status (Service, 2008). In addition to species meeting this criteria found in Table 1: Listed and Special-Status Species Potentially Occurring Within Preserves, additional listed rare species and species of concern within Placer County are

found in Table 2-1: Rare and Species of Special Concern Potentially Occurring Within Preserves. For complete species description, please refer to Appendix 7.

Table 2-1: Rare and Special Species of Concern Potentially Occurring Within Preserves

Special-Status Species	Regulatory Status (Federal; State; Local; CNPS) ¹	Species Habitat ²
Amphibians		
<i>Rana muscosa</i> Southern mountain yellow-legged frog	C	Throughout their range, these species historically inhabited lakes, ponds, marshes, meadows, and streams at elevations typically ranging from 4,500 to 12,000 feet, but can occur as low as 3,500 ft. in the northern portions of their range. <i>Although habitat for this species occurs at higher elevation in the greater Placer County area, the species has not been recorded locally in recent history.</i>
<i>Rana sierra</i> Sierra Nevada Mountain yellow legged frog	PX	Occupy a wide elevation range historically (370 meters to 2,290 meters) with rocky, shaded streams and cool waters originating from springs and snow melt. <i>Although habitat for this species occurs at higher elevation in the greater Placer County area, the species has not been recorded locally in recent history.</i>

¹(C) Candidate- Candidate to become a proposed species, (FC) Federal Candidate- Federal candidate to become a proposed species, (FT) Federally Threatened- Listed as likely to become endangered within the foreseeable future by Federal Regulations, (P) Proposed – Officially proposed in the Federal Register for listing as endangered or threatened, (PX) Proposed Critical Habitat- The species is already listed. Critical habitat is being proposed for it, (SR) State rare- Listed as being rare by the state of California, (X) Critical habitat designated for this species.

²See Appendix 7 - Species habitat description provided by USFWS

3.0 Plan Implementation

The following section outlines the implementation of this Plan. This covers how the plan is organized for regulatory approvals, dependent on individual preserves and availability of funding.

3.1 Plan Organization

To implement this Plan, goals and detailed actions have been developed and are presented by chapter. These goals and actions were developed primarily to meet regulatory requirements and also to support the City of Rocklin's General Plan goals, policies, and objectives. If for any reason this Plan contradicts other documents or policies, this Plan will be the guiding document within any appended preserve area.

3.2 Open Space Management Areas and Applicability of the Plan

3.2.1 Open Space Preserve

An open space preserve considered by this Plan are areas that are protected by the U.S. Army Corps of Engineers in an effort to preserve functions and values of jurisdictional waters of the United States and serve as wildlife habitat. These lands are set aside and protected by recorded deed restrictions or other legally-protective instrument with the goal of keeping the identified property in a condition that preserves its significant biological, hydrologic, and topographic features. Several open spaces have been designated Stream, Wetland and/or Vernal Pools Preserves. For all properties appended to this Plan, the Baseline Condition report will aid the Preserve Manager in setting management goals for individual sites as outlined in section 3.6.

3.3 Legal Protection

All properties appended to this Plan will be encumbered with deed restrictions, recorded with the County of Placer, to be granted to the City of Rocklin. The deed restrictions will limit land uses and management of the preserves to ensure protection of the biotic resources (i.e. protect conservation values). A copy of the Deed Restriction template is included in Appendix 1.

3.4 Transfers

Any subsequent transfer of responsibilities under this long-term management plan to a different land manager shall be requested by the Preserve Manager in writing to the Regulatory Agencies, shall require written approval by the Regulatory Agencies, and shall be incorporated into this long-term management plan by amendment. Any subsequent property owner assumes all Preserve Manager responsibilities described in this long-term management plan and as required in the deed restrictions (or other protective instrument), unless otherwise amended in writing by the Regulatory Agencies.

3.5 Management and Maintenance Responsibility of Privately Owned General Open Space Parcels

Though limited, the City of Rocklin occasionally conducts maintenance in privately owned open space parcels where easements or other interests may exist. This maintenance typically consists of flood control,

invasive plant removal, or wildfire prevention measures. This Plan does not apply to privately owned open space parcels beyond the above-listed maintenance activities, and does not apply to any lands not specifically appended to this Plan.

3.6 Habitat Management Baseline

At the time that any property is proposed to be appended to this plan, a report of the baseline conditions must be submitted to the City of Rocklin. This report must include the following information:

- Baseline conditions
 - Jurisdictional Determination (waters of the US)/ Wetland Delineation
 - NRCS soils map
 - Vegetation map showing distribution, % cover and species of vegetation types
 - Habitat map for known / potential threatened or endangered species
 - Report on the general condition of all wetlands and vernal pools, including location, size, hydrology, topography, and species compositions.
 - Locations of all sample points
 - Fencing and signage map
 - Infrastructure map
 - Cultural / Historic / Archaeological Report
 - ANY / ALL specific management requirements including those resulting from agency permits or consultations, associated with easements, or associated with adjacent lands
 - Copies of any permits issued pertaining to the proposed parcel
- Legal property description (metes & bounds)
- Title Search (including description of any existing easements or claims)
- Recordation of agency approved Deed Restrictions
- PAR (or similar estimate of Land Management Costs and obligations)
- Acceptance Page

This baseline condition report will be used to determine the management (maintenance) baseline for each new preserve that is appended to this Plan. Monitoring and management of each appended preserve will be done in light of the established baseline condition (i.e. the Baseline Report will establish the Management Goal for appended Preserves). Annual monitoring reports will compare the vegetative and hydrologic condition of each preserve to the recorded baseline, and will make management recommendations relative to the baseline. General inspections will evaluate the form and function of wetlands and waters, and will evaluate any changes in jurisdictional waters (erosion / sedimentation / hydrologic changes). Inspections will also provide assessment of vegetative form and function related to composition, potential fuel buildup, habitat value, and invasive species control, and will note any other problems that may have occurred including vandalism, dumping, or needed fence repair or infrastructure. The annual monitoring report will make recommendations for active management.

The baseline condition report must include any / all conditions imposed by agencies, including requirements for specific management for endangered or special status species – or *any other* condition

imposed in perpetuity (as a part of the long term management of the site). Such conditions must be made clear and explicit to the City and must be considered prior to any preserve area being appended to this plan.

The baseline condition must describe any existing use of a preserve *prior to* the preserve being appended to this plan. Such uses may include existing trails or roads, existing outfalls, culverts, or detention basins, or existing easements such as utility line easements or easements for ingress / egress. Other interests must be identified in the title search such as water or mineral rights, or any other claim. Additionally, any structure that is to be maintained by the City must be identified, including (but not limited to) sheds, out buildings, culverts, outfalls, bridges, trails, or roadways. The Baseline Condition Report must include a narrative description of all existing uses, including recreational (passive or active), or any other uses that may be considered under a claim of prescriptive easement.

Representative photo-points will be established for each preserve to demonstrate qualitative condition. Photos will be included in each annual report, and will be taken from the same position and aspect annually.

3.7 Plan Implementation

This Plan will become effective upon final Agency approval. Once approved, all open space preserves currently managed by the City of Rocklin will be governed by this Plan. The City of Rocklin anticipates that additional properties will be appended to the Plan according to the process outlined in section 5, and will be managed pursuant to the Plan. This Plan will be implemented upon signature execution by the Corps and the City of Rocklin (Preserve Manager) – See Signature Page at the beginning of this Plan.

3.8 Regulatory Approvals

The City of Rocklin recognizes the authority of the State of California and the U. S. Government to regulate activities pursuant to state and federal laws. It is anticipated that lands appended to this document may be encumbered by conditions of Regulatory Agencies that specify specific management practices. Upon appending any property to this Plan, the City will manage appended preserve areas in accordance with this Plan, and the requirements of the Regulatory Agencies, and will calculate management costs accordingly.

The City recognizes that some properties appended to this Plan may be the subject of compensatory mitigation including site restoration, re-vegetation, creation or enhancement of wetlands or riparian corridors, or other practices that may be required by the agencies to meet specific performance criteria. The City will make contractual arrangements with the property owner prior to appending properties to this Plan, when site-specific mitigation measures have not been fully satisfied. In doing so, the City will act as the long term manager / owner.

The following Regulatory Agencies may retain jurisdictional oversight and enforcement requirements for properties managed pursuant to this Plan.

REGULATORY AGENCIES;

- U.S. Army Corps of Engineers
- National Marine Fisheries Service
- U.S. Fish & Wildlife Service
- U.S. Environmental Protection Agency
- State of California Department of Fish & Wildlife
- State of California Regional Water Quality Control Board

3.9 Regular Plan Updates.

The City intends to conduct an update of this Plan every five years. At minimum, these updates will include updating the GOSMP graphics to show the most recent Open Space additions; updating the monitoring, management, and maintenance practices based on monitoring data collection, staff feedback, and research indicating that a change in procedures would be beneficial; updating Goals and Actions as tasks are completed; and updating the staff responsibility designations for GOSMP tasks, if they have changed.

Changes in monitoring, management, and maintenance actions within the Preserve will require amending the GOSMP and approval of the Corps. If an amendment is not required when the GOSMP is updated the city will not need to contact the Corps.

3.10 Amending the Plan

The Preserve Manager and the Regulatory Agencies may meet and confer from time to time, upon the request of any one of them, to revise the long-term management plan (General Open Space Management Plan) to better meet management objectives and preserve the habitat and conservation values of the properties appended to this Plan. Any proposed changes to the long-term management plan shall be discussed with the Regulatory Agencies and the Preserve Manager. Any proposed changes will be designed with input from all parties. Amendments to the long-term management plan shall be approved by the Regulatory Agencies in writing, shall be required management components, and shall be implemented by the Preserve Manager.

If the CDFW or USFWS determine, in writing, that continued implementation of the long-term management plan would jeopardize the continued existence of a state or federally listed species, any written amendment to this long-term management plan, determined by either the CDFW or USFWS as necessary to avoid jeopardy, shall be a required management component and shall be implemented by the Preserve Manager.

Any amendment to this Plan, including appending additional Preserve Properties, will be maintained in electronic copy and hardcopy by the Preserve Manager.

3.11 Adaptive Management

Adaptive management means an approach to natural resource management which incorporates changes to management practices, including corrective actions as determined to be appropriate by the Regulatory Agency in discussion with the Preserve Manager. This technique allows the Preserve Manager to make changes to support specific land management goals (e.g., management goals may change if endangered species colonize a specific preserve site). Adaptive management may also include those activities necessary to address the effects of climate change, fire, flood, or other natural events, force majeure, etc. Before considering any adaptive management changes to the long-term management plan, the Preserve Manager will consider whether such actions will help ensure the continued viability of Preserve's biological, hydrological, and physical resources, and whether the changes support the goal of maintaining (or improving upon) the established Baseline Condition. The long-term management of the Preserve will include elements of the U.S. Department of the Interior Adaptive Management Technical Guide (Williams, et al 2007, Appendix 8).

For example, using the adaptive management strategy, the long-term success of vernal pool fairy shrimp populations within the Preserve could be addressed. Using the principals of adaptive management, the success of fairy shrimp within the Preserve would be considered a goal. The objective would be the presence of the fairy shrimp and would be determined during annual monitoring. If fairy shrimp are detected, it is safe to assume that current management activities should continue. However, if fairy shrimp are not detected, it is imperative under the principals of adaptive management to have the means to develop an alternative management strategy to attain the goal. An alternative strategy could include an additional inoculation of seed-bearing soil from a known shrimp-occupied pool within a pre-defined area, preferably nearby. If, in the process of monitoring, the constructed basin is found to not support "typical" vernal pool hydrology, an alternate management strategy could include soil analysis and excavation in a different location. Alternate management strategies will continue to be proposed and implemented until the desired goal is achieved.

Any adaptive management that significantly changes the overall land management goal for a particular preserve, or deviates from the Baseline Condition (goal), must be conducted in conjunction with the Regulatory Agency, particularly where such adaptive management is intended to provide improved condition to support special status species.

3.12 Active Management

Active management will be conducted on each preserve area designed to maintain the baseline (at minimum). Management may include such activities as grazing, removal of exotic or invasive plants, and minor maintenance repair to fencing, existing culverts and outfalls, removal of garbage, repair of vandalism, maintenance of existing roadways or trails needed for preserve management. Maintenance may also include work on structures identified as a part of the baseline, including existing storage sheds or out buildings.

Active management is intended to support the baseline condition (management goal). Any active management activities *not specified* in this plan must be approved by the agencies prior to implementation. Such activities may include restorative site grading or reconstruction of infrastructure elements (e.g. replacement of a bridge, road, or culvert). Some of these activities may trigger permitting

requirements pursuant to State or Federal law. In these cases, the Preserve Manager will attain all necessary permits prior to implementation of the land management.

4.0 Open Space Administration and Funding

4.1 Administrative Goals

This Plan requires the coordination of the Preserve Manager with financial resources, staff, and consultants and contractors as needed. This Plan is intended to ensure decisions made between City departments, and within these departments, are made consistently. The Preserve Manager is intended to be the primary responsible party for all management decisions regarding properties managed pursuant to this Plan; however it is essential that the Preserve Manager maintain effective lines of finance, and is able to balance management goals against other public health and safety concerns. In cases where competing interests conflict with the management goals for a Preserve, this Plan is the guiding document. The Goals and Actions outlined in Table 4-1 *Administrative and Funding Goals and Actions* are intended to ensure that decisions are made consistently and that coordination between City departments, as well as within the departments is efficient.

4.2 Open Space Administration – Personnel and Responsibilities

The roles outlined below for Preserve Manager and Monitoring Biologist make up the primary personnel who will oversee, monitor, and coordinate the maintenance of the properties appended to this Plan.

4.2.1 Preserve Manager

The Preserve Manager is the City of Rocklin, Director of the Department of Public Services. The Preserve Manager, and subsequent Preserve Managers upon transfer (if any), shall implement this long-term management plan, managing and monitoring all preserve properties appended to this Plan in perpetuity to preserve habitat and conservation values in accordance with the deed restrictions and this long-term management plan. Long-term management tasks shall be funded through the City of Rocklin's Community Facilities Districts (CFD), numbers 5 and 6, and by the City of Rocklin's General Fund. The Preserve Manager shall be responsible for providing an annual report to the Regulatory Agencies detailing the time period covered, an itemized account of the management tasks and recommendations for management tasks for the following monitoring period. The Preserve Manager will be responsible for all aspects of land management pursuant to this plan, and will coordinate with City Departments, the Monitoring Biologist, and the Regulatory Agencies as necessary to meet management goals. The Preserve Manager will additionally seek necessary permits when required, (such as a Section 404 permit pursuant to the Clean Water Act). Additionally, any agency consultation that may be required by Regulatory Agencies (such as Section 7 consultation pursuant to Endangered Species Act) must be completed for any regulated activity, and will be the responsibility of the Preserve Manager.

The City of Rocklin Director of Public Works is assisted in the duties of the Preserve Manager by the Environmental Services Manager, the Stormwater Engineering Technician and the Public Works Inspector. The Environmental Services Manager prepares and coordinates environmental permit applications, manages Open Space Preserves, and monitors reports and contracts to ensure compliance with the Regulatory Agencies. The Stormwater Engineering Technician coordinates Open Space monitoring and reporting, and manages the grazing program. The Public Works Inspector and the Stormwater Engineering Technician coordinate to maintain the baseline condition of the Preserve.

The Preserve Manager will provide the qualifications to the Regulatory Agencies, of all management parties, including the Preserve Manager, designated Monitoring Biologist(s), and any other parties employed by the City for purposes of preserve monitoring or management.

The City of Rocklin, as the Preserve Manager, will retain the following management responsibilities for all preserve areas subject to this Plan:

- Applying for, implementing, and monitoring use of federal and state grants
- Participating in budget preparation and administration including: overseeing expenditures, submitting justification for budget items and preparing requests for proposals, agreements, and contracts Acting as liaison with other departments, governmental agencies, community groups, and the general public concerning the coordination of activities related to department or City operations
- Providing interdepartmental coordination for resource management programs and their implementation requiring the balancing of public recreation opportunities with good land stewardship
- Ensuring City operations comply with federal and state regulations and permits
- Ensuring that City operations complement regional watershed planning and invasive species efforts
- Implementing all requirements of this Plan, including monitoring/reporting, adaptive management, and Agency Coordination as needed.
- Coordinating responses to citizen inquiries and complaints, and educating the public about the value of our natural resources and how to preserve them
- Researching, evaluating, and preparing statistical, financial and demographic data for staff reports, studies, surveys, and analyses
- Preparing administrative studies on organizational and administrative procedures
- Evaluating existing and proposed administrative policies, practices, and techniques and monitoring quality assurance for programs and facilities
- Investigating complaints and recommending corrective actions as necessary to resolve complaints
- Recommending new policies and procedures
- Reviewing construction activities within and adjacent to the Preserve

- Active management to meet Management Goals (typically to maintain Baseline Condition)
 - Invasive plant/animal management
 - Fire (fuel) management
 - Maintenance of fencing / signage
 - Garbage removal / vandalism/ unauthorized structures or plantings
 - Sedimentation / erosion
 - Management for special status species
 - Infrastructure maintenance

4.3 Use of Qualified Personnel/Monitoring Biologist

If the Preserve Manager does not have the appropriately trained staffed to carry out any of the specialized tasks required by this Plan, he or she will ensure that monitoring and management is conducted by professionals who retain the qualifications for management of sensitive natural resources.

In some cases, this may include personnel with specific skill in management of cultural resources, or specific permits for management of threatened or endangered species (for example). The Preserve Manager will provide all necessary personnel to meet all management responsibilities, including monitoring and management activities.

Duties of the Qualified Personnel may include but are not limited to the following:

- Baseline condition monitoring including vegetation condition, wetland and habitat function, and other responsibilities outlined in the Baseline Condition report.
- Evaluating thatch accumulation and recommending removal if necessary
- Evaluating grazing practices and recommending any necessary changes
- Evaluating the presence of invasive species and recommending management
- Conducting surveys and data collection within the Preserve and preparing reports
- Evaluating site conditions and recommending remedial action to the Preserve Manager
- Assisting in the review or planning of restoration activities, educational activities within the Preserve, and other tasks such as grant proposals
- Working with the Preserve Manager and Regulatory Agency

4.4 Changes in Personnel

If timing allows, the outgoing and incoming personnel will meet and the former will advise the latter of trends, problem areas, and any administrative difficulties.

4.5 Open Space Funding and Management Prioritization

4.5.1 Funding Goals

This Plan is dependent on available funding; therefore it is the City of Rocklin's goal to use existing funding efficiently and to acquire additional funding through grants and other sources. Preserves will be appended to this Plan with identified and confirmed funding sources, and funding amounts will be justified by analysis of management needs. The City of Rocklin will commit to funding management of Preserves appended to this plan, in perpetuity.

Table 4-1. Administrative and Funding Goals and Actions

Goal 4-1: Emphasize Coordination between City departments that are involved with Preserve issues or that conduct work within the Preserve	Goal 4-2: Accept or acquire new open space areas consistently and objectively	Goal 4-3: Periodically revisit staff organization, position descriptions, and responsibilities	Goal 4-4: Optimize Preserve funding
Action 4-1-1: Coordinate between City maintenance crews and the Preserve Manager	Action 4-2-1: Rely on General Plan policies to guide the dedication of preserves to this plan. Consider parcels that include linkages to other open space parcels when evaluating dedication.	Action 4-3-1: Ensure staff positions are properly structured to efficiently address Preserve management needs.	Action 4-4-1: Optimize funding through partnerships and volunteer opportunities.
Action 4-1-2: Coordinate between planning, engineering, parks, fire, and traffic staff and the Preserve Manager regarding development or construction within or adjacent to the Preserve	Action 4-2-2: The Preserve Manager will follow the process established in section 5 prior to accepting parcel dedications.	Action 4-3-2: Monitor the effectiveness of Preserve administration during the annual budgeting process.	Action 4-4-2: At the City’s discretion, pursue federal and state funding

4.5.2 City of Rocklin Funding

Funding for properties managed pursuant to the Plan will be provided by the City of Rocklin Community Facilities District, numbers 5 and 6 and the City of Rocklin General Fund. All preserve areas appended to this plan will have annual maintenance and management costs that will be funded by the CFD, to the level determined in the attached analysis of annual operating costs (See Template, Appendix 9). CFD funding will pay for all expenses associated with long-term management including time and funding needed to conduct the basic monitoring site visits and reporting, weed mowing, trash removal, fence repair, and a prorated calculation of funding needed to fully replace the fences every 50 years. Any additional infrastructure maintenance needs that may be unique to a Preserve will be identified as a part of the Baseline Condition and will be included in the analysis of operating costs. The City of Rocklin maintains a 15 year maintenance schedule which is used to project the costs of repairing and replacing city infrastructure including the Open Space Preserves. In addition, CFD 5 is currently taxing at a rate substantially below the maximum allowable tax rate, and both CFD 5 and 6 maintain a reserve to adequately fund long term maintenance commitments. Please refer to Appendix 10 for a budget of operation and management costs for the existing Open Space Preserve.

As part of the funding for the management of the Open Space Preserve, CFD 5 and 6, and the general fund have contingency funds built in. These funds are in place for emergencies such as vandalism of fencing, signage, or other unanticipated needs.

4.5.3 Management Prioritization for Required Actions

Although not expected, in some circumstances (e.g. an approved change in management goals, or unforeseen maintenance cost such as a fire) prioritization of management or monitoring tasks, including tasks resulting from new requirements (or adaptive management), may be necessary if insufficient funding is available to accomplish all management / monitoring tasks. The Preserve Manager and the Regulatory Agencies shall discuss task priorities and funding availability to determine which tasks will be implemented. In general, tasks are prioritized in this order: 1) required by a local, state, or federal agency – this may include such activities as endangered species management or management for public health and safety; 2) tasks necessary to maintain or remediate habitat quality; and 3) monitoring tasks. Resources, including labor, equipment and materials necessary to implement priority tasks, will also be considered. Final determination of task priorities in any given year of insufficient funding will be determined in consultation with the Regulatory Agencies. A schedule of required tasks can be seen below in table 4-2.

Table 4-2. Required Tasks

	Biological Inspection	General Inspection	Residual Dry Matter Inspection	Maintenance Activity	Reporting
July					
August					
September		All Areas	All Areas		
October				Correct all issues found in previous inspections	
November	Orchard Creek Whitney Ranch				
December				Correct all issues found in previous inspections	Grazing Summary to City by Dec 31
January		Orchard Creek Whitney Ranch			
February	Stanford Ranch Sunset West	Claremont		Correct all issues found in previous inspections	
March				Correct all issues found in previous inspections	
April	Claremont Stanford Ranch Sunset West				
May	Orchard Creek Whitney Ranch			Correct all issues found in previous inspections	
June				Correct all issues found in previous inspections	Annual Report to Corps by June 31

5.0 Adding New Open Space Preserves and Management Prior to Transfer

This document provides an overall plan by which these existing and proposed Open Space Preserves will be funded and managed in perpetuity, and intends to allow the city to add additional holdings as they become available by appending them to this management plan. This section of the document describes the methodology by which preserves will be appended to this Plan.

5.1 Development Project Proponent Responsibilities

To be appended to this Plan, the project proponent must provide:

- A copy of all applicable environmental permits, including local, State and Federal permits
- A map Identifying the location of the open space boundary as approved by the Regulatory Agencies
- Identification and installation of any improvements required by the Agencies and the City
- When adding a new property to this Plan that requires an amendment to this Plan, the project proponent must provide the City a list of special permit requirements for management and funding to append to the Plan.
- Baseline Conditions Report
 - Jurisdictional Determination (waters of the US)/ Wetland Delineation
 - NRCS soils map
 - Vegetation map showing distribution, % cover, and species of vegetation types
 - Habitat map for known / potential threatened or endangered species showing occupancy and condition of the habitats
 - Report on the general condition of all wetlands, including location, size, hydrology, topography, and species compositions.
 - Locations of all sample points
 - Fencing map
 - Infrastructure map
 - Cultural / Historic / Archaeological Report
 - ANY / ALL specific management requirements including those resulting from agency permits or consultations, associated with easements, or associated with adjacent lands
 - Established photo-point monitoring stations (including a map)
- Legal property description (metes & bounds)
- Title Search (including description of any existing easements or claims)
- Recordation of agency approved Deed Restrictions (Template is in Appendix 1)
- PAR (or similar estimate of Land Management Costs and obligations)
- Acceptance Page

The project proponent may be required to pay a processing fee to the City to append to this Plan.

Management and maintenance of the preserve until the preserve is appended is the responsibility of the property owner and shall be conducted in accordance with this Plan. If there are site-specific compensatory mitigation measures that have not been fully satisfied, the City will make contractual arrangements with the DA permit holder to ensure that the compensatory mitigation measures are the responsibility of the DA permit holder until such time that the compensatory mitigation measures are completed to the satisfaction of the permitting agency(ies). The contractual arrangements would consist of the DA permit holder retaining financial and other responsibilities for the monitoring, reporting, and performance of any necessary remediation/corrective actions to fully satisfy the compensatory mitigation measures. Once the contractual arrangement is in place, the City will take ownership and append the entire preserve to this Plan and be responsible for the maintenance of the preserve (less the areas subject to compensatory mitigation) per the requirements of this Plan.

5.2 Management during Adjacent Project Construction

In the event that there are any construction or maintenance activities that may require use of heavy equipment within or adjacent to a preserve, for example maintenance of utility lines within established easements, the following protection measures will be implemented at a minimum:

- Improvement plans for projects adjacent to preserves must show the boundaries and label the preserve areas.
- Evidence that any earthmoving activities within the preserve have obtained all necessary agency approvals.
- Construction personnel will be educated on the preserve goals and provided detail necessary to avoid damage, including necessary information on protected resources or species.
- The minimum necessary construction area will be used.
- The Preserve Manager will set construction limits that do not encroach on any protected wetlands and minimize disturbance to the uplands.
- The Preserve Manager will set construction limits that do not encroach on any known archaeological or cultural resource.
- The limits of the construction area and the preserve boundary will be delineated using high visibility construction fencing. For projects within the preserve, a qualified biologist will flag all wetlands within 25 feet of the construction boundary.
- A Stormwater Pollution Prevention Plan (SWPPP) will be prepared and best management practices will be implemented.
- The Preserve Manager will require a qualified monitoring biologist to be present during activities within 250 feet of a preserve area.

5.2.1 Post Construction Remediation

Post construction remediation may include hydroseeding areas that were disturbed by equipment, restoring the original grade where the intent was not to alter it (e.g. smoothing out tire tracks), removing debris, restoring impacted waters of the U.S., or other activities necessary to return the area to the baseline condition.

Revegetation of disturbed soil within the Preserve shall be done using only plants and seed mixes native to the region. Removal and clean-up of trash that blows in from construction adjacent to or within the Preserve shall be the responsibility of the entity performing the construction. Clean-up shall occur on a daily basis. Once construction is complete, all temporary construction fencing, temporary erosion control materials (e.g. silt fencing, wattles, etc.), and other debris shall be removed from the Preserve and discarded appropriately.

Bonding and monitoring is required as outlined in sections 8.3.2 and 8.3.3 if waters of the U.S. within the Preserve are impacted. Restoration and monitoring shall be conducted depending on the impact type as outlined in section 8.3 or as required by the Corps.

In the case where construction activities are directly related to the Preserve (i.e., the Preserve is an Open Space set-aside requirement of a larger development project), the project proponent will be expected to fund all required protective measures. In cases where the City cannot reasonably require

project proponents to fund such activities, the City as the Preserve Manager, may need to provide protective measures.

5.3 Dedication Process for Open Space Preserves

The City will take management and maintenance responsibility for Open Space Preserves once adjacent development is complete, permit obligations have been met, contractual arrangements with the City have been made for any compensatory mitigation measures, and the project proponent has completed the transfer process/obligations outlined in this section. The procedures for dedicating an Open Space Preserve to the City are outlined below:

Prior to dedication, the documents/procedures outlined in section 5.1 must be submitted/completed and the Preserve Manager or other designated City staff member will conduct a walk-through with the Open Space owner. The purpose of this walk-through will be to:

- Ensure that permanent fencing and signs have been installed.
- Ensure trash and debris has been removed from the Open Space Preserve.
- Ensure that any areas of erosion, sedimentation, or vandalism resulting from surrounding development have been corrected.
- Ensure that the project proponent conducted appropriate habitat maintenance activities prior to turn over to the City (e.g., invasive plant removal) such that the City is able to accept the Open Space Preserve in good condition.
- Ensure that all permit conditions have been met prior to dedication.
- Proof from regulating agencies, such as a letter, stating that all mitigation requirements have been met.

Upon dedication to the City, the Open Space Preserve will be managed by the City according to this Plan.

6.0 Biological Resource Monitoring and Surveys

The overriding management goal of the Plan is the maintenance of existing biological functions and values determined to exist on a specified property at the time that that property is appended to the plan (Baseline Condition). The City of Rocklin intends to manage preserves so that they continue to provide habitat to managed species, and continue to provide the suite of physical, chemical and biological functions associated with existing waters (wetlands and other waters) and vegetation. The City will, at a minimum, commit to maintenance of the baseline condition determined to exist at the time of property transfer, but will endeavor to improve site conditions beyond existing conditions when possible (i.e. removal of exotic or invasive species to below the baseline condition). If future opportunity is presented to enhance habitat conditions, the City recognizes that such improvement may be subject to regulatory agency permitting. An annual report will be submitted to the Regulatory Agencies on site conditions. All monitoring and survey activities are intended to inform the Preserve Manager and the agency personnel on the on-going status of the preserve areas, to inform whether management goals are being met, whether management activities need to be modified, and to report on on-going costs associated with management. The following monitoring methods are presented as typical requirements for Preserves, but may be adjusted by the Preserve Manager depending on the size and complexity of the appended property.

6.1 Biological Resource Surveys

Properties appended to this Plan are subject to inventories and surveys to establish the presence and location of native species and their habitat, to document their continued survival, and inform and gauge the effectiveness of management efforts. Adaptive management measures may be taken in response to management needs. Changes in overall management goals may require changes in survey / monitoring / reporting requirements. Annual survey reports will make recommendations for any proposed changes, as well as recommendations to more effectively meet established management goals.

6.1.1 Requesting Authorization and Reporting

The Preserve Manager recognizes that some monitoring and survey efforts may require special permits and that the following agencies may need to be consulted prior to some survey efforts; U.S. Fish & Wildlife Service, National Marine Fisheries Service/NOAA Fisheries, and/or California Department of Fish & Wildlife CDFW.

6.2 Wetland and Riparian Monitoring

This Plan outlines the basic biological monitoring of riparian and non-vernal pool wetland areas with the objective of maintaining and preserving the preserve site's waters of the U.S. (including wetlands). Wetland and riparian monitoring shall be conducted twice a year, once in the spring (March) and once in the summer months (June-July). General topographic conditions, hydrology, general vegetation cover and composition, invasive species, erosion, will be noted, evaluated and mapped during a site examination in the spring. Notes to be made will include observations of plant species encountered, water quality, general extent of wetlands, and any occurrences of erosion, and weed invasion. Monitoring is to be conducted in light of the Baseline Condition; any deviations in hydrologic or biological condition will be noted, and recommendations made in the annual report to the agencies.

6.2.1 Monitoring Methods

General Riparian and Wetland Condition

As stated previously, the general condition of the riparian areas and non-vernal pool wetlands will be established in the Baseline Condition report, and all annual reports will note changes relative to the Baseline condition (or other established Management Goal), including changes in vegetation species composition, changes in hydrology or topography, and changes in overall condition (including land practices on adjacent properties with the potential to affect the Preserve function). Maintenance status of infrastructure, including fencing, allowable trails, roadways, etc., and any negative disturbance, including animal (e.g. boring insects, beaver damage, and feral animals) / human damage (e.g. vandalism or dumping) will be included. Reference sites for photographs shall be established as a part of the baseline condition report, and a site map showing the reference sites shall be prepared for the Preserve. Reference

Table 6-1. Biological Resource Surveys and Inventories Goals and Actions

	Open Space Mapping			Wildlife/Special Status Animal Survey				Vegetation/Special Status Plant Surveys		
	Goal 6-1: Maintain an accurate map of Waters of the U.S. within Preserve	Goal 6-2: Identify and map quality of native communities. Prioritize areas to receive resources with priority given to high quality habitat.	Goal 6-3: Create and maintain detailed maps of Preserve areas.	Goal 6-4: Create and maintain an inventory of potential habitat and occupied habitat for special status species that are likely to occur within the Preserve	Goal 6-5: Maintain existing populations of Endangered Species.	Goal 6-6: Conduct surveys for other native animal species	Goal 6-7: Maintain a database of beaver dams within the Preserve	Goal 6-8: Track changes in vegetation community species composition	Goal 6-9: Conduct surveys for special-status plants that are likely to occur within the Preserve	Goal 6-10: Maintain an oak tree canopy within the Preserve
Annual Surveys		<p>Action 6-2-1: Identify and prioritize specific areas where restoration and enhancement opportunities exist</p> <p>Action 6-2-2: Create a GIS-based map of each habitat management unit showing quality of habitat</p>		<p>Action 6-4-1: Utilize annual counts of anadromous salmonids listed as threatened or endangered under ESA, if available.</p> <p>Action 6-4-2: Annually visit known Swainson's hawk and burrowing owl nest/burrow locations during nesting season to document continued use.</p>	Action 6-5-1: Conduct surveys for Valley Longhorn elderberry beetle and vernal pool fairy shrimp as outlined in section 6-14-4 and 6-13-4.	Action 6-6-1: Conduct general bird surveys twice per year to monitor seasonal bird use.	Action 6-7-1: Identify problematic beaver dams annually.	Action 6-8-1: Establish set plots and conduct specific vegetation monitoring annually as outlined in sections 6.2, 6.3, and 6.4.	<p>Action 6-9-1: Annually conduct surveys for known occurrences of special-status species plants using agency promulgated survey methods.</p> <p>Action 6-9-2: If surveys of known occurrences demonstrate that the species is no longer present, use adaptive management to determine what action will be taken.</p>	
Periodic Surveys	Action 6-1-1: Conduct a delineation of all waters of the U.S. within the Preserve according to the most current U.S. Army Corps of Engineers manual. Differentiate between created/restored and naturally occurring waters of the U.S.	Action 6-2-3: Establish and map reference creek conditions for use as a benchmark for evaluating restoration potential, designing restoration projects, and to guide maintenance activities Goal 6-2-4: Reassess the mapping efforts and update them every 10 years.		<p>Action 6-4-3: Every five years, conduct nest/burrow surveys in appropriate area not known to support Swainson's hawk nests or burrowing owl burrows.</p> <p>Action 6-4-4: Every five years, conduct surveys for evidence of VELB use in elderberry shrubs.</p>		Action 6-6-2: Conduct amphibian and reptile surveys every five years and maintain a list of species present during each monitoring year.			Action 6-9-3: Every five years, conduct surveys for special-status plants in appropriate habitat where they have not been previously located using agency-promulgated survey methods.	<p>Action 6-10-1: Create a species-specific oak tree map using remote sensing and ground-truthing.</p> <p>Action 6-10-2: Map all native oak trees greater than three feet in height with a sub-meter accurate GPS unit. Collect species, DBH, height estimate, and health data on each tree.</p>
Annual Mapping Efforts				Action 6-4-5: Annually maintain a GIS-based map of all habitats that have been surveyed and the locations where the target species have been found. Submit location records to the CNDDDB			Action 6-7-2: Using existing data and fieldwork, create a GIS-based map of the locations of all beaver dams within the Preserve.			
Periodic Mapping Efforts	Action 6-1-2: Create a GIS-based map of all water of the U.S. and create a consistent numbering system for monitoring and data management purposes.		Action 6-3-1: Create consistent field maps of all Preserve areas showing waters of the U.S.					Action 6-8-2: Develop a detailed vegetation community map based on aerial assessment and field verification and update it every ten years.		Action 6-10-3: Develop a GIS-based map combining the spatial data with the descriptive tree data.
Update Frequency	Action 6-1-3: Update the delineation every ten years.		Action 6-3-2: Update field maps every five years.			Action 6-6-3: Annually maintain a City animal list.	Action 6-7-3: Update the map annually for use in beaver management actions.	Action 6-8-3: Annually maintain a GIS-based map of all habitats that has been surveyed and the locations where the target species have been found. Submit location records to the CNDDDB.	Action 6-9-4: Annually maintain a GIS-based map of all habitats that have been surveyed and the locations where the target species have been found. Submit records to the CNDDDB.	<p>Action 6-10-4: Revisit the oak tree survey every ten years to track changes in City-wide species health, species compositions and survival, and to add to new trees that reach three feet in height.</p> <p>Action 6-10-5: Update the canopy coverage map every ten years.</p>

Table 6-2. Annual Monitoring by Habitat Management Unit

Goal 6-11: Monitor Wetland and Riparian areas twice throughout the year.	Goal 6-12: Monitor Oak Woodland/Savannah two times throughout the year.	Goal 6-13: Monitor Vernal Pool Grassland two times throughout the year.
Action 6-11-1: Identify problematic erosion.	Action 6-12-1: Monitor thatch levels at the 20 oak woodland/savannah plots annually.	Action 6-13-1: Monitor thatch levels at the 30 grassland monitoring plots annually.
Action 6-11-2: Monitor changes in species composition.	Action 6-12-2: Track changes in oak species composition and regeneration at a minimum of 20 oak woodland/savannah plots every five years.	Action 6-13-2: Conduct vernal pool floristic monitoring annually within 20% of vernal pools.
Action 6-11-3: Identify problematic beaver dams.	Action 6-12-3: Identify problematic stormwater run-off or beaver dams.	Action 6-13-3: Monitor a minimum of 30 grassland plots each year.
Action 6-11-4: Identify populations of existing or newly established invasive plant species.	Action 6-12-4: Identify populations of existing or newly introduced invasive plant species.	Action 6-13-4: Track changes in listed vernal pool invertebrate occurrences/populations by conducting surveys twice per year within 20% of vernal pools.
Action 6-11-5: Monitor the success of enhancement and restoration efforts.	Action 6-12-5: Monitor the success of enhancement and restoration efforts.	Action 6-13-5: Identify problematic changes in vernal pool hydrology by monitoring 20% of the vernal pools once in the wet season and once in the dry season.
Action 6-11-6: Identify any other human-caused disturbances.	Action 6-12-6: Identify any other human caused disturbances.	Action 6-13-6: Identify populations of existing or newly introduced invasive plant species.
		Action 6-13-7: Monitor the success of enhancement and restoration efforts.
		Action 6-13-8: Identify any other human-caused disturbances.

Table 6-3. Biological Resource Survey and Inventory Summary

Action Summary	Responsible Party	Timing
Conduct City-wide delineation of Waters of the U.S.	Preserve Manager/Monitoring Biologist/GIS Analyst	Every 10 years during April-May
Prepare a detailed vegetation community map.	Preserve Manger/Monitoring Biologist/GIS Analyst	Update every 10 years once developed
Prepare a map showing high quality, marginal quality, and degraded native communities.	Preserve Manager/Monitoring Biologist/GIS Analyst	Every 10 years during May-June
Oak tree canopy coverage map	Monitoring Biologist/GIS Analyst	Every 10 years during May-June
Create consistent field maps	Preserve Manager/Monitoring Biologist/GIS Analyst	Every 5 years once developed
Oak tree inventory	Preserve Manager/Monitoring Biologist/GIS Analyst	Every 10 years during May-July
Map special-status species habitat and occurrences.	Monitoring Biologist/GIS Analyst	Update with new occurrences annually once developed.
Conduct surveys for special-status plants	Monitoring Biologist	Every 5 years in potential habitat that is not occupied and annually for known occurrences during April-June as appropriate for the species.
Conduct surveys for Swainson's hawks nesting and burrowing owls.	Monitoring Biologist	Every 5 years in potential habitat that is not known to be occupied and annually for known nest/burrows during April-August for the species.
Conduct surveys for Valley elderberry longhorn beetles.	Monitoring Biologist	Every 5 years in potential habitat April-June
Allow and utilize annual counts of anadromous salmonids	Preserve Manager Dry Creek Conservancy	Annually during each run
Conduct general bird surveys.	Monitoring Biologist	Twice per year
Conduct amphibian reptile surveys	Monitoring Biologist	Every 5 years in potential habitat that is not known to be occupied and annually for known occurrences – Survey timing as appropriate for the species
Maintain an inventory/map of beaver dam locations.	Preserve Manager/Creek Crew/Monitoring Biologist	Update annually once developed

photographs will be taken of the overall wetland / riparian setting as a part of the Baseline Condition and re-taken at the same location and aspect for comparative reference. A list of observed plant species will be included (associated with vegetative community, wetland, riparian, upland, etc) as a part of the Baseline Condition Report. Annual monitoring of riparian and wetland areas will include monitoring for changes in vegetative composition relative to established baseline conditions.

Invasive Plant Monitoring

Invasive species threaten the diversity and abundance of native species through competition for resources, predation, parasitism, and interbreeding with native populations, transmitting diseases, or causing physical or chemical changes to the invaded habitat. Invasive plant species will be monitored and recommendations for eradication will be included in monitoring reports. Species identified by the California Invasive Plant Council will be specifically targeted for removal (Refer to Appendix 11 - California Invasive Plant Inventory, California Invasive Plant Council, 2006). Monitoring surveys will include a qualitative assessment (e.g. visual estimate of cover) of potential or observed noxious weeds or other non-native species invasions, especially in or around any wetland features. Additional actions to control invasive species will be evaluated and prioritized. The Preserve Manager shall additionally consult the following sources for guidance on what species may threaten the site and on management of those species: The California Department of Food and Agriculture (CDFA) list of "noxious weeds" that are subject to regulation or quarantine by county agricultural departments, the California Department of Food and Agriculture's Integrated Pest Control Branch, and the University of California State Integrated Pest Management Program list of "Exotic and invasive pests and diseases that threaten California's agricultural, urban, or natural areas".

Listed Riparian and Wetland Threatened/Endangered Plant Species Monitoring

Riparian and wetland communities existing within the properties appended by this Plan may provide habitat to various common species of wildlife and may provide suitable habitat for special-status species. If the preserve area is occupied, or becomes occupied, by any listed species, this information will be included in the annual monitoring report to the agencies, and such data will be recorded with the State of California for inclusion in the California Natural Diversity Database (CNDDDB). Adaptive management, including changes to the monitoring protocols, may occur as a result of colonization of a preserve area by listed (protected) species. Please refer to Appendix 7. Population assessment surveys will be conducted every year to monitor status. The annual survey dates will be selected during the appropriate blooming period and will generally occur from late March through April depending on the timing of the blooming period each year. Occupied habitat will be mapped and numbered to allow repeatable data collection over subsequent survey years. Abundance will be assessed semi-quantitatively using broad abundance categories, i.e., 0, 1 - 100, 101 - 500, 501 - 1,000, and >1,000 plants. Changes to occupied habitat, such as changed hydrology or vegetation composition, should be observed and recorded.

Listed Riparian and Wetland Threatened/Endangered Animal Species Monitoring

Riparian and wetland communities existing within the properties appended by this Plan may provide habitat to various common species of wildlife and may provide suitable habitat for special-status species. If the preserve area is occupied, or becomes occupied, by any listed species, this information will be included in the annual monitoring report to the agencies, and such data will be recorded with the State of California for inclusion in the California Natural Diversity Database (CNDDDB). Please refer to Appendix 7. Status of the listed species will be monitored every year by conducting population assessment surveys. The annual survey dates will be selected during the appropriate period each year. Other tasks to enhance or monitor habitat characteristics for animal species shall be implemented as needed.

6.2.2 Monitoring Timeline

Monitoring of wetland and riparian habitat will be conducted twice a year. General habitat conditions will be assessed in spring and invasive plants and general habitat conditions will be monitored in summer/fall.

6.2.3 Actions, Responsible Parties and Timing

Table 6-4 below summarizes the actions, responsible parties, and timing for riparian and wetland management and monitoring.

Table 6-4. Riparian and Wetland Management and Monitoring Summary

Action Summary	Responsible Party	Timing
Conduct invasive plant monitoring and asses general habitat condition.	Preserve Manager/ Monitoring Biologist	Spring and Summer
Provide management recommendations, if needed	Monitoring Biologist	As soon as needed following inspections based on the urgency of the recommendation
Implement recommended management actions	Preserve Manager	Within 60 days of recommendation or as soon as conditions allow.

6.3 Vernal Pool Grassland Monitoring

This Plan outlines the basic biological monitoring of vernal pool grassland areas with the objective to maintain and preserve the preserve site's waters of the U.S. including wetlands. Properties appended to this Plan shall monitor vernal pool grasslands four times per year. These monitoring surveys will consist of observations of the perimeter of the area, as well as meandering transects through its interior to determine general condition.

6.3.1 Monitoring Methods

20% of vernal pools within the properties appended to this Plan will be monitored. Vernal pools to be monitored will be chosen at random, as to represent the full range of vernal pool habitats and sizes. In general, the same group of vernal pools will be monitored year each to allow maintenance and proper effectiveness tracking over time. Sample monitoring data sheets are included in appendix 12.

General Vernal Pool Grassland Condition

The general condition of the vernal pool grasslands will be noted, including changes in vegetation species composition, compared to the Baseline Condition for the preserve area. Disturbances, including animal- and human, should be noted as well, including fencing repair needs or trash removal. Reference sites for photographs shall be established as a part of the Baseline Condition and a site map showing the reference sites shall be prepared for the Preserve.

Hydrologic Monitoring

The purpose of hydrologic monitoring is to detect changes in the function of preserved vernal pools resulting from changes in hydrology. Vernal pool hydrology will be monitored twice a year, with the goal of tracking condition relative to the Baseline Conditions in order to protect vernal pool plant, invertebrate, and other wildlife species. Surveys shall include observations of potential water depth, maximum current water depth, and percent inundation for each monitored vernal pool. In addition, monitoring reports will include precipitation data to allow the Preserve Manager to evaluate the performance of the vernal pools relative to available water supply.

Vegetation Monitoring

Species composition within vernal pools, as well as the surrounding upland grassland will be monitored each year.

Vernal Pools

Vernal pool vegetative monitoring will be completed annually in the spring. Vernal pool general characteristics will be noted including if the vernal pool is created/restored or naturally occurring. Plant species having 25% or higher relative vegetation will be considered dominant and will be recorded. If none of the plant species in the vernal pool have 25% or higher relative cover, then the plant species with 10% relative cover or greater will be considered dominant. A comprehensive list of all plant species observed will be created to track species composition relative to the Baseline Condition (on an on-going basis). Any necessary tasks will be identified, prioritized and implemented as funding is available.

Upland Grassland

A minimum of 20 randomly selected upland grassland plots will be selected for monitoring. An additional 10 plots will be selected which can represent those grasslands dominated by native grassland populations, invasive weed populations, and other desired communities. The selected plots will measure three by three meters square and the location will be recorded using a sub-meter accurate GPS unit. Monitoring shall take place once a year in the spring months, preferably late April. Observations collected will include a species list, the total cover of vegetation, the absolute cover of each species, and trends within the plot. A list of plant species observed will be created to track species composition relative to the Baseline Condition (on an on-going basis).

Thatch Monitoring

Observations of thatch accumulation will be conducted annually at the locations of the upland grassland monitoring plots. If excess thatch is present and appears to be inhibiting natural recruitment of oak trees, represents a fire hazard, or is in excess of 1,200 lbs./ac., a removal practice will be determined by the Preserve Manager. Removal of thatch may be conducted by selective browsing / grazing or by mechanical hand tools.

Invasive Plant Monitoring

Invasive species threaten the diversity or abundance of native species through competition for resources, predation, parasitism, and interbreeding with native populations, transmitting diseases, or causing physical or chemical changes to the invaded habitat. Invasive plant species will be monitored and recommendations for eradication will be included in monitoring reports. Species identified by the California Invasive Plant Council will be specifically targeted for removal (Refer to Appendix 10 - California Invasive Plant Inventory, California Invasive Plant Council, 2006). Monitoring surveys will include a qualitative assessment (e.g. visual estimate of cover) of potential or observed noxious weeds or other non-native species invasions, primarily in or around the wetlands. Additional actions to control invasive species will be evaluated and prioritized. The Preserve Manager shall additionally consult the following sources for guidance on what species may threaten the site and on management of those species: The California Department of Food and Agriculture (CDFA) list of "noxious weeds" that are subject to regulation or quarantine by county agricultural departments, the California Department of Food and Agriculture's Integrated Pest Control Branch, and the University of California State Integrated Pest Management Program list of "Exotic and invasive pests and diseases that threaten California's agricultural, urban, or natural areas".

Listed Vernal Pool Grassland Threatened/Endangered Plant Species Monitoring

Vernal pool grassland communities existing within the properties appended by this Plan may provide habitat to various common species of wildlife and may provide suitable habitat for special-status species. If the preserve area is occupied, or becomes occupied, by any listed species, this information will be included in the annual monitoring report to the agencies, and such data will be recorded with the State of California for inclusion in the California Natural Diversity Database (CNDDDB). Adaptive management may be employed to manage for newly

colonizing threatened or endangered species. Please refer to Appendix 7. Population assessment surveys will be conducted every year to monitor status. The annual survey dates will be selected during the appropriate blooming period and will generally occur from late March through April depending on the timing of the blooming period each year. Occupied habitat will be mapped and numbered to allow repeatable data collection over subsequent survey years. Abundance will be assessed semi-quantitatively using broad abundance categories, i.e., 0, 1 - 100, 101 - 500, 501 - 1,000, and >1,000 plants. Changes to occupied habitat, such as changed hydrology or vegetation composition, should be observed and recorded.

Listed Vernal Pool Grassland Threatened/Endangered Animal Species Monitoring

Vernal pool grassland communities existing within the properties appended by this Plan may provide habitat to various common species of wildlife and may provide suitable habitat for special-status species. If the preserve area is occupied, or becomes occupied, by any listed species, this information will be included in the annual monitoring report to the agencies, and such data will be recorded with the State of California for inclusion in the California Natural Diversity Database (CNDDDB). Please refer to Appendix 7. Adaptive management may be employed to manage for newly colonizing threatened or endangered species. Status of the listed species will be monitored every year by conducting population assessment surveys. The annual survey dates will be selected during the appropriate period each year. Other tasks to enhance or monitor habitat characteristics for animal species shall be implemented as needed.

6.3.2 Monitoring Timeline

Vernal pool grassland monitoring will occur four times per year. Survey timing may be adjusted on annual conditions, although wet season hydrology and vernal pool invertebrate monitoring shall occur twice during January through March. Vernal pool vegetation and upland grass monitoring shall occur in spring and invasive plant monitoring and dry season hydrology in summer.

6.3.3 Actions, Responsible Parties and Timing

Table 6-5 below summarizes the actions, responsible parties, and timing for vernal pool grassland management and monitoring.

Table 6-5. Vernal Pool Grassland Management and Monitoring Summary

Action Summary	Responsible Party	Timing
Conduct wet season hydrology and invertebrate monitoring	Preserve Manager/ Monitoring Biologist	Winter
Conduct vernal pool and upland grassland vegetation monitoring	Preserve Manager/ Monitoring Biologist	Spring
Conduct invasive plant monitoring and asses general habitat condition.	Preserve Manager/ Monitoring Biologist	Summer
Conduct dry season hydrology monitoring	Preserve Manager/ Monitoring Biologist	Summer

Conduct thatch Monitoring	Preserve Manager/ Monitoring Biologist	Fall, after grazing is concluded
Provide management recommendations, if needed	Monitoring Biologist	As soon as needed following inspections based on the urgency of the recommendation
Implement recommended management actions	Preserve Manager	Within 60 days of recommendation or as soon as conditions allow.

6.4 Oak Woodlands/Savannah Monitoring

Properties appended to this Plan shall monitor oak woodlands/savannah communities three times a year. These monitoring surveys will consist of observations of the perimeter of the area, as well as meandering transects through its interior.

6.4.1 Monitoring Methods

General Oak Woodland/Savannah Condition

The overall general condition of the oak woodland/savannah will be noted, including changes in vegetation species composition relative to the Baseline Condition. Animal and human-caused damage or disturbances shall be noted as well, including fencing repair needs or trash removal (or any other infrastructure maintenance requirements).

Vegetation Monitoring

Understory Grassland Monitoring

Monitoring methods for the grassy understory of oak woodland/savannah vegetative communities shall follow those of upland grassland (see Section 6.3.1). An additional 20 grassland monitoring plots will be monitored.

Oak Tree Health and Composition Monitoring

Oak tree health shall be monitored by walking meandering transects through the oak woodland/savannah areas. Ten (10) sites will be selected at random and a 50 meter by 100 meter plot will be chosen. An additional 10 sites will be selected that represent poor regeneration, high density of invasive species, or other desired areas. A 50 meter by 100 meter plot will be clearly marked in these additional sites. The location will be recorded using a sub-meter accurate GPS unit.

Observations such as location, species, diameter at breast height (DBH), height estimate, and health of each oak will be recorded within each plot. These observations will be collected every five years.

Thatch Monitoring

Observations of thatch accumulation will be conducted annually at the locations of the understory grassland monitoring plots. If excess thatch is present and appears to be inhibiting natural recruitment of oak trees, represents a fire hazard, as described in the Citywide Fuel Load Reduction Guidelines (Appendix 13) or is in excess of 1,200 lbs./ac, a

removal practice will be determined by the Preserve Manager. Removal of thatch may be conducted by selective browsing / grazing, or with hand tools and small equipment.

Invasive Plant Monitoring

Invasive species threaten the diversity or abundance of native species through competition for resources, predation, parasitism, and interbreeding with native populations, transmitting diseases, or causing physical or chemical changes to the invaded habitat. Invasive plant species will be monitored and recommendations for eradication will be included in monitoring reports. Species identified by the California Invasive Plant Council will be specifically targeted for removal (Refer to Appendix 10 - California Invasive Plant Inventory, California Invasive Plant Council, 2006). Monitoring surveys will include a qualitative assessment (e.g. visual estimate of cover) of potential or observed noxious weeds or other non-native species invasions. Additional actions to control invasive species will be evaluated and prioritized. The Preserve Manager shall consult the following sources for guidance on what species may threaten the site and on management of those species: The California Department of Food and Agriculture (CDFA) list of "noxious weeds" that are subject to regulation or quarantine by county agricultural departments, the California Department of Food and Agriculture's Integrated Pest Control Branch, and the University of California State Integrated Pest Management Program list of "Exotic and invasive pests and diseases that threaten California's agricultural, urban, or natural areas". Invasive/exotic species will be managed/removed according to the Invasive Plant Management Plan (Appendix 14)

Listed Oak Woodland/Savannah Threatened/Endangered Plant Species Monitoring

Oak woodland/savannah communities existing within the properties appended by this Plan may provide habitat to various common species of wildlife and may provide suitable habitat for special-status species. If the preserve area is occupied, or becomes occupied, by any listed species, this information will be included in the annual monitoring report to the agencies, and such data will be recorded with the State of California for inclusion in the California Natural Diversity Database (CNDDDB). Please refer to Appendix 6. Population assessment surveys will be conducted every year to monitor status. The annual survey dates will be selected during the appropriate blooming period and will generally occur from late March through April depending on the timing of the blooming period each year. Occupied habitat will be mapped and numbered to allow repeatable data collection over subsequent survey years. Abundance will be assessed semi-quantitatively using broad abundance categories, i.e., 0, 1 - 100, 101 - 500, 501 - 1,000, and >1,000 plants. Changes to occupied habitat, such as changed hydrology or vegetation composition, should be observed and recorded. As above, adaptive management techniques may be employed in the event of colonization of a preserve area by threatened or endangered species.

Listed Oak Woodland/Savannah Threatened/Endangered Animal Species Monitoring

Oak woodland/savannah communities existing within the properties appended by this Plan may provide habitat to various common species of wildlife and may provide suitable habitat for special-status species. If the preserve area is occupied, or becomes occupied, by any listed

species, this information will be included in the annual monitoring report to the agencies, and such data will be recorded with the State of California for inclusion in the California Natural Diversity Database (CNDDDB). Please refer to Appendix 7. Status of the listed species will be monitored every year by conducting population assessment surveys, and adaptive management methods may be employed to incorporate habitat requirements for threatened or endangered species. The annual survey dates will be selected during the appropriate period each year. Other tasks to enhance or monitor habitat characteristics for animal species shall be implemented as needed.

6.4.2 Monitoring Methods

Grassland plot monitoring will occur in April or May. Invasive plants, habitat condition, and oak woodland/savannah plot monitoring will occur in June or July. Thatch monitoring will occur in August or September.

6.4.3 Actions, Responsible Parties and Timing

Table 6-6 below summarizes the actions, responsible parties, and timing for oak woodland/savannah management and monitoring.

Table 6-6. Oak Woodland/Savannah Management and Monitoring Summary

Action Summary	Responsible Party	Timing
Conduct grassland plot monitoring	Preserve Manager/Monitoring Biologist	Spring
Conduct invasive species monitoring and assess general habitat condition.	Preserve Manager/Monitoring Biologist	Summer
Conduct oak woodland/savannah plot monitoring	Preserve Manager/Monitoring Biologist	Every 5 years during summer
Conduct thatch monitoring	Preserve Manager/Monitoring Biologist	After grazing has concluded
Provide management recommendations, if needed	Monitoring Biologist	As soon as needed following inspections based on the urgency of the recommendation
Implement recommended management actions	Preserve Manager	Within 60 days of recommendation or as soon as conditions allow.

7.0 Biological Resource Management

The properties appended to this Plan are subject to management of biological resources according to habitat communities as listed below.

7.1 Biological Resources Management Goals

The biological resource management goals and actions (Table 7-1) of this Plan takes into account the goals and objectives as stated in the City of Rocklin’s General Plan (see Appendix 3). Though expanded

and modified as needed to meet the requirements of the agencies (primarily the Corps and Service), the primary goals and objectives of the General Plan used in the development of this Plan are: the protection of wetlands, vernal pools, and rare, threatened and endangered species of both plants and animals, and limiting access where sensitive habitats are present.

As part of the Preserve Manager's responsibilities and duties, an annual work plan will be developed using data collected during prior monitoring years. This plan will aid in developing future goals and prioritizing management actions.

Unless otherwise amended, the overall management goal for any specific preserve parcel will be maintenance of the baseline condition described in the Baseline Condition Report.

7.2 Riparian and Wetland Management

The goals and objectives incorporated in this Plan (Table 7-1) are intended to be representative of, and complementary to, the goals found in the City of Rocklin General Plan. This Plan is intended to be the guiding document for creek, riparian, and adjacent wetland habitat management and restoration for properties appended to this Plan.

7.2.1 Riparian and Wetland Restoration

Maintenance, in combination with enhancement and restoration are key to the long term success of the preserved wetland and riparian areas. If opportunities arise for additional ecological restoration of habitat, such as availability of grants or money collected as "in-lieu" mitigation, such restoration will be included in a proposal to the agencies for approval, if applicable. In the case where such a proposal may trigger a permitting requirement, a permit will be obtained prior to any on-ground work. An example of potential restoration activity not requiring Corps approval is planting acorns or oak seedlings in the riparian zone. Activities not requiring Corps approval should still be reviewed by the Monitoring Biologist or other technical expert and included in the annual report. Unless otherwise proposed and approved by the agencies, the stated management goal for all Preserves will be determined by the Baseline Condition report, and all management decisions and actions will be taken in light of the Baseline Condition (Maintenance).

7.2.2 Invasive Plant Management

The Monitoring Biologist will assess the presence of exotic and invasive plant species during inspections and recommend removal as needed. Removal may be accomplished by mechanical, biological (grazing / browsing), or select use of herbicides. If herbicides are necessary to meet a pest control objective, the least toxic and most target-specific herbicide will be chosen. The use of herbicides may occur in Waters of the U.S. except for vernal pools. A 60 foot buffer must be maintained around all vernal pools and elderberry shrubs when spraying for non-native invasive species. Species management requires knowledge of the biology of the species, the available methods for controlling them, and the secondary effects of these methods. Monitoring of site conditions before, during and after treatments are necessary to determine if objectives are being met and if methods need to be revised.

Plant species designated by the California Invasive Plants Council (Cal-IPC) to be "pest" species will be subject to eradication, removal, or other control methods as needed, and determined by the Preserve Manager. Invasive non-native plants that threaten wildlands in California as listed by California Invasive Plant Inventory (2006) are found in Appendix 10. Please note that Appendix 10 is intended to be updated and replaced as new lists are generated.

Table 7-1. Biological Resource Management Goals and Actions

	Wetland and Riparian Habitat Management Unit			Vernal Pool Grassland Habitat Management Unit		
	Goal 7-1: Maintain undisturbed, high quality, native habitats.	Goal 7-2: Enhance moderate to marginal quality native communities.	Goal 7-3: Restore degraded or low quality native communities.	Goal 7-4: Maintain undisturbed, high quality, native communities.	Goal 7-5: Enhance moderate to marginal quality native communities	Goal 7-6: Restore degraded or low quality native communities
Graze				Action 7-4-1: Graze vernal pool grassland at a minimum of once every three years to minimize thatch buildup, promote the continued success of native plant populations, and reduce the establishment of invasive plants.	Action 7-5-1: Graze vernal pool grassland at a minimum of once every three years to minimize thatch buildup, promote the expansion of native plant populations, and discourage the expansion of existing populations of invasive plants.	Action 7-6-1: Graze vernal pool grassland at a minimum of once every three years to minimize thatch buildup, and discourage the year-to-year regeneration of existing populations of invasive plants.
Maintain/Enhance/Restore Native Plant Species	Action 7-1-1: Maintain populations of native riparian and wetland plant species by removing competing invasive species and allowing existing populations to propagate naturally. Action 7-1-2: Establish specific goals and implementation measures for riparian vegetation and aquatic habitat as they relate to the City's watersheds for critical factors such as vegetative diversity, percent canopy cover, and in-stream structure.	Action 7-2-1: Expand and maintain populations of native riparian and wetland plant species by removing competing invasive species and planting and maintaining additional wetland plugs, cuttings, seed, or seedlings. Action 7-2-2: Establish specific goals and implementation measures for riparian vegetation and aquatic habitat as they relate to the City's watersheds for critical factors such as vegetative diversity, percent canopy cover, and in-stream structure.	Action 7-3-1: Restore wetland and riparian plant species by removing competing invasive species, planting native grasses and forbs, and maintaining restored areas to ensure plant establishment. Action 7-3-2: Establish specific goals and implementation measures for riparian vegetation and aquatic habitat as they relate to the City's watersheds for critical factors such as vegetative diversity, percent canopy cover, and in-stream structure.	Action 7-4-2: Maintain stands of native grasses and populations of native forbs by removing competing invasive species and allowing existing populations to propagate naturally.	Action 7-5-2: Expand then maintain stands of native grasses and forbs by removing competing invasive species and planting and maintaining additional seeds or seedlings.	Action 7-6-2: restore native grasses and forbs by removing competing invasive species, planting native grasses and forbs, and maintaining restored areas to ensure plant establishment.
Control Invasive Plants	Action 7-1-3: Control newly establishing populations of invasive plants to maintain a high quality habitat status.	Action 7-2-3: Control existing populations of invasive plants.	Action 7-3-3: Conduct intensive removal of large populations of invasive plants and replace with native riparian and wetland plant species. Maintain restored areas to ensure plant establishment.	Action 7-4-3: Control newly establishing populations of invasive plants to maintain a high quality habitat status.	Action 7-5-3: Control existing populations of invasive plants.	Action 7-6-3: Conduct intensive removal of large populations of invasive plants.
Maintain Hydrology						Action 7-6-4: Restore appropriate vernal pool hydrology to wetlands converted from vernal pools where modifications are feasible.
Prune/Remove Trees	Action 7-1-4: Remove or prune trees that are a fire or safety hazard, or have a disease that has the potential to spread rapidly and have a significant habitat impact. Minimize impact to the Preserve from equipment during removal. Action 7-1-5: If not a hazard, retain declining, hollow, dead or fallen oak trees as they have habitat value.	Action 7-2-4: Remove or prune trees that are a fire or safety hazard, or have a disease that has the potential to spread rapidly and have a significant habitat impact. Minimize impact to the Preserve from equipment during removal. Action 7-2-5: If not a hazard, retain declining, hollow, dead or fallen oak trees as they have habitat value.				
Monitor	Action 7-1-6: Conduct monitoring for wetland and riparian habitat as outlined in section 6.2.	Action 7-2-6: Conduct monitoring for wetland and riparian habitat as outlined in section 6.2.	Action 7-3-6: Conduct monitoring for wetland and riparian habitat as outlined in section 6.2.	Action 7-4-5: Conduct monitoring within vernal pool grassland as outlined in Section 6.3.	Action 7-5-5: Conduct monitoring within vernal pool grassland as outlined in Section 6.3.	Action 7-6-5: Conduct monitoring for vernal pool grassland as outlined in section 6.3.
Adaptive Management	Action 7-1-7: Use information gained through monitoring to inform survey and management goals and actions in the following year's work plan.	Action 7-2-7: Use information gained through monitoring to inform survey and management goals and actions in the following year's work plan.	Action 7-3-7: Use information gained through monitoring to inform survey and management goals and actions in the following year's work plan.	Action 7-4-6: Use information gained through monitoring to inform survey and management goals and actions in the following year's work plan.	Action 7-5-6: Use information gained through monitoring to inform survey and management goals and actions in the following year's work plan.	Action 7-6-6: Use information gained through monitoring to inform survey and management goals and actions in the following year's work plan.

Table 7-1. Biological Resource Management Goals and Actions (continued)

	Oak Woodland/Savannah Habitat Management Unit			All Units	
	Goal 7-7: Maintain undisturbed, high quality, native habitat	Goal 7-8: Enhance moderate to marginal quality native communities.	Goal 7-9: Restore degraded or low quality native communities.	Goal 7-10: Manage beaver populations affecting the Preserve.	Goal 7-11: Develop, implement, and update Grazing Plan.
Graze	Action 7-7-1: Graze oak woodland/savannah as needed to keep thatch from building up to levels that inhibit natural oak seedling establishment. To protect seedling/sapling young oaks, select the appropriate grazing animal kind and class, grazing period, or protect concentrations of seedlings and sapling with fencing during grazing.	Action 7-8-1: Graze oak woodland/savannah as needed to keep thatch from building up to levels that inhibit natural oak seedling establishment. To protect seedling/sapling young oaks, select the appropriate grazing animal kind and class, grazing period, or protect concentrations of seedlings and sapling with fencing during grazing.	Action 7-9-1: Graze oak woodland/savannah as needed to keep thatch from building up to levels that inhibit natural oak seedling establishment. To protect seedling/sapling young oaks, select the appropriate grazing animal kind and class, grazing period, or protect concentrations of seedlings and sapling with fencing during grazing.		Action 7-11-1: Develop and implement an overarching Grazing Plan.
Maintain/Enhance/Restore Native Plant Species	Action 7-7-2: Maintain associated stand of native grasses and populations of native forbs by removing competing invasive species and allowing native populations to propagate naturally. Action 7-7-3: Promote continued natural oak propagation with a focus on Valley and Blue oaks by clearing vegetation from around volunteer seedlings and saplings, then mulching them.	Action 7-8-2: Expand then maintain associated stands of native grasses and population of native forbs and shrubs by removing competing invasive species, and planting and maintaining additional seeds or seedlings. Maintenance of some open grassland between trees in oak savannah is desirable. Action 7-8-3: Supplement existing populations of oak trees by selectively planting and maintaining acorns or seedlings where insufficient natural regeneration is resulting in a limited age class distribution. Plant oak trees ten feet or greater from the Preserve perimeter, trails, and utilities. Plant oak trees greater than ten feet apart and oriented along the direction of flow within areas that have to potential to flood.	Action 7-9-2: Restore associated native grasses, forbs and shrubs by removing competing invasive species, planting native grasses and forbs, and maintaining restoring areas to ensure plant establishment. Action 7-9-3: Restore oak trees to areas appropriate for these species where they have been eliminated or severely reduced by past land use. Actively plant and maintain acorns or seedlings. Plant oaks ten feet or greater from the Preserve perimeter, trails, and utilities. Plant oak trees greater than ten feet apart and oriented along the direction of flow within areas that have to potential to flood.		
Control Invasive Plants	Action 7-7-4: Control newly established populations of invasive plants to maintain a high quality habitat status.	Action 7-8-4: Control existing populations of invasive plants.	Action 7-9-4: Conduct intensive removal of large populations of invasive plants and replace with native species. Maintain restored areas to ensure plant establishment.		
Maintain Hydrology				Action 7-10-1: Implement the Beaver Management Plan (Appendix 15).	
Prune/Remove Trees	Action 7-7-5: Remove or prune trees that are a fire or safety hazard or have a disease with the potential to spread rapidly and have significant habitat impact. Minimize impacts to the Preserve from equipment during removal. Action 7-7-6: If not a hazard, retain declining, hollow, dead or fallen oak trees as they have habitat value.	Action 7-8-5: Remove or prune trees that are a fire or safety hazard or have a disease with the potential to spread rapidly and have significant habitat impact. Minimize impacts to the Preserve from equipment during removal. Action 7-8-6: If not a hazard, retain declining, hollow, dead or fallen oak trees as they have habitat value.	Action 7-9-5: Remove or prune trees that are a fire or safety hazard or have a disease with the potential to spread rapidly and have significant habitat impact. Minimize impacts to the Preserve from equipment during removal. Action 7-9-6: If not a hazard, retain declining, hollow, dead or fallen oak trees as they have habitat value.		
Monitor	Action 7-7-7: Conduct monitoring for oak woodland/savannah as outlined in section 6.4.	Action 7-8-7: Conduct monitoring for oak woodland/savannah as outlined in section 6.4.	Action 7-9-7: Conduct monitoring for oak woodland/savannah as outlined in section 6.4.		
Adaptive Management	Action 7-7-8: Use information gained through monitoring to inform survey and management goals and actions in the following year's work plan.	Action 7-8-8: Use information gained through monitoring to inform survey and management goals and actions in the following year's work plan.	Action 7-9-8: Use information gained through monitoring to inform survey and management goals and actions in the following year's work plan.	Action 7-10-2: Conduct a study on the carrying capacity of the Preserve. Use this data to inform management goals and actions in the following year's work plan.	Action 7-11-2: Monitor the effectiveness of the Grazing Plan and update it every five years.

7.2.3 Removal of Native Riparian Trees

Removal of native trees is expressly not-allowed pursuant to this Plan. However, if it is determined by the Preserve Manager that native trees must be removed due to disease, or are a danger to public safety or private property, removal will be permitted with appropriate tree removal permits, if applicable. The appropriate Regulatory Agencies will be notified regarding removal of native trees.

7.2.4 Beavers and Beaver Dams

Reduction of predator populations due to development in the region has led to an increase in beaver populations in the City of Rocklin. It is the responsibility of the Preserve Manager to determine if: the beavers should be left as part of the natural ecosystem, beaver baffling devices should be installed and the beavers should be allowed to remain, the beaver dams should be breached, or the beavers should be removed. Beaver dams have the potential to adversely affect a habitat by causing flooding and killing trees adjacent to the creek or stream. Decisions regarding the removal (or not) of beavers will be made in accordance with the Beaver Management Policy (appendix 15).

7.2.5 Special-Status Species Management

Riparian and non-vernal pool wetland communities existing within the properties appended by this Plan may provide suitable habitat for special-status species. By managing the overall health of the riparian and wetland communities the resultant effects upon local special-status species is expected to be positive. The occurrence or recruitment of special status species will be recorded with the California Natural Diversity Database, and adaptive management methods may be employed to ensure the long-term survival of special-status species.

7.2.6 Actions, Responsible Parties, and Timing

The following table summarizes the actions, responsible parties, and timing for riparian and wetland management.

Table 7-2. Riparian and Wetland Management Summary

Action Summary	Responsible Party	Timing
Conduct enhancement and restoration	Preserve Manager	Throughout the year as necessary or when conditions allow
Conduct invasive species management	Preserve Manager/Creek Crew	Species-specific timing
Remove native riparian trees, if needed	Creek Crew	As needed
Manage beavers and beaver dams	Creek Crew	Throughout the year as necessary
Conduct special-status species management	Preserve Manager	Throughout the year as necessary

7.3 Vernal Pool Grassland Management

The management of vernal pool grassland will involve enhancement and restoration, thatch management, invasive species management, and preservation of appropriate vernal pool hydrology.

7.3.1 Vernal Pool Grassland Enhancement and Restoration

Enhancement and restoration are key to the long term success of the preserved vernal pool grassland areas. If opportunities arise for additional ecological restoration of habitat, such as availability of grants or money collected as “in-lieu” mitigation, such restoration will be included in a proposal to the agencies for approval, if applicable. In the case where such a proposal may trigger a permitting requirement, a permit will be obtained prior to any on-ground work. Unless otherwise proposed and approved by the agencies, the stated management goal for all Preserves will be determined by the Baseline Condition report, and all management decisions and actions will be taken in light of the Baseline Condition (Maintenance).

7.3.2 Thatch Management

Wildfires historically burned grassland, and oak woodland/savannah communities, and prevented the accumulation of dead plant material (mostly grasses and forbs) or thatch, and therefore avoided the creation of a more significant fire / fuel problem. The accumulation of potential fuels in the form of thatch and / or woody shrubs can create “ladder fuels” which allow wildfire to progress into the crowns of larger trees. Additionally, accumulated thatch acts as a mulch which can prevent the germination of many native plants. Grazing by cattle historically reduced the amount of dead plant material in these areas, however, with present development, many of these lands are no longer used for grazing and thatch has an opportunity to build up. This buildup of thatch can adversely affect the ability of native plants to compete with non-natives, especially in vernal pools and seasonal wetlands. These proposed methods for thatch management are as follows:

Grazing / Browsing

Grazing / Browsing is the best method of reducing vegetative build-up but must be done while vegetation is palatable (typically during winter months in California), and is more useful for prevention of thatch build-up rather than removal of previously accumulated phytomass. Grazing / browsing, is effective for thatch control when done for multiple (consecutive) growing seasons. A more detailed grazing plan, that includes a monitoring protocol, is included in Appendix 16

Hand Tools

Both mechanical and non-mechanical hand tools, such as a weed wrench, string trimmer or chainsaw, may be used to reduce thatch accumulation within the Preserve. To be effective, cut material must be removed from the site once work is complete. When possible, these activities should be scheduled in coordination with invasive species control.

7.3.3 Invasive Plant Management

The Monitoring Biologist will assess the presence of exotic and invasive plant species during inspections and recommend removal as needed. Removal may be accomplished by mechanical, hand, biological (grazing), or select use of herbicides. If herbicides are necessary to meet a pest control objective, the least toxic and most target-specific herbicide shall be chosen. The use of herbicides may occur in Waters of the U.S. except for vernal pools. A 60 foot buffer must be maintained around all vernal pools and elderberry shrubs when spraying for non-native invasive species. Species management requires knowledge of the biology of the species, the available methods for controlling them, and the secondary effects of these methods. Monitoring of site conditions before, during and after threaten is necessary to determine if objectives are being met and if methods need to be revised.

Plant species designated by the California Invasive Plants Council (Cal-IPC) to be “pest” species will be subject to eradication, removal, or other control methods as needed, and determined by the Preserve Manager. Invasive non-native plants that threaten wildlands in California as listed by California Invasive Plant Inventory (2006) are found in Appendix 10. Please note that Appendix 10 is intended to be updated and replaced as new lists are generated.

7.3.4 Maintaining Natural Vernal Pool Hydrology

The flow of drainage, landscaping, and storm water runoff from adjacent development can adversely impact vernal pool hydrology by maintaining hydro-period too long for many vernal pool adapted plant species. The City of Rocklin will re-direct the flow of storm water and/or irrigation runoff from new projects such that natural hydrology (and hydro-period) can be restored. As previously discussed, other sources of flooding such as beavers or accumulation of drift materials due to storm events may cause adverse effects to vernal pool habitat due to flooding. If flooding inundates adjacent vernal pools, it is the responsibility of the Preserve Manager to take appropriate action to restore the natural hydrological regime.

7.3.5 Special status Species Management

Vernal pool grassland communities existing within the properties appended by this Plan may provide suitable habitat for special-status species. By managing the overall health of the riparian and wetland communities the resultant effects upon local special-status species is expected to be positive. Should special status species colonize a Preserve site, the Preserve Manager will take steps to adaptively manage the site for the species. In these cases, the CNDDDB will be updated with the new data, and it will be addressed in annual reports to the Agencies. Surveys for special-status species will be conducted as outlined in table 6-1 and 6-5.

7.3.6 Actions, Responsible Parties, and Timing

The following table summarizes the actions, responsible parties, and timing for vernal pool grassland management.

Table 7-3. Vernal Pool Grassland Management Summary

Action Summary	Responsible Party	Timing
Conduct enhancement and restoration activities	Preserve Manager	Throughout the year as necessary or when conditions allow
Conduct thatch management	Preserve Manager	Dependent on method
Conduct invasive species management	Preserve Manager	Species-specific timing
Maintain natural vernal pool hydrology	Preserve Manager	Throughout the year as necessary
Conduct special-status species management	Preserve Manager	Throughout the year as necessary

7.4 Oak woodland/Savannah Management

The management of oak woodland/savannah will involve enhancement and restoration, thatch management, and invasive species management.

7.3.5 Special status Species Management

Enhancement and restoration are key to the long term success of the preserved oak woodland/savannah areas. If opportunities arise for additional ecological restoration of habitat, such as availability of grants or money collected as “in-lieu” mitigation, such restoration will be included in a proposal to the agencies for approval, if applicable. In the case where such a proposal may trigger a permitting requirement, a permit will be obtained prior to any on-ground work. In areas that are not naturally regenerating, oak trees will be planted to augment existing populations. Prior to planting, site-specific conditions and revegetative methods should be reviewed by an arborist, biologist, restoration specialist, or other qualified personnel.

Unless otherwise proposed and approved by the agencies, the stated management goal for all Preserves will be determined by the Baseline Condition report, and all management decisions and actions will be taken in light of the Baseline Condition (Maintenance). The Preserve manager will endeavor to take all opportunities for enhancement and restoration when they arise.

The City of Rocklin’s Oak Tree Preservation Guide has been appended to this Plan (See Appendix 5).

7.4.2 Thatch Management

Wildfires historically burned grassland, and oak woodland/savannah communities, and prevented the accumulation of dead plant material (mostly grasses and forbs) or thatch, and therefore avoided the creation of a more significant fire / fuel problem. The accumulation of potential fuels in the form of thatch and / or woody shrubs can create “ladder fuels” which allow wildfire to progress into the crowns of larger trees. Additionally, accumulated thatch acts as a mulch which can prevent the germination of many native plants. Grazing by cattle historically reduced the amount of dead plant material in these areas, however, with present development, these lands are no longer used for grazing and thatch has an

opportunity to build up. This buildup of thatch can adversely affect the ability of native plants to compete with non-natives, especially vernal pools and seasonal wetlands. These proposed methods for thatch management are as follows:

Grazing / Browsing

Grazing / Browsing is the best method of reducing vegetative build-up but must be done while vegetation is palatable (typically during winter months in California), and is more useful for prevention of thatch build-up rather than removal of previously accumulated phytomass. Grazing / browsing, is effective for thatch control when done for multiple (consecutive) growing seasons.

Hand Tools

Both mechanical and non-mechanical hand tools, such as a weed wrench, string trimmer or chainsaw, may be used to reduce thatch accumulation within the Preserve. To be effective, cut material must be removed from the site once work is complete. When possible, these activities should be scheduled in coordination with invasive species control.

7.4.3 Invasive Plant Management

The Monitoring Biologist will assess the presence of exotic plant species during inspections and recommend removal as needed. Removal may be accomplished by mechanical, hand, biological (grazing), or select use of herbicides. If herbicides are necessary to meet a pest control objective, the least toxic and most target-specific herbicide will be chosen. The use of herbicides may occur in Waters of the U.S. except for vernal pools. A 60 foot buffer must be maintained around all vernal pools and elderberry shrubs when spraying for non-native invasive species. Species management requires knowledge of the biology of the species, the available methods for controlling them, and the secondary effects of these methods. Monitoring of site conditions before, during and after threaten is necessary to determine if objectives are being met and if methods need to be revised.

Plant species designated by the California Invasive Plants Council (Cal-IPC) to be “pest” species will be subject to eradication, removal, or other control methods as needed, and determined by the Preserve Manager. Invasive non-native plants that threaten wildlands in California as listed by California Invasive Plant Inventory (2006) are found in Appendix 10. Please note that Appendix 10 is intended to be updated and replaced as new lists are generated.

7.4.4 Removal of Native Oaks

Native oak trees within the properties appended to this Plan that present hazard (fire or falling hazard), or have a disease that has the potential infect other preserve trees (e.g., sudden oak death, or boring insects) may be pruned or removed at the direction of the Preserve Manager. The Monitoring Biologist or other qualified personnel will inspect the tree to confirm that removal or pruning is necessary prior to initiation of the work. If not a necessary treatment, dead, hollow, declining, or fallen oak trees should be retained in place, as they are an important component of the local ecosystem which is relied upon by nesting birds, serves to provide nest and storage sites for wildlife food caches, and provides habitat for

beneficial wood-eating insects. The City of Rocklin’s Oak Tree Preservation Guide has been appended to this Plan (See Appendix 5).

7.4.5 Hydrologic changes - Nuisance Run-Off and Flooding

The flow of drainage, landscaping, and storm water runoff from adjacent roadways and development can adversely impact oak tree health. When possible the City of Rocklin will work to re-direct the flow of storm water and/or irrigation runoff from previously developed projects such that natural hydrology can be restored. As previously discussed, flooding from re-directed creeks and drainages or from obstructions or from beaver dams may cause adverse effects to oak trees due to flooding. If inundation caused by any of these sources adversely affects oak woodland/savannah habitat, it is the responsibility of the Preserve Manager to take appropriate action and restore the natural hydrological regime.

7.4.6 Special status Species Management

Oak woodland/savannah communities existing within the properties appended by this Plan may provide suitable habitat for special-status species. By managing the overall health of the oak woodland/savannah communities, the resultant effects upon local special-status species should be positive. Should special status species colonize a Preserve site, the Preserve Manager will take steps to adaptively manage the site for the species.

7.4.7 Actions, Responsible Parties, and Timing

The following table summarizes the actions, responsible parties, and timing for oak woodland/savannah management.

Table 7-4. Oak Woodland/Savannah Management Summary

Action Summary	Responsible Party	Timing
Conduct enhancement and restoration activities	Preserve Manager	Throughout the year as necessary or when conditions allow
Conduct thatch management	Preserve Manager	Dependent on method
Conduct invasive species management	Preserve Manager	Species-specific timing
Removal of native oak trees	Preserve Manager	As needed for fire prevention
Remove/prevent nuisance run-off and beaver dams	Preserve Manager/ Creek Crew	Throughout the year as necessary
Conduct special-status species management	Preserve Manager	Throughout the year as necessary

7.5 Wildlife Management (Pest management)

7.5.1 Beaver Management

Reduction of predator populations due to development in the region has led to an increase in beavers in the City of Rocklin. It is the responsibility of the Preserve Manager to determine if: the beavers should

be left as part of the natural ecosystem, beaver baffling devices should be installed and the beavers should be allowed to remain, the beaver dams should be breached, or the beavers should be removed. Beaver dams have the potential to adversely affect a habitat by causing flooding (including flooding of neighboring properties), and killing trees adjacent to the creek or stream. Additionally, impounded water behind beaver dams may provide habitat for mosquitos or other disease vectors. If flooding caused by beavers adversely affects vegetation communities or wildlife with the properties appended by this Plan, or if beavers are determined to represent a health and safety risk, it is the responsibility of the Preserve Manager to take appropriate action and restore the natural hydrological regime. Beaver management shall be conducted in accordance with the Beaver Management Plan (Appendix 15).

7.5.2 Feral Animal Management

In some cases it is anticipated that feral animals, such as wild pigs, cats or dogs may colonize Preserve areas. The Preserve Manger will determine if feral animals represent a problem with the help of the Monitoring Biologist (e.g. feral cats can have a negative effect on some endangered animal populations), and will develop a plan for removal of any problematic feral populations. The Preserve Manager will be responsible for all aspects of feral animal management, including interaction with, and education of the public where necessary, and will endeavor to conduct feral animal removal in the most humane way practicable.

7.5.3 Vector Species

If it is determined by the Preserve Manager that any preserve is harboring dangerous vector species, the Preserve Manager will control the vector species according to the process outlined in the Vector Control Plan which is included as Appendix 17. If pesticides are necessary to meet a pest control objective, the least toxic and most target-specific pesticide will be chosen. Vector species management requires knowledge of the biology of the species, the available methods for controlling them, and the secondary effects of these methods. Monitoring of site conditions before, during and after treatment is necessary to determine if objectives are being met and if methods need to be revised.

Vector control will only be done in coordination with the Placer County Vector Control District.

In rare cases, additional wildlife vectors may be identified, such as potential rabies-infected animals, or animals that may carry infectious diseases. In these cases, the Preserve Manager will work with Animal Control, public health officials, and potentially the vector control district when necessary to remove any threat to public safety.

7.6 Invasive Plant Management Goals

Invasive species threaten the diversity or abundance of native species through competition for resources, predation, parasitism, and interbreeding with native populations, transmitting diseases, or causing physical or chemical changes to the invaded habitat.

The Preserve manager will monitor and maintain control over non-native invasive species, including but not limited to noxious weeds that diminish site quality for which the Preserve was established. Invasive

plant species will be monitored and recommendations for eradication will be included in monitoring reports. Species identified by the California Invasive Plant Council will be specifically targeted for removal (Refer to Appendix 10 - California Invasive Plant Inventory, California Invasive Plant Council, 2006). The Preserve Manager shall consult the following sources for guidance on what species may threaten the site and on management of those species: The California Department of Food and Agriculture (CDFA) list of "noxious weeds" that are subject to regulation or quarantine by county agricultural departments, the California Department of Food and Agriculture's Integrated Pest Control Branch, and the University of California State Integrated Pest Management Program list of "Exotic and invasive pests and diseases that threaten California's agricultural, urban, or natural areas".

Although Management Goals are set by the Baseline Condition report, the Preserve Manager will endeavor to improve the condition of all preserves with regard to invasive plant management.

7.7 Invasive Plant Management

The Monitoring Biologist will assess the presence of exotic and invasive plant species during inspections and recommend removal as needed. Each year's annual walk-through survey (or a supplemental survey) will include a qualitative assessment (e.g. visual estimate of cover) of potential or observed noxious weeds or other non-native species invasions. Additional actions to control invasive species will be evaluated and prioritized. Removal may be accomplished by mechanical, biological (grazing), or select use of herbicides. If herbicides are necessary to meet a pest control objective, the least toxic and most target-specific herbicide will be chosen. Species management requires knowledge of the biology of the species, the available methods for controlling them, and the secondary effects of these methods. Monitoring of site conditions before, during and after treatments is necessary to determine if objectives are being met and if methods need to be revised.

Plant species designated by the California Invasive Plants Council (Cal-IPC) to be "pest" species will be subject to eradication, removal, or other control methods as needed, and determined by the Preserve Manager. Invasive non-native plants that threaten wildlands in California as listed by California Invasive Plant Inventory (2006) are found in Appendix 10. Please note that Appendix 10 is intended to be updated and replaced as new lists are generated.

It is the responsibility of the Preserve Manger to:

- Stay informed on potential new invasive species, their threat to resources, likely vector pathways, control methods and monitoring techniques.
- Incorporate measures to avoid spreading invasive species into preserve areas and control any invasive species currently on the site.
- Use best management practices (BMPs) during maintenance and other field activities to avoid introducing invasive species into new areas.
- Actively manage Preserve Sites to reduce or eliminate invasive species.

8.0 Open Space Maintenance

8.1 Open Space Maintenance Goals

The overriding management goal of the Plan is the maintenance of existing biological functions and values determined to exist on a specified property at the time that that property is appended to the plan (Baseline Condition). The City of Rocklin intends to manage preserves so that they continue to provide habitat to managed species, and continue to provide the suite of physical, chemical and biological functions associated with existing waters (wetlands and other waters) and vegetation.

8.2 Specific Maintenance Descriptions

The following sections outline planned maintenance activities with the properties appended by this Plan.

8.2.1 Trash Removal

During each site visit, occurrences of trash and/or trespass will be recorded. This record will include type, location, and recommendations to clear, minimize, or rectify a trash and/or trespass impact. At least quarterly trash will be collected and removed and vandalism and trespass impacts will be repaired.

8.2.2. Maintenance of Fencing, Gates, and Signage

Fencing and signage will be maintained by the City of Rocklin (Preserve Manager) as established in the baseline condition. Repairs to fencing and signage will be conducted as needed (as issues are discovered), and within 60 days of discovery. Fencing is proposed to be installed by the previous owner and in good repair prior to transfer of the preserve to the City of Rocklin. Required fencing will vary in type depending upon the location and intended purpose of the fencing. During each site visit, condition of fences and gates will be recorded. Location, type, and recommendations to implement fence and/or gate repair or replacement, will be made to the Preserve Manager. Preserve areas that are not fenced at the time this Plan is implemented, shall be fenced according to the DA permit conditions within 2 years. Within 6 months, all missing fencing will be identified and a prioritized schedule of installation will be developed.

Private Property Fencing

If a property appended by this Plan is adjacent to private property, and fencing belongs to the adjacent owner at the time the Preserve is appended to this Plan, the maintenance and replacement of fencing is the responsibility of the adjacent property owner(s). However, the Preserve Manager will notify private property owners or the Homeowner's Association (where appropriate) in the case where problems are discovered with privately-owned fencing, such a disrepair, and direct them to remedy the fencing concern within 60 days. If the repairs are not completed within 60 days of notification, the Preserve Manager shall repair the fence or remove any illegal gates and bill the homeowner or HOA for the

expense. In cases where private fencing is removed entirely, and the owner is not required to replace it, the Preserve manager will fund the replacement within 60 days (after which, it will become a Preserve obligation). Replacement of fencing at the City's expense may be a justified method of ensuring security of the preserve, and is a reasonable measure to prevent encroachment.

If existing properties that are adjacent to private property, and fencing belongs to the adjacent owner, are not fenced at the time that this document is approved then the owner of the adjacent property shall be required to install fencing. Within 6 months, all missing fencing will be identified and within 12 months, the property owner will be notified of the requirement to fence their property. If the property is not fenced within 12 months of the notice date, the City will perform the required work and bill the property owner.

Adjacent Open Space Fencing

If another preserve is developed adjacent to an existing preserve appended by this Plan, and both properties are appended to this Plan, the existing fencing between the two preserves may be removed to provide wildlife passage or to allow for concurrent management of both preserves.

8.2.3 Maintenance Within Drainages, Culverts, and Bridges

It is the responsibility of the Preserve Manager to carry out minor maintenance within drainages, culverts, and bridges. These activities may include removal/displacement of sand, silt, sediment, debris, rubbish, woody or aquatic vegetation and other obstructions to flow, the control of weeds, grasses, and emergent vegetation, and the cleaning, repair, and replacement of in-kind or similar erosion control facilities. These efforts must be undertaken to ensure maintenance of baseline hydrologic conditions and to prevent flooding concerns.

These maintenance activities may trigger a permitting requirement with Regulatory Agencies; in cases where regulatory permits may be required, the Preserve manager will consult the agencies, and will attain appropriate permits, prior to conducting work.

8.2.4 Emergency Situations/Maintenance Requiring a Permit

If any action is taken by the City of Rocklin as a result of an emergency situation, and such action has an effect of the biological, chemical, or physical function of a preserve area, the agencies will, in all cases, be notified within two weeks following the emergency. Corps emergency notification procedures will be followed. The notification will summarize the emergency, actions taken, and will propose remediation where necessary to restore form and function of the preserve area.

a. Upland Emergency

Should an emergency situation arise that requires immediate action in an upland area, but would normally require that the Corps (or other regulatory agency) be notified, or have review and approval authority, the Corps (or other regulatory agency) will be notified verbally within forty-eight (48) hours, with written confirmation of the actions taken within one (1) week.

b. Emergency in Wetlands or Waters of the US

Should an emergency situation arise that requires immediate action in a jurisdictional wetland or waters of the U.S., but would normally require that a permit be obtained from the Corps, the following applies as stated in the Code of Federal Regulations, Title 33, Chapter II, Part 325, Section 325.2 Processing of Applications:

Emergency procedures: Division engineers are authorized to approve special processing procedures in emergency situations. An "emergency" is a situation which would result in an unacceptable hazard to life, a significant loss of property, or an immediate, unforeseen, and significant economic hardship if corrective action requiring a permit is not undertaken within a time period less than the normal time needed to process the application under standard procedures.

California Fish and Game (Wildlife) Code Section 1600 also has emergency procedures stipulations that may apply. In these cases, the Regulatory Agencies will be notified prior to any action being taken.

8.3 Correction of Vandalism/Accidental Open Space Impacts

It is difficult to anticipate and provide measures to correct all potential unanticipated impacts to the properties appended by this Plan. The following sections outline corrective measures for some potential impacts. If a particular situation is not addressed in this Plan, it is the responsibility of the Preserve Manager to determine an appropriate action. Corrective actions may require approval from the appropriate Regulatory Agencies where impacts may occur to regulated species or waters of the U.S (for example). In some cases, the City Police department may be utilized to enforce corrective action.

8.2.4 Emergency Situations/Maintenance Requiring a Permit

Restoration of grassy upland areas should include seeding with appropriate native grass seed. Areas of bare ground should be protected with erosion control measures such as erosion control blanketing or tacked straw until revegetation has occurred. Monitoring for invasive species after revegetation should occur during the spring for the following two years. If increased cover of invasive plant species are found in the previously disturbed area, the party causing the disturbance will conduct invasive plant removal to the satisfaction of the Preserve Manager.

8.3.2 Sedimentation in Vernal Pools or Other Wetlands

Agency Notification

If turbid water from a construction site or other activity is discharged into a preserved wetland, the Preserve Manager will notify the Corps and the Service within 72 hours. In many cases, turbid water may be present due to uncontrollable forces (such as heavy storm events causing erosion); while in other cases the cause may be controllable (such as impacts due to cattle, or the afore-mentioned construction activity). The Preserve Manager will be responsible for making a determination of the source and reporting this information to the appropriate agencies within 72 hours.

Assessment of Impacts

The Preserve Manager and Monitoring Biologist, or other qualified personnel, will assess the impacted wetland features. Through this assessment it will be determined if immediate remediation is warranted, or if monitoring will be conducted. Corrective actions may range from City or agency enforcement against persons responsible, to simple removal of the source of fill material (or the removal of material directly), to no action at all.

Remediation Plan/Remediation Monitoring

Up to three years of monitoring will be conducted to determine if remediation is needed. Yearly monitoring will consist of one winter visit and one summer visit each year to assess the hydrology and floristic composition of the wetland. If the monitoring assessment indicates that removal of the sediment is warranted, it will be conducted during the summer months when the wetland is completely dry. Small amounts of the sediment will be removed by hand tools. Care will be taken to remove only the sediment and not disturb the original grade of the wetland. If a significant discharge of sediment occurs, removal by hand may not be feasible. Minor grading (using a skip loader or asphalt floater, or other appropriate equipment) may be used in these instances. Current Corps policy requires that three years of monitoring be conducted after the remediation has taken place.

Remediation Bonding

For a construction-related discharge into a preserved wetland, the project proponent will make a cash payment, post a bond, or enter into another financial arrangement acceptable to the City and the Agencies. The amount will be enough to cover the cost to monitor the wetland for up to six years (pre and post-remediation), to conduct remediation (this cost will be estimated), and to purchase mitigation credits at a mitigation bank or in-lieu fee fund equal to the current Agency mitigation requirements for the impacted acreage (in case remediation is not successful). The bond must be in place before the project receives final permit approval for the work in progress that resulted in the unpermitted discharge (i.e., grading permit, building permit or other City authorized permit). The project proponent responsible for the discharge will then pay for the monitoring and remediation or credit/in lieu fee purchase. The City will release the bond when the Agencies have signed off that the wetland has either been remediated or mitigated. If for some reason, the project proponent chooses not to pay for monitoring and remediation or replacement of the wetland, the City will call for full payment of the bond and will use the money to conduct the needed remediation and monitoring activities or will purchase mitigation credits in coordination with the Agencies.

8.3.3 Accidental Fill of Wetlands/Waters of the U.S.

Agency Notification

If fill from a construction site or other activity is discharged into a preserved wetland, the Preserve Manager will notify the Corps and the Service within 72 hours of the discovery of the fill.

Assessment of Impacts

The Preserve Manager, Monitoring Biologist, and Agency personnel will assess the impacted habitat including the acreage and severity of the fill.

Removal of Fill/Restoration Plan

Restoration for fill/loss of waters of the U.S. will result in the removal of fill from the feature. Minor impacts that can be removed by hand will be immediately restored by the Preserve Manager. Within one week, notification will be provided to agencies regarding the removal / restoration effort to allow agency personnel to approve (or disapprove) the effort. Significant impacts that require restorative grading followed by replanting will require approval of a restoration plan by the Regulatory Agencies prior to implementation.

If the impact is construction-related, the project proponent (owner of construction project) may be financially responsible for corrective action including restoration, mitigation, and monitoring (subject to agency enforcement). Mitigation may include purchase of mitigation credits or in-lieu fee payment, and remediation of impacted sites may require financial bonding through the reconstruction and monitoring phases for impacted acreage. The bond holder (City or agencies) will release the bond when the Agencies have signed off that the wetland has either been remediated or mitigated. In cases where the remediation / mitigation is deemed unacceptable or fails to gain release by the Agencies, the bond may be released by the bond holder to a third party to conduct the needed remediation and monitoring activities or will purchase mitigation credits in coordination with the Agencies.

It may not be necessary for the party causing the fill to obtain an after-the-fact permit if the feature wetland is due to the removal of the fill and restoration as outlined in Code of Federal Regulations, Title 33, Chapter II, Part 326.3(e)(1)(i), under After-the-fact Permit Applications:

Following the completion of any required initial correction measures, the district engineer at the Corps will accept an after-the-fact permit application unless he/she determines that one of the exceptions listed in subparagraphs i-iv [of 33 326.3(e)(1)] is applicable. Applications for after-the-fact permits will be processed in accordance with the applicable procedures in 33 CFR Parts 320-325. Situations where no permit application will be processed or where the acceptance of a permit application must be deferred are as follows:

No permit application will be processed when restoration of the waters of the United States has been completed that eliminates current and future detrimental impacts to the satisfaction of the district engineer.

If an after-the-fact Corps permit is not required within Endangered Species habitat due to the proposed restoration efforts, the Preserve Manager will only have to discuss a modification to the Biological Opinion to conduct the restoration if: 1) the restoration work is not covered by the Biological Opinion or 2) the impact amount covered under the Biological Opinion is exceeded.

If it is determined that an after-the-fact Corps permit is required (i.e., the feature cannot be restored), the Corps may have to consult with the Service or NOAA Fisheries/NMFS if corrective work will directly

or indirectly impact endangered/threatened species habitat and: 1) the work is not covered by the Biological Opinion, 2) the impact amount covered under the Biological Opinion is exceeded, or 3) the endangered/threatened species habitat is under the jurisdiction of NOAA Fisheries/NMFS.

8.3.4 Removal of Native Trees or Shrubs

Removal of native trees and/or shrubs from any Preserve site without direction from the Preserve manager is expressly forbidden by this Plan. Restoration of shrubs and trees will be conducted by the replanting of native trees / shrubs at multiplier that will anticipate the final survival rate of the plantings, to permanently replace the lost trees / shrubs at a minimum of 1:1.

8.3.5 Fencing and Signage

Replacement or repair of fencing or signage will be conducted within 60 days following identification. The Preserve Manager is responsible for ensuring that site security is maintained for all properties appended to this Plan.

8.3.6 Erosion

Minor erosion shall be corrected promptly with minor grading and reseeding with native seeds, use of straw wattles, erosion control blankets, hydroseed mixes (containing native seed or sterile grass seed mixes), and other erosion control methods. Severe erosion control efforts may on occasion be necessary. In cases where these efforts trigger permitting requirements (e.g. cases where fill materials may be placed in jurisdictional waters), the Preserve Manager will be required to attain regulatory permits. In cases where erosion control may be required on an emergency basis, the Preserve manager will contact the applicable agencies prior to commencing work.

8.3.7 Off Highway Vehicle Use

Off road vehicle use by members of the public will be disallowed through fencing, vehicle barriers, and signage. The Preserve Manager will evaluate damage and promptly enforce corrective measures. Fencing plans will include designated access points for preserve management / emergency vehicle access, and site maps included in the Baseline Condition report will delineate access roadways, trails, and easements (that may require vehicle access). The Preserve Manager will correct any resulting damage within 60 days or as soon as conditions allow.

8.3.8 Encroachment by Neighboring Property Owners / Other Members of the Public

Encroachment into Preserve Area may include such activities as people using sites for gardening, or horticulture (growing of marijuana), or transient / homeless encampment within Preserves. Additional possible encroachment may include construction of off-road race tracks, installation of fencing for containment of animals (chickens, goats, cattle, rabbits), unauthorized trails or gates/access points, or construction of structures (e.g. hunting blinds or tree houses). If unauthorized access to preserve properties is observed within the properties appended to this plan, the Preserve Manager will follow

City procedures pursuant to the Rocklin Municipal Code section 8.30.110 (Appendix 18) for notifying the party responsible, and will require correction within 60 days. The City Police department will be utilized when necessary to enforce correction of problems of encroachment. If encroachments are not corrected within 60 days, City staff will dismantle and remove any components of unauthorized structures or non-native plantings from the preserve. Unauthorized trails will be treated and re-planted and the Preserve Manager will install additional signage as necessary. Illegal gates and access points will be removed and the homeowner or HOA will be billed for the expense where possible.

Encroachments that exist within Preserves at the time that this document is approved will be removed in the following timeline. Within 6 months, all existing encroachments will be identified and within 12 months, all home owners will be notified of the requirement to correct encroachments. If encroachments have not been corrected within 12 months of the notice date, the City will perform the required work and bill the property owner.

8.4 Open Space Maintenance Monitoring

All properties appended to this Plan shall be inspected once per month. General Inspections will allow for timely identification and correction of maintenance issues, encroachment, vandalism, and unanticipated impacts. Detailed biological monitoring efforts will be conducted on different schedules as appropriate.

8.4.1 Monitoring Timeline

General Inspections of the properties appended to this Plan will be conducted on a monthly basis. The Preserve Manager will make recommendations with regard to any issues related to management goals including (1) any habitat enhancement measures necessary to meet goals, (2) any site / active management issues that need to be addressed (e.g., encroachment issues, litter, fence repair, structure maintenance, etc.), and (3) any required changes in the monitoring or management practice that may be necessary, including such things as adaptive management, site evaluation for specific recurrent problems, or monitoring of specific past issues. An inspection sheet (see appendix 12) will be used to evaluate preserves during each visit.

Table 8-1. Open Space Maintenance Monitoring Summary

Action Summary	Responsible Party	Timing
General Inspections	Preserve Manager	Spring and Summer
General Inspection Reports	Preserve Manager	Following each monitoring visit
Corrective Action	Preserve Manager/ Creek Crew	Within 60 days of detection
Preventive Action	Preserve Manager	Throughout the year as needed

8.5 Wildfire Management Descriptions

8.5.1 Creating Preventable Firebreaks

In some cases, particularly older preserve areas, preventable firebreaks may need to be created within the Preserve to reduce ladder fuels in areas where the City Fire Department deems a firebreak necessary. Ladder fuels will be removed in accordance with the *Citywide Fuel Load Reduction Guidelines* (Appendix 13). The guidelines would be utilized by the City when conducting fire fuel load reduction activities on any property within the City. While it is recognized that any specific site being considered for fuel load reduction activities will have its own unique characteristics that will require varying approaches, the guidelines are intended to provide the City with a very basic and consistent approach for fuel load reduction activities.

The City's primary purpose in conducting fuel load reduction activities is to reduce ladder fuels by thinning and removing trees and brush so as to decrease the vertical continuity between surface and crown fuels. The actions are intended to limit the ability of a fire to transition from surface to crown by separating surface fuels from crown fuels.

The guidelines include the following provisions:

1. Tree Species less than 6 inches dbh (diameter at breast height) will be selectively identified for removal.
2. Tree species larger than 6 inches dbh will have their limbs trimmed and/or removed up to 10 feet in height.
3. Diseased, dying, or dead trees will be selectively identified for removal if they are deemed to represent a hazard (e.g. the tree is in danger of falling and damaging property and/or blocking natural drainage ways, and/or the tree represent a significant source of fire fuel load in the opinion of the City Fire Department).

8.5.2 Grazing / Browsing

Grazing / Browsing should be used as a fuel reduction method. Goats, sheep or cattle may be used for grazing / browsing. The Preserve Manager may contract such services to third party service providers (The City does not maintain an animal herd for this purpose).

8.5.3 During a Wildfire

If a wildfire occurs, firefighting vehicles will need to access the open space. The Preserve Manager will endeavor to provide appropriate access points for firefighting efforts. It is recognized that health and safety concerns (during emergencies) may take precedent, and that in cases where such efforts result in damage to the Preserve (or to function of the Preserve), the Preserve Manager will make efforts to restore the form and function. In cases where damage is significant, the Preserve manager will develop a restoration plan that will be submitted to the Agencies for approval. Funding for restoration activities is

included as part of the contingency funds for emergency activities in the CFDs and General Fund as described in section 4.5.2.

8.6 Wildfire Monitoring

Annual surveys should be conducted to reduce the risk of fire within the properties appended to this plan. This will include evaluation of fuel and thatch accumulation, as well as development of management recommendations for fire risk reduction.

8.6.1 Monitoring Timeline

Monitoring to identify potential fire hazards and ensure that firebreaks are implemented will occur in late spring (prior to June 1st) of each year, when fuel load can typically be best assessed. Identification of potential control burn areas will be conducted on an as needed/if desired basis. If a wildfire occurs, a site visit will be conducted to determine if remediation is needed. Significant restoration efforts will be coordinated with the appropriate Agencies.

9.0 City Facilities Maintenance, Installation and Replacement

Agency authorized facilities within the properties appended to this plan include, but are not limited to trails and maintenance roads detention and retention structures, water quality features, outlets and inlets, bridges and culverts, water lines, natural gas lines, stream gauges, and cell phone towers. These facilities shall be maintained, repaired, and updated with the integrity to protect biological resources from unpermitted impacts. All such facilities will be clearly identified and mapped as a part of the Baseline Condition report. Easement holders (such as utility operators) will be identified, and will be allowed appropriate access. In cases where maintenance of facilities conflicts with the management goals of the preserve, the Preserve Manager will conference with the Agencies to develop an appropriate solution.

9.1 Facility Specific Maintenance and Installation Descriptions

9.1.1 Hiking / Bike Trails and Maintenance Roads

Maintenance of all Agency authorized hiking / bike trails may include trimming of overhanging trees and shrubs, mow-strips of up to 4' wide on each side of the trail, using herbicides within 4' of the trail to control vegetation (e.g. poison oak), maintenance of trail surfaces including repaving or replacement of hardscape, and maintenance of trail grades. All trails and maintenance roadways that are explicitly authorized by the DA permit will be clearly mapped as a part of the Baseline Condition report for each preserve appended to his Plan (including delineation of maintenance strips). The overall goal of the

preserve management will be the maintenance of biological conditions, and new recreational uses are not anticipated.

9.1.2 Post-Construction Water Quality Features

Under the Clean Water Act, the City is required to regulate stormwater discharges by the National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit. The City is currently covered under California's Phase II NPDES Municipal General Stormwater Permit. While the majority of stormwater quality improvement focuses on point source control, detention/retention structures are occasionally located within Open Space areas.

Currently, only retention/detention structures (may also serve as water quality basins) and vegetated swales are the only post construction storm water quality controls found with the City's Open Space. Post-construction stormwater quality controls utilized in the future may include water quality basins (constructed wetland basins, water quality detention basins, and infiltration basins), infiltration trenches, vegetated swales, and vegetated filter strips. These uses are presented in the Plan for conceptual approval. The installation of outfall structures and constructed swales/ditches is discussed in more detail in Section 9.1.4 below. The Preserve Manager will coordinate with the project manager, and State and Federal Agencies for approval of the installation of these controls. The required maintenance actions will depend on the individual post construction water quality feature. The City will ensure post-construction water quality controls found within Open Space are regularly inspected and ongoing maintenance is occurring. A maintenance plan will be prepared for each post construction BMP installed within the Open Space as outlined in the Stormwater Quality Design Manual.

Until the maintenance plans are developed, maintenance for water quality basins will include regular trash removal and occasional removal or replacement of vegetation, and may require sediment removal on a more irregular basis. Additionally, vegetation removal may be required as a mosquito abatement measure. If problematic erosion is found during regular inspections the water source will be redirected or dissipated. If necessary, the area of erosion may be recontoured, mulched and/or seeded with the appropriate native seed mix. Channels leading to Water Quality Basins may also require vegetation or sediment removal to allow for free flow into the basin.

Maintenance for grassy swales will include regular trash removal, the occasional removal (mowing or weed-whacking) or replacement of vegetation, occasional removal of sediment, and the repair of problematic erosion.

9.1.3 Outfalls / Detention Basins

Under the Clean water Act, the City is required to regulate stormwater discharges by the National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit. Facilities, such as outfall structures, and detention basins that are explicitly authorized by the DA permit will be clearly identified as a part of the Baseline Condition report for each Preserve appended to this Plan, and will be maintained by the Preserve Manager. Management may include removal of obstructions (silt, vegetation, and garbage), clearing of live vegetation, maintenance of vegetated swales, or LID (Low Impact Development) features such as vegetated infiltration basins (detention basins). If new outfalls or

detention basins (or other water quality features) are proposed, the Preserve Manager will obtain approval and any necessary permits from the Agencies prior to implementation.

9.1.4 Landscaping / Other Adjacent Land Uses

Landscaping that is adjacent to properties appended by this Plan may have adverse effects on vegetation within the Preserve. For example, vernal pool vegetation is adapted to cyclical wet / dry seasonality, and if the hydroperiod is artificially extended (e.g., by runoff from landscaping), vernal pool vegetation typically does not persist. Similarly, runoff from up-slope agricultural practices or from development projects may have the effect of altering the timing and volume of discharge of water which may alter the vegetative composition. The Preserve Manager will make reasonable efforts to control the effects of adjacent land uses on Preserves by controlling buffer space where possible, and by controlling runoff onto Preserves where it does not support the management goals.

9.1.5 Utilities and Associated Easements

All easements will be identified as a part of the Baseline Condition report for properties appended to this Plan. The Preserve manager will work with easement holders who have a right to access utilities to monitor, maintain, inspect and repair such facilities. Access will be limited to only the area needed to access the utility and complete the planned activity, and efforts will be undertaken to protect the functions and values of the Preserve, while concurrently allowing easement holders to exercise their legal rights. If activities granted pursuant to easement rights trigger permit requirements, the Preserve Manger will alert the Agencies and the easement holder of such obligations.

9.2 Emergency Facility Maintenance

Unforeseeable emergencies may occur on the properties appended to this plan. In such emergencies, coordination with appropriate agencies may be required.

If any action is taken by the City of Rocklin as a result of an emergency situation, and such action has an effect of the biological, chemical, or physical function of a preserve area, the agencies will be notified within two weeks following the emergency. The notification will summarize the emergency, actions taken, and will propose remediation to restore form and function of the preserve area.

9.3 City Facility Maintenance Monitoring

The goal of City facility monitoring will focus on determining if maintenance, replacement, or modifications are needed, such as outfall design modifications to prevent erosion. City facility maintenance will occur on an on-going basis. The Preserve Manager will work with City personnel to ensure that all maintenance, replacement, and modification is done in the most protective and sensitive

manner, and will be responsible for ensuring that appropriate permits are attained from regulatory agencies (where needed).

9.4 Maintenance Impacting Listed Species

Although measures will be taken to avoid direct and indirect impacts to listed species, some impacts may occur as a result of routine maintenance or during efforts to ensure public safety. The Agencies will be contacted in such events to determine necessary permitting requirements.

10.0 Prohibited Activities Within Open Space Preserves

10.1 Prohibited Activities

This plan explicitly prohibits use of preserves for activities that hinder or harm the capacity of the Preserve Manager to meet the management goals. These activities include the use of preserves for any activity that may directly or indirectly negatively affect the functions and values of the preserve. The following are explicitly prohibited pursuant to this plan.

- Access, except along Agency authorized trails or for management pursuant to this Plan or law enforcement or emergency situations.
- Use of preserve for storage of excavated material, or any other fill material, even on a temporary basis
- Storage or dumping of garbage, concrete rubble, asphalt, construction materials, or fuels
- Burning of garbage, wood, or any other material
- Construction of new trails or roadways without agency consent
- Use of preserve for active recreation (Park uses) or overnight camping.
- Establishment of new storm water outfalls or use of preserve for storm water detention (existing outfalls described in the Baseline Condition for specific Preserve areas are excluded)
- Discharging or carrying firearms, crossbows, fireworks, or projectile weapons of any kind is not permitted (except law enforcement officials)
- Use of any motorized vehicle, including off-road vehicles, within preserve boundaries (except as required for Emergencies or preserve management)
- any adjacent landowner or resident to create a garden, landscape, playground or any other type of "improvement"
- Use of preserve for any agricultural production
- Planting of Non-native vegetation. The sides of newly constructed trails will be reclaimed with plant materials that are native to Placer County. Native plant materials may be used to replant any disturbances to open space.

- Personal use for privately owned animals such as horses, dogs, sheep, or other livestock
- Activities that unduly interfere with the health, safety, and welfare of the users or neighbors in the area, or that create a nuisance or hazard to the use and safety of person using or neighboring such areas is prohibited. Disorderly conduct (including amplified sound) shall be prohibited.
- Creation of unauthorized gates or access points to preserve areas.
- Construction, reconstruction or placement of any building, billboard, sign, structure, or other improvement, except as provided in the Long-term Management Plan or upon approval of the Corps.
- Unseasonable watering; use of fertilizers, herbicides, pesticides, biocides, or other agricultural chemicals; mosquito abatement activities; weed abatement activities; incompatible fire protection activities; and any and all other uses which may adversely affect the conservation purposes of this Declaration.
- Grazing and agricultural activity of any kind, except as provided in the Long-term Management Plan.
- Commercial or industrial uses.
- Depositing or accumulating soil, trash, ashes, refuse, waste, bio-solids or any other material.
- Filling, dumping, excavating, draining, dredging, mining, drilling, removing, exploring for or extracting minerals, loam, gravel, soil, rock, sand or other material on or below the surface of the Property, or granting or authorizing surface entry for any of these purposes.
- Altering the surface or general topography of the Property, including building roads, paving or otherwise covering the Property with concrete, asphalt, or any other impervious material, except as provided in the Long-term Management Plan and approved by the Department of the Army Permit of subsequently approved by the Corps.
- Removing, destroying, or cutting trees, shrubs or other vegetation, except as required for: (i) fire protection measures as specified in the Long-term Management Plan; (ii) maintenance of existing foot trails or roads; (iii) prevention or treatment of disease; (iv) utility line clearance.
- Transferring any water right necessary to maintain or restore the biological resources of the Property.
- Planting, introduction or dispersal of non-native or exotic plant or animal species.
- Manipulating, impounding or altering any natural watercourse, body of water or water circulation on the Property and any activities or uses detrimental to water quality, including but not limited to degradation or pollution of any surface or sub-surface waters.
- Recreational activities including, but not limited to, off-trail hiking or biking, horseback riding, hunting or fishing.
- Permitting a general right of access to the property.
- Assigning, terminating, or altering any and all mineral, water, or air rights, without the prior written authorization of the Corps.
- Granting any additional interest in the Property, without the prior written authorization of the Corps

11.0 Recreation, Education, Partnerships, and Volunteer Opportunities

11.1 Recreation, Education, Partnerships, and Volunteer Opportunity Goals

Unless otherwise specifically identified in the DA permit, Preserve areas are intended to be biological preserves and will be closed to public access. Preserves may only be used for passive recreational activities if allowed by the DA permit. Additionally, research uses are allowed as long as they do not interfere with the ability of the Preserve Manager to meet management obligations and goals. Use of the preserve area for research purposes must be approved by the Preserve Manager and the Regulatory Agencies. The properties appended to this Plan should be used to increase awareness of open space issues, build support for protecting open space areas, and minimize City expenditures to correct open space impacts.

11.1.1 Recreation

Access to the preserves shall be limited by fencing and signage. Passive recreation is only allowed on trails explicitly authorized by the DA permit.

The use of bike trails and hiking trails, outlook points, and other passive uses that do not impact listed species habitat and are approved by the Preserve Manager and DA permit, may be allowed if they are part of the baseline condition or are approved by the regulatory agency after the site is appended to this Plan. All recreational uses of individual Preserves appended to this plan must be established as a part of the Baseline Condition Report for that specific parcel or approved by the regulatory agency. The Preserve Manager reserves the right to remove recreational uses if it is determined that they are having a deleterious effect on the preserve, or are preventing the preserve from reaching management goals.

In no case will recreational use of a site be prioritized above the management of preserve parcels as biological preserves.

11.1.2 Education

Educational programs within the open space preserves will be limited to students, parents, and faculty of the local school district (or other educational institutions), with the exception of training conducted for City staff. Individuals or groups should coordinate with the Preserve Manager prior to use of the open space. It is the responsibility of the Preserve Manager to ensure such activities do not adversely affect the preserved habitats. Research projects desiring to work directly with listed species must gain approval from the appropriate Agency(s), and may be required to attain agency permits prior to such work.

11.1.3 Partnerships

The Preserve Manager will take available opportunities to create partnerships with governmental and non-governmental groups to allow for additional preserve properties to be appended to this Plan.

Additionally, it is hoped that such partnerships may contribute to the addition of more properties to the portfolio, and thereby preservation of additional open spaces. City Staff are encouraged to work with educational institutions and other land-management groups to further understanding of efficient land management to reach management objectives.

11.1.4 Volunteer Opportunities

Various volunteer opportunities may develop overtime within the properties appended to this Plan. Such opportunities may include but are not limited to restoration or monitoring opportunities, adopt a trail, or educational / naturalist programs.

12.0 Reporting Requirements and Agency Notification Process

12.1 Annual Reporting Requirements

Annual reports on all management tasks conducted and general site conditions will be provided by the Preserve Manager to the Regulatory Agencies by June 30 of each year. This report will include descriptions for each Preserve parcel appended to this Plan, and will include (for each parcel) specific recommendations with regard to (1) any habitat enhancement measures deemed to be necessary to meet preserve goals, (2) any maintenance problems or violations of this Plan or the deed restrictions present, (3) a proposed resolution and timeline for any maintenance problems or violations of this Plan or the deed restrictions, and (4) any changes in the monitoring or management program that appear to be warranted based on monitoring results to date, or recommendations for changes to monitoring or maintenance goals. Map showing appended preserves, general and biological observations and photos for each preserve. Reference Corps regulatory number SPK-2014-01022.

12.1.1 Review and Approval

All activities requiring Agency review and approval will be outlined in the annual report. If it is not possible to include such information in the annual report, the Preserve Manager will submit a separate letter to the Agencies. A written approval from these agencies must be obtained before proceeding with such activities. Additionally, any proposed activity that may trigger a permitting requirement must be discussed in annual reports, and appropriate permits must be attained prior to implementation. Any changes to management goals must be discussed and approved by the Agencies prior to implementation.

12.1.2 Activities Requiring a Permit

Some activities that may be proposed by the Preserve manager for a particular preserve may trigger permitting requirements pursuant to State or Federal law. This Plan describes a suite of maintenance

and monitoring activities, most of which are presumed to not trigger these requirements, however it is incumbent on the Preserve Manager to apply for regulatory permits when necessary. In cases where activities discharge fill material into regulated waters of the United States, the Preserve Manager must seek appropriate Clean Water Act, and State of California permits (Section 1600 of the Fish & Game code, and Porter-Cologne Act permissions). Additionally, there may be instances where management activities have the potential to affect protected species (pursuant to either the Federal- or State Endangered Species Act). The Preserve Manager will maintain communication with Agency personnel, both through annual reporting, and through more direct relationships, in order to make these determinations on a case-by-case basis. It is understood that not all potential scenarios have been captured within this Plan and that the Preserve manager will coordinate activities with the Agencies where and when necessary.

12.1.3 Changes in Notification Requirements

The City, the Service, and the Corps may agree to change the notification requirements for certain activities that do not require a permit. These would be cases where repeated notification or requests for approval have been made for a certain activity and a course of action has been established. To reduce staff time required from both the City and the Agencies, the City would follow the approved course of action and notification would not be required.

12.1.4 Agency Monitoring/Inspection

Corps and Service personnel may inspect and monitor the condition of any append preserve at any time.

12.2 Notices

Any notices regarding this long-term management plan shall be directed as follows:

PRESERVE MANAGER:

City of Rocklin
Public Works Director
4081 Alvis Court
Rocklin, CA 95677
916-625-5162

PROPERTY OWNER:

Same as Preserve Manager

SIGNATORY AGENCY:

U.S. Army Corps of Engineers
Sacramento District
1325 J Street, Room 1350
Sacramento, CA 95841
Attn: Nancy Haley, Chief, California North
Branch
Telephone: 916-557-7731

13.0 References

- California Invasive Plant Council. 2006. Protecting California's Wildlands from Invasive Plants through Research, Restoration, and Education. California Invasive Plant Inventory.
- Service. 2007. Species Account Conservancy Fairy Shrimp (*Branchinecta conservatio*). U.S. Fish and Wildlife Service, Sacramento, CA.
- _____. 2007. Species Account Fisher (*Martes pennanti*). U.S. Fish and Wildlife Service, Sacramento, CA.
- _____. 2007. Species Account Vernal Pool Fairy Shrimp (*Branchinecta lynchi*). U.S. Fish and Wildlife Service, Sacramento, CA.
- _____. 2007. Species Account Vernal Pool Tadpole Shrimp (*Lepidurus packardi*). U.S. Fish and Wildlife Service, Sacramento, CA.
- _____. 2009. Species Account California Tiger Salamander (*Ambystoma californiense*). U.S. Fish and Wildlife Service, Sacramento, CA.
- _____. 2009. Species Account Delta Smelt (*Hypomesus transpacificus*). U.S. Fish and Wildlife Service, Sacramento, CA.
- _____. 2009. Species Account El Dorado Bedstraw (*Galium californicum sierrae*). U.S. Fish and Wildlife Service, Sacramento, CA.
- _____. 2009. Species Account Layne's Butterweed (*Senecio layneae*). U.S. Fish and Wildlife Service, Sacramento, CA.
- _____. 2009. Species Account Pine Hill Ceanothus (*Ceanothus roderickii*). U.S. Fish and Wildlife Service, Sacramento, CA.
- _____. 2009. Species Account Stebbins' Morning Glory (*Calystegia stebbinsii*). U.S. Fish and Wildlife Service, Sacramento, CA.
- _____. 2009. Species Account Sacramento Orcutt Grass (*Orcuttia viscida*). U.S. Fish and Wildlife Service, Sacramento, CA.
- _____. 2009. Species Account Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*). U.S. Fish and Wildlife Service, Sacramento, CA.
- _____. 2010. Species Account California Red-Legged Frog (*Rana draytonii*). U.S. Fish and Wildlife Service, Sacramento, CA.
- _____. 2014. Federal Endangered and Threatened Species that Occur in or May Be Affected by Projects in the Counties and/or U.S.G.S 7 ½ Minute Quads Requested. County Lists. U.S. Fish and Wildlife Service, Sacramento Fish and Wildlife Office, Sacramento, CA.
- _____. 2014. Mountain Yellow-Legged Frog (Northern DPS) *Rana muscosa*. U.S. Fish and Wildlife Service.

_____. 2014. Species Account Giant Garter Snake (*Thamnophis gigas*). U.S. Fish and Wildlife Service, Sacramento, CA.

_____. 2014. Species Profile Environmental Conservation Online System; Chinook salmon (*Oncorhynchus tshawytscha*). U.S. Fish and Wildlife Service, Sacramento, CA.

_____. 2014. Species Profile Environmental Conservation Online System; Lahontan cutthroat trout (*Oncorhynchus clarkii*). U.S. Fish and Wildlife Service, Sacramento, CA.

_____. 2014. Species Profile Environmental Conservation Online System; Steelhead (*Oncorhynchus (=salmo) mykiss*). U.S. Fish and Wildlife Service, Sacramento, CA.

_____. 2014. Species Profile Environmental Conservation Online System; Tahoe Yellow Cress (*Oncorhynchus (Rorippa) subumbellata*). U.S. Fish and Wildlife Service.

_____. 2014. Species Account Yellow-Billed Cuckoo (*Coccyzus americanus*). U.S. Fish and Wildlife Service, Sacramento, CA.