# Operations and Management Plan

For

# Folsom Plan Area Conservation Area and Passive Recreation Open Space

Sacramento County, California

9 June 2017

Prepared For: Folsom South Area Group



## **Operations and Management Plan**

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#### 1.0 INTRODUCTION

#### 1.1 Setting

The approximately 3,513-acre Folsom Plan Area (FPA) is located in the City of Folsom, Sacramento County, California. It is bound by Highway 50 to the north, Prairie City Road to the west, White Rock Road to the south, and the El Dorado County line to the east (Figure 1. *FPA Open Space Location and Vicinity*). The FPA corresponds to portions of Sections 15 through 22 of Township 9 North and Range 7 East of the "Buffalo Creek, Clarksville, Folsom, and Folsom SE, California" U.S.G.S. 7.5-minute quadrangles (USGS 1978a and b):

The FPA is a large-scale, mixed-use, master-planned community consisting of mixed-density residential uses, a regional shopping center, and other employment generating uses. The FPA will also provide associated infrastructure including on-site backbone infrastructure, schools, parks, an on-site trail system, off-site sewer improvements, off-site roadway improvements, and off-site highway interchanges. In addition to the development, the FPA would permanently protect 30 percent of the site ( $\pm 1060$  acres) as on-site open space. This will consist of  $\pm 72$ acres of naturalized parkways<sup>1</sup> that will be built as part of project development, and ±988.17 acres of open space that will permanently protect oak woodlands, Waters of the U.S. including wetlands, cultural resources, and other sensitive habitat or species. This latter open space type will consist of two areas: the Conservation Area and the Passive Recreation Open Space (Figure 1 and Attachment A). The Conservation Area (±340 acres) contains sensitive habitats such as preserved tricolored blackbird (Agelaius tricolor) foraging habitat, Waters of the U.S., and protected cultural resources, and will be protected by a declaration of covenants and restrictions or conservation easement in a form acceptable to the applicable federal and state regulatory agencies. The Passive Recreation Open Space (±648 acres) will be established to protect oak woodland/savannah in accordance with City of Folsom (City) guidelines while allowing for limited recreational uses such as trail systems and other recreation activities or facilities the City may implement in the future. The Passive Recreation Open Space will be zoned as Open Space, thus restricting future development, but will not be subject to a recorded declaration of covenants and restrictions or conservation easement. The boundaries and acreages of the Conservation Area and Passive Recreation Open Space, as shown in this document, are subject to modifications. As each project or phase moves forward and detailed grading plans are prepared, the exact boundaries and acreages of the Conservation Area and Passive Recreation Open Space will be determined, and final maps will be appended to the Plan in Attachment B (Final Conservation Area and Passive Recreation Open Space Maps).

The Conservation Area and the Passive Recreation Open Space will collectively be referred to as "FPA Open Space" throughout this document." However, since the two open space types have their own requirements and management needs, they will be discussed separately within this document. Due to the sensitive habitats and cultural resources that are protected with the Conservation Area, long-term monitoring and management for this area is required in accordance with regulatory agencies and is more restrictive than management within the Passive Recreation Open Space. Monitoring and management of the Conservation Area is

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<sup>&</sup>lt;sup>1</sup> Although considered part of the larger open space area for the FPA, naturalized parkways are not the subject of this Operations and Management Plan. As such, no further discussion on the management of these areas is included in this document.

specifically addressed in Chapter 5 including inspection requirements, prohibitions and long-term management activities. Management of the Passive Recreation Open Space is much less restrictive than the Conservation Area, and it is addressed in Chapter 6. While many of the management activities are similar (or the same) between these two open space types, they are discussed separately within these two chapters to provide a complete discussion of management needs for each open space type.

#### 1.1.1 Regulatory Background

#### 1.1.1.1 U.S. Army Corps of Engineers

The FPA proponents include private developers/property owners and the City. The developers/applicants own specific properties (projects) within the FPA. The City is also an applicant and will have jurisdiction over the FPA roadways and other backbone infrastructure, however, it will be the developers that implement the backbone infrastructure as part of their projects as each development moves forward. The developers/applicants will all proceed with development under the guidelines of the FPA and its EIR/EIS, but on their own schedules. The project proponents for the FPA are currently seeking authorization to fill Waters of the United States (U.S.) from the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act under separate permits. Separate permit authorization (Permit) (e.g., individual permit, general permit, letter of permission) for each portion of the FPA are required from the USACE for the impacts to waters of the U.S., including wetlands (Waters). As each Permit is obtained or modified, it will be added to this document (Attachment C). A summary of the preservation requirements for each permit or subsequent modification (as of the date of this Plan) is included in Table 1 (Summary of Allowable Fill and Preservation Requirements by Permit). As each property receives a permit or a modification, this table will be updated.

This Operations and Management Plan for the Folsom Plan Area Conservation Area and Passive Recreation Open Space (Plan) was prepared in anticipation of special conditions of the Permits requiring the development of a long-term management plan for the portions of the FPA Open Space that contain preserved Waters of the U.S. and/or Historic Properties.

#### 1.1.1.2 California Department of Fish and Wildlife

The California Department of Fish and Wildlife (CDFW) has issued a Master Streambed Alteration Agreement (Master Agreement) between CDFW and the Folsom South Area Group (Attachment D). This 12-year agreement covers general construction of the FPA including the backbone infrastructure. Per the terms of the Master Agreement, as each individual project moves forward, a sub-notification will be submitted to CDFW which details Project specific impacts, construction detail, and mitigation requirements for CDFW jurisdictional features. In anticipation of the terms of the final Streambed Alteration Agreement for each project or phase of project, this Plan also addresses required management for foraging habitat for tricolored blackbird within certain Conservation Areas within the FPA.

	Verification Date	Permit Date	Modification Date	Acres of Fill Allowed	Acres of Preservation Required per Permit	WOTUS Preservation Required Permit			
CWA Section 404 Permit Issued:									
Backbone Infrastructure SPK-2007-02159	Varies; All backbone infrastructure within the FPA verified concurrently with each Project.	6/6/2014		Permanent On-site: 11.302 ac comprised of: 0.624 ac vernal pool 1.231 ac seasonal wetland 4.930 ac seasonal wetland swale 0.617 ac seep 0.017 ac marsh 1.181 ac creek/channel 1.494 ac intermittent drainage 0.356 ac ditch 0.852 ac pond  Permanent Off-site: 2.349 ac comprised of: 0.316 ac vernal pool 0.061 ac seasonal wetland 0.055 ac seasonal wetland swale 1.440 ac marsh 0.426 ac creek/channel 0.044 ac intermittent drainage 0.007 ac ditch	No preservation required.	No preservation required.			
Mangini Ranch SPK-2013-00486	2/6/2009	8/6/2014	5/2/16 Modifications to Project Description and Special Condition 2.	Permanent: 5.94 ac comprised of: 0.12 ac vernal pool 0.44 ac seasonal wetland 3.59 ac seasonal wetland swale 0.14 ac seep 0.56 ac ephemeral drainage 0.12 ac ditch 0.97 ac pond	65	9.894 ac comprised of: 2.922 ac seasonal wetland 0.132 ac vernal pool 0.061 ac marsh 0.023 ac seeps 2.219 ac ephemeral drainage 4.116 ac intermittent drainage 0.419 ac pond 0.002 ac ditch/canal			

Table 1. Summary of Allowable Fill and Preservation Requirements by Permit\*

Table 1. Sulfilliary of Allowable Fill and Freservation Requirements by Fermit								
		Permit			Acres of Preservation	WOTUS Preservation		
	Verification Date	Date	Modification Date	Acres of Fill Allowed	Required per Permit	Required Permit		
Carpenter Ranch SPK-2006-00984	7/23/07	7/25/2014		Permanent: 8.381 ac comprised of: 0.808 ac vernal pools 0.010 ac seasonal wetland 4.314 ac seasonal wetland swale 1.234 ac seep 0.014 ac marsh 1.169 ac Creek/Channel 0.833 ac ditch	64.2	14.732 ac comprised of: 0.069 ac vernal pool 0.113 ac seasonal wetland 2.418 ac seasonal wetland swale 0.262 ac seep 0.078 ac marsh 11.498 ac creek/channel 0.285 ac ditch		
Russell Ranch SPK-2013-00488	2/6/2009	9/24/2015		Permanent: 1.38 ac comprised of: 0.02 ac vernal pool 0.07 ac seasonal wetland swale 0.39 ac seep 0.90 ac of intermittent drainage  Temporary: 0.20 ac comprised of: 0.20 ac of seasonal wetland swale	19.3	7.80 ac comprised of: 0.07 ac vernal pool 1.33 ac seasonal wetland swale 5.50 ac seep 0.90 ac intermittent drainage		
Folsom 138 (Gragg Property) SPK-2008-00.26	2/6/2009	9/18/2014		Permanent: 0.921 ac comprised of: 0.018 ac vernal pool 0.084 ac seasonal wetland 0.521 ac seasonal wetland swale 0.246 ac seep 0.040 ac marsh 0.012 ac intermittent drainage	3.51	1.475 ac comprised of: 0.635 ac seasonal wetland 0.578 ac seasonal wetland swale 0.263 ac seep		
	nit Not Yet Issued: (to b		issuance of the perm	it)				
Folsom Heights	2/6/2009	TBD						
Alder Ranch (Hillsborough and Sacramento Country Day School)	7/11/2008 (Hillsborough) 4/20/2004 (Sacramento Country Day School)	TBD						
Prairie City Road Business Park	7/11/2008	TBD						
Javanifard and Zarghami	2/6/2009	TBD						

<sup>\*</sup>Current as of the date of this O&M Plan.

#### 1.1.1.3 U.S. Fish and Wildlife Service

A U.S. Fish and Wildlife Service (USFWS) Biological Opinion was issued for the FPA (Service File #81420-2010-F-0620-1). Biological Opinions are issued as a result of an Endangered Species Act (ESA), Section 7 consultation between the USACE and the USFWS. A Section 7 consultation is the process by which federal agencies, permitting an otherwise legal activity, consult with the USFWS to authorize the "incidental take <sup>2</sup>" of species listed as threatened or endangered under ESA. The Biological Opinion for the FPA is included in this document as Attachment E. All mitigation requirements to offset impacts on listed species would occur off-site at a USFWS approved mitigation bank, and is the requirement of the individual developers. Therefore, no further coordination with the USFWS relative to the FPA open space is expected.

#### 1.1.1.4 National Historic Preservation Act

In compliance with Section 106 of the National Historic Preservation Act (NHPA) and the First Amended Programmatic Agreement (FAPA) (Attachment F) between the USACE and the California State Historic Preservation Officer (SHPO), regarding the Folsom Plan Area Specific Plan, and its Historic Property Management Plan (HPMP), a Historic Property Treatment Plan (HPTP) will be required if there will be adverse effects to Historic Properties. Historic Properties are defined in 36 CFR Part 800.16 as cultural resources that are listed on, or are eligible for inclusion in, the National Register of Historic Places. The activities authorized in this Plan shall not conflict with those allowable or prohibited under the FAPA or HPTP. Copies of approved HPTPs as of the date of this document are provided in Attachment G; however, as additional HPTPs are developed and approved under the FAPA, they will be submitted to the City for incorporation into this Plan. In addition, some activities discussed in this Plan are prohibited from occurring within the boundaries of Historic Properties being preserved in perpetuity, either as required by an applicable HPTP or by default through their placement into open space in order to avoid adverse effect. Maps showing the locations of these cultural resources, as well as the subset of resources that require annual monitoring, are provided in a confidential Attachment H to this Plan, and are restricted from public distribution.

Implementation of this Plan within or immediately adjacent to Historic Properties shall include a review by the USACE and/or SHPO, at the discretion of the USACE, prior to implementation. In the event that an HPTP is not required for an Applicant, provisions for avoidance of adverse effects to Historic Properties may have been built into the project design. Implementation of this Plan shall not result in an adverse effect to Historic Properties.

#### 1.1.2 Remediation Requirements

<sup>&</sup>lt;sup>2</sup>Take is defined as: "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect listed animal species, or attempt to engage in such conduct" (16 U.S.C. 1538). Harm has been further defined to include habitat destruction when it injures or kills a listed species by interfering with essential behavior patterns, such as breeding, feeding, foraging, or resting. "Harass" in this

listed species by interfering with essential behavior patterns, such as breeding, feeding, foraging, or resting. "Harass" in this definition means "...an intentional or negligent act or omission that creates the significant likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering (50 CFR § 17.3). The term "person" is defined as "an individual, corporation, partnership, trust, association, or any other private entity; or any officer, employee, agent, department, or instrumentality of the Federal government, of any State, municipality, or political subdivision of a state, or any other entity subject to the jurisdiction of the United States."

Contaminated media (i.e., soil, groundwater, and/or sediment) beneath a small portion of the FPA Open Space, is being remediated by Aerojet under U.S. Environmental Protection Agency (EPA) and State oversight. This area (hereafter referred to as "Remediation Area") is precluded from various actions that would involve use of or access to groundwater or soil disturbance. A map showing the Remediation Area is included in Attachment I, and it includes a portion of the Conservation Area and a portion of the Passive Recreation Open Area. Since the Remediation Requirements by Aerojet are specific to only this area within the FPA Open Space, additional requirements for this area will be fully described in the Land Use Covenants that will be prepared prior to the transfer of these lands to the City. Since the type of remediation is unknown at this time, no further details about these additional requirements or restrictions are available. The City, as Preserve Owner/Manager of the FPA Open Space, is not responsible for implementing Aerojet's Remediation Requirements; however, the City is responsible for oversight of Remediation Personnel working within the FPA Open Space to ensure compliance with this Plan. Remediation Personnel are required to coordinate with the City when access to the FPA Open Space is required.

Portions of the Remediation Area (either Conservation Area or Passive Recreation Open Space area) may be fenced to restrict public access. Signs will be installed along the fence for any restricted area indicating the area is a sensitive area and entry is prohibited. Any work conducted in restricted areas by the City or its agents (i.e., biologists, archeologists, maintenance workers) will have the appropriate training as outlined in the Land Use Covenants. Throughout this document, the Passive Recreation Open Space area is described as open for public use. Any restricted portions of the Passive Recreation Open Space within the Remediation Area is excluded from this allowance and is not open for public use.

#### 1.1.3 Prehistoric and Historic Uses

#### 1.1.3.1 Local Prehistory

The earliest evidence of the prehistoric inhabitants of the region surrounding the project area comes from a single, deeply buried site in the bank of Arcade Creek, north of Sacramento, containing grinding tools and large, stemmed projectile points. The points and grinding implements suggest an occupation date of sometime between 8000 and 5000 BP (Wallace 1978). However, it was not until after about 5500 BP, in the Late Archaic Period, when people began to move into the San Joaquin and Sacramento Valleys in any significant numbers. This earliest permanent settlement of the Delta region of the Sacramento River is called the Windmiller Tradition and is known primarily from burial sites containing relatively elaborate grave goods (Ragir 1972; Wallace 1978). Around 3000 BP, subsistence strategies in the Delta region became noticeably more "focal," with a clear increase in the reliance on acorns and salmon (Elsasser 1978). Culturally, this has been dubbed the Cosumnes Tradition (3700 to 1000 BP), and appears to be an outgrowth of the Windmiller Tradition (Ragir 1972). Projectile points found embedded in the bones of excavated skeletons suggest that warfare was on the rise, possibly as a result of increased competition over available resources and trade (Beardsley 1954; Lillard et al. 1939; Ragir 1972). The next, and final, discrete prehistoric culture is the Hotchkiss Tradition (1000 to 181 BP [AD 1769]) that persisted until the arrival of European settlers in central California (Beardsley 1954; Ragir 1972). During this period, use of acorns and salmon reached its peak, along with hunting of deer. Diet was supplemented with the addition

of waterfowl, hard seeds, and other resources. Large sedentary villages along the lower Sacramento and San Joaquin Rivers, their tributaries, and the Delta were common.

#### 1.1.3.2 Ethnography

Ethnographically, the project area is in the southwestern portion of the territory occupied by the Penutian-speaking Nisenan. The Valley Nisenan lived along the Sacramento River, primarily in large villages with populations of several hundred each. Between there and the foothills, the grassy plains were largely unsettled, used mainly as a foraging ground by both valley and hill groups (Placer County 1992). Individual and extended families "owned" hunting and gathering grounds, and trespassing was discouraged (Kroeber 1976; Wilson and Towne 1978). Residence was generally patrilocal, but couples actually had a choice in the matter (Wilson and Towne 1978).

Subsistence activities centered around the gathering of acorns (tan bark oak and black oak were preferred), seeds, and other plant resources. The hunting of animals such as deer and rabbits, and fishing were also an important part of normal subsistence activities. Large predators, such as mountain lions were hunted for their meat and skins, and bears were hunted ceremonially. Although acorns were the staple of the Nisenan diet, they also harvested roots like wild onion and "Indian potato," which were eaten raw, steamed, baked, or dried and processed into flour cakes to be stored for winter use (Wilson and Towne 1978). The discovery of gold in 1848 at Sutter's Mill, near the Nisenan village of *Colluma* (now Coloma) on the South Fork of the American River, drew thousands of miners into the area, and led to widespread killing and the virtual destruction of traditional Nisenan culture. By the Great Depression, no Nisenan remained who could remember the days before the arrival of the Euro-Americans (Wilson and Towne 1978).

#### 1.1.3.3 Historical

Mining is the dominant historical theme in the FPA and in the surrounding lands. The region later known as the Folsom Mining District was extensively placer mined during the Gold Rush. The Folsom area was originally settled in 1849 by African-American miners, and from that circumstance, the area became known as Negro Bar. By 1855, Chinese miners were reworking abandoned diggings and a large number of them were employed at various regional mines through the 1880s (Westwood *et al.* 2013).

Initially, during the early 1850s, surface deposits (usually less than 3 feet deep) were placer mined through a series of small hand-dug excavations. The surface gravels were washed by pan or by higher-volume methods that employed rockers, long toms, and/or sluice boxes. These activities were often initially concentrated along drainages and swales (such as Alder Creek, which drains the FPA). Ground sluicing, a technique which uses water (not under pressure) to break down gold-bearing gravels, could have occurred any time from the 1850s up until the turn of the century. Low-pressure hydraulic mining took place at Rebel Hill sometime between the mid-1850s and 1884. From the early 1850s until the late 1890s and again in 1925, drift mining was employed at Alder Creek. As cemented gravels cap some of the area, shafts were sunk through this hard surface layer into the "softer" gravels. Gold-bearing leads were followed out with drift mining techniques in these softer gravels.

#### 1.1.4 Surrounding Land Uses

Prior to development, the surrounding land uses included cattle grazing, urban residential, and industrial (i.e., Aerojet facilities). Upon completion of development, the FPA Open Space will be surrounded by a mixed use residential development and associated infrastructure.

#### 1.1.5 Conservation Area Description

The Conservation Area was designed to protect Waters of the U.S. including wetlands, and areas of historical/cultural significance. In addition, portions of the Conservation Area are also being managed as foraging habitat for tricolored blackbird. Attachment A shows the conceptual locations identified as potentially suitable for foraging habitat for tricolored blackbirds. As each phase or project moves forward, a detailed analysis will be conducted to determine what parcel will be used as mitigation for tricolored blackbird foraging habitat, and that parcel will be managed as outlined in this Plan.

The majority of the Waters of the U.S. and isolated Waters of the State within the FPA Open Space and their associated buffers (25-feet for smaller wetlands and drainages and 100-feet for Alder Creek) are protected within the Conservation Area. The Conservation Area boundary shown on the figures within this Plan are subject to slight modifications. As each project moves forward and detailed grading plans are prepared, the exact boundaries and acreages of the Conservation Area and Passive Recreation Open Space will be determined, and final maps will be appended to the Plan in Attachment B.

The Conservation Area boundary incorporates all buffers associated with wetlands and other Waters of the U.S. or isolated Waters of the State. Gaps in the Conservation Area boundary were included for additional trail crossings that the City may wish to install within the Passive Recreation Open Space in the future (Attachment A).

The Conservation Area currently supports numerous plant communities including oak woodland, annual grassland, and Valley foothill riparian. Approximately 49.541 acres of Waters of the U.S. fall within the Conservation Area including: vernal pools (1.876 acres), seasonal wetlands (2.335 acres), seasonal wetland swales (9.065 acres), seep (7.357 acres), marsh (0.153 acre), creek/channel (13.971 acres), ditch (0.625 acre), intermittent drainage (9.107 acres), and pond (5.020 acres). Additionally, 0.030 acre of isolated Waters of the State occur within the Conservation Area including seasonal wetland (0.001 acre), and ditch/canal (0.029 acre). A summary of preservation requirements for each Property that has an active USACE permit is included in Table 1.

The Conservation Area also contains areas of historical or cultural significance. These include historic-era mining-related archaeological sites, including cabin foundations, mine tailings, and portions of mining ditches, among others. The locations of Historic Properties located within the Conservation Area are confidential and information about their locations can be obtained from the City.

The Conservation Area is protected from future development by a recorded declaration of covenants and restrictions or conservation easements in a form that is acceptable to the applicable federal and state Regulatory Agencies, and will be monitored and managed as

outlined in Section 5.0 of this Plan. Use of conservation easements (as discussed throughout the rest of this Plan) will be restricted to specific historic properties identified in a USACE-approved HPTP as requiring preservation in perpetuity. All other portions of the Conservation Area will be protected by recordation of a Declaration of Covenants and Restrictions. There are no existing utility easements within the Conservation Area; therefore, no impacts would occur in the Conservation Area from ongoing maintenance of existing utilities.

#### 1.1.6 Passive Recreation Open Space Description

The Passive Recreation Open Space includes all other areas in the FPA Open Space that are not subject to a recorded declaration of covenants and restrictions or conservation easement. The intent of the Passive Recreation Open Space is to allow limited recreational use for residents while maintaining the adjacent habitats in perpetuity. The City intends to use the Passive Recreation Open Space to provide recreational activities such as bike trails, pedestrian trails, trail amenities and other recreation activities or facilities the City may implement. Some trails and trail amenities have already been incorporated into the project design (as shown in Attachment A) and will be implemented by each project proponent. Additional activities the City may wish to implement (but are not part of the current project design) include additional trails (both paved and unpaved), cross country running/cyclocross course, Frisbee golf, off-leash dog areas and off-leash dog trails, challenge courses such as cross fit, ropes courses, and zip lines, youth-oriented community camping (e.g., scouts), rock climbing, bike park, art walk or trails, wildlife viewing areas, additional parking, staging, and restroom areas, duel equestrian and bike trails along the Alder Creek corridor, an arboretum or botanical garden, and an archery range. All of these are allowable uses within the Passive Recreation Open Space; however, the City will be responsible for obtaining applicable permits and authorizations for any infrastructure required in support of these activities that are not already part of the project design. If any of these activities within the Passive Recreation Open Space are placed near the boundaries of the Conservation Area, additional fencing and signage will be added to protect the Conservation Area from unauthorized access.

Similar to the Conservation Area, the Passive Recreation Open Space boundary shown on the figures within this Plan are subject to slight modifications. Throughout most of the FPA, a transition area of approximately 25-30 feet has been incorporated into the project design. This area is part of the Passive Recreation Open Space which is meant to separate the Conservation Area from the development area. The resources within this transition area are considered to be impacted as this area may be graded to allow for slopes and other grading associated with the development. As each project moves forward and detailed grading plans are prepared, the exact boundaries and acreages of the Conservation Area and Passive Recreation Open Space will be determined, and final maps will be appended to the Plan in Attachment B.

As described in Section 1.1.2, the Passive Recreation Open Space that is within the Remediation Area (Attachment I) may be restricted from public access. Any restricted areas within the Remediation Area will be fenced to restrict public entry. Signs will be installed along the fence indicating the area is a sensitive area and entry is prohibited. Any work conducted in this restricted area by the City or its agents (i.e., biologists, archeologists, maintenance workers) will have the appropriate training as outlined in the Land Use Covenants that will be developed when the Remediation Area is transferred to the City.

Plant communities within the Passive Recreation Open Space include annual grassland and blue oak woodland/oak savannah. The Passive Recreation Open Space will not be subject to a recorded declaration of covenants and restrictions or conservation easement, and it will be managed and maintained according to Section 6.0 of this Plan. Since the Passive Recreation Open Space is adjacent to the Conservation Area, this plan addresses its long-term management in order to protect the Conservation Area in perpetuity.

#### 1.1.7 FPA Open Space Phasing Plan

The development of the FPA is anticipated to occur over approximately 20 years. Prior to initiation of any given project or phase of a project, the project proponent will submit the appropriate information as required in the relevant project's individual permit. It is anticipated that as each property within the FPA is developed, the portion of the FPA Open Space adjacent to the development parcel will be transferred to the City as described in Section 2.3 and a recorded declaration of covenants and restrictions or conservation easement will be recorded over the Conservation Area portion of the FPA Open Space. Figure 2 is a conceptual phasing schematic showing which properties would be responsible for implementing which portions of the FPA Open Space. The exact boundaries of the FPA Open Space that will be transferred to the City will be determined as each project or phase moves forward. As each new recorded declaration of covenants and restrictions or conservation easement within the FPA is recorded, it will be added to Attachment J-1.

#### 1.2 Topography and Soils

The FPA Open Space area is situated at elevations between 240 to 810 feet above mean sea level. There are thirteen different soil types mapped within the FPA Open Space area. Soil series mapped by the Natural Resource Conservation Service for the site include (107) Argonaut-Auburn Complex, 3-8% slopes; (110) Auburn-Argonaut Rock Outcrop Complex, 8-30% slopes; (145) Fiddyment Fine Sandy Loam, 1-8% slopes; (160) Hicksville Sandy Clay Loam, 0-2% slopes, occasionally flooded; (183) Orangevale Coarse Sandy Loam, 2-5% slopes; (190) Pits; (192) Red Bluff loam, 2-5% slopes; (196) Red Bluff-Xerorthents, dredge tailing complex, 2-50% slopes; (235) Vleck Gravelly Loam, 2-15% slopes; (237) Whiterock Loam, 3-30% slopes; (AkC) Argonaut Gravelly Loam, 2-15% slopes; (AwD) Auburn Silt Loam, 2-30% slopes; and (AxD) Auburn Very Rocky Silt Loam, 2-30% slopes (Figure 3. *Natural Resources Conservation Service Soil Types*).

#### 1.3 Biological Resources

Several plant communities occur within the FPA Open Space. These communities support a variety of wildlife species and may support special-status species. Figure 4 depicts the various plant communities present within the FPA Open Space.

#### 1.3.1 Plant Communities and Associated Wildlife

The southern and eastern portions of the FPA Open Space are dominated by annual grassland, while the northwestern portion is primarily blue oak woodland, blue oak savannah, and a riparian corridor along Alder Creek.

#### 1.3.1.1 Annual Grassland Community

The annual grasslands within the FPA Open Space are dominated by a variety of non-native naturalized Mediterranean grasses including soft chess (Bromus hordeaceus), ripqut brome (Bromus diandrus), medusahead grass (Elymus caput-medusae), slender wild oat (Avena barbata), and little quaking grass (Briza minor). Other native and non-native herbaceous species include sticky tarweed (Holocarpha virgata), yellow-star thistle (Centaurea solstitialis), rose clover (Trifolium hirtum), shamrock clover (Trifolium dubium), Fremont's tidy-tips (Layia fremontii), Valley tassels (Castilleja attenuata), and hyacinth brodiaea (Triteleia hyacinthina). The annual grassland supports a modest diversity of wildlife species. Small mammals may include California vole (Microtus californicus), black-tailed jackrabbit (Lepus californicus), deer mouse (*Peromyscus maniculatus*), and pocket gopher (*Thomomys* spp.). These mammals represent potential foraging items for predators such as northern harrier (Circus cyaneus), redtailed hawk (Buteo jamaicensis), white-tailed kite (Elanus leucurus), gopher snake (Pituophis catenifer), western rattlesnake (Crotalus viridus), and coyote (Canis latrans). Birds that may find the grasslands suitable for nesting include the horned lark (Eremophila alpestris) and western meadowlark (Sturnella neglecta). Other birds, which do not necessarily nest within the grasslands, but may forage in this habitat, include Brewer's blackbird (Euphagus cyanocephalus) and tricolored blackbird (Agelaius tricolor).

#### 1.3.1.2 Blue Oak Woodland/Blue Oak Savannah

Blue oak woodland and blue oak savannah occur in the northwestern and western portions of the FPA Open Space. Blue oaks (*Quercus douglasii*) represent the dominant tree species in both of these communities. The species observed in the understory are generally similar to those found in annual grasslands. The blue oak woodland community within the FPA Open Space is characterized by relatively dense canopy cover, while oak distribution in oak savannah habitat is sparse.

#### 1.3.1.3 Valley Foothill Riparian

A relatively narrow Valley foothill riparian community occurs along portions of Alder Creek within the FPA Open Space. Dominant plant species within and adjacent to Alder Creek include narrow-leaf cattail (*Typha angustifolia*), mosquito fern (*Azolla filiculoides*), black willow (*Salix gooddingii*), arroyo willow (*Salix lasiolepis*), sandbar willow (*Salix exigua*), Fremont's cottonwood (*Populus fremontii*), white alder (*Alnus rhombifolia*), Valley oak (*Quercus lobata*), South American vervain (*Verbena bonariensis*), soft rush (*Juncus effusus*), creeping spikerush (*Eleocharis macrostachya*), dallis grass (*Paspalum dilatatum*), Himalayan blackberry (*Rubus armeniacus*), water primrose (*Ludwigia peploides* ssp. *peploides*), water speedwell (*Veronica anagallis-aquatica*), and water cress (*Nasturtium officinale*).

The Valley foothill riparian communities in this region typically support a wide variety of wildlife species including Bewick's wren (*Thryomanes bewickii*), downy woodpecker (*Picoides pubescens*), golden-crowned sparrow (*Zonotrichia atricapilla*), wood duck (*Aix sponsa*), red-shouldered hawk (*Buteo lineatus*), great horned owl (*Bubo virginianus*), and tree swallow (*Tachycineta bicolor*).

The understory scrub community will eventually provide nesting habitat for species such as wrentit (*Chamaea fasciata*), song sparrow (*Melospiza melodia*), and California towhee (*Pipilo crissalis*). Resident and migratory songbirds such as hermit thrush (*Catharus guttatus*), Bewick's wren, fox sparrow (*Passerella iliaca*), and spotted towhee (*Pipilo maculatus*) also utilize willow scrub community for foraging and nesting cover.

Other wildlife species expected to occur within the riparian habitat include Pacific chorus frog (*Pseudacris regilla*), western gray squirrel (*Sciurus griseus*), striped skunk (*Mephitis mephitis*), beaver (*Castor canadensis*), common garter snake (*Thamnophis sirtalis*), and raccoon (*Procyon lotor*).

#### 1.3.1.4 Urban/Disturbed

Several small areas within the FPA Open Space are part of the current road alignment along Placerville Road. These areas are considered to be urban/disturbed and are typically devoid of any vegetation. These areas will remain in place and will be used for emergency vehicle access. There is no intention to maintain these roads for active use. The road alignment does not occur within the Conservation Area.

#### 1.3.2 Wetlands and Other Waters of the U.S.

A variety of Waters of the U.S., including wetlands, and isolated Waters of the state occur in the FPA Open Space, the majority of which occur within the Conservation Area. Each type is described in detail below, and the acreages presented are for Waters of the U.S. protected within the Conservation Area. The verification date for each property is shown in Table 1.

#### 1.3.2.1 Vernal Pools

Vernal pools are poorly drained, depressions that occur within the annual grassland landscape. Vernal pools are fed by direct rainfall or surface run-off. Water ponds for several weeks at a time during the rainy season and may dry completely between storm events.

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, primarily through evaporation, the "drying" phase begins during which pool basins begin drying and plant flowering reaches its peak, followed by the setting of seeds. The final phase is the "drought" phase, which is characterized by dry soils and dead or dormant vegetation. Since vernal pools hold ponded water and have emergent vegetation, they are responsible for some nutrient uptake/transformation.

There are approximately 1.876 acres of vernal pools within the Conservation Area. Plant species observed within vernal pools include Carter's buttercup (*Ranunculus bonariensis*), Vasey's coyote-thistle (*Eryngium vaseyi*), creeping spikerush (*Eleocharis macrostachya*), and slender popcorn-flower (*Plagiobothrys stipitatus*). Typical wildlife associated with vernal pools includes various aquatic invertebrates and amphibians such as the pacific chorus frog. Vernal pool fairy shrimp and vernal pool tadpole, both federally listed species, occur within vernal pools within

the development area; however, they are not currently known to occur within the vernal pools with the FPA Open Space. Vernal pools within the development area will be filled and mitigated for by the developers/property owners as authorized by the USACE and USFWS.

#### 1.3.2.2 Seasonal Wetland/Seasonal Wetland Swale

Within the Conservation Area, seasonal wetlands (2.335 acres) and seasonal wetland swales (9.065 acres) occur within the annual grassland and occasionally in the oak woodlands.

A variety of plants and wildlife can be found within seasonal wetlands and swale communities. The "drier" seasonal wetlands/swales may be dominated by grasses and annual herbs including Italian ryegrass (*Festuca perennis*), Mediterranean barley (*Hordeum marinum*), and hyssop loosestrife (*Lythrum hyssopifolia*). The "wetter" seasonal wetlands/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. When inundated, these seasonal wetlands and 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.

#### 1.3.2.3 Seep

Seeps are seasonally or perennially wet areas resulting from discharge of groundwater to the surface. Approximately 7.357 acres of seep occur within the Conservation Area. Dominant plants within the seeps include spikerush, hyssop loosestrife, pennyroyal (*Mentha pulegium*), and cut-leafed geranium (*Geranium dissectum*). Other plant species within the seep include curly dock (*Rumex crispus*), willow (*Salix* species), and Himalayan blackberry.

#### 1.3.2.4 Marsh

Approximately 0.153 acre of marsh occurs within the Conservation Area. The marshes are perennial wetland features that appear to be fed by sub-surface seepage. Plant species observed within the marsh include mannagrass (*Glyceria declinata*), hyssop loosestrife, spiny-fruited buttercup (*Ranunculus muricatus*), water cress, and peppermint (*Mentha spicata*).

#### 1.3.2.5 Creek/Channel (Alder Creek) and Intermittent Drainages

Approximately 13.971 acres of creek/channel (Alder Creek) and 9.107 acres of associated intermittent drainages occur within the Conservation Area. A portion of the Alder Creek watershed (i.e. upland buffer area) also occurs in the FPA and Conservation Area. Intermittent drainages and creeks 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.

Conditions in Alder Creek are further described in the Alder Creek Watershed Action Management Plan (City of Folsom 2010), herein referred as the Alder Creek Action Plan,

available at: <a href="http://www.folsom.ca.us/depts/public\_works/stormwater/alder.asp">http://www.folsom.ca.us/depts/public\_works/stormwater/alder.asp</a>. The Watershed Action Plan describes watershed conditions and recommends actions to protect, preserve, enhance, and restore watershed health in Alder Creek. As future projects are proposed by the City for the Passive Recreation Open Space area, the Preserve Owner/Manager should consult the Alder Creek Action Plan for information and consistency with recommendations for projects in the watershed.

#### 1.3.2.6 Ditch

Approximately 0.625 acre of constructed ditches occur within the Conservation Area that pond water for a sufficient period of time during the growing season to support hydrophytic vegetation. These features were constructed on contour; however, they appear to no longer convey flow. Dominant plant species within the mapped constructed ditches included Vasey's coyote-thistle, Carter's buttercup, creeping spikerush, and annual hairgrass (*Deschampsia danthonioides*). Other species commonly observed within these features on-site included hyssop loosestrife, smooth cat's-ear (*Hypochaeris glabra*), Mediterranean barley, and sticky tarweed.

#### 1.3.2.7 Pond

Stock ponds represent ponded areas that were either created or enhanced through the placement of an earthen dam in the course of a drainage and/or through excavation. Stock ponds exhibit an ordinary high water mark. Two stock ponds (5.020 acres) are located within the Conservation Area. Vegetation within these features generally occurs within the shallower areas along the margins. Plant species observed within and adjacent to the stock ponds included Goodding's black willow (*Salix gooddingil*), Freemont cottonwood (*Populus fremontil*), cattail (*Typha* sp.), hyssop loosestrife, pennyroyal, curly dock, creeping spikerush, and Vasey's coyote-thistle.

#### 1.3.3 Special-Status Species

There are several federally- or state- listed species that are known to occur or have the potential to occur within the FPA Open Space. Each of these species is further described below.

#### 1.3.3.1 Swainson's Hawk

The Swainson's hawk (*Buteo swainsoni*) is listed as a threatened species and is protected pursuant to the California Endangered Species Act. This species nests in North America (Canada, western United States, and Mexico) and typically winters from South America north to Mexico. However, a small population has been observed wintering in the Sacramento-San Joaquin River Delta (England et al. 1997). In California, the nesting season for Swainson's hawk ranges from mid-March to late August.

Swainson's hawks nest within tall trees in a variety of wooded communities including riparian, oak woodland, roadside landscape corridors, urban areas, and agricultural areas, among others. Foraging habitat includes open grassland, savannah, low-cover row crop fields, and livestock pastures. In the Central Valley, Swainson's hawks typically feed on a combination of California vole, California ground squirrel (*Spermophilus beecheyi*), ring-necked pheasant (*Phasianus colchicus*), many passerine birds, and grasshoppers (*Melanopulus* species). Swainson's hawks

are opportunistic foragers and will readily forage in association with agricultural mowing, harvesting, discing, and irrigating (Estep 1989). The removal of vegetative cover by such farming activities results in more readily available prey items for this species.

#### 1.3.3.2 Valley Elderberry Longhorn Beetle

The Valley elderberry longhorn beetle (VELB) is associated with live elderberry shrubs (*Sambucus* sp.), its exclusive host plant. Life history of VELB is assumed to follow a sequence of events similar to that of related taxa (USFWS 1984). Adult VELB, which are generally short-lived, typically emerge from elderberry shrubs in May, but have been encountered from March through June. After mating, females deposit eggs in crevices on the bark of living elderberry plants. Upon hatching, VELB larvae bore into the pith of the elderberry shrub, where they remain for one to two years. Following pupation, adult VELB emerge from the elderberry through created emergence holes which are circular or somewhat oval in shape. Emergence holes are indicative of VELB use, although all elderberry shrubs within the range of the species, whether or not the shrubs reveal emergence holes, represent potentially occupied habitat. A total of 8 shrubs were widely dispersed within the development area of the FPA, and per the Biological Opinion (USFWS 2014), all shrubs will be removed and transplanted offsite and mitigation credits will be purchased by the developers/property owners. While no elderberries exist within the current FPA Open Space, there is still potential for VELB to occur within the FPA Open Space if elderberry shrubs become established.

#### 1.3.3.3 Vernal Pool Fairy Shrimp

The vernal pools within the Conservation Area represent potential habitat for the vernal pool fairy shrimp. This species is federally listed as threatened. The vernal pool fairy shrimp, is a small branchiopod crustacean in the family Branchinectidae. It ranges in size from ½ to one inch long. They have delicate elongate bodies, large stalked compound eyes, no carapaces, and eleven pairs of swimming legs. They swim upside down by beating their legs in a complex, wavelike movement that passes from front to back. Fairy shrimp feed on algae, bacteria, protozoa, rotifers and bits of detritus.

The vernal pool fairy shrimp occupies a variety of different vernal pool habitats, from small, clear, sandstone rock pools to large, turbid, alkaline, grassland valley floor pools. It tends to occur in smaller pools measuring less than 0.05 acre.

Female fairy shrimp carry their cysts in a ventral brood sac. The cysts are either dropped to the pool bottom or remain in the brood sac until the female dies and sinks. When the pool dries out, so do the cysts. They remain in the dry pool bed until rains and other environmental stimuli hatch them. Fairy shrimp cysts are capable of withstanding heat, cold and prolonged desiccation. When the pools refill, some, but not all, of the cysts may hatch. The cyst bank in the soil may contain cysts from several years of breeding. The average time to maturity is only forty-one days. Under warmer conditions, it can be as little as eighteen (Eriksen and Belk 1999). Vernal pool fairy shrimp are typically active and identifiable from early December to early May.

Little information is available on the historical distribution of vernal pool fairy shrimp. However, since it is currently known to occur in a wide variety of vernal pool habitats, the historic range

may be coincided with the historic distribution of vernal pools in the Central Valley and Southern Oregon. Currently, the vernal pool fairy shrimp range is widespread but not abundant. Known populations extend from Southern Oregon through most of the length of the Central Valley. Along the central coast, they range from northern Solano County to Pinnacles National Monument in San Benito County. Additional disjunct populations exist: one near Soda Lake in San Luis Obispo County, one in the mountain grasslands of northern Santa Barbara County, one on the Santa Rosa Plateau in Riverside County, and one near Rancho California in Riverside County.

The vernal pool fairy shrimp is protected under the federal ESA as administered by the USFWS. Only approved biologists with a federal permit can survey for, net, or handle this species. Impacts to this species are authorized by the USFWS through the issuance of a Biological Opinion. Most of the area within the FPA has been surveyed according to USFWS survey protocols. Vernal pool fairy shrimp have only been found in two pools in the northwest corner of the FPA that are not located within the Conservation Area. Impacts to this species is authorized by the FPA's Biological Opinion, and mitigation is the requirement of the developers/property owners.

#### 1.3.3.4 Vernal Pool Tadpole Shrimp

The vernal pools within the Conservation Area represent potential habitat for the vernal pool tadpole shrimp. This species is federally listed as an endangered species. The vernal pool tadpole shrimp is a small crustacean in the Triopsidae family. It has compound eyes, a large shield-like carapace (shell) that covers most of the body, and a pair of long cercopods (appendages) at the end of the last abdominal segment. Vernal pool tadpole shrimp adults reach a length of 2 inches. They have about 35 pairs of legs and two long cercopods. This species superficially resembles the rice field tadpole shrimp (*Triops longicaudatus*).

Vernal pool tadpole shrimp typically inhabit vernal pools containing clear to highly turbid water, ranging in size from 54 square feet in the former Mather Air Force Base area of Sacramento County, to the 89-acre Olcott Lake at Jepson Prairie. Vernal pool tadpole shrimp are usually found within the bottom sediments. Their diet consists of organic debris and living organisms, such as fairy shrimp and other invertebrates.

The life history of the vernal pool tadpole shrimp is linked to the seasonal cycle of the vernal pool. After winter rainwater fills the pool, the population is reestablished from cysts that lie dormant in the dry pool sediments. Sexually mature adults have been observed in vernal pools three to four weeks after the pools had been filled. Some cysts hatch immediately and the others remain dormant in the soil to hatch during later rainy seasons.

The vernal pool tadpole shrimp is currently distributed across the Central Valley of California and in the San Francisco Bay area.

The vernal pool tadpole shrimp is protected under the federal ESA as administered by the USFWS. Only approved biologists with a federal permit can survey for, net, or handle this species. Impacts to this species are authorized by the USFWS through the issuance of a Biological Opinion. Most of the area within the FPA has been surveyed according to USFWS survey protocols. Vernal pool tadpole shrimp have only been found in one vernal pool south of

the FPA within the off-site infrastructure area of the project. This vernal pool is not within the FPA Open Space area. Impacts to this species is authorized by the FPA's Biological Opinion, and mitigation is the requirement of the developers/property owners.

#### 1.3.3.5 White-Tailed Kite

White-tailed kite (*Elanus leucurus*) is not listed pursuant to either the California or federal Endangered Species Acts; however, the species is fully protected pursuant to Section 3511 of the California Fish and Game Code. This species is a common resident in the Central Valley and the entire length of the California coast (Dunk 1995). In northern California, white-tailed kites typically nest from March through June. Nesting occurs in trees within riparian, oak woodland, savannah, and agricultural communities that are found in or near foraging areas such as open grasslands, meadows, farmlands, savannahs, and emergent wetlands.

#### 1.3.3.6 Tricolored Blackbird

The tricolored blackbird (*Agelaius tricolor*) is listed as a candidate species pursuant the California Endangered Species Act and a USFWS bird of conservation concern. This colonial nesting species is distributed widely throughout the Central Valley, Coast Range, and into Oregon, Washington, Nevada, and Baja California (Beedy and Hamilton 1999). Tricolored blackbirds nest in colonies that can range from several pairs to several thousand pairs, depending on prey availability, the presence of predators, or level of human disturbance. Tricolored blackbird nesting habitat includes emergent marsh, riparian woodland/scrub, blackberry thickets, densely vegetated agricultural and idle fields (e.g. wheat, triticale, safflower, fava bean fields, thistle, mustard, cane, and fiddleneck), usually with some nearby standing water or ground saturation. They feed mainly on grasshoppers during the breeding season, but may also forage upon a variety of other insects, grains, and seeds in open grasslands, wetlands, feedlots, dairies, and agricultural fields. The nesting season is generally from March through August.

#### 1.3.3.7 State Listed Species of Concern

There are several State Listed Species of Concern that have the potential to occur within the FPA Open Space. These include: pallid bat (*Antrozous pallidus*), Townsend's big-eared bat (*Corynorhinus townsendi*), American badger (*Taxidea taxus*), loggerhead shrike (*Lanius ludovicianus*), burrowing owl (*Athene cunicularia*), prairie falcon (*Falco mexicanus*), merlin (*Falco columbarius*), ferruginous hawks (*Buteo regalis*), Cooper's hawk (*Accipiter cooperii*), sharp-shinned hawk (*Accipiter striatus*), and northern harrier (*Circus cyaneus*).

#### 1.4 Plan Goals

The goals of the Plan are:

- 1. To provide a long-term management and monitoring approach for the Conservation Area and the Passive Recreation Open Space.
- 2. To provide clear guidance on the allowable and prohibited activities within the Conservation Area and the Passive Recreation Open Space.

- 3. To provide specific methods for management, maintenance, and monitoring for the Conservation Area and the Passive Recreation Open Space.
- 4. To eliminate the need for multiple management plans when new open space is established and transferred as each project moves forward.
- 5. To provide an agency approved and agreed-upon method for agency notifications, reviews and approvals.
- 6. To provide an agency approved and agreed-upon process for corrective actions.
- 7. To reduce the risk of catastrophic wildfires from spreading through the Conservation Area and the Passive Recreation Open Space and threatening nearby homes and properties.
- 8. To provide a platform for grant funding, if desired by the Preserve Manager.

If any provision in this Plan is found to be ambiguous and affects the Conservation Area, then the USACE should be notified for clarification in advance of any action taken. If the City pursues maintenance agreements with the regulatory agencies (i.e., CDFW), these maintenance agreements can be appended to this Plan in order to expedite activities covered under those agreements.

#### 1.5 Definitions

#### 1.5.1 Annual Report

The yearly report prepared by the Monitoring Biologist in conjunction with the Preserve Owner/Manager that will be submitted to the USACE and CDFW by June 30<sup>th</sup> of each year. Details on the content of the annual report are included in Section 5.1.7.

#### 1.5.2 Biological Opinion

The specific Biological Opinion issued by the USFWS for the FPA (Service File #81420-2010-F-0620-1).

#### 1.5.3 California SHPO

The California State Historic Preservation Officer.

#### 1.5.4 CDFW

The California Department of Fish and Wildlife.

#### 1.5.5 City

The City of Folsom. The City, specifically the Parks and Recreation Department, will act as the long-term Preserve Manager and Preserve Owner for the FPA Open Space.

#### 1.5.6 Conservation Area

The Conservation Area is intended to permanently protect wetlands and other Waters of the U.S., cultural/historical resources, and foraging habitat for tricolored blackbird. The

Conservation Area will be permanently protected by a recorded declaration of covenants and restrictions or conservation easements in a form acceptable to the applicable federal and state regulatory agencies, and will be managed and maintained as discussed in Section 5.0 of this Plan. A small portion of the Conservation Area is part of the Remediation Area (see Attachment I). This area may have more restrictions than those presented within this Plan. The details of the management of the Remediation Area will be outlined in the Land Use Covenants prepared prior to the transfer to the City.

#### 1.5.7 Developer/Property Owner

The relevant developer/property owner for each project within the FPA, or its successors or assignees, undertaking construction activities within any phase of the permitted project. The developer/property owner is responsible for obtaining all appropriate permits and authorizations to impact sensitive resources. The developer/property owner is also responsible for implementing all mitigation requirements set forth by these permits and authorizations.

#### 1.5.8 Fuel Modification Zone

A strip of land where combustible vegetation has been thinned, modified or both and partially or totally replaced with approved drought tolerant, fire resistant, and/or irrigated plants to provide an acceptable level of risk from vegetation fires. Fuel modification zones will be limited to the Passive Recreation Open Space area only with the exception of a few areas where fuel load modification zones occur within the Conservation Area. Anticipated fuel load modification zones are shown in Figure 5 and Attachment A.

1.5.9 FPA

Folsom Plan Area.

#### 1.5.10 FPA Open Space

Folsom Plan Area Open Space. This includes the two areas of Open Space that are subject to this Plan: the Conservation Area and the Passive Recreation Open Space. Landscape corridors are not subject to this Plan and are not discussed within this document.

#### 1.5.11 FAPA

First Amended Programmatic Agreement between the U.S. Army Corps of Engineers and the California Office of Historic Preservation regarding the Folsom Plan Area Specific Plan, Sacramento County, California.

1.5.12 HPMP

Historic Property Management Plan.

1.5.13 HPTP

Historic Property Treatment Plan.

#### 1.5.14 Invasive Plants

Invasive plants are plants that are not native and replace native vegetation or native habitats. The Monitoring Biologist and the Preserve Owner/Manager can refer to the species found on the California Invasive Plant Council (Cal-IPC) California Invasive Plant Inventory to assist them in determining if a plant is an invasive plant.

#### 1.5.15 Monitoring Biologist

The primary scientist, consulting scientist, or firm hired to assist the Preserve Owner/Manager. The monitoring biologist should have the appropriate qualifications to perform the duties and obligations required by this Plan.

#### 1.5.16 Native Plant Species

For the purposes of this Plan, plants native to the FPA Open Space are defined as those plants believed by the scientific community to have been present in Sacramento County prior to the settlement of Europeans. *The Jepson Manual* (Baldwin et al 2012) will be the primary reference for determining if a plant is native or non-native. However, because this reference is specific only as to subregions, which encompass portions of several counties, the Preserve Owner/Manager can consult with the Monitoring Biologist, local botanists, or the local chapter of the California Native Plant Society to determine if a plant should be considered native to the FPA Open Space. Documentation of these consultations will be included in the annual reports.

#### 1.5.17 Non-Native Plant Species

Any plant not considered a native plant species as defined above. Some non-native plants can also be considered invasive.

#### 1.5.18 Open Space Conservation Values

Open Space Conservation Values are defined as the physical, biological, and environmental processes needed to maintain the suitability of the habitats in the FPA Open Space.

#### 1.5.19 Passive Recreation Open Space

The Passive Recreation Open Space consists of annual grasslands and blue oak woodland/oak savannah that are not subject to a recorded declaration of covenants and restrictions or conservation easement. The Passive Recreation Open Space is intended for bike trails, pedestrian trails, trail amenities, and other recreation activities or facilities the City may implement. The Passive Recreation Open Space will be managed as outlined in Section 6.0 of this Plan. A small portion of the Passive Recreation Open Space Area is part of the Remediation Area (see Attachment I). This area may have more restrictions than those presented within this Plan. The details of the management of the Remediation Area will be outlined in the Land Use Covenants prepared prior to the transfer to the City.

#### 1.5.20 Permit

The specific USACE permit issued for each project within the FPA. As each permit is obtained for the individual properties, it will be added to the Plan in Attachment C.

#### 1.5.21 Plan

The Operations and Management Plan for the Folsom Plan Area Conservation Area and Passive Recreation Open Space prepared in compliance with the Permits and agreements issued for projects within the FPA.

#### 1.5.22 Preserve Manager

Upon the recordation of the declaration of covenants and restrictions or conservation easement within the Conservation Area and transfer of the FPA Open Space to the City of Folsom, the City, specifically the Parks and Recreation Department, will serve as Preserve Manager (and also Preserve Owner, see Section 1.5.23). The developer/property owner associated with each specific project within the FPA will act as Preserve Manager prior to the transfer to the City. In either case, the Preserve Manager is responsible for the monitoring and reporting as described in this Plan. The City will also be the long-term Preserve Owner/Manager for both the Conservation Area and the Passive Recreation Open Space.

#### 1.5.23 Preserve Owner

Initially, the parties responsible for the maintenance and management of the Conservation Area within the FPA Open Space, will be the current owners. The expected long-term owner and party responsible for the monitoring and reporting as described in this Plan will be the City, specifically the Parks and Recreation Department (who is also the Preserve Manager, see Section 1.5.22).

#### 1.5.24 Qualified Personnel

Professional biologists, botanists, archaeologists, and other specialists employed by the Preserve Owner/Manager to perform the duties and obligations required by this Plan.

#### 1.5.25 Regulatory Agencies or Agencies

All agencies with regulatory control over the FPA including the USACE, USFWS, the EPA, CDFW, and California Regional Water Quality Control Board (RWQCB), Central Valley Region or other authority (Remediation Regulatory Agency) with oversight of Remediation Requirements. To the extent that an agency is exercising its control under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or like authority to require or oversee remedial action, it is a Remediation Regulatory Agency.

#### 1.5.26 Remediation Personnel

Any personnel engaged in remediation activities and oversight (including Remediation Regulatory Agency personnel).

#### 1.5.27 Remediation Requirements

A portion of the FPA Open Space is subject to all current and future obligations by Aerojet (under EPA and State oversight) to remediate contaminated media including soil, sediment, and groundwater including the management of remediated groundwater beneath the FPA Open Space, and to inspect and monitor such remediation, whether imposed on Aerojet by any governmental agency exercising jurisdiction over the contamination or to resolve third party claims, and whether at or emanating from the FPA Open Space or emanating from other property (the "Remediation Requirements").

1.5.28 USACE

The United States Army Corps of Engineers.

1.5.29 USFWS

The United States Fish and Wildlife Service.

1.5.30 Wells

The term "well" used throughout this Plan includes monitoring wells, extraction wells, and any associated infrastructure including pipelines and other utilities or remediation equipment/facilities associated with Remediation Requirements. A map of approximate well locations within the Remediation Area of the FPA Open Space is included in Attachment I.

#### 2.0 FPA OPEN SPACE OWNERSHIP AND FUNDING MECHANISM

The FPA Open Space is made up of two components: the Conservation Area and the Passive Recreation Open Space. The following section describes the ownership, management, and funding responsibilities for the Conservation Area and the Passive Recreation Open Space areas.

#### 2.1 Conservation Area

#### 2.1.1 Owner and Preserve Manager

The area that will become the FPA Open Space is currently owned by multiple property owners (i.e., the developers). The developers or current owners will act as Preserve Manager of their properties until the city accepts the dedication of the Open Space areas that are required under any given phase (see Section 2.3 for the Transfer Process). Once the City has accepted the transfer and becomes the Preserve Owner of that portion of the FPA Open Space, the City, specifically the Parks and Recreation Department's Open Space Preserve Manager will be the Preserve Manager for that phase of the FPA Open Space. The Preserve Manager will be responsible for resolving any issues that arise in relation to the Conservation Area. Additionally, the Preserve Manager will be responsible for overseeing all maintenance and monitoring activities for the Conservation Area as described in this Plan for all Open Space areas.

In addition, upon the transfer of any portion of land that is protected by a recorded declaration of covenants and restrictions or within a conservation easement that is intended to preserve confidential Native American or tribal resources, and upon request from a federally recognized and/or California native tribe to gain access to the tribal resource for visitation, the City shall develop a right-of-access authorization for requesting tribes. The authorization shall specify the terms under which tribal access can be legally achieved and shall define the acceptable and prohibited uses thereof. An example of a right-of-access authorization is provided in Attachment K.

#### 2.1.2 Funding Mechanism

The Conservation Area will be funded by Mello Roos Community Facilities District 18 (CFD 18) which was established to manage infrastructure elements within the FPA along with managing parks, trails, landscape corridors and open space areas including the Conservation Area. CFD 18 was established in cooperation with the Plan Area landowners, and will levy an annual tax in perpetuity against all taxable property in the Folsom Plan Area. The proceeds of this annual tax will, in turn, be used to pay the annual costs incurred by the City in the operation and maintenance of the Open Space areas including the Conservation Area. If, for any reason, the City terminates CFD 18 funding for operation and maintenance of the Conservation Area, the City shall provide an alternative plan for such funding acceptable to the USACE and CDFW.

The City will be the ultimate owner and the City's Parks and Recreation Department's Open Space Manager will be the manager of the Conservation Area. In order to fund such maintenance and operations, a Property Analysis Report (PAR) was prepared for the Conservation Area to ensure that all activities required by this Plan will be fully funded by CFD 18. As such, the City required that CFD 18 provide an annual funding source equal to, or in excess of the annual monitoring and maintenance cost as calculated in the PAR (specifically

Section 9 of PAR). The funding for the Conservation Area will become available in phases as each phase of development is completed and the associated funding source begins drawing revenue. The special taxes will be the responsibility of the developer until such time as the lots/parcels have been sold. These special taxes will continue to be levied against property owners thereafter. Should a property owner foreclose, the City will continue to receive the special tax revenue pursuant to the Teeter Plan administered by the County of Sacramento. The Teeter Plan allows counties to advance money to local jurisdictions in an amount equal to the current year's delinquent property taxes. In return, the counties receive penalties and interest on the delinquent taxes once collected.

Should the developer not perform required monitoring and maintenance of the Conservation Area prior to dedicating to the City, the City will delay acceptance until it is complete.

As stated above, the amount needed to fund the long-term management and monitoring for the Conservation Area as described in this Plan for each year was determined by a PAR (Attachment L). PARs are generated through the use of a computer program written by the Center for Natural Lands Management to allow government agencies, land trusts, and preserve management foundations and organizations to better define and understand the financial obligations that come with managing natural areas. The program lists a number of activities, structures, and overhead costs associated with preserve management and allows the user to choose the tasks that apply. A part of the funding for the management of the Conservation Area is a 20% contingency fund as shown in the PAR. This fund is in place for emergencies such as vandalism of fencing, signage, or other unanticipated needs.

Although the PAR is a useful tool, the City has established their own budget using their experience and actual costs for managing the Conservation Area. The City's budget is over 220% greater than the amount calculated by the PAR. Additional information on the budgets is provided in Attachment L.

The funding of the Conservation Area is part of the overall CFD 18, and the funding for the Conservagion Area cannot be voted out or eliminated without the entire CFD 18 being eliminated. In addition, the CFD allows for an inflation escalator of up to 4% a year which is also cumulative (i.e, if no escalation is used in one particular year, it can be cumulatively applied in a future year).

The City's budget for managing the FPA Open Space, including separate budgets for both the Conservation Area and the Passive Recreation Open Space is included in Attachment L.

#### 2.2 Passive Recreation Open Space

#### 2.2.1 Owner and Manager

The Passive Recreation Open Space will be owned and managed by the City, specifically the Parks and Recreation Department's Open Space Manager and transferred at the same time as any adjacent Conservation Areas.

#### 2.2.2 Funding Mechanism

Funding the long-term management for the Passive Recreation Open Space is consistent with what is described in Section 2.1. The City's budget for managing the FPA Open Space (both Conservation Area and Passive Recreation Open Space) is included in Attachment L.

#### 2.3 Transfer of Properties

The FPA Open Space will be transferred to the City in phases as construction of individual developments are completed. At the time of final map, a declaration of covenants and restrictions or conservation easement will be placed on the Conservation Area portion of the Open Space that will ultimately be transferred to the City. Once a development is completed, the open space portion for that development (see Figure 2) (both Conservation Area and Passive Recreation Area) will be transferred to the City in fee, by grant deed or dedication.

It is anticipated that construction will commence before the City actually takes ownership of, and responsibility for, maintenance of the Conservation Areas. This "interim" period is likely to be no more than six to eighteen months, but could be somewhat longer due to unanticipated factors, e.g., unusual weather delays. If such an "interim period" is expected to occur, the Permittee shall remain responsible for maintenance and compliance with any and all permit, mitigation, and reporting requirements of the Conservation Area until the City takes ownership thereof. Prior to the start of any construction on Permittee's land, Permittee shall cause to be recorded against the portion of the Conservation Area affected by such construction, the declaration of covenants and restrictions using the form attached as Attachment J-1 of this Plan. Funding of monitoring and maintenance of the Conservation Area during the "interim period" will be pursuant to an agreement between the Permittee and the City (Attachment J-2).

Prior to transfer, the City may require the developers/property owners to implement certain actions including (but not limited to):

- Installation of fire protective measures in areas adjacent to residential or commercial structures (i.e., installation of fire breaks, removal of fire ladders, etc.);
- Installation of permanent fencing and signage (as needed);
- Removal of trash and other debris from the open space areas;
- Re-establish water quality treatment BMP's, such as stormwater basins, or other stormwater management facilities, within the open space to their as-built (optimum) condition;
- Establishment of warranty period for structures within the FPA Open Space (i.e., culverts, etc.); and
- Installation of temporary fencing if only a portion of the Open Space parcel will be transferred.

The City may request a walk-through of the FPA Open Space area prior to transfer to ensure all required items are met.

In addition, any remaining mitigation requirements (i.e., oak trees, riparian vegetation, creek restoration, etc.) pursuant to regulatory permits will still be the responsibility of the developers/property owners even after transfer to the City has occurred. Copies of all annual

monitoring report the City, and the	rts for mitigation e City will be not	n activities will b tified upon succe	e sent to the ap essful completion	plicable regulator n of mitigation re	ry agencies and quirements.

# 3.0 FPA CONSERVATION AREA AND PASSIVE RECREATION OPEN SPACE PERSONNEL

The roles outlined below make up the primary personnel that will oversee, monitor and coordinate the maintenance and management of the Conservation Areas and Passive Recreation Open Space. They are intended to work together as a team to manage these areas. Since the City is the anticipated long-term Preserve Owner and Preserve Manager, the phrase "Preserve Owner/Manager" will be used throughout the rest of this plan to describe the City's responsibilities.

#### 3.1 Conservation Area Preserve Owner/Manager

The Conservation Area will be owned and managed by the City, pursuant to declarations of covenants and restrictions or conservation easements and this Plan. Recorded declarations of covenants and restrictions or conservation easements will be included in Attachment J -1 as they become available, and will be approved by USACE prior to recordation of the covenants and restrictions to the City. Funding for the perpetual management and care of the Conservation Area will be provided for through CFD as described under Section 2.1.2.

#### 3.1.1 Preserve Owner/Manager Responsibilities

The Preserve Owner/Manager's responsibilities and duties shall include but not be limited to:

- Reviewing construction activities in and adjacent to the Conservation Area.
- Monitoring and seeking correction for impacts to the Conservation Area from adjacent land uses.
- Coordinating Biological Inspections of the Conservation Area by a Monitoring Biologist.
- Coordinating Historic Property Inspections of the portions of the Conservation Area that include Historic Properties by a Monitoring Archaeologist, as specified in the HPTP.
- Coordinating General Inspections of the Conservation Area as required by this Plan.
- Assuring that gates, fencing, and signage at the Conservation Area are maintained.
- Removing trash, as needed.
- Coordinating thatch or invasive plant management, in coordination with the Monitoring Biologist.
- Coordinating grazing of the Conservation Area, if necessary, as discussed in this Plan.
- Reviewing monitoring data and coordinating with the Monitoring Biologist and Monitoring Archaeologist (as appropriate), and informing USACE of any remedial action.
- Submitting an Annual Report in coordination with the Monitoring Biologist and Monitoring Archaeologist regarding the status of the Conservation Area to the USACE and CDFW.
- Maintaining a File for the Conservation Area. This File will contain a record of management and maintenance related activities, correspondence, and determinations regarding the Conservation Area.
- Arranging corrective actions necessary to ensure the quality of the habitat and integrity of Historic Properties within the Conservation Area.
- Coordinating use of the Conservation Area for education, restoration efforts, or other tasks such as grant proposals.

- Working proactively with the Monitoring Biologist, Monitoring Archaeologist, and regulatory agency staff.
- Arranging for right-of-access agreements with tribes that request visitation of Native American cultural resources.

#### 3.2 Qualified Personnel/Monitoring Staff

If the Preserve Owner/Manager does not have the appropriately trained staff to carry out any of the specialized tasks required by this Plan, the Preserve Owner/Manager shall retain Qualified Personnel (i.e., consultants, professional biologists, botanists, archaeologists, or other types of specialists) to conduct specialized tasks.

#### 3.2.1 Qualified Personnel/Monitoring Biologist Responsibilities

The Monitoring Biologist shall be familiar with California flora and fauna, and, in particular, shall have knowledge regarding Valley foothill riparian species and their ecology, vernal pool grasslands, and oak woodlands. Overall, duties of the Monitoring Biologist may include, but are not limited to:

- Administering wetland function and erosion monitoring tasks.
- Evaluating the accumulation of dead vegetative matter (thatch) and recommending removal, if needed.
- Evaluating the presence of newly introduced invasive plant species and recommending management, if needed. (This will be limited to new populations or new species. It is understood that there is an existing suite of invasive plant species in the Conservation Area as mapped at the time of transfer to the City.) See Section 5.1.3 for more information on the Baseline Weed Map.
- Conducting the Biological Inspection, collecting data on the Conservation Area, and preparing reports required by this Plan.
- Evaluating site conditions and recommending remedial action to the Preserve Owner/Manager.
- Assisting in reviewing or planning restoration activities and other uses of the Conservation Area for education, or other tasks such as grant proposals.
- Working with the Preserve Owner/Manager and agency staff.

#### 3.2.2 Qualified Personnel/Monitoring Archaeologist Responsibilities

All cultural resources work carried out pursuant to this Plan and, if applicable, the HPTP, shall be conducted, as appropriate, by or under the direct supervision of a person who at a minimum meets the Secretary of the Interior's *Professional Qualification Standards for Archaeology* (48 FR 44739) and who has had at least one year of full-time professional experience at a supervisory level in the study of archaeological resources of the historic period.

The Monitoring Archaeologist will be responsible for carrying out all cultural resources work within this Plan and implementing all monitoring tasks as outlined in each HPTP.

#### 3.3 Passive Recreation Open Space Preserve Owner/Manager

The Passive Recreation Open Space will also be owned and managed by the City. The specific management and maintenance that is planned to occur within these areas is described in Section 6.0.

#### 3.4 Remediation Personnel

Although not directly tied to the maintenance or management of the FPA Open Space, Remediation Personnel (any personnel engaged in remediation activities and oversight, including Remediation Regulatory Agency Personnel) are required to access the Remediation Area (see Attachment I) to inspect contaminated media and remedial equipment subject to cleanup by Aerojet (under EPA and State oversight). In order to meet Remediation Requirements, Remediation Personnel will occasionally enter the Remediation Area to access, install, remove and maintain extraction wells and/or monitoring wells and their associated infrastructure (i.e., pipelines, utilities, etc.). Extraction wells, monitoring wells, and their associated infrastructure are hereafter referred to as "wells". Remediation personnel should work with the Preserve Owner/Manager so that all parties are aware of activities occurring within the Remediation Area. If construction of new wells or modification of existing wells within the Conservation Area is necessary, then notification to the USACE and the Preserve Owner/Manager is required. If the installation of remediation wells will result in an impact on any biological or cultural resource, review and approval of the USACE (and the USFWS and California SHPO - if deemed necessary by the USACE) is necessary and is the responsibility of the Remediation Personnel. No notification to USACE is required if Remediation work is conducted within the Passive Recreation Open Space portion of the Remediation Area.

#### 3.5 Changes in Personnel

If the FPA Open Space Preserve Owner/Manager, Qualified Personnel/Monitoring Staff, or any other management personnel are changed, the outgoing and incoming personnel will tour the FPA Open Space together and the former will advise the latter of trends, problem areas, and any administrative difficulties. Any changes in personnel will be documented in the annual reports.

#### 4.0 MANAGEMENT DURING PROJECT CONSTRUCTION

#### 4.1 Protective Measures to be Taken During Initial Project Construction

As the projects within the FPA are built, some construction will occur within portions of the FPA Open Space. The majority of this construction will occur within the Passive Recreation Open Space, but some (i.e., outfalls and in-stream flood control facilities) will be constructed within the boundary of the Conservation Area. In general, where construction will occur within FPA Open Space, the minimum necessary construction area will be used. To avoid impacts to the biological and cultural resources within the Conservation Area, the following protective measures will be taken during project construction. Because construction will occur by project, and potentially by phase within each project, the protective measures described below will be initiated at the beginning of each project and/or phase. The items detailed in this section are the responsibility of the current developer/property owner since the FPA Open Space will not be transferred to the City until after construction is complete in a given phase. The City's budget for managing the FPA Open Space includes on-going maintenance costs for these items.

#### 4.1.1 Improvement Plans

To ensure that contractors working within or adjacent to the Conservation Area are aware of its presence, improvement plans for each phase of development and projects adjacent to the Conservation Area will show the Conservation Area boundaries. All labels referencing historic properties shall not conflict with the terms of the FAPA or HPTP

#### 4.1.2 Pre-Construction Meetings

Pre-construction meetings for projects adjacent to or in the FPA Open Space will address the location of the Conservation Area, the sensitive habitats and Historic Properties present, and the minimization of disturbance to the FPA Open Space, especially the Conservation Area. These meetings should occur prior to the initiation of construction within each project and/or phase. Construction activities shall comply with Permit conditions, and the contractor awareness training requirements specified in the FAPA and HPTP, if applicable. A sample checklist of items to be addressed at pre-construction meetings is contained in Attachment M. Locations of wetland resources are included in Attachment A. Confidential locations of historic properties are on file with the City.

#### 4.1.3 Grading within the Open Space

Grading and/or slope construction within and along the FPA Open Space boundaries will be necessary to achieve the appropriate grade to install roads, crossings, detention basins, outfalls, utilities, pads, and bike trails, etc. All of the grading within the FPA Open Space will be limited to the Passive Recreation Open Space, with the exception of outfalls and in-stream flood control facilities in a few locations in the Conservation Area. Outfall locations, as they are currently designed, are provided in Figure 5 and Attachment A, and final outfall locations will provided to the City once Project designs are finalized. Grading within the FPA Open Space, will not disturb or modify any existing preserved wetlands or Historic Properties within the Conservation Area as these areas are meant to be protected in perpetuity. A confidential map showing the locations of Historic Properties and cultural resources within the FPA Open Space will be provided to the

City (Attachment H). The minimum necessary construction area will be used for work in both the Passive Recreation Open Space and Conservation Area. Portions of the FPA Open Space that are graded will be seeded with native seed as described in Section 4.1.9 to re-establish vegetation. When disturbed areas have become revegetated and construction is complete, all temporary erosion control materials (e.g., straw bales, straw wattles and stakes, silt fencing) will be removed from the FPA Open Space.

# 4.1.4 Flagging Preserved Wetlands and Historic Properties Adjacent to Construction Within the Open Space

Where construction will occur within the FPA Open Space, temporary construction fencing will be installed denoting the limits of construction to exclude grading activities from any protected biological and cultural resources. Prior to the installation of that fence, the developer/property owner or the developer's/property owner's contractor will hire a qualified biologist to flag the preserved wetland(s) and a qualified archaeologist to flag boundaries of Historic Properties within the limits of construction, as specified in the HPTP, if applicable. Brightly colored pinflags will be used so that workers are aware of the location of the protected habitat/resources and can install their temporary construction fencing accordingly.

# 4.1.5 Temporary Construction Fencing

Prior to construction within any project or phase of the FPA, high-visibility temporary construction fencing will be installed along the boundary of the Conservation Area within or adjacent to any active construction including construction on adjacent properties. Fencing will also be installed at the limits of construction within the Passive Recreation Open Space when improvements such as the bike trails, water quality basins, crossings, etc. are constructed. In all cases, this fencing will be maintained daily until permanent fencing is installed. Following completion of construction of each phase of the project, the temporary fencing must be removed.

## 4.1.6 Water Quality/Hydro-modification and Flood Control Basins

Several water quality facilities will be constructed within the FPA Open Space. Storm drains will be directed to water quality/hydro-modification or flood control basins (hereafter collectively referred to as "stormwater basin") for sedimentation and slow metering of storm runoff prior to water being discharged into the creek or intermittent drainages within the Conservation Area. Some flood control basins will be located within the Conservation Area (in-stream) to meter flows from large storm events. Depending on the size of the storm event, water will be detained for a short period of time. The approximate locations of the stormwater basins are shown on Figure 5 and Attachment A, per the adopted 2014 FPA Storm Drainage Master Plan.

As each project moves forward, detailed plans for water quality basins will be submitted by the developer/property owner to USACE and CDFW for review and approval. Additional stormwater basin design options that may be considered are included in the Alder Creek Action Plan (City of Folsom 2010).

# 4.1.7 Outfalls and Drainage Swales

Run-off from developed areas within the FPA will be designed to reach the creeks or drainages within the Conservation Area. Past experience has shown that ill-designed or inappropriately placed outfalls can permanently and adversely impact the hydrology of preserved wetland features. This was taken into consideration during outfall design. The approximate locations of the outfalls are shown on Figure 5 and Attachment A. As each project moves forward, detailed plans and final outfall locations will be submitted by the developer/property owner to the USACE and CDFW for review and approval. Additional outfall design options that may be considered are included in the Alder Creek Action Plan (City of Folsom 2010).

## 4.1.8 Storm Water Pollution Prevention

Storm water best management practices (BMPs) help reduce the potential for pollutant discharges into the FPA Open Space, in particular the Conservation Area, and are required by the State Water Resources Control Board for any project over one acre in size or smaller projects that are part of a larger project. These BMPs are typically included in a Storm Water Pollution Prevention Plan (SWPPP) which will be prepared and implemented to control sediment and erosion during construction. The SWPPP includes preventing sediment-laden runoff from reaching creeks and drainages. Oil, soil amendments (e.g., lime) or other chemicals used in construction activities shall not be allowed to contaminate site runoff that discharges to the FPA Open Space. For all construction related activities in and adjacent to the FPA Open Space, perimeter BMPs shall be installed (e.g., straw wattle, silt fencing, etc.) and maintained as a minimum sediment control measure at all times (year round) for the duration of construction. When disturbed areas have become revegetated and construction is complete, all temporary erosion control materials (e.g., straw bales, straw wattles and stakes, silt fencing) will be removed by the developer/property owner from the FPA Open Space.

## 4.1.9 Use of Native Grasses in Post Construction Revegetation

Upon the completion of construction work within the FPA Open Space, all temporarily disturbed areas will be re-seeded with a native seed mix. All seeds must be for plants native to California, and preferably from ecotypes from Sacramento or surrounding counties. Attachment N provides guidelines for seed mixes for different revegetation situations and a list of local native grass seed companies. If the developer/property owner desires to use a different seed mix from those listed in Attachment N, he/she will consult with the Preserve Owner/Manager, Monitoring Biologist, and/or qualified landscape contractor who will approve the seed mix. The seed mix will also need USACE approval.

#### 4.1.10 Trash Removal and Post Construction Clean-Up

During construction, paper, plastic, food wrappers, and other trash often blows into open space areas from adjacent construction sites. The developer/property owner or the developer's/property owner's contractor will remove trash blown into the FPA Open Space from adjacent construction on a daily basis by hand. After construction is complete and the temporary construction fencing has been replaced by permanent fencing (where applicable), temporary fencing and posts will be removed from the FPA Open Space. Additionally, when disturbed areas adjacent to or within the FPA Open Space have become revegetated and

construction is complete, all temporary erosion control materials (e.g., straw bales, straw wattles and stakes, silt fencing) will be removed from the FPA Open Space.

## 4.1.11 Fire Prevention Measures During Construction

Prior to grading, the contractor shall prepare a wildland fire management plan that addresses wildland fire prevention strategies to be taken during construction activities for that particular phase of the project. The wildfire management plan shall consider defensible space, clearance requirements near ignition sources, and other fire safety practices that are consistent with the City's Fire Code. The contractors will work with the City and local fire authority to determine if any explosive or hot work permit requirements exist for the project. The wildland fire management plan will be approved by the City's fire chief.

## 4.2 Preserve Management During Project Construction

During project construction, the developer/property owner will serve as Preserve Manager and will be responsible for implementing this Plan until such time as construction within and adjacent to the FPA Open Space is complete. At that time, the process described in Section 2.3 will facilitate the transfer of the FPA Open Space to the City. Upon recordation of the declaration of covenants and restrictions or conservation easement by the City, management of that portion of the FPA Open Space (both Conservation Areas and Passive Recreation Open Space) will be the responsibility of the City. At that time, the City will become the Preserve Manager.

# 5.0 LONG TERM MONITORING AND MANAGEMENT OF THE CONSERVATION AREA

The following discusses the long-term monitoring and management for the Conservation Area. This includes a discussion of the yearly inspections and reporting requirements, agency notifications, prohibited and allowable uses, and adaptive management techniques for the long-term management of the Conservation Area.

If any provision in this Plan is found to be ambiguous and affects the Conservation Area, then USACE should be notified for clarification in advance of any action taken; CDFW will also be notified for any questions pertaining to the preserved tricolored blackbird foraging habitat.

# 5.1 Long-Term Monitoring of the Conservation Area

The following describes the yearly monitoring of the Conservation Area which is to continue in perpetuity.

#### 5.1.1 Schedule

The schedule of inspections for the Conservation Area is as follows:

- The Qualified Personnel/Monitoring Biologist shall conduct three Biological Inspections each year.
- The Preserve Owner/Manager shall conduct (at minimum) two General Inspections each year. The General Inspections can be conducted concurrently with the Biological Inspections.
- If Historic Properties are present, then the schedule of monitoring by a Monitoring Archaeologist shall be carried out in accordance with the HPTP or at a minimum, at least once per year.

Attachment O provides a suggested annual monitoring timeline. The inspection timeframes are a general guide, and the surveys should be timed to best meet the monitoring goals.

## 5.1.2 Biological Inspections

In managing the Conservation Area, measures must be taken to help ensure that the existing conditions are maintained in perpetuity. Inspections by qualified personnel will help ensure the long-term integrity of the wetlands and upland habitats.

The inspections will be conducted in order to qualitatively monitor the Conservation Area habitats as well as monitor the general wetland function, thatch accumulation, newly introduced invasive species, use by tricolored blackbirds within the tricolored blackbird foraging habitat preserves, and overall function of the preserved habitats. Additionally, these inspections can monitor the grazing regime in areas where grazing is required for tricolored blackbird foraging habitat management as well.

Although each of the three surveys has a focus, all aspects of the Conservation Area will be reviewed, generally, during each visit. During the biological inspections, the Monitoring Biologist

will walk the perimeter of the Conservation Area, to the extent possible, as well as meandering transects through its interior. In general, the following aspects of the Conservation Area should be monitored during all Biological Inspections in addition to the more detailed surveys outlined below:

- Wetland Function: The Monitoring Biologist should take general notes on the status of the preserved wetlands to ensure they have the appropriate hydrologic regime at the appropriate time of year.
- Thatch Accumulation: In addition to the protocol described in Section 5.1.2.3, the Monitoring Biologist should take general notes on thatch accumulation throughout the Conservation Area.
- Invasive Species: The Monitoring Biologist should assess the status of known populations of existing invasive plants and look for new populations or new invasive species and continually update the invasive plant map (See Section 5.1.3) as needed.
- Oak Tree Health: During each inspection, the Monitoring Biologist will generally observe
  the condition of the oak trees throughout the preserve to assess the health and vigor of
  the trees. A certified arborist can be consulted, if necessary, but is not required by this
  Plan.
- Use by tricolored blackbirds within the tricolored blackbird foraging habitat preserves.

The following describes the suggested monitoring protocol for each of the biological surveys.

#### 5.1.2.1 Winter Survey (January – March)

The winter survey will focus on the overall hydrology of the wetlands throughout the Conservation Area. The Monitoring Biologist will assess the condition of the wetlands and uplands to ensure that they have the appropriate hydrologic regime. In addition, the Monitoring Biologist will also monitor for anthropogenic influences on the different habitats and informally document the plant and wildlife species observed (i.e., prepare a species list).

While assessment-level fairy shrimp surveys are not required as part of the long-term monitoring for the Conservation Area, it is encouraged to help determine overall wetland condition and health. If the Preserve Owner/Manager desires to collect this information, it is allowed, provided that the Monitoring Biologist is permitted by USFWS to conduct such surveys. All state and federal requirements for notification and reporting as specified in the biologist's collection permit from the USFWS must be observed.

## 5.1.2.2 Spring Survey (April – June)

The spring survey is intended to assess the various wetland habitats during the floristic season. Wetland floristic monitoring should consist of general species lists to determine if the species composition is appropriate for the wetland type. The spring survey will also include a general assessment-level use survey of all areas set aside as part of the on-site tricolored blackbird foraging habitat preserve.

# 5.1.2.3 Summer/Fall Survey (July – October)

The summer/fall survey will focus on oak tree health, invasive species monitoring, and thatch accumulation.

# Oak Tree Health and Composition Monitoring

A large component of the FPA Open Space, including areas within the Conservation Area, consists of oak woodland and savannah. The Monitoring Biologist will generally assess the condition of the oak trees within the Conservation Area and note any potential concerns within the oak woodlands. A certified arborist may conduct this assessment, but it is not required as part of this Plan. While annual monitoring of the oak woodlands is not a requirement of the Plan, the City may choose to conduct a more detailed assessment of oak tree health. Appendix A provides some guidelines and potential monitoring techniques the City may implement in order to monitor oak tree health.

#### **Invasive Plant Monitoring**

Before the transfer of the Conservation Area to the City, the developer/property owner will hire a qualified biologist to map all existing invasive or problematic plant species. This map, the Baseline Invasive Weed Map, will be provided to the Preserve Owner/Manager. During subsequent years, the presence of newly established invasive plant species or problematic native species, as well as the expansion of existing populations will be assessed annually by walking meandering transects through the Conservation Area. The results will be used to update the Baseline Invasive Weed Map (see Section 5.1.3) and included in the monitoring report with recommendations for the control of these populations.

## Thatch Accumulation and Residual Dry Matter Monitoring

The Monitoring Biologist will make an annual determination regarding thatch levels (see Attachment P for sample data sheets). Four permanent residual dry matter (RDM) stations will be established by the Monitoring Biologist within the grasslands. The permanent stations will be selected to include a full range of variability in topographic position, soil type, slope and aspect. A minimum of one monitoring station will be established within one of the areas set-aside as the tricolored blackbird foraging habitat preserve. No permanent stations will be located in vernal pools or wetland swales due to their overall low productivity. Each station will be monitored annually using the Wildlands Solutions technique (Wildland Solution 2008).

The Wildland Solutions technique involves the use of a Robel Pole (a 1-1/8" diameter PVC pipe marked in one inch increments) and two painted golf balls, placed on either side of the Robel Pole, as visual reference points. These visual reference points will be assessed at a distance of 20 feet and 10 feet. Photographs will be taken of each visual reference point at a distance of 20 feet and a height of 5 feet to provide a permanent record of site conditions. The degree of visibility at these distances gives a good estimate of RDM.

The results will be used to maintain the grassland at levels of RDM considered appropriate for grassland habitat (800-1000 pounds per acre). Within the tricolored blackbird foraging habitat preserve portions of the Conservation Area, thatch will be maintained at less than 6 inches as described in Section 5.2.2.12. If excess thatch is present and appears to be inhibiting the natural recruitment of oak trees, represents a fire hazard, or is in excess of 1,200 lbs/ac (or taller than 6 inches within the tricolored blackbird foraging habitat preserve), the Monitoring Biologist will work with the Preserve Owner/Manager to determine the best removal practice for each particular site. Several management practices can be used to address thatch including controlled burning, mowing, or grazing as described in Section 5.2.2.2. Grazing or mowing is the preferred method for managing thatch within the tricolored blackbird foraging habitat preserve.

If grazing is to occur, portions of the Conservation Area to be grazed would be leased annually, and adjustments would be made each year to manage the site for the target RDM. More information on thatch management is included in Appendix B (Thatch Management Plan).

## 5.1.3 Baseline Invasive Weed Map

Before new parcels are added to the Conservation Area, the developer/property owner shall hire a qualified biologist to map existing invasive and problematic plant species within the Conservation Area. During baseline weed mapping, the biologist will walk meandering transects throughout the Conservation Area and map the current extent/locations of invasive species using a combination of Global Positioning Units (GPS) data logging and aerial photo interpretation. This map, the Baseline Invasive Weed Map, will be provided to the Preserve Owner/Manager upon transfer of the parcel.

Throughout the years, the Monitoring Biologist will assess the presence of any problematic invasive plant species that become newly established or that expand within the Conservation Area and recommend corrective actions as needed. As new populations of invasive species are found or existing populations expand, the Monitoring Biologist will update the map appropriately. If necessary, recommendations for the control of these populations would be addressed in the monitoring report. The map can be used to assess priority areas for invasive species removal efforts.

## 5.1.4 Historic Property Inspections

Monitoring of Historic Properties within the Conservation Area shall be carried out by a qualified Monitoring Archaeologist at least once per year, unless specified otherwise by an applicable HPTP. A confidential map showing the locations of Historic Properties that require monitoring is provided in Confidential Attachment H and is restricted from public distribution. Inspections by a qualified Monitoring Archaeologist will help ensure the long-term integrity of the Historic Properties within the Conservation Area.

The annual inspections (or more frequently, if stipulated in an HPTP) will be conducted in order to qualitatively monitor the integrity of the Historic Properties. The Monitoring Archaeologist shall utilize the most recent site records, obtained from the North Central Information Center of the California Historical Resources Information System to determine if changes to the integrity

have occurred since the last inspection. The Monitoring Archaeologist shall document the inspection on an updated site record and submit it to the North Central Information Center. If any vandalism or impacts to the Historic Property are observed, the Monitoring Archaeologist shall document the impacts, notify the USACE immediately, and coordinate with the Preserve Owner/Manager and USACE to resolve any adverse effect or take corrective action. Such action may require consultation with the SHPO.

## 5.1.5 General Inspections

The Preserve Owner/Manager or other Qualified Personnel (i.e., Monitoring Biologist) will conduct General Inspections twice annually. These inspections can be combined with the Biological Inspections. The General Inspections will concentrate on an evaluation of the following factors: erosion, fire hazard reduction, fencing integrity, condition of signage, trash accumulation, and evidence of unauthorized use by motor vehicles. The entire perimeter of the Conservation Area will be covered, to the extent possible, as well as meandering transects through its interior. A Preserve Inspection Sheet will be utilized in order to evaluate potential problem areas during each field visit. A sample Preserve Inspection Form is included in Attachment Q. Previous inspection forms will be reviewed before each visit in order to make sure that a possible or recurring problem area is not missed. If any problems are identified, more frequent inspections will be used to closely track any problems as well as to ensure that remedial actions are effective. Evaluation and corrective actions for each potential problem area are described below.

## 5.1.5.1 Erosion and Sedimentation

During the General Inspection, the Preserve Owner/Manager (or Monitoring Biologist) will assess the Conservation Area for evidence of erosion and sedimentation caused by sheet-flow drainage from adjacent areas. If found, immediate standard erosion control measures (such as the installation of wattles) will be implemented. This is most crucial during initial construction activities. If any significant erosion/sedimentation problems occur that result in discharge of sediment into Waters of the U.S., that are not already covered under the Section 404 Permit, the USACE will also be notified and a qualified erosion control specialist will be consulted. See Section 5.5 for remediation actions for sedimentation.

For construction activities within or adjacent to the Conservation Area, the developer/property owner or other parties conducting allowed uses will be responsible for the installation and maintenance of erosion and sediment control measures.

#### 5.1.5.2 Fire Hazard Reduction

During the General Inspection, the Preserve Owner/Manager (or Monitoring Biologist) will assess the Conservation Area for potential fire hazards. The Preserve Owner/Manager and Monitoring Biologist may consult with the City Fire Chief in the assessment of fire risk. Along with the thatch and RDM data collected during the Biological Inspections, the Preserve Owner/Manager and/or Monitoring Biologist will determine if any areas within the Conservation Area contain "fire ladders" or otherwise pose a fire risk. Fire ladders are a pathway for ground fires to become crown fires and include downed wood piles or downed branches on live or dead trees.

If at any time conditions in the Conservation Area become a fire hazard, and require measures beyond those described in this Plan, the Preserve Owner/Manager will work with USACE and the local fire authorities to decide on the best method to reduce the fire risk in the Conservation Area. Any actions taken will also follow the City of Folsom Community Wildfire Protection Plan (City of Folsom 2013) to the extent possible and will be in compliance with Folsom Fire Code Section 319.2.

Project design has incorporated at least 30 feet of Passive Recreation Open Space as a buffer between development and the Conservation Area. This area is intended to serve as a fire break between development and the FPA Open Space area. The City may require up to 100 feet of buffer between development and the FPA Open Space, and in areas were 100 feet of Passive Recreation Open Space is available, fire prevention maintenance (i.e., fire breaks) is allowed. No fire breaks are allowed within the Conservation Area (except as shown in Figure 5 and Attachment A) without consultation and/or approval from agencies.

# 5.1.5.3 Fencing, Gates, and Signage

The developer/property owner is responsible for the initial installation of fencing. The condition of any established fencing, gates, and signage in the Conservation Area will be assessed during the General Inspections. The Preserve Owner/Manager will be responsible for maintaining the fencing, gates, and signage, except for residential fencing. Residential fencing will be maintained by the individual homeowner and will be enforced by the Covenants, Conditions, and Restrictions (CC&Rs) administered by the Homeowner's Association (HOA). All residential fencing must occur within the boundaries of the residential parcel and not within the FPA Open Space. Ground-disturbing activities associated with replacement or maintenance of fencing shall not conflict with the terms of the FAPA or HPTP. Signage restricting entry into areas with Historic Properties must not specifically delineate the resource location, but shall cite the applicable PRC code (5097.99, 5097.993-5097.994). Remediation Personnel will have a separate lock (if required) with 24-hour access to the Remediation Area.

#### 5.1.5.4 Trash Accumulation

During the General and/or Biological Inspections, the Preserve Owner/Manager (or Monitoring Biologist or Archaeologist) will note locations of trash within the Conservation Area. The Preserve Owner/Manager will arrange for the removal of trash from the Conservation Area as necessary.

## 5.1.5.5 Unauthorized Motor Vehicle Use

The perimeter of the Conservation Area will be inspected for evidence of unauthorized motor vehicle use/access. If necessary, corrective actions such as repairing locks and gates will be taken. The Preserve Owner/Manager will be responsible for taking the proper corrective actions.

## 5.1.6 Agency Monitoring/Inspection

The USACE may inspect and monitor the condition of the Conservation Area at any time. CDFW can inspect and monitor the tricolored blackbird foraging habitat preserves at any time.

## 5.1.7 Annual Reporting Requirements

The Preserve Owner/Manager, in conjunction with the Monitoring Biologist, will prepare an Annual Report for the Conservation Area which will be submitted to USACE and CDFW by June 30th of each year. The Annual Report will follow the 2015 Sacramento Pacific Division Mitigation and Monitoring Guidelines (SPD MMG; USACE 2015) and will include at minimum, the 2015 SPD Mitigation Monitoring Report Form (Attachment Q), a vicinity map, a map of the Conservation Area, photos documenting the status of the Conservation Area, a description of proposed activities and maintenance or management actions as required by this Plan, a description of actions for which USACE notification or approval was not needed, but were carried out during the year, observations from the Biological Inspections, and recommendations for altered management practices as needed. In addition, the report will provide a projected budget for the following year's monitoring and management activities, along with any anticipated CPI adjustments. The report will refer to the USACE regulatory division file number for each project and CDFW's Master Steambed Alteration Agreement and/or subsequent Lake or Streambed Alteration Agreement numbers for each project.. The reports will be sent to the attention of Chief, Sacramento Valley Office, Regulatory Branch, at the USACE and to CDFW Region 2. Annual monitoring and reporting will occur in perpetuity.

The Monitoring Archaeologist will prepare an Annual Report for the Conservation Area in conjunction with the Preserve Owner/Manager, which will be submitted to the USACE by June 30<sup>th</sup> of each year. The Annual Report will, to the extent feasible, follow the USACE SPD MMG standards and will include at minimum, a map of the Conservation Area, photos documenting the status of the Historic Properties located within the Conservation Area, a description of activities and maintenance or management actions as required by this Plan, a description of actions for which USACE notification or approval was not needed, but were carried out during the year, observations from the Archaeological Inspections, and recommendations for altered management practices as needed. The report will refer to the USACE regulatory branch number for each project. The reports will be sent to the attention of Chief, California Delta Branch, Regulatory Division, at the USACE and the North Central Information Center.

#### 5.2 Long-Term Management of the Conservation Area

In preparing a management plan for habitat to be preserved in perpetuity, it must be acknowledged that there will undoubtedly be future developments in habitat and species management that may affect how the Plan Goal is met. This management plan can only provide guidance for adopting new technologies or practices as they are developed. Ultimately, the Preserve Owner/Manager in coordination with the Monitoring Biologist, Monitoring Archaeologist, the USACE, and CDFW must determine the appropriate management decision for a given situation.

#### 5.2.1 Agency Notification

The USACE has expressed a desire to be notified when certain management and maintenance activities are undertaken within the Conservation Area. It is also recognized that the Preserve Owner/Manager needs to be able to carry out management and maintenance activities in a timely and responsive manner. (In this section "Agency" or "Agencies" means the USACE).

Therefore, the following notification requirements have been defined. Attachment R also provides a summary of Agency notification requirements. In addition, CDFW will be notified in advance of any alterations in the management needs for the tricolored blackbird foraging habitat preserve areas.

#### 5.2.1.1 No Notification Required

If an activity in this Plan does not have a specific requirement for notification, then no notification is required provided it is not a Prohibited Activity (see Section 5.3), a review and approval activity, or an activity that requires a permit. If an activity was not anticipated, and therefore not mentioned in this Plan, then (at a minimum) coordination with the USACE and/or CDFW (and possibly other regulatory agencies) would be required to determine the appropriate level of Agency involvement prior to the activities' implementation.

#### 5.2.1.2 Notification

For those activities noted in this Plan as requiring Agency notification, the following action will be taken. All efforts will be made to outline the activities for the coming year in the annual report, to be submitted by June 30<sup>th</sup> of each calendar year. Additionally, for each activity requiring Agency notification, the Preserve Owner/Manager will submit a separate letter notifying the Agencies. Both the annual report and the letter will include a written description of the activity, the timing of the activity, and what methodology will be used, as well as a map showing what areas will be targeted. The Agencies will have 60 days to contact the Preserve Owner/Manager to discuss the activity if they do not approve. If the Preserve Owner/Manager is not contacted within 60 days, then the activity will be considered approved. Notification will be made either by fax, email, registered mail, or overnight transmittal.

## 5.2.1.3 Review and Approval

For those activities noted in this Plan as requiring Agency review and approval, the following action will be taken. All efforts will be made to outline the activities for the coming year in the annual letter report, which is submitted by June 30<sup>th</sup> of each calendar year. Additionally, for each activity requiring Agency review and approval, the Preserve Owner/Manager will submit a separate letter to the Agencies. Both the annual report and the letter will include a written description of the activity, the timing of the activity, and what methods will be used, as well as a map showing what areas will be targeted. The Agencies will have 60 days to review, discuss, and approve or disapprove the activity. For these activities, the approval from the Agencies must be written. Submittal of activities for review and approval as well as written approval back from the Agencies will be made either by fax, email, priority mail, or overnight transmittal.

# 5.2.1.4 Activities Requiring a Permit

This Plan has been designed to assist the Preserve Owner/Manager to preserve and maintain habitats within the Conservation Area, and it is not anticipated that routine management activities will affect Waters of the U.S., and/or Historic Properties. However, it is possible that certain Remediation Requirements conducted by Aerojet and/or modified management activities may have the potential to "impact" Waters of the U.S., result in "incidental take" of listed species, or a cultural resource. The purpose of this section is to clarify that any actions not

anticipated by this Plan may require a separate permit or other authorization from the USACE. Such activities could not be implemented until authorization or required permits are received.

An authorization (Permit) under Section 404 of the Clean Water Act may be required if an activity within the Conservation Area will result in the permanent or temporary discharge of dredged and/or fill material into Waters of the U.S., including wetlands, and was not previously permitted. As of the date of this Plan, there are several Nationwide Permits<sup>3</sup> (NWP) designed for activities that result in minimal impacts on the aquatic environment, many with a 0.50-acre limit on loss of Waters of the U.S. These NWP may apply for maintenance and related activities that might occur within the Conservation Area. These are NWP 3, *Maintenance*; NWP 7, *Outfall Structures and Maintenance*; NWP 12, *Utility Line Activities*; NWP 13, *Bank Stabilization*; and NWP 27, *Stream and Wetland Restoration Activities*. Issuance of a permit by the USACE may require the USACE to consult with the USFWS pursuant to Section 7 of the Endangered Species Act if the proposed action is anticipated to affect a federally-listed or proposed species. It may also require the USACE to consult with the SHPO, pursuant to Section 106 of the NHPA.

If the USACE or another federal agency is not involved with the project, and federally-listed species may be taken as a result of the proposed action, then an incidental take permit pursuant to Section 10(a)(1)(B) of the Endangered Species Act should be obtained. The USFWS may issue such a permit upon the permit applicant's completion of a satisfactory habitat conservation plan for the listed species that would be taken by the project. The USFWS also may provide technical assistance upon request if there is a question as to whether an activity may affect listed and/or proposed species, and to recommend measures that can be taken to avoid or minimize adverse effects. Specific maintenance activities may also qualify for the Clean Water Act Section 404(f) exemption for maintenance. If there is a question regarding whether a maintenance activity will require a USACE permit, or USFWS consultation, the Preserve Owner/Manager should seek quidance from the USACE and/or USFWS, as appropriate.

The Preserve Owner/Manager may avoid negative effects to federally-listed species by designing and implementing measures that will minimize effects to the species to the extent that no "take" of listed species will occur.

In addition to federal requirements, in-stream activities may require a 1600 permit from the CDFW. In lieu of obtaining individual 1600 permits for individual projects, the City may obtain a routine maintenance permit from CDFW. If this permit is acquired by the City, it can be appended to this Plan.

# 5.2.1.5 Emergency Situations

Should an emergency situation arise that requires immediate action in an upland area, and would normally require that the USACE be notified or have review and approval authority, the USACE will be notified verbally within 48 hours, with written confirmation of the actions taken within one week. In these situations, "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.

<sup>&</sup>lt;sup>3</sup> Nationwide Permits are permits for categories of activities that result in minimal impacts on the aquatic environment, many with a 0.50-acre limit on loss of Waters of the U.S.

Should an emergency situation arise that requires immediate action in a Waters of the U.S., including wetlands, or within the boundaries of an Historic Property, the USACE (and other applicable Regulatory Agencies) should be notified immediately.

## 5.2.1.6 Notification Regarding Listed Species

Within three (3) working days of finding any dead or injured individuals of any species listed under the Federal Endangered Species Act, or any unauthorized take of the species listed in the Biological Opinion, the Preserve Owner/Manager must notify the USFWS, Division Chief of Endangered Species at (916) 414-6600, or applicable number at that time. All such notices shall include the date, time and location of the incident or of the findings of a dead or injured animal.

## 5.2.2 Preserve Management Activities and Guidelines

The following management strategies, approved uses, and restrictions are intended to provide a framework for the long-term management and operation of the Conservation Area. Before considering any management action, the Preserve personnel must consider the Plan Goal, which is to ensure that the protected resources within the Conservation Area are maintained in good condition such that it will continue to support the flora and fauna of the uplands and Waters of the U.S., including wetlands, in perpetuity. Furthermore, this Plan cannot anticipate all possible site conditions. Therefore, if a condition arises which is not specifically addressed by this Plan, the Preserve Owner/Manager may upon review and approval by the USACE adopt techniques not described here.

#### 5.2.2.1 Authorized Access

The intent of the Conservation Area is to maintain the habitats and resources of these areas in perpetuity and limited access to the Conservation Area will further this goal. Public access to the FPA Open Space will be limited to the Passive Recreation Open Space. No regular public access to the Conservation Area is permitted. Passive and educational access to the Conservation Area is encouraged, but should be coordinated with the Preserve Owner/Manager to reduce the potential for inadvertent impacts to protected habitats and Historic Properties. Public access to Historic Properties within the Conservation Area must not allow for artifact collection or ground disturbing activity. The public can learn to respect and enjoy the protected habitats and resources if they are provided appropriate access such as that provided in the Passive Recreation Open Space. Pedestrian and vehicular access to any portion of the Conservation Area will be discouraged through signage, fencing, and/or natural barriers. The following access is allowed for long-term management in the Conservation Area and maintenance and installation of structures and improvements in the Conservation Area:

- Ongoing Conservation Area management including, monitoring, vegetation management, and mosquito abatement activities;
- Maintenance activities such as pond and utility maintenance (restricted to the immediate area where maintenance is occurring);
- Access by Remediation Personnel for Remediation Requirements is allowed in the Remediation Area (map located in Attachment I);

- Grazing contactor (within the tricolored blackbird foraging habitat preserve areas, and within other conservation areas if grazing is used to manage for invasive species or for fuel load modification);
- Emergency or law enforcement vehicles;
- Educational activities authorized through the Preserve Owner/Manager that do not impact Historic Properties;
- Non-mechanized clean-up, including trash removal, activities authorized through the Preserve Owner/Manager;
- Habitat restoration activities authorized through the Preserve Owner/Manager (unless specifically excluded by the FAPA or HPTP).
- Fence repair and replacement; and
- Installation and maintenance of signs, drainage swales, water quality and flood control basins.

Notification to the agencies is not required for the allowed access identified above. The specific activities requiring access may require agency notification or review and approval, as described for the activity in the following sections and in Section 5.4.

## 5.2.2.2 Thatch Management

Historically, grassland habitats burned periodically due to the occasional wildfire. These fires would burn dead plant material or thatch, keeping it from building up. Native ungulates, and later cattle, have inhabited the grasslands within the Conservation Area. The grazing and trampling action of these animals also would have reduced the amount of dead plant material. In urban preserves, thatch has an opportunity to build up because of the lack of fires and grazing. This buildup of thatch can be detrimental to the Conservation Area habitats. During one of the biological surveys (as discussed in Section 5.1.2.3), the Monitoring Biologist will make a determination as to the extent of thatch accumulation and if it is adversely impacting the Conservation Area habitats. Appendix B includes a thatch management plan, which discusses three potential methods for thatch management: mowing, grazing, and controlled burns (prescribed burns). Mowing equipment is allowed in the Conservation Area for thatch management. Mowing does not require agency notification; however, it does require surveys for nesting birds if implemented during the time period when birds are actively nesting. Additionally, removal of vegetation from within the boundaries of Historic Properties is prohibited, unless specifically allowed by an HPTP. Goat grazing to control vegetation within the boundaries of Historic Properties is permissible, unless the Monitoring Archaeologist finds that damage to sites is occurring or is likely to occur. Grazing does not require agency notification; however, the grazing plan does require review and approval by the USACE and CDFW (for tricolored blackbird foraging habitat preserve areas). Lastly, prescribed burning does require review and approval from USACE and surveys for nesting birds may be required if implemented during the time period when birds are actively nesting. Any actions taken will also follow the City of Folsom Community Wildfire Protection Plan (City of Folsom 2013) to the extent possible and will be in compliance with Folsom Fire Code Section 319.2.

## 5.2.2.3 Invasive Plant Species Management

Management of non-native plant species can be a complex and expensive task. It is important to recognize that the Preserve Owner/Manager can only conduct as much invasive species

management as can be accomplished with the funding provided as part of this Plan or by obtaining other funds such as grant funds (not required by this Plan).

The Monitoring Biologist and the Preserve Owner/Manager can refer to the species found on the California Invasive Plant Council (Cal-IPC), California Invasive Plant Inventory (Inventory) to assist them in determining if a plant is an invasive plant species of concern. Cal-IPC updates this Inventory from time to time, and the current Inventory is found online at <a href="https://www.cal-ipc.org/paf">www.cal-ipc.org/paf</a>. The Monitoring Biologist and/or Preserve Owner/Manager should update this list from the above referenced website, as needed, in the future.

Prior to the transfer of the Conservation Area to the City, the developer/property owner will hire a qualified biologist to map the existing invasive and problematic species to produce the Baseline Invasive Weed Map as described in Section 5.1.3. This map will be provided to the City upon transfer. This map can be used in subsequent years as a baseline of existing conditions and should be updated every five years or as needed. It is unreasonable to require or expect eradication of established invasive species as identified in baseline surveys at the site. The required management of invasive plants will therefore be limited to the management of newly introduced invasive plants and working to contain the spread of existing invasive plant populations, as funding allows, that are a threat to the Conservation Area values. Beyond management activities, if the Preserve Owner/Manager would like to pursue more extensive removal of invasive species through volunteer efforts or grant funding, that is encouraged.

In addition to looking for existing invasive species during the General Inspections, the Monitoring Biologist will also assess the presence of any newly introduced invasive species during the Biological Inspections and recommend removal as needed as described in Section 5.1.3. Three methods of removing or controlling these species are outlined below and also summarized in Appendix C.

## Hand/Mechanical Removal

Hand removal or use of small hand powered or handheld equipment (such as a Weed Wrench or a chainsaw) is always the preferred method and should be the first choice for removing invasive plant species from the Conservation Area. If hand removal methods are tried and found to be ineffective, or the problem is too widespread for hand removal to be practical, then mechanical methods (use of larger equipment with motors such as mowers) or biological controls as described below can be implemented. Hand/mechanical removal does not require agency notification. Mechanical removal of vegetation from within the boundaries of Historic Properties is prohibited, unless specifically allowed in the HPTP. Goat grazing to control vegetation within the boundaries of Historic Properties is permissible, unless the Monitoring Archaeologist finds that damage to sites is occurring or is likely to occur. Agency notification and approval is required for 1) ground disturbing activities or 2) mechanical removal that requires anything other than the use of small, hand-powered or handheld equipment when it occurs in waters of the U.S. or within the boundaries of Historic Properties. The USACE may need to consult with SHPO on most instances where mechanical removal is proposed within the boundaries of historic properties.

# **Biological Controls**

Biological controls are natural parasites, predators or pathogens that are released to combat non-native species. For example, there are several natural enemies of yellow star thistle, such as the hairy weevil, that have been introduced from Europe to act as biological controls against this invasive species. The insects begin life within the seed head of the flower and develop there, feeding on the seeds. The County Agricultural Commissioner would be the point of contact for use of these biological controls within the Conservation Area. As of 2012, the commissioner does not have a program for providing the hairy weevil for biological control; however, the commissioner must be contacted if biological controls obtained from other sources are proposed for use.

Biological controls should be used with caution and only after contact with the Agricultural Commissioner's office. If biological control methods are tried and found to be ineffective or if biological control methods are not available for the target species, then herbicides can be used, but only as outlined below. The use of biological controls in the Conservation Area requires agency notification.

#### **Herbicides**

Herbicides can be used for the management of invasive plant species if other methods (hand or mechanical) do not work. Herbicides can be potentially harmful, and the use of chemicals will be considered carefully before use. The most recent research regarding the appropriate herbicide for the target plant will be reviewed prior to their use. Chemicals must be applied according to the label. Use of herbicides requires agency notification. This notification does not obviate the need for the Preserve Owner/Manager to obtain any other applicable approvals for the use of these chemicals; however, herbicides shall not be used within the boundaries of Historic Properties. Goat grazing to control vegetation within the boundaries of Historic Properties is permissible, unless the Monitoring Archaeologist finds that damage to sites is occurring or is likely to occur.

#### 5.2.2.4 Tree Removal

If any of the native trees in the Conservation Area become diseased and are a threat to other trees, public safety or private property, removal of that tree will be allowed. All tree removal will comply with the City's tree preservation ordinance. In addition, removal will be consistent with CDFW regulations if the tree is in a riparian area. Non-native tree removal is allowed. Removal may require a nesting raptor survey consistent with the Migratory Bird Treaty Act Removal is not required if a tree has died and is not a threat to other trees, public safety, or to private property. Dead trees are often important habitat elements for wildlife and should remain in the Conservation Area. Tree removal within the Conservation Area does not require notification of the USACE, unless ground disturbing activities will occur as a result of the tree removal. If ground disturbing activities are to occur during tree removal within the Conservation Area, USACE notification is required. Tree removal within the Conservation Area requires notification of CDFW if the tree is in a riparian area, unless the activity is addressed through an ongoing maintenance agreement between the City and CDFW. All tree removal within the boundaries of Historic Properties shall require review and approval by the USACE and/or California SHPO. Appendix A and C contain information on tree removal quidelines.

## 5.2.2.5 Vegetation Debris Removal within Alder Creek and Associated Drainages

The Preserve Owner/Manager is allowed to conduct certain flood control activities within the drainage corridors and floodway. These activities may include vegetation removal adjacent to structures such as road or trail crossings and outfalls, in channels or on banks to maintain channel capacity and within in-stream flood control basins. Appendix C summarizes vegetation removal guidelines. It should be noted that this type of work should only be done if truly needed to minimize disturbance to the drainages and/or maintain the original channel capacity. This Plan does not negate the City's obligation to abide by federal and state laws. Vegetation removal for the maintenance of the channel in the Conservation Area may require a 1602 Streambed Alteration Agreement from CDFW.

Notification of the USACE is not required for hand/mechanical removal of vegetation. If hand/mechanical removal of vegetation would occur within the boundaries of Historic Properties, then, review and approval by the USACE and/or California SHPO is required. Agency review and approval is required for ground disturbing activities. Agency review and approval is also required for mechanical removal of vegetation that is not limited to the use of small hand powered or handheld equipment, when it occurs in Waters of the U.S. Disturbance or removal of soil or sediment from the drainages will most likely require a Permit from the USACE. The Preserve Owner/Manager should contact the USACE to determine what type of authorization for the maintenance work is required. If the City obtains a maintenance permit with any of the regulatory agencies, it can be appended to this Plan.

# 5.2.2.6 Beaver Management

The Preserve Owner/Manager and/or the Monitoring Biologist will assess the beaver population within the Conservation Area. Reduction of predator populations and increases in perennial flows due to development in the region has apparently led to an increase in beavers throughout the area. If beaver dams become established, the Preserve Owner/Manager should consult with the Monitoring Biologist to determine if it is best to: leave the beavers alone as they are a natural part of the ecosystem, install a beaver baffler device to control the water level and allow the beavers to remain, breach the beaver dam, or if removal of the beavers is appropriate. The use of beaver baffling devices is allowed. Situations where beaver management may be prudent are when beaver dams are causing water levels to rise such that they are causing or have the potential to cause property damage or adversely affect the adjacent wetlands and riparian vegetation. Care should be taken to weigh the effects of the beaver's presence. Beaver dams can also result in positive impacts to streamside habitat. Work should be done by hand, but if the dam is too large, equipment such as backhoe with rubber tracks/tires can be used. The Preserve Owner/Manager will be responsible for managing beaver populations. If removal of beaver populations is deemed necessary then work will be done in consultation with CDFW. Removal of beaver dams or installation of a baffler device using handheld equipment does not require Agency notification.. Ground disturbing activities would require agency notification and approval, and may require a permit. Mechanized dam removal that uses anything other than small or handheld equipment in waters of the U.S., would also require Agency notification. Appendix D summarizes several beaver management techniques.

#### 5.2.2.7 Mosquitoes

If mosquito control within the Conservation Area is necessary, the local Mosquito Vector Control District (MVCD) will independently implement mosquito control measures. The Sacramento-Yolo MVCD has prepared a management plan for mosquito control (Sacramento-Yolo Mosquito Vector Control District 2005). This management plan addresses management strategies for dealing with mosquito populations within protected habitats. Due to recent occurrences of certain mosquito borne diseases, such as West Nile Virus, the MVCD has been conducting aerial as well as ground spraying. These techniques are used to combat large areas and are not designed in such a manner to allow exclusion of particular pieces of property. Thus, if these techniques are repeated there is no way of preventing these pesticides from entering the Conservation Area. Aerial and ground spraying for mosquito control is allowed within the Conservation Area without agency notification; however, if the MVCD plans on conducting more targeted management activities within the Conservation Area, it would require notification of the Preserve Owner/Manager and Agencies and would be the responsibility of MVCD to obtain any required state or federal approvals.

#### 5.2.2.8 Pond Maintenance

There are two ponds located within the Conservation Areas. Both ponds are naturally fed by direct rainfall and surrounding runoff from the landscape. The ponds are primarily open water with patches of vegetation generally occurring in the shallower areas and along the margins. Plant species observed within and adjacent to the stock ponds included Goodding's black willow, Freemont cottonwood, cattail, hyssop loosestrife, pennyroyal, curly dock, creeping spikerush, and Vasey's coyote-thistle. Over time, water levels within the pond may decrease allowing more vegetation and/or algae to increase within the pond. This will create a more marsh-like wetland that lacks the open water quality of a pond. In order to maintain the ponds in their current condition, this Plan allows for the removal of up to 50% of the perennial vegetation (e.g., cattails and willows), and also allows for supplemental water within the pond, if necessary during summer months, to maintain the ponds in perpetuity. Notification of the USACE is not required for hand/mechanical removal of vegetation within the ponds. Agency review and approval is required for ground disturbing activities and for mechanical removal of vegetation that is not limited to the use of small hand-powered or handheld equipment, when it occurs in Waters of the U.S. Vegetation removal within the ponds may require a permit from USACE and/or CDFW.

#### 5.2.2.9 Homeowner Liaison

The Preserve Owner/Manager will be responsible for informing residents whose property adjoins the Conservation Area if they are in violation of any of the stipulations of the declaration of covenants and restrictions or conservation easement and to require remediation if necessary (see Section 5.5).

#### 5.2.2.10 Trash Removal

The Preserve Owner/Manager will arrange for removal of trash and other unwanted debris from the Conservation Area as necessary. Hand/mechanical removal of trash and unwanted debris does not require agency notification. Agency notification is required if the mechanical removal

involves anything other than the use of small hand powered or handheld equipment. Ground disturbing activities or mechanical removal involving anything other than the use of small hand powered or handheld equipment in waters of the U.S. would require Agency notification and approval, and potentially a permit.

#### 5.2.2.11 Recreation, Education and Restoration

### Recreation

There is no recreation planned to occur within the Conservation Area. All recreation activities are limited to Passive Recreation Open Space.

#### Educational Activities in the Conservation Area

The Conservation Area represents an opportunity to encourage a sense of ownership and respect for open space, wildlife habitat, and Historic Properties in local students. The Alder Creek Action Plan outlines possible recreational and educational programs within the watershed. Use of the Conservation Area for education will be limited to students, parents, and faculty of the local school district, local area residents, or other persons with the consent of the Preserve Owner/Manager. Individuals or groups using the Conservation Area for educational purposes will coordinate their use with the Preserve Owner/Manager. If the educational activities will be passive in nature, such as an occasional walk through the Conservation Area to discuss plants and animals of the wetland habitats, then the consent of the Preserve Owner/Manager is sufficient and agency notification is not required. The Preserve Owner/Manager shall notify authorized visitors of the restriction on artifact collection or ground disturbance. If active use (other than restoration activities) of the Conservation Area is proposed, or regular, but passive use of the Conservation Area is proposed, agency notification and approval is required. To avoid repeated inquiries with the USACE, a use plan could be developed by the interested school or school district for a one-time approval. See below for review and notification information on restoration activities.

#### Community Clean-up Days

Often, communities have open space or creek clean-up days as described under "Creek Week" in the latest edition of the Alder Creek Action Plan (City of Folsom 2010). Teams of residents "adopt" an open space area and pick up trash. Individuals or groups participating in a clean-up event will coordinate their use of the Conservation Area with the Preserve Owner/Manager. See Section 5.2.2.10 for notification requirements for trash/debris removal.

## Future Habitat Restoration/Enhancement

In the future, the Preserve Owner/Manager or other group/organization may want to conduct habitat restoration or enhancement within the Conservation Area. This could include the removal of invasive plant species, planting native plants, or other restoration activities (City of Folsom 2010). Removal of invasive plant species is addressed in Section 5.2.2.3. A list of native plants that can be used in restoration has been included

as Attachment S. This list is not all-inclusive; other locally native plants can be used in restoration. Future habitat restoration/enhancement must be coordinated with USACE, USFWS, CDFW, and California SHPO (as appropriate) to ensure that no adverse effects to Waters of the U.S., including wetlands, listed species, or cultural resources will occur. Planting native vegetation does not require agency notification unless extensive areas of ground disturbance are required (i.e., ground disturbance greater than that required for the individual seeds/acorns, tree seedlings, or native grass, e.g. needlegrass [*Stipa* spp.] plantings). Habitat restoration/enhancement within waters of the U.S. or the boundaries of Historic Properties would require Agency notification and approval.

## 5.2.2.12 Additional Management for Tricolored Blackbird Foraging Habitat

It is anticipated that portions of the Conservation Area will be designated as mitigation for impacts to tricolored foraging habitat. While Attachment A shows all the areas potentially available for inclusion in the tricolored blackbird foraging habitat preserve, as each project or phase moves forward, the exact area will be designated and this Plan will be appended.

Monitoring and management of the tricolored blackbird foraging habitat preserve will be conducted as already outlined in this Plan for the remainder of the Conservation Area with the following exceptions:

- The preserve will be grazed on an annual basis by cattle, horses or sheep to keep thatch
  at optimal height for tricolored blackbird foraging (less than 15 centimeters or roughly 6
  inches; Shuford and Gardali 2008). Alternatively, mowing may be used, but must be
  preceded by a survey for nesting birds.
- Manure of grazing animals, which increases abundance of insect prey species for tricolor blackbird, will be left onsite.
- Use of pesticides will not be allowed within the preserve, as these can lead to poisoning of the birds (Shuford and Gardali 2008). However, if mosquito abatement is deemed essential, abatement measures may be implemented as described in Section 5.2.2.4.
- Existing breeding habitat (consisting of species such as Himalayan blackberry and milk thistle [Silybum marinum]) shall not be removed (e.g. by herbicide use, cutting or burning) from the tricolored blackbird foraging habitat preserve (Shuford and Gardali 2008).
- Annual monitoring for use by tricolored blackbirds will be conducted during the Spring biological inspection.

#### 5.3 Prohibited Activities within the Conservation Area

This section outlines the restrictions on activities that can take place in the Conservation Area. It is understood that the following activities are prohibited, except as needed to accomplish the management and maintenance activities described in this Plan or to comply with Aerojet's Remediation Requirements. Additionally, if any of these prohibited activities must be undertaken due to special circumstances, agency notification and approval is required.

#### 5.3.1 Access to the Conservation Area

There is no planned public access to the Conservation Area. Authorized access is allowed as described in Section 5.2.2.1. Off-trail pedestrian, bicycle, or vehicular access to the Conservation Area should be discouraged through fencing and signage.

# 5.3.2 Vegetation Removal

No killing, removal, or alteration of any existing native vegetation will be allowed in the Conservation Area except as identified in Sections 5.2.2.2, 5.2.2.4, and 5.2.2.5 of this Plan, and that which is not in direct conflict with the FAPA or HPTP, and which does not cause an effect to an Historic Property. See Appendix C for vegetation removal guidelines.

## 5.3.3 Burning and Dumping

No burning or dumping of rubbish, garbage or any other wastes or fill materials will be allowed in the Conservation Area. The foregoing prohibition shall not be interpreted to prohibit controlled burning as a method of thatch management, which requires agency notification and approval as identified in Section 5.2.2.2.

## 5.3.4 Discing

No discing (overturning the soil to less than 1-foot depth) can occur in the Conservation Area.

#### 5.3.5 Additional Roads, Trails, and Utility Lines

Roads, trails, and utility lines not identified in this Plan will not be allowed in the Conservation Area, unless authorized by the Agencies. If the Preserve Owner/Manager determines that a new road, trail, or utility line is needed, than the Preserve Owner/Manager will provide plans to the USACE for review and approval. The USACE's cultural resources specialist, and/or California SHPO (as deemed appropriate by the USACE), shall also be consulted for review and approval.

Installation of new remediation wells is allowed to meet Remediation Requirements by Aerojet (under EPA and state oversight). However, the installation of new remediation wells requires agency notification. If the new remediation well would be placed in a waters of the U.S. or within the boundaries of a Historic Property, agency notification and approval, and in some cases, a permit, is required and as described in Section 5.4.9.

## 5.3.6 Equipment or Fuel Storage

No permanent equipment or fuel storage is allowed within the Conservation Area. No temporary equipment or fuel storage is allowed, unless necessary to undertake any of the maintenance or construction activities, provided the temporary equipment or fuel storage does not occur within waters of the U.S. or the boundaries of a Historic Property. All temporary equipment or fuel storage requires agency notification and approval.

# 5.3.7 Topography

Once adjacent development is complete and authorized structures (e.g., outfalls) have been constructed, no alteration may be made to the existing topography of the Conservation Area, unless authorized by the Agencies. Additional structures, leveling, grading, or removal of tailings rock requires agency notification and approval, and in some cases, a permit. No exploration, development, or extraction of oil, gas or minerals may be made from the Conservation Area.

Installation of new remediation wells is allowed to meet Remediation Requirements by Aerojet (under EPA and state oversight), as identified in Section 5.4.9.

# 5.3.8 Herbicides, Pesticides, and Chemical Agents

No herbicides, pesticides, and chemical agents shall be used except as identified in Section 5.2.2.3 for invasive species management, Appendix C for Vegetation Removal, and 5.2.2.7 for Mosquitoes. Herbicides shall not be used within the boundaries of Historic Properties. Goat grazing to control vegetation within the boundaries of Historic Properties is permissible, unless the Monitoring Archaeologist finds that damage to sites is occurring or is likely to occur. No pesticides shall be used in the tricolored blackbird foraging habitat preserve as described in Section 5.2.2.12.

#### 5.3.9 Motor Vehicle Use

No motorized vehicles shall be ridden, brought, used, or permitted on any portion of the Conservation Area except as outlined for maintenance, emergency, and other authorized access as discussed in Section 5.2.2.1.

#### *5.3.10* Construction

Once adjacent project development is complete and the anticipated structures and improvements within the Conservation Area are in place (e.g., outfalls), no construction, placement of new structures, fencing, or new roads shall be allowed in the Conservation Area without agency notification and approval.

#### 5.3.11 Non-Native Plants

The planting of non-native plants is prohibited within the Conservation Area.

#### 5.3.12 Metal Detecting

The use of metal detectors is prohibited within the Conservation Area.

#### 5.3.13 Groundwater Related Activities

Extraction of groundwater is prohibited within the Conservation Area or anywhere within the Remediation Area, including portions of the Passive Recreation Open Space that are within the Remediation Area (see Attachment I). This includes drilling, boring, otherwise constructing, or use of a well for the purpose of extracting water for any use, including, but not limited to,

domestic, municipal, potable, or industrial uses, except (i) for necessary construction dewatering in Conservation Areas outside of the Remediation Area; (ii) to meet Remediation Requirements by Aerojet; or (iii) unless and until expressly approved in writing by EPA and the RWQCB. If extraction of groundwater is proposed, Agency notification and approval is required if the activities would occur in waters of the U.S., within the boundaries of a Historic Property, or if ground disturbing activities would occur.

The recharge of groundwater is prohibited in the Conservation Area except to meet Remediation Requirements by Aerojet. This includes installing, operating or maintaining a recharge or sedimentation control basin that is designed to infiltrate water unless and until expressly approved in writing by EPA and RWQCB and in compliance with all necessary permits. Constructing a recharge or sedimentation control basin in the Conservation Area requires agency notification and approval. Maintaining a recharge or sedimentation control basin in the Conservation Area requires agency notification. The operation or maintenance of a recharge or sedimentation control basin requires agency notification and approval if the operation or maintenance would occur in waters of the U.S. or the boundaries of Historic Properties, or if ground disturbing activities would occur.

The injection of groundwater is prohibited in the Conservation Area except to meet Remediation Requirements by Aerojet. This includes installing, operating or maintaining any injection well for any use unless and until expressly approved in writing by EPA and RWQCB and in compliance with all necessary permits. The installation of new injection wells requires agency notification. If the new injection well would be placed in waters of the U.S. or within the boundaries of a Historic Property, agency notification and approval, and in some cases, a permit, is required. The operation and maintenance of an injection well requires agency notification and approval if the operation or maintenance would occur in waters of the U.S. or the boundaries of Historic Properties, or if ground disturbing activities would occur.

# 5.4 Installation and Long-Term Maintenance of Structures and Improvements in the Conservation Area

The following provisions outline the allowed maintenance of structures and improvements present within the Conservation Area. Maintenance involving vegetation removal is not allowed unless explicitly stated below or as identified in Section 5.2.2.2, 5.2.2.3, 5.2.2.4, and 5.2.2.5 or as outlined in Appendix A, Appendix B, and Appendix C. If any maintenance or replacement activities associated with these structures will directly impact preserved Waters of the U.S. (including wetlands) or Historic Properties, will occur within 100 feet of elderberry shrubs, or if ground disturbing activities would occur, agency notification and approval is required.

It should be noted, that the exact location and number of some structures that occur within the FPA is estimated. As each phase moves forward a more detailed land plan will be developed. Every effort will be made to keep structures in approximately the same location as shown in Attachment A. Any changes to the project design requires agency notification and approval. SHPO may be contacted by the USACE should it be determined that activities may impact a Historic Property.

# 5.4.1 Protective Measures During Post-Development Construction Within the Conservation Area

After the FPA has been built out, occasional construction may take place along the boundary of the Conservation Area (e.g., outfall replacement/repair, trail maintenance, or on-going Aerojet activities such as well monitoring, closing wells, and relocating wells). Past experience has shown that biological resources in urban preserves are vulnerable to disturbance during construction. In general, the minimum necessary construction area will be used. Construction limits will be set that do not encroach on any preserved wetlands or cultural resources. To avoid impacts to the Conservation Area and the protected resources, the following protective measures will be taken during project construction.

## 5.4.1.1 Pre-Construction Meetings

Pre-construction meetings for construction occurring adjacent to or in the Conservation Area will address the presence of the Conservation Area, the sensitive habitats and resources present (including Historic Properties) and minimization of disturbance to the Conservation Area. The Preserve Owner/Manager can also conduct a post-construction inspection to determine if those conducting the construction need to do any post-construction remediation. The developer/property owner or party conducting allowed construction activities within the Conservation Area will be responsible for conducting the pre-construction monitoring and if necessary retaining a construction monitor. If Historic Properties are located within the boundaries of the Conservation Area where construction will occur then the pre-construction meeting will also address cultural resource sensitivity.

## 5.4.1.2 Temporary Construction Fencing

Prior to construction activities, high visibility temporary construction fencing will be installed denoting the limits of construction to exclude grading activities from any protected biological and cultural resources. Prior to the installation of that fence, the Preserve Owner/Manager will require a qualified biologist to flag the preserved wetland(s) and a qualified archaeologist to flag boundaries of Historic Properties within the limits of construction, as specified in the HPTP, if applicable. Brightly colored pin-flags will be used so that workers are aware of the location of the protected habitat/resources and can install their temporary construction fencing accordingly. Monitoring of installation of temporary construction fencing within the immediate vicinity of Historic Properties may be required, as specified in the HPTP.

#### 5.4.1.3 Storm Water Pollution Prevention

A SWPPP will be prepared and implemented to control sediment and erosion during construction. The SWPPP will include best management practices to prevent runoff from dust control and dewatering entering adjacent protected resources. BMPs will also prevent oil, soil amendments (e.g., lime) or other chemicals used in construction activities from contaminating site runoff that discharges into the Conservation Area. For all construction related activities in and adjacent to the Conservation Area, perimeter BMPs shall be installed (i.e., straw wattle, silt fencing, etc.) and maintained as a minimum sediment control measure at all times (year round).

#### 5.4.1.4 Use of Native Grasses in Post Construction Revegetation

Upon the completion of construction work within the FPA Open Space, all temporarily disturbed areas will be re-seeded with a native seed mix (see section 4.1.9). All supplemental plantings in the FPA Open Space must be for plants native to California, and preferable from ecotypes from the Sacramento or surrounding counties. Attachment S provides a list of native trees, shrubs, and grasses. Use of species not included in Attachment S shall be approved by the Preserve Owner/Manager in consultation with the Monitoring Biologist, and/or qualified landscape contractor.

## 5.4.1.5 Fire Prevention Measures During Construction

At the time of construction, the contractor shall prepare a wildland fire management plan that addresses wildland fire prevention strategies to be taken during construction activities for that particular phase of the project. The wildfire management plan shall consider defensible space, clearance requirements near ignition sources, and other fire safety practices that are consistent with the City's Fire Code. The contractors will work with the City and local fire authority to determine if any explosive or hot work permit requirements exist for that project phase.

#### 5.4.1.5 Trash Removal and Post Construction Clean-Up

During construction, paper, plastic, food wrappers, and other trash often blow into preserve areas from adjacent construction sites. The developer/property owner or construction manager will remove trash blown into the Conservation Area by hand from adjacent construction as needed, at minimum once weekly. After construction is complete and the temporary construction fencing has been replaced by permanent fencing (if applicable), temporary fencing and posts will be removed from the Conservation Area. Additionally, when disturbed areas adjacent to or within the Conservation Area have become revegetated and construction is complete, all temporary erosion control materials (e.g., straw bales, straw wattles and stakes, silt fencing) will be removed from the Conservation Area.

## 5.4.2 Fencing and Signage

#### 5.4.2.1 Fencing

The initial installation of fencing in the FPA Open Space is the responsibility of the developer/property owner whose property that portion of the FPA occurs in. Permanent fencing for the FPA Open Space will be installed once construction is complete for a given phase or project. No fencing will be installed within the Conservation Area. All fencing will be limited to the Passive Recreation Open Space areas unless unforeseen circumstances necessitate the need for fencing within the Conservation Area. Any fence construction in the Conservation Area requires agency notification and approval. Agency notification and approval is required for fence maintenance in waters of the U.S., in the boundaries of Historic Properties, or if ground disturbing activities would occur. Pedestrian and vehicular traffic in the Conservation Area will be deterred through fencing and signage in the Passive Recreation Open Space. See Section 6.0 for more information regarding fencing, fencing types, and responsible parties for fence maintenance and repair within the Passive Recreation Open Space. Remediation Personnel will

have a separate lock with 24-hour pedestrian and vehicular access (if necessary) to the Remediation Area to comply with Remediation Requirements.

If fencing is ultimately required within the Conservation Area, maintenance and replacement of fencing must be restricted to the minimum area needed to fix the fencing. Whenever possible, maintenance and replacement of fencing should take place from outside the Conservation Area.

## 5.4.2.2 Preserve and Interpretive Signs

Signage will be installed within the Passive Recreation Open Space area to inform the public of the presence of the Conservation Area. An example of a Biological Preserve sign has been included as Attachment T, and an example of an appropriate sign to discourage access to Historic Properties (without calling attention to them) is provided in Attachment U. Appropriate sign locations will be determined once adjacent land use plans are developed to determine ideal placement. Preserve and interpretive signs shall be installed on fencing or within the Passive Recreation Open Space area, unless unforeseen circumstances necessitate the need for preserve and interpretive signs within the Conservation Area. Agency notification and approval is required for preserve and interpretive signs installed or replaced within waters of the U.S., in the boundaries of Historic Properties, or if ground disturbing activities would occur in an area larger than that needed to install the sign posts. If, in the future, the Preserve Owner/Manager feels that additional signage is warranted then more may be installed. The developer/property owner is responsible for the initial cost of installing Conservation Area signage. The Preserve Owner/Manager will be responsible for the maintenance and replacement of the signage. See Section 6.0 for more information regarding signage within the Passive Recreation Open Space. At no time shall any sign indicate the presence of protected Historic Properties. Cultural interpretive panels, where required by an HPTP, shall be installed in accordance with this Plan.

# 5.4.3 Water Quality and Flood Control Basins

Several water quality facilities will be constructed within the FPA Open Space. Storm drains will be directed to these facilities to allow for sedimentation prior to water being discharged into the creek or intermittent drainages within the Conservation Area. Depending on the size of the storm event, water will be detained for a short period of time. Approximate locations of the water quality basins are shown on Figure 5 and Attachment A. As each project moves forward, detailed plans for water quality basins will be submitted to the USACE for review and approval and final, approved plans will be provided to the City by the developer/property owner. The Preserve Owner/Manager will be responsible for the maintenance of water quality and flood control basins upon recordation of the declaration of covenants and restrictions or conservation easement. Appendix E describes a recommended maintenance program for Water Quality/Flood Control Basins. Maintenance of water quality and flood control basins requires agency notification and approval if the maintenance would occur in waters of the U.S. outside of the boundaries of the basin, within the boundaries of a Historic Property, or if ground disturbing activities would occur outside of the boundaries of the basin.

# 5.4.4 Outfalls and Drainage Swales

Run-off from developed areas within the FPA must reach the creeks or drainages within the Conservation Area. Past experience has shown that ill-designed or inappropriately placed

outfalls can permanently and adversely impact the hydrology of preserved wetland features. This was taken into consideration during outfall design. The outfalls and their approximate locations are shown on Figure 5 and Attachment A. Final outfall locations will be submitted to the Agencies for review and approval as each phase moves forward. Final, approved plans will be provided to the City by the developer/property owner. The Preserve Owner/Manager will be responsible for the maintenance of outfalls and drainage swales upon recordation of the declaration of covenants and restrictions or conservation easement. Maintenance of outfalls and drainage swales requires agency notification and approval if the maintenance would occur in waters of the U.S., within the boundaries of a Historic Property, or if ground disturbing activities would occur. Vegetation removal required in outfalls and swales would be implemented as identified in Sections 5.2.2.2, 5.2.2.3, 5.2.2.4 and 5.2.2.5 or Appendices A, B and C.

## 5.4.5 Trail System

As depicted on the FPA Open Space detail map (see Figure 5 and Attachment A) a paved bike trail and unpaved walking trails will meander through the Passive Recreation Open Space. Although the trails exist within the Passive Recreation Open Space, care should be taken so that maintenance activities of the trails do not encroach upon the Conservation Area. No public access either by trails or off-trail activities are allowed in the Conservation Area.

To the extent possible natural barriers such as topography or vegetation will be utilized to detour off-trail access to the Conservation Area; however, there are several locations where fencing may be utilized to protect biological or cultural resources. In the event that natural barriers are removed or no longer provide adequate protection for the Conservation Area, appropriate fencing will be installed.

#### 5.4.6 Fuel Load Modification Zone

Currently, very few fuel-load modification zones are planned within the Conservation Area (see Figure 5 and Attachment A). As discussed in Section 5.2.2.2, mowing is an acceptable form of thatch control to reduce fire risk. Removal of vegetation within the boundaries of Historic Properties is prohibited, unless specified in the HPTP. Goat grazing to control vegetation within the boundaries of Historic Properties is permissible, unless the Monitoring Archaeologist finds that damage to sites is occurring or is likely to occur. Any actions taken will also follow the City of Folsom Community Wildfire Protection Plan (City of Folsom 2013) to the extent possible and will be in compliance with Folsom Fire Code Section 319.2. To protect against crown fires, pruning of trees up to 8-feet in height is allowed to remove fuel ladders provided that sensitive resources are not harmed. Agency notification and approval for the pruning of trees is required if the activity would occur in waters of the U.S., within the boundaries of a Historic Property, or that require ground disturbing activities. The Preserve Owner/Manager will work with the Monitoring Biologist, Monitoring Archeologist (or other qualified personnel) and local fire authorities to determine the best fire management practices within the Conservation Area. If fire management activities are required beyond what is allowed in the Plan, than agency notification and approval is required if the fire management activities would occur in waters of the U.S., within the boundaries of a Historic Property, or that require ground disturbing activities.

# 5.4.7 Bridge Crossings and Detention Culverts

All bridge crossings and detention culverts will be within the Passive Recreation Open Space. See Section 6.0 and Appendix E for more information regarding maintenance of these features.

#### 5.4.8 Utilities

As depicted in Figure 5 and Attachment A, there are several areas of the FPA Open Space that are or will be crossed by utility lines. Access to the Conservation Area for the installation, maintenance, and replacement of existing and proposed utility lines and poles is allowed and will be restricted to the minimum area needed to accomplish the task. Agency notification and approval is required for the installation of utilities that would occur in waters of the U.S.; within the boundaries of a Historic Property, or that require ground disturbance.

## 5.4.9 Remediation Requirements

Entry into the Remediation Area (see Attachment I) by Remediation Personnel is required for Remediation Requirements by Aerojet (with EPA and state oversight). Activities in the Remediation Area may include but are not limited to the construction, operation, maintenance and repair of facilities required for the response activities as well as monitoring and sampling associated with the remediation. Construction by Remediation Personnel within the Conservation Area portion of the Remediation Area should, at a minimum, be reviewed by the Preserve Owner/Manager. Remediation Personnel should attempt to limit construction activities to the minimum area required. Agency notification and approval is required for the installation, removal, or maintenance of wells that would occur in waters of the U.S.; within the boundaries of a Historic Property; or that require ground disturbance. In some cases, these actions may require a permit. Remediation Personnel will be responsible for obtaining the appropriate permits and/or authorizations.

Any construction activities not related to Remediation Requirements is not allowed within the Remediation Area.

#### 5.5 Restoration and Disturbance Remediation Activities in the Conservation Area

#### 5.5.1 Post-Construction Remediation/Restoration

The replacement of the previously mentioned structures or improvements (see Section 5.4) in the Conservation Area may require post-construction restoration. These structures or improvements were originally permitted as part of the project through the USACE, the USFWS, and CDFW. For these cases, post-construction remediation/restoration means, for example, hydroseeding with native species the areas of the Conservation Area that were disturbed by equipment, restoring the original grade where the intent was not to alter it, cleaning up construction debris, and generally reverting the area back to pre-construction conditions. A list of native grass species and other locally native plants that can be used in revegetation/restoration is included as Attachment S. Hydroseeding with native species and generally cleaning up construction debris would not require agency notification. However, restoring the original grade would require agency notification and approval.

## 5.5.2 Restoration of Violations/Vandalism

It is difficult to anticipate and provide a mitigation measure for all potential violations within the Conservation Area, however, the following table outlines some potential violations and mitigation guidelines. If a particular situation is not listed here, that does not mean that restoration is not required. In these cases, determining an appropriate mitigation measure will be at the discretion of the Preserve Owner/Manager in coordination with the Monitoring Biologist and agencies. Restoration activities require agency notification and approval when activities would occur in waters of the U.S., within the boundaries of a Historic Property, or that require ground disturbance. Seeding with natives and hand/mechanical removal of vegetation or garbage does not require agency notification.

Type of Disturbance	Mitigation Guidolino
Type of Disturbance Disturbance of Grassy Upland Areas	Mitigation Guideline  Restoration of grassy upland areas due to disturbance resulting in
Disturbance of Grassy opiand Areas	bare ground should include seeding the area with appropriate native
	grass seed (see Attachments N and S) and implementing the proper
	erosion control measures until the bare ground becomes vegetated
	again.
Removal of Native Tree (except as	Restoration for the removal native trees or shrubs should result in
described in Section 5.2.2.4) or Shrub	the replacement of the habitat. This could be in the form of planting
Habitat	tree/shrub seeds or seedlings in an amount sufficient to ultimately
	result in the survival to maturity of the same number of trees or
	shrubs that were removed. Monitoring of the replacement plants
Water of the H.C. Sachadian continue	should be done for at least two seasons.
Waters of the U.S., including wetlands	Restoration for fill/loss of Waters of the U.S. should result in the
	removal of fill from the feature, potentially the minor re-grading and revegetation of the feature (if appropriate) and monitoring for at
	least two seasons to gauge the feature's recovery. The Preserve
	Owner/Manager will contact the USACE if fill/loss of Waters of the
	U.S., including wetlands, has occurred and submit for review and
	approval what remediation/restoration is proposed.
Sedimentation in Vernal Pools	If sedimentation within a vernal pool occurs, the Preserve
	Owner/Manager will notify the USACE. The Preserve Owner/Manager
	will wait until summer when the vernal pool is dry. The Monitoring
	Biologist will assess the vernal pool at that time to determine if
	remediation (i.e., removal of the sediment) is warranted, or if the
	pool is recovering sufficiently on its own. Indicators of recovery
	include the re-establishment of vernal pool plant species and
	recovery of the pool's vegetative cover. If the first year of monitoring
	indicates that no remediation will be needed, one more year of
	monitoring will be conducted. Monitoring will consist of one winter
	visit and one summer visit to assess the overall health of the vernal
	pool. If the first year of monitoring/first summer assessment
	indicates that removal of the sediment is warranted, it will be
	conducted during the summer months when the pool is completely
	dry. The sediment will be removed by hand shovel. Care will be
	taken to remove only the sediment and not disturb the original grade
	of the vernal pool. Two years of monitoring after the remediation has
	taken place are required.
Impacts to Elderberry Shrubs	If, in the future, elderberry shrubs are found to be growing in the
	FPA Open Space and are affected by future activities, impacts should include componentary plantings. The Proserve Owner/Manager
	include compensatory plantings. The Preserve Owner/Manager should contact USFWS to determine the appropriate mitigation for
	I should contact our wasto determine the appropriate mitigation for

Type of Disturbance	Mitigation Guideline
	impacts to elderberry shrubs.
Fencing	Restoration for the destruction or modification (e.g., installing an unauthorized gate) of FPA Open Space (i.e., any fence that borders open space) should include fixing or replacing the section of fencing to its original specifications as enforced by CC&Rs or the LLD/CFD.
Structures, Landscaping, Other Improvements, etc.	Any unauthorized structure, landscaping, or other improvement should be removed from the FPA Open Space. Depending on the type of disturbance, mitigation may be required using the above mitigation measures as guidelines.
Impacts or Vandalism to Historic Properties	Any impacts or vandalism to Historic Properties within the Conservation Area shall be communicated to the Preserve Owner/Manager and USACE immediately. USACE will consult with SHPO as appropriate to develop an appropriate method of corrective action.

# 5.5.3 Timing/Process for Corrective Actions

Minor corrective measures not requiring notification or approval of the USACE and/or the USFWS (e.g., prevention of unexpected runoff, prevention of unauthorized access to the area by placing locks on gates, etc.) will be carried out by the Preserve Owner/Manager within sixty (60) days, unless site conditions warrant delay (i.e., if soil is saturated and equipment would damage the upland habitat in the Conservation Area, it may be necessary to delay work until conditions improve). All other corrective actions will take place when conditions are best suited for restoration to occur, and after the USACE and/or the USFWS have been notified or the Preserve Owner/Manager has received approval.

# 6.0 LONG-TERM MANAGEMENT OF THE PASSIVE RECREATON OPEN SPACE

The purpose of this section is to provide guidelines for activities and long-term management in the Passive Recreation Open Space. Although these areas are not subject to a declaration of covenants and restrictions or conservation easement, care should be taken when managing these areas so that management will not result in inadvertent impacts to the adjacent Conservation Area.

If any provision in this Plan is found to be ambiguous, then an interpretation consistent with the purpose and goals of this Plan and its underlying regulatory requirements shall be favored over any interpretation that would potentially result in an adverse effect to the resource in question. This may require consultation with the appropriate regulatory and permitting agencies in advance of action taken under said provision.

### 6.1 Passive Recreation Open Space Management Activities and Guidelines

The following outlines management and maintenance activities that are allowed within the Passive Recreation Open Space.

#### 6.1.1 Authorized Access

The intent of the Passive Recreation Open Space is to allow access to the FPA Open Space. Allowed public access to the FPA Open Space will be limited to the trail system within the Passive Recreation Open Space. This type of passive and educational access to the FPA Open Space is encouraged. The public can learn to respect and enjoy the protected habitats and resources if they are provided appropriate access. Off-trail pedestrian access to any portion of the Conservation Area will be discouraged through signage, fencing, and/or natural barriers. At no time shall signage indicate the presence of protected historic properties, unless specifically allowed for by the HPTP. Access to the Passive Recreation Open Space for maintenance activities (such as trail maintenance, utility maintenance, ground water sampling) is allowed. Access to the Remediation Area by Remediation Personnel and other staff necessary to carry out this Plan is allowed. If in the future, grazing is used to either manage invasive species or for fuel load management, access by the grazing contractor will be allowed, unless specifically excluded by the HPTP. Vehicular access for mosquito abatement activities or for emergency or law enforcement situations by medical, fire or law enforcement personnel is allowed. Authorized access to the Conservation Area is described in Section 5.2.2.1.

In addition, the City may decide to incorporate other recreational activities in the Passive Recreation Open Space. Access for construction of these facilities and public access for use are allowed in the Passive Recreation Open Space. These activities include additional trails (both paved and unpaved), cross country running/cyclocross course, Frisbee golf, off-leash dog areas and off-leash dog trails, challenge courses such as cross fit, ropes courses, and zip lines, youth-oriented community camping (e.g., scouts), rock climbing, bike park, art walk or trails, wildlife viewing areas, additional parking, staging, and restroom areas, duel equestrian and bike trail along the Alder Creek corridor, an arboretum or botanical garden, and an archery range. The Preserve Owner/Manager will be responsible for obtaining applicable permits and authorizations for any of these activities that are not part of the project design or for any modifications to the

fencing plan depicted in Attachment A. Access for these activities is allowed except within any restricted areas within the Remediation Area where no public access is allowed. If any of these activities within the Passive Recreation Open Space are placed within 50 feet of the boundaries of the Conservation Area, additional fencing and signage will be added to protect the Conservation Area from unauthorized access.

#### 6.1.2 Fuel Load Modification Zone

Historically, grassland and oak savannah/woodland habitats burned periodically due to the occasional wildfire. These fires would burn dead plant material or thatch, keeping it from building up. Native ungulates, and later small grazers such as goats/sheep, inhabited the grasslands within the Passive Recreation Open Space. The grazing and trampling action of these animals would have reduced the amount of dead plant material. In urban open space areas, thatch has an opportunity to build up because of the lack of fires and grazing. This buildup of thatch can be detrimental to the habitats and result in an increased fire risk.

Within the Passive Recreation Open Space, the Preserve Owner/Manager can place fuel load modification zones (i.e., firebreaks) wherever necessary for fire prevention management (with the exception of the Remediation Area, where no ground disturbing activities are allowed, and within the boundaries of a protected Historic Property which requires hand removal by a qualified archeologist). Throughout most of the FPA, a transition area of at least 30-feet has been incorporated into the project design to separate the Conservation Area from the developed areas. These transition areas are part of the Passive Recreation Open Space. Fuel load modification zones are intended to be within this transition area as shown on Figure 5 and Attachment A. However, fuel load modification zones can be larger (up to 100-feet) if more Passive Recreation Open Space land is present between the development and the Conservation Area. Except as shown on Figure 5 and Attachment A, fuel load modification zones are not allowed within the Conservation Area.

The Preserve Owner/Manager will be responsible for maintaining the fuel load modification zones. Fuel load modification in the Passive Recreation Open Space is expected to include mowing vegetation to 2 inches high or less or light discing (overturning the soil to less than 1foot depth) unless within the boundaries of a protected Historic Property (which requires hand removal by a qualified archeologist). If discing is used to decrease fire risk, than the discing will occur outside of the drip line of trees within the fuel load modification zone, to the extent possible. However, to protect against crown fires, pruning of trees up to 8-feet in height is allowed to remove fuel ladders. The Preserve Owner/Manager will be responsible for implementing fuel load modification as well as arranging for a ground nesting bird survey to be conducted each year prior to the mowing or discing in accordance with the Migratory Bird Treaty Act. Any actions taken will also follow the City of Folsom Community Wildfire Protection Plan (City of Folsom 2013) to the extent possible and will be in compliance with Folsom Fire Code Section 319.2. The Preserve Owner/Manager will work with the Monitoring Biologist, Monitoring Archeologist (or other qualified personnel) and local fire authorities to determine the best fire management practices within the Passive Recreation Open Space. If fire management activities are required beyond what is allowed in the Plan then, at a minimum coordination with the USACE (and possibly other regulatory agencies) would be required to determine the appropriate level of Agency involvement prior to the activities' implementation.

Agency notification and approval is required for activities involving anything other than handheld or hand-powered equipment that would occur in waters of the U.S.; within the boundaries of a Historic Property, or that require ground disturbance.

#### 6.1.3 Invasive Plant Species Management

If an invasive species is found within the Passive Recreation Open Space it would be prudent to control this species before it has a chance to spread to the adjacent Conservation Area. The Preserve Owner/Manager should work with the Monitoring Biologist for suggestions on dealing with invasive plant species. The same methods described in Appendix C and in Section 5.2.2.3 for the Conservation Area apply to the Passive Recreation Open Space.

#### 6.1.4 Tree Removal

If any native trees within the Passive Recreation Open Space become diseased and are a threat to other trees or are a danger to public safety or private property, removal will be allowed. This statement does not imply permission to undertake the removal of any tree without obtaining any appropriate tree removal permits, if applicable. Non-native tree removal is allowed. In addition, removal will be consistent with CDFW regulations if the tree is in a riparian area. Removal may require a nesting raptor survey consistent with applicable laws. If a tree has died, is not a threat to other trees, a danger to public safety, or to private property, then removal is not required. Dead trees are often important habitat elements for wildlife and should remain in the FPA Open Space. All tree removal within the boundaries of Historic Properties shall be preapproved by the USACE and/or California SHPO. Appendix A and C contain information on tree removal guidelines. Agency notification and approval is required for tree removal activities that require anything other than handheld or hand-powered equipment and that would occur in waters of the U.S.; within the boundaries of a Historic Property, or that require ground disturbance.

#### 6.1.5 Vegetation Removal

Vegetation removal within the Passive Recreation Open Space is allowed. However, in order to maintain a natural setting, the City should remove the minimum amount of vegetation necessary. Vegetation removal within the boundaries of Historic Properties shall be preapproved by the USACE and/or California SHPO. Surveys for elderberry shrubs, which could become established within the FPA Open Space in the future, should be conducted prior to any vegetation removal in riparian areas. If elderberry shrubs are identified, they should be avoided and/or the USFWS should be notified. Vegetation removal associated with the water quality basins and adjacent to outfalls is permitted, but should be limited to the area of the basins. See Appendix C for vegetation removal guidelines. Vegetation removal activities involving anything other than handheld or hand-powered equipment that would occur in waters of the U.S.; within the boundaries of a Historic Property, or that require ground disturbance.

#### 6.1.6 Trash Removal

The Preserve Owner/Manager will arrange for trash pickup, as necessary, along the roadways, trails, fuel load modification zones, and in areas adjacent to amenities.

## 6.1.7 Remediation Requirements

Access to the Remediation Area (see Attachment I) by Remediation Personnel is required for Remediation Requirements by Aerojet (with EPA and state oversight). A small portion of the Passive Recreation Open Space is part of the Remediation Area. Activities that may need to be conducted by Remediation Personnel in the Remediation Area may include but are not limited to the construction, operation, maintenance and repair of facilities required for the response activities as well as monitoring and sampling associated with the remediation. If construction by Remediation Personnel is required within the Passive Recreation Open Space portion of the Remediation Area, than the Remediation Personnel should notify the Preserve Owner/Manager. Construction activities should be limited to the minimum area required. If construction activities overlap the Conservation Area, then the requirements of Section 5.4.9 will be implemented. Agency notification and approval is required if construction activities in the Passive Recreation Open Space would occur in waters of the U.S.; within the boundaries of a Historic Property, or that require ground disturbance. Remediation Personnel will be responsible for obtaining the appropriate permits and/or authorizations.

#### 6.2 Prohibited Activities Within The Passive Recreation Open Space

Although the Passive Recreation Open Space is not subject to a declaration of covenants and restrictions or conservation easement, it is part of the FPA Open Space and some activities are restricted in order to prevent inadvertent impacts to the Conservation Area, including preserved wetlands and cultural resources. This section provides a summary of activities that are prohibited within the Passive Recreation Open Space.

## 6.2.1 Access to the Passive Recreation Open Space

The intent of the Passive Recreation Open Space is to allow limited recreational use for residents while maintaining the adjacent habitats in perpetuity. Pedestrian and bicycle access will be limited to the approved trails within the Passive Recreation Open Space. Off-trail pedestrian or bicycle access into the Conservation Area should be discouraged through fencing and signage. Signage specifically identifying the presence of a cultural resource is prohibited, unless required as part of an HPTP.

The Preserve Owner/Manager may decide to incorporate other recreational activities in the Passive Recreation Open Space. Access for construction of these facilities and public access for use are allowed in the Passive Recreation Open Space. These activities include additional trails (both paved and unpaved), cross country running/cyclocross course, Frisbee golf, off-leash dog areas and off-leash dog trails, challenge courses such as cross fit, ropes courses, and zip lines, youth-oriented community camping (e.g., scouts), rock climbing, bike park, art walk or trails, wildlife viewing areas, additional parking, staging, and restroom areas, duel equestrian and bike trail along the Alder Creek corridor, an arboretum or botanical garden, and an archery range. The Preserve Owner/Manager will be responsible for obtaining applicable permits and authorizations for any of these activities that are not part of the project design or for any modifications to the fencing plan depicted in Attachment A. If any of these activities within the Passive Recreation Open Space are placed within 50 feet of the boundaries of the Conservation

Area, additional fencing and signage will be added to protect the Conservation Area from unauthorized access.

A small portion of the Passive Recreation Open Space occurs within the Remediation Area (see Attachment I). If it is determined that public access is not allowed in any portion of the Remediation Area, then fencing and signs will be installed to prohibit public access.

#### 6.2.2 Burning and Dumping

No burning or dumping of rubbish, garbage or any other wastes or fill materials will be allowed in the Passive Recreation Open Space. The foregoing prohibition shall not be interpreted to prohibit controlled burning as a method of thatch management.

#### 6.2.3 Discing

Light discing (overturning the soil to less than 1-foot depth) for fuel load modification purposes can occur anywhere in the Passive Recreation Open Space (with the exception of the Remediation Area, where no ground disturbance is allowed, and within the boundaries of a Historic Property where hand removal by a qualified archeologist is required). While mowing is the preferred method for fuel load modification, discing is allowed. If discing is used to decrease fire risk, than the discing will occur outside of the drip line of trees within the fuel load modification zone, to the extent possible.

# 6.2.4 Additional Roads, Trails, and Utility Lines

Roads, trails, and utility lines identified in this Plan will be allowed in the Passive Recreation Open Space and were reviewed and approved by the USACE, the USFWS, and California SHPO as part of the Permit and the Biological Opinion. Installation of new trails within the Passive Recreation Open Space and/or significant modifications to approved trail alignments, may require review and approval by the Preserve Owner/Manager, the USACE, (and the USFWS and California SHPO – if deemed appropriate by the USACE).

#### 6.2.5 Equipment or Fuel Storage

There will be no permanent equipment or fuel storage within the Passive Recreation Open Space. Temporary storage will only occur, as needed, during construction or maintenance activities.

## 6.2.6 Herbicides, Pesticides, and Chemical Agents

No herbicides, pesticides, and chemical agents shall be used except as described in Section 5.2.2.3. for invasive species management, Appendix C for Vegetation Removal, and 5.2.2.7 for Mosquitoes.

#### 6.2.7 Motor Vehicle Use

No motorized vehicles shall be ridden, brought, used, or permitted on any portion of the FPA Open Space except as necessary for FPA Open Space construction, maintenance, or emergency purposes and as described in Sections 5.2.2.1 and 6.1.1.

#### 6.2.8 Construction

Once adjacent project development is complete and the anticipated structures and improvements within the Passive Recreation Open Space are in place, no construction, placement of new structures, or new roads shall be allowed in the Passive Recreation Open Space, except those listed in Section 6.1.1, without the review and approval by the Preserve Owner/Manager and USACE, at a minimum. If construction will impact Waters of the U.S. or Historic Properties, Agency notification and approval would be required. Maintenance of authorized structures is allowed provided that maintenance will not impact Waters of the U.S. or Historic Properties cultural resources without first obtaining the appropriate Agency authorization and/or permits.

#### 6.2.9 Non-Native Plants

No non-native plants will be planted in the Passive Recreation Open Space.

#### 6.2.10 Metal Detection

The use of metal detectors is prohibited within the Passive Recreation Open Space.

#### 6.2.11 Groundwater Related Activities

Groundwater extraction is prohibited in the FPA Open Space. This includes drilling, boring, otherwise constructing, or use of a well for the purpose of extracting water for any use, including, but not limited to, domestic, municipal, potable, or industrial uses, except (i) for necessary construction dewatering; (ii) to meet Remediation Requirements by Aerojet; or (iii) unless and until expressly approved in writing by EPA and RWQCB. Constructing and maintaining a groundwater extraction system in the Passive Recreation Open Space Area requires agency notification and approval if the activities would occur in Waters of the U.S. or the boundaries of Historic Properties.

Groundwater recharge is prohibited in the FPA Open Space except to meet Remediation Requirements by Remediation Personnel. This includes installing, operating or maintaining a recharge or sedimentation control basin that is designed to infiltrate water unless and until expressly approved in writing by EPA and RWQCB and in compliance with all necessary permits. Constructing or maintaining a recharge system in the Passive Recreation Open Space Area requires agency notification and approval if the activities would occur in Waters of the U.S. or the boundaries of Historic Properties.

Groundwater injection is prohibited in the FPA Open Space except to meet Remediation Requirements by Remediation Personnel. This includes installing, operating or maintaining any injection well for any use unless and until expressly approved in writing by EPA and RWQCB and in compliance with all necessary permits. Constructing or maintaining a groundwater injection system in the Passive Recreation Open Space Area requires agency notification and approval if the activities would occur in Waters of the U.S. or the boundaries of Historic Properties.

# 6.3 Installation and Long-Term Maintenance of Structures and Improvements within the Passive Recreation Open Space

The following provisions outline the allowed maintenance of structures and improvements present within the FPA Open Space. Maintenance involving vegetation removal is not allowed unless explicitly stated below or as described in Appendix A, B, and C. If maintenance or replacement activities associated with these structures will directly or indirectly impact preserved Waters of the U.S., elderberry shrubs, or Historic Properties, the USACE, the USFWS, CDFW, and/or the California SHPO will be notified and any appropriate permits will be obtained. If Waters of the U.S. (including wetlands) or elderberry shrubs will not be impacted by maintenance or replacement of any of these structures or improvements, then the Preserve Owner/Manager will review the plans for the activity to be sure that as little disturbance to the Conservation Area occurs as possible, but the USACE will not have to be notified. If the Preserve Owner/Manager determines that the activity will occur within the boundaries of an Historic Property, then the USACE must be notified in advance. These activities will be described in the Annual Report. In addition, areas disturbed will be restored (see Section 6.4).

It should be noted, that the exact location and number of some structures that occur within the FPA is estimated. As each phase moves forward a more detailed land plan will be developed. Every effort will be made to keep structures in approximately the same location as shown in Figure 5 and Attachment A. Any changes to the project design s that result in new activities in Waters of the U.S. or within the boundaries of Historic Properties would require review and approval by the USACE and/or SHPO.

# 6.3.1 Protective Measures Taken During Post-Development Construction Within the Passive Recreation Open Space

After the Project has been built out, occasional construction may take place in the Passive Recreation Open Space (e.g., on-going Remediation activities by Remediation Personnel such as well monitoring, closing wells, relocation of wells, replace or repair outfall, bike trail maintenance, water quality basin maintenance). Past experience has shown that biological resources in urban open space areas are vulnerable to disturbance during construction. In general, construction shall be limited to the Passive Recreation Open Space, if encroachment into the Conservation Area is required, the Preserve Owner/Manager will work with the Monitoring Biologist and Monitoring Archeologist to determine appropriate steps. Construction limits will be set that do not encroach on any preserved wetlands or Historic Properties. To avoid impacts to FPA Open Space and the wildlife habitats, the following protective measures will be taken during project construction.

# <u>6.3.1.1 Pre-Construction Meetings</u>

Pre-construction meetings for construction occurring adjacent to or in the Passive Recreation Open Space will address the presence of the wildlife habitats as well as the adjacent Conservation Area, the sensitive habitats and resources present and minimization of disturbance to the Conservation Area. If construction will encroach into the Conservation Area, the Preserve Owner/Manager must be notified to review construction plans. The Preserve Owner/Manager can also conduct a post-construction inspection to determine if those conducting the construction need to do any post-construction remediation.

#### 6.3.1.2 Temporary Construction Fencing

Prior to construction activities, high visibility temporary construction fencing will be installed to limit construction to the immediate area where construction is planned. This fencing will reduce the potential for disturbance of the habitats. Any resources warranting special protection will be pin flagged to avoid impacts not authorized by a permit. In all cases, this fencing will be maintained daily until completion of construction. Monitoring of installation of temporary construction fencing within the immediate vicinity of historic properties may be required, as specified in the HPTP.

#### 6.3.1.3 Storm Water Pollution Prevention

Storm water best management practices (BMPs) help reduce the potential for pollutant discharges into the FPA Open Space and are required by the State Water Resources Control Board for any project over one acre in size or smaller projects that are part of a larger project. A Storm Water Pollution Prevention Plan (SWPPP) will be prepared and implemented to control sediment and erosion during construction. This includes preventing runoff from dust control and dewatering. Oil, soil amendments (e.g., lime) or other chemicals used in construction activities shall not be allowed to contaminate site runoff that discharges to the FPA Open Space. For all construction related activities in and adjacent to the Conservation Area, perimeter BMPs shall be installed (i.e., straw wattle, silt fencing, etc.) and maintained as a minimum sediment control measure at all times (year round).

#### 6.3.1.4 Use of Native Grasses in Post Construction Revegetation

When construction work disturbs soil within the Passive Recreation Open Space, all seed used to revegetate must be native to California, preferably ecotypes from Sacramento or surrounding counties. Attachment N provides guidelines for seed mixes for different revegetation situations, but the Preserve Owner/Manager in consultation with the Monitoring Biologist, and/or qualified landscape contractor will review and ultimately approve the seed mix to ensure that the seed mix will result in revegetation that meets required performance standards. Attachment N also provides contact information for local native grass seed companies.

#### 6.3.1.5 Trash Removal and Post Construction Clean-Up

During construction, paper, plastic, food wrappers, and other trash often blow into preserve areas from adjacent construction sites. The Preserve Owner/Manager will remove trash blown into the Passive Recreation Open Space from adjacent construction as needed and by hand, at

minimum once weekly. After construction is complete and the temporary construction fencing has been replaced by permanent fencing (if applicable), temporary fencing and posts will be removed from the Passive Recreation Open Space. Additionally, when disturbed areas adjacent to or within the Passive Recreation Open Space have become revegetated and construction is complete, all temporary erosion control materials (e.g., straw bales, straw wattles and stakes, silt fencing) will be removed from the Passive Recreation Open Space.

# <u>6.3.1.6 Fire Prevention Measures During Construction</u>

Prior to grading, the contractor shall prepare a wildland fire management plan that addresses wildland fire prevention strategies to be taken during construction activities. The wildfire management plan shall consider defensible space, clearance requirements near ignition sources, and other fire safety practices that are consistent with the City's Fire Code. The contractors will work with the City and local fire authority to determine if any explosive or hot work permit requirements exist for the project. The wildland fire management plan will be approved by the City's fire chief.

# 6.3.2 Fencing, Signage, and Bollards

#### 6.3.2.1 Temporary Construction Fencing

See Section 4.1.5 for information on temporary fencing required during construction.

# 6.3.2.2 Installation of Fencing and Fencing Types

The initial installation of permanent fencing in the FPA Open Space is the responsibility of the developer/property owner whose property that portion of the FPA occurs in. Permanent fencing for the FPA Open Space will be implemented as part of the adjacent development as the project builds out. Existing fencing will be assessed for integrity and will be repaired as needed. Three types of fencing will be used depending on the adjacent land use: open view fencing (e.g., wrought iron, or other fencing types that allow unobstructed visibility into the FPA Open Space), solid fencing (e.g., masonry wall or wood fencing), or post and cable fencing (Figure 6. Fencing Plan). In some locations natural barriers (e.g., blackberry thickets or steep terrain) will be used in place of fencing. Changes in fencing type are allowed if adjacent land use changes. Monitoring of fence installation within the immediate vicinity of historic properties may be required, as specified in the HPTP. Any modifications to the fencing plan depicted in Attachment A that would affect Waters of the U.S. or Historic Properties would require Agency notification. In the event that natural barriers are removed or no longer provide adequate protection for the Conservation Area, appropriate fencing will be installed.

# 6.3.2.3 Maintenance and Repair

Maintenance and replacement of fencing and signage must be restricted to the minimum area needed to fix the fencing. Maintenance and repair of the fencing requires agency notification and approval if the activities would occur in Waters of the U.S. or the boundaries of Historic Properties and require anything other than the use of handheld or hand-powered equipment. There are four anticipated fence types, and the maintenance responsibility and funding sources for these types are addressed below.

# Roadway Fencing

Fencing along roadways, will be open fencing or natural barriers. The Preserve Owner/Manager will be responsible for the maintenance and replacement of fencing along roadways and bike trails. In the event that natural barriers are removed or no longer provide adequate protection for the Conservation Area, appropriate fencing will be installed.

#### Residential Fencing

The maintenance and replacement of fencing, where the FPA Open Space is adjacent to private property within the development project, is the responsibility of the adjacent property owner(s) or HOA. The home owners or the HOA will be responsible for enforcing the residential fencing requirements which will be described in the CC&Rs. All residential fencing must occur within the boundaries of the residential parcel and not within the FPA Open Space.

# Adjacent Open Space Fencing

Existing and future developments border the FPA. In the event that an adjacent development project incorporates its open space adjacent to the FPA Open Space, then the fencing between the two open space areas can be taken down if it is desired or practical. The removal of common fencing could allow for wildlife passage or joint management. Approval from the Preserve Owner/Manager is required prior to fence removal.

# Additional Fencing Requirements

Fencing may also be installed along the boundary of each phase. As with other areas of the FPA Open Space, fencing will utilize natural barriers where feasible and installation of open or solid fencing, whichever is deemed most appropriate, in areas where no natural barriers exist. This fencing can be removed once the next phase of construction begins. Monitoring of installation of fencing within the immediate vicinity of historic properties may be required, as specified in the HPTP. In the event that natural barriers are removed or no longer provide adequate protection for the Conservataion Area, appropriate fencing will be installed.

#### 6.3.2.4 Covenants, Conditions, and Restrictions Required

Each development within the FPA will have CC&Rs that will make the home owners aware of the FPA Open Space adjacent to the property. They will be informed that this is protected property and that they are required to maintain their fencing in good repair. The CC&Rs and the CFD will also have descriptions and diagrams of fencing types present along their FPA Open Space, and specifications for such fencing.

# 6.3.2.5 Preserve and Interpretive Signs

Conservation Area signage will be installed to inform the public of the presence of the Conservation Area. Sample sign language has been included as Attachments T and U. Appropriate sign locations will be determined once adjacent land use plans are developed to

determine ideal placement. If, in the future, the Preserve Owner/Manager feels that additional signage is warranted then more may be installed. In addition to the smaller signs posted along Conservation Area boundaries, interpretive signs may be installed along the Passive Recreation corridor. The content of the signs will educate the public about Valley foothill riparian and oak woodland habitats, their conservation, common species observed, and would encourage respect for the FPA Open Space. The signs will be placed along the bike trail or adjacent to areas of significant historical/ecological value. Exact locations should be determined in the field after construction to ensure the best view of the FPA Open Space's habitats in conjunction with each sign. The developer/property owner is responsible for the initial cost of installing signage and interpretive signage. Preserve Owner/Manager will be responsible for the maintenance and replacement of the signage. At no time shall preserve and interpretive signage indicate the presence of protected Historic Properties, unless authorized in the HPTP. Sample signage for a protected Historic Property is included in Attachment U. Installation and maintenance of signage requires agency notification if the activities would occur in Waters of the U.S. or the boundaries of Historic Properties.

# 6.3.2.6 Bollards and Gates

The Preserve Owner/Manager will be responsible for the maintenance of authorized gates into the FPA Open Space and for keeping them locked to prevent unauthorized motor vehicle access. All other gates, such as gates installed by residents or other entities allowing access into the FPA Open Space are prohibited. The Preserve Owner/Manager will be responsible for notifying any party that has installed an unauthorized gate into the FPA Open Space and require its removal and replacement with the appropriate fencing. Bollards will be placed at each point where a bike trail enters the FPA Open Space. The Preserve Owner/Manager will be responsible for the maintenance and replacement of the bollards and for keeping them in the upright position when maintenance vehicles are not accessing the FPA Open Space. Remediation Personnel will have a separate lock with 24-hour access (if necessary) to access the Remediation Area to comply with Remediation Requirements.

#### 6.3.3 Water Quality Basins/Hydro-modification and Flood Control Basins

Several water quality/hydro-modification and flood control basins (hereafter collectively referred to as "stormwater basin") for sedimentation and slow metering of storm runoff prior to water being discharged into the creek or intermittent drainages within the Conservation Area. Some stormwater basins will be located within the Conservation Area (in-stream) to meter flows from large storm events. Depending on the size of the storm event, water will be detained for a short period of time. The approximate locations of the stormwater basins are shown on Figure 5 and Attachment A, per the adopted 2014 FPS Storm Drainage Master Plan. A complete plan depicting finalized locations will be submitted to the USACE upon finalization of each phase's land use plan. Changes to the locations of basins that would occur in Waters of the U.S. or the boundaries of Historic Properties would require Agency notification and approval. Appendix E contains information regarding stormwater basin maintenance.

#### 6.3.4 Trail System

As depicted on the FPA Open Space detail map (see Figure 5 and Attachment A) a paved bike trail and unpaved walking trails will meander through the Passive Recreation Open Space.

Although the trails exist within the Passive Recreation Open Space, care should be taken so that maintenance activities of the trails do not encroach upon the Conservation Area. The maintenance described below is provided as a guideline for activities that are expected to occur within the Passive Recreation trail system.

The bike trail alignment shown in the detail maps is the expected route, but may vary in areas upon further land planning. In areas where the bike trail crosses drainages, bridges will span the drainages to avoid impacting wetlands/waters. Changes to the locations of trails that would occur in Waters of the U.S. or the boundaries of Historic Properties would require Agency notification and approval.

To the extent possible natural barriers such as topography or vegetation will be utilized to detour off-trail access; however, there are several locations where fencing may be utilized to protect biological or cultural resources. An estimation of approximate fencing needs is depicted in Figure 5 and Attachment A. If during construction the Preserve Owner/Manager feels that additional fencing is warranted in order to protect the adjacent preserved habitat or Historic Property, more fencing may be added. A map showing the additional fencing location will be included with the annual monitoring report. Installation of additional fencing will be the responsibility of the developer/property owner. Bollards will be placed at each location where the bike trail enters the FPA Open Space. Routine maintenance activities including repainting stripes, fixing cracks, and mowing on either side of the bike trail are allowed. Use of herbicides to maintain the 3-foot bike trail shoulder is allowed. Monitoring of the installation of post and cable shall be carried out in accordance with the FAPA or HPTP. In the event that natural barriers are removed or no longer provide adequate protection for the Conservataion Area, appropriate fencing will be installed.

# 6.3.5 Outfalls and Drainage Swales

Run-off from developed areas within the FPA must reach the creeks or drainages within the FPA Open Space. Past experience has shown that ill-designed or inappropriately placed outfalls can permanently and adversely impact the hydrology of preserved wetland features. This was taken into consideration during outfall design. The outfalls and their approximate locations are shown on Figure 5 and Attachment A. Final outfall locations will be submitted to the Agencies as each phase moves forward. Outfalls located in Waters of the U.S. or the boundaries of Historic Properties would require Agency notification and approval.

#### 6.3.6 Fuel Load Modification Zone

Within the Passive Recreation Open Space, the Preserve Owner/Manager can place fuel load modification zones (i.e., firebreaks) wherever necessary for fire prevention management (with the exception of the Remediation Area, where no ground disturbing activities are allowed, and within the boundaries of a protected Historic Property which requires hand removal by a qualified archeologist). Throughout the FPA, a buffer of at least 30-feet has been incorporated into the project design to separate the Conservation Area from the developed areas. Fuel load modification zones are intended to be within this buffer as shown on Figure 5 and Attachment A. However, fuel load modification zones can be larger (up to 100-feet) if more Passive Recreation Open Space land is present between the development and the Conservation Area.

Except as shown on Figure 5 and Attachment A, fuel load modification zones are not allowed within the Conservation Area.

The Preserve Owner/Manager will be responsible for maintaining the fuel load modification zones. Fuel load modification in the Passive Recreation Open Space is expected to include mowing vegetation to 2 inches high or less or light discing (overturning the soil to less than 1foot depth) unless within the boundaries of a protected Historic Property (which requires hand removal by a qualified archeologist). If discing is used to decrease fire risk, than the discing will occur outside of the drip line of trees within the fuel load modification zone, to the extent possible. However, to protect against crown fires, pruning of trees up to 8-feet in height is allowed to remove fuel ladders. The Preserve Owner/Manager will be responsible for implementing fuel load modification as well as arranging for a ground nesting bird survey to be conducted each year prior to the mowing or discing in accordance with the Migratory Bird Treaty Act. Any actions taken will also follow the City of Folsom Community Wildfire Protection Plan (City of Folsom 2013) to the extent possible and will be in compliance with Folsom Fire Code Section 319.2. The Preserve Owner/Manager will work with the Monitoring Biologist, Monitoring Archeologist (or other qualified personnel) and local fire authorities to determine the best fire management practices within the Passive Recreation Open Space. If fire management activities are required beyond what is allowed in the Plan and/or would affect Waters of the U.S. or Historic Properties, or require extensive ground disturbance, then the Preserve Owner/Manager will notify the USACE (and SHPO if deemed necessary by USACE) if .

# 6.3.7 Bridge Crossings and Detention Culverts

To keep water flowing at the various bridge crossings, vegetation and large woody debris can be cleared from within these structures within the FPA Open Space. Maintenance permits between the City and regulatory agencies can be obtained to streamline the process for clearing debris from bridge crossings and culverts.

#### 6.3.8 Utilities

As depicted in Figure 5 and Attachment A, there are several areas of the FPA Open Space that are or will be crossed by utility lines. Access to the FPA Open Space areas for the installation, maintenance, and replacement of existing and proposed utility lines and poles is allowed and will be restricted to the minimum area needed to accomplish the task. Installation of utilities across protected Historic Properties must be carried out in accordance with the FAPA and/or HPTP and will require review and approval by the USACE. The USACE, at its discretion, may seek concurrence from California SHPO.

#### 6.3.9 Railroad Tracks

There is an existing railroad line that occurs along Placerville Road. This railroad line will remain within the Passive Recreation Open Space area. Although this railroad line is currently not in use, at some point in the future, the City may elect to use this line as part of a regional transit program.

#### 6.3.10 Remediation Requirements

Entry in the FPA Open Space areas by Remediation Personnel is required for Remediation Requirements by Aerojet (with EPA and state oversight). Activities in the Remediation Area may include but are not limited to the construction, operation, maintenance and repair of facilities required for the response activities as well as monitoring and sampling associated with the remediation. Construction within the Remediation Area should, at a minimum, be reviewed by the Preserve Owner/Manager. Remediation Personnel should attempt to limit construction activities to the minimum area required. Agency notification and approval is required if construction activities in the Passive Recreation Open Space would occur in waters of the U.S.; within the boundaries of a Historic Property, or that require ground disturbance. Remediation Personnel will be responsible for obtaining the appropriate permits and/or authorizations.

# 6.4 Remediation/Restoration Activities within the Passive Recreation Open Space

#### 6.4.1 Post-Construction Remediation/Restoration

The replacement of the previously mentioned structures or improvements in the Passive Recreation Open Space may require post-construction restoration. These structures or improvements were originally permitted as part of the project through the USACE, the USFWS, and CDFW. For these cases, post-construction remediation/restoration means, for example, hydroseeding areas of the FPA Open Space that were disturbed by equipment, restoring the original grade where the intent was not to alter it, cleaning up construction debris, and generally reverting the area back to pre-construction conditions. A list of native grass species and other locally native plants that can be used in revegetation/restoration is included in this plan as Attachments N and S.

#### 6.4.2 Restoration of Violations/Vandalism

It is difficult to anticipate and provide a mitigation measure for all potential violations or vandalism within the Passive Recreation Open Space. In general, the types of disturbance and suggested mitigation guidelines and timelines detailed in Section 5.5.2 should also apply to the Passive Recreation Open Space.

#### 7.0 REFERENCES

- Agricola, G. 1950. *De re Metallica*. Translated from the first Latin edition of 1556 by H. C. and L. H. Hoover. New York: Dover Publications, Inc.
- Askin, D. and R. Docken. 1980. The Natoma Station Ground Sluices: An Historical Study. Prepared for the Natomas Company.
- Aviña, Rose H. 1976. Spanish and Mexican Land Grants in California. Arno Press, New York.
- Baldwin, B.G; D.H. Goldman; D.J. Keil; R. Patterson; and T.J. Rosatti, editors. 2012. The Jepson Manual: Vascular Plants of California, Second Edition. University of California Press, Berkeley.
- Beardsley, R.K. 1954. Temporal and Areal Relationships in Central California Archaeology, Parts I & II. *University of California Archaeological Survey Reports*, Nos. 25 & 25, Berkeley.
- Beedy, E.C. and W.J. Hamilton, III. 1999. Tricolored Blackbird (Agelaius tricolor), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: http://bna.birds.cornell.edu/bna/species/423.
- Bidwell, John. 1971. Sutter's Fort. In *California Heritage: An Anthology of History and Literature*, edited by John and Laree Caughey, pp. 134-138. F. E. Peacock Publishers, Itasca, Illinois. Revised Edition.
- Bunker, E.A. n.d. The Natomas Water Company (history). Folsom Historical Society ms.
- California Department of Fish and Game. 1998. California vernal pool assessment preliminary report. http://maphost.dfg.ca.gov/wetlands/vp\_asses\_rept/index.htm#Contents
- California Invasive Plant Council. 2006. California Invasive Plant Inventory. Berkeley.
- California Native Plant Society (CNPS). 2001. Inventory of Rare and Endangered Vascular Plants of California. Special Publication. Number 1, 6th ed. Sacramento California. 387 pp.
- California Native Plant Society (CNPS). 2010. Vegetation Program: Sampling Protocols and Projects: Instructions and Forms. Available online: http://www.cnps.org/cnps/vegetation/pdf/percent\_cover\_diag-cnps.pdf. Accessed 12 November 2010.
- Caltrans. 2008. *Historical Context and Archaeological Research Design for Mining Properties in California*. Division of Environmental Analysis, California Department of Transportation, Sacramento. http://www.dot.ca.gov/ser/guidance.htm#mining\_study
- Carlson, Denton W. 1955. Mines and Mineral Resources of Sacramento County, CA. *California Journal of Mines and Geology* 51 (2): 117-199.
- City of Folsom. 2013. City of Folsom Community Wildlife Protection Plan. April 2013.

- Clark, William B. 1970. Gold Districts of California. California Department of Conservation, California Geological Survey, California.
- Davies, J. 1999. Rhoades Diggings. Manuscript on file, Rhoads' Diggings Binder, Folsom History Museum, Folsom.
- Dunk, J.R. 1995. White-tailed Kite (Elanus leucurus), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: http://bna.birds.cornell.edu/bna/species/178
- ECORP Consulting, Inc. 2008. Comprehensive Clean Water Act, Section 404, Permit Applications for the Folsom Plan Area Specific Plan Project, Sacramento County, California.
- Egenhoff, E.L. 1949. *The Elephant As They Saw It.* State of California Division of Mines, San Francisco.
- Elsasser, A.B. 1978. Development of Regional Prehistoric Cultures. In *Handbook of North American Indians, Volume 8: California,* edited by R. F. Heizer, pp. 37-57. Smithsonian Institution, Washington, D.C.
- Elzinga, C.L., Salzer, D.W., and Willoughby, J.W. 1998. Measuring and Monitoring Plant Populations. Bureau of Land Management National Business Center, Denver Colorado. 476 pp.
- England, A.S., M. J. Bechard, and C. S. Houston. 1997. Swainson's Hawk (Buteo swainsoni), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: http://bna.birds.cornell.edu/bna/species/265.
- Eriksen, C. and D. Belk. 1999. Fairy Shrimps of California's Puddles, Pools, and Playas. Mad River Press, Inc. Eureka, CA.
- Estep, J.A. 1989. Biology, movements, and habitat relationships of the Swainson's hawk in the Central Valley of California, 1986-1987. California Department of Fish and Game, Nongame Bird and Mammal Section Report.
- Folsom, City of. 2010. Alder Creek Watershed Action Management Plan. Prepared for City of Folsom, Public Works Department. Prepared by AECOM, Sacramento, CA.
- Gudde, Erwin G. 1975. *California Gold Camps: A Geographical and Historical Dictionary of Camps, Towns, and Localities Where Gold Was Found and Mined; Wayside Stations and Trading Centers.* University of California Press, Berkeley and Los Angeles, California.
- Hoover, Mildred, Hero E. Rensch, Ethel G. Rensch and William N. Abeloe. 1990. *Historic Spots in California* (Fourth Edition), revised by Douglas E. Kyle. Stanford University Press, Stanford.

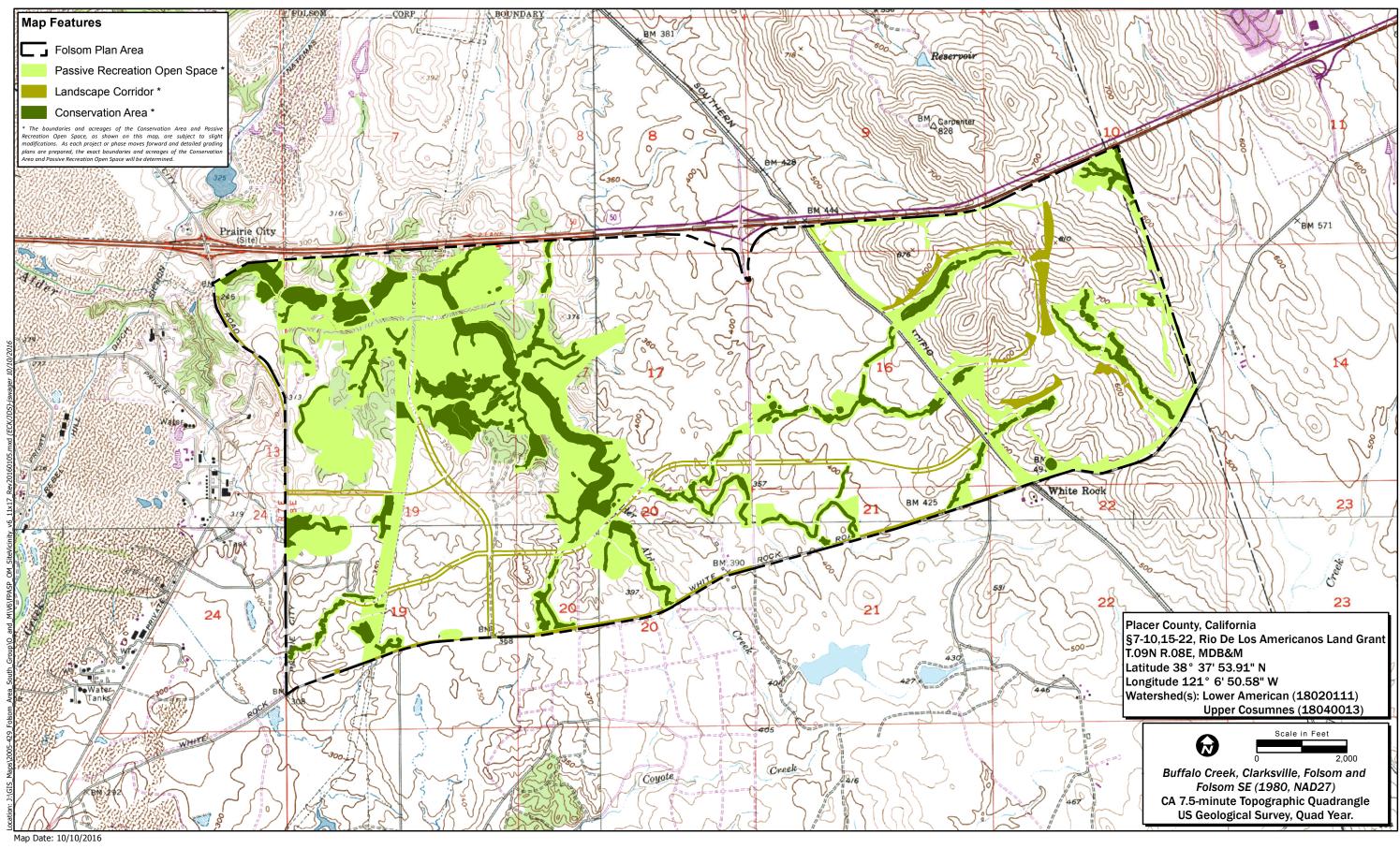
- Kelly, J.L., and H. John McAleer. 1986. *An Archaeological Survey, Assessment and Recommendations for the Ohio Flat Mining District* (CA-TRI-943), Trinity County, California. Bureau of Land Management, Redding District.
- Kroeber, Alfred L. 1976. *Handbook of the Indians of California*. Dover Publications, Inc., New York.
- LaLande, J.M. 1985. Sojourners In Search of Gold: Hydraulic Mining Techniques of the Chinese on the Oregon Frontier. *The Journal of the Society for Industrial Archaeology* 11(1): 29-52.
- Lillard, J.B., R. F. Heizer, and F. Fenenga. 1939. An Introduction to the Archaeology of Central California. *Sacramento Junior College, Department of Anthropology Bulletins*, No. 2, Sacramento.
- Lindström, Susan and John Wells. 1989. A Cultural Resource Evaluation of Aerojet General Corporation, Sacramento Plant, Sacramento County. Ms. On file, North Central Information Center.
- Lindström, S.G., J. Wells, and N. Wilson. 1988. *A Comparative Evaluation of the Natoma Ground Sluice Diggings, Folsom.* Report on file North Central Information Center, California State University, Sacramento.
- Littlejohn, H.W. 1928. *Nisenan Geography*. Ms in Bancroft Library, University of California, Berkeley.
- Marshall, James W. 1971. The Discovery. In *California Heritage: An Anthology of History and Literature*, edited by John and Laree Caughey, pp. 191-192. F. E. Peacock Publishers, Itasca, Illinois. Revised Edition.
- Myfolsom.com. 2007. Folsom History. Electronic document. http://www.myfolsom.com/prairiecity.shtml, accessed March 5, 2007.
- Placer County Cultural Resources Inventory. 1992. Placer County Cultural Resources Inventory, Historical, Architectural, and Archaeological Resources of Placer County, California. Placer County Department of Museums, Auburn, California.
- Plimpton, John. 1964. Scrapbooks Vol IV: South Fork of the American River Ms. 13 loose-leaf binders. On file, Interpretive Services Library, State of California, Department of Parks and Recreation. Sacramento.
- Ragir, S. 1972. The Early Horizon in central California prehistory. *Contributions of the University of California Archaeological Research Facility* 15. Berkeley.
- Reed, P.B., Jr. 1988. *The National List of Plant Species That Occur in Wetlands: California (Region O).* U.S. Fish and Wildlife Service. Biological Report 88(26.10).
- Ritchie, Neville. 1981. Archaeological Interpretations of Alluvial Gold Tailing Sites, Central Otago, New Zealand. *In New Zealand Journal of Archaeology*, Wellington, New Zealand.

- Sacramento-Yolo Mosquito and Vector Control District. March 2005. Mosquito and Mosquito-Borne Disease Management Plan. Sacramento, California. http://www.fightthebite.net/download/Mosquito\_Management\_Plan.pdf
- Shipley, W.F. 1978. Native Languages of California. In *Handbook of North American Indians, Vol. 8: California*, edited by R.F. Heizer, pp. 80-90. Smithsonian Institution, Washington, D.C.
- Shuford, W. D., and Gardali, T., editors. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.
- Silver. S. 1995. *Pieces of the Past: People, Landmarks, Events & Bits of the Past from Folsom, California*. Victorian Secrets, Folsom.
- Thompson, T.H. and A.A. West. 1880. *History of Sacramento County*. Reproduced by Howell-North, 1960, Berkeley.
- United States of America, Department of Agriculture, Soil Conservation Service. 1993. Soil Survey of Sacramento County, California. U.S. Department of Agriculture, Soil Conservation Service. Davis, California. 399 pp. + illus.
- United States Department of the Interior, Fish and Wildlife Service (USFWS). 1984. Endangered and threatened wildlife and plants; review of invertebrate wildlife for listing as endangered or threatened species. Federal Register 49:21664-21673.
- United States Department of the Interior, Geological Survey. 1978a. Buffalo Creek, California Quadrangle, Sacramento County. 7.5-Minute Series Topographic. U.S. Geological Survey. Denver. Colorado.
- United States Department of the Interior, Geological Survey. 1978b. Clarksville, California Quadrangle, Sacramento County. 7.5-Minute Series Topographic. U.S. Geological Survey. Denver, Colorado.
- United States Department of the Interior, Geological Survey. 1980a. Folsom, California Quadrangle, Sacramento County. 7.5-Minute Series Topographic. U.S. Geological Survey. Denver, Colorado.
- United States Department of the Interior, Geological Survey. 1980b. Folsom SE, California Quadrangle, Sacramento County. 7.5-Minute Series Topographic. U.S. Geological Survey. Denver, Colorado.
- Wallace, William J. 1978. "Post-Pleistocene Archeology, 9000 to 2000 BC." In *Handbook of North American Indians, Vol. 8: California*, edited by R.F. Heizer, pp. 25-36. Smithsonian Institution, Washington, D.C.

- Wells, J.H. 1985. Hydraulic Mining in California: Effect of Sawyer Decision (May 17, 1985). (Manuscript in possession of deceased author's estate).
- Wells, J.H. 1969. Placer Examination, Principles and Practice. *Bureau of Land Management Technical Bulletin 4*. Washington D.C.: U.S. Government Printing Office.
- Wells, J.H. 1966. Report on Placer Mining in the U.S. in Relation to the National Surface Mining Study. Bureau of Land Management, Portland. (Ms. In possession of author).
- Werner, R.H., J.M. Flaherty, J.W. Dougherty, and D. Davis. 1995. Cultural Resources Study, Broadstone II Master Plan Area, City of Folsom, Sacramento County, California, Vol. I: Inventory and National Register Assessments. ASI Archaeology and Cultural Resources Management. Submitted to H.C. Elliott Company, Inc. Copies available from the U.S. Army Corps of Engineers, Regulatory Division, Sacramento.
- Westwood, L., Stephen Pappas, and Susan Lindström. 2013. Folsom South of U.S. Highway 50 Specific Plan Project: Historic Properties Management Plan. [Supersedes the Preliminary Historic Properties Synthesis Report] Prepared for Sacramento District, U.S. Army Corps of Engineers and California Office of Historic Preservation. ECORP Consulting, Inc., Rocklin.
- Wildland Solutions. 2008. Monitoring Annual Grassland Residual Dry Matter: A Mulch Manager's Guide for Monitoring Success. (2<sup>nd</sup> ed.) [Brochure 34 pp.]. Brewster, WA: Guenther, K. and Hayes, G.
- Wilson, John N. 1986. These Lonely Hills. (self published)
- Wilson, Norman L. and Arlene Towne. 1978. Nisenan. In California, edited by Robert F. Heizer, pp. 387-397. Handbook of North American Indians, vol. 8, William G. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.
- Winfield, Davis J. 1890. An Illustrated History of Sacramento County, California. Lewis Publishing Company.
- Windmiller, Ric. 1999. Evaluation of Cultural Resources, Valley View Specific Plan Area, El Dorado Hills, El Dorado County, California. Ric Windmiller, Consulting Archaeologist. Submitted To El Dorado Hills Investors, Inc. Copies available from the North Central Information Center, California State University, Sacramento.
- Young, B. 1982. Reclamation of Dredge Tailings, Folsom District, Sacramento County. *California Geology*, June 1982.

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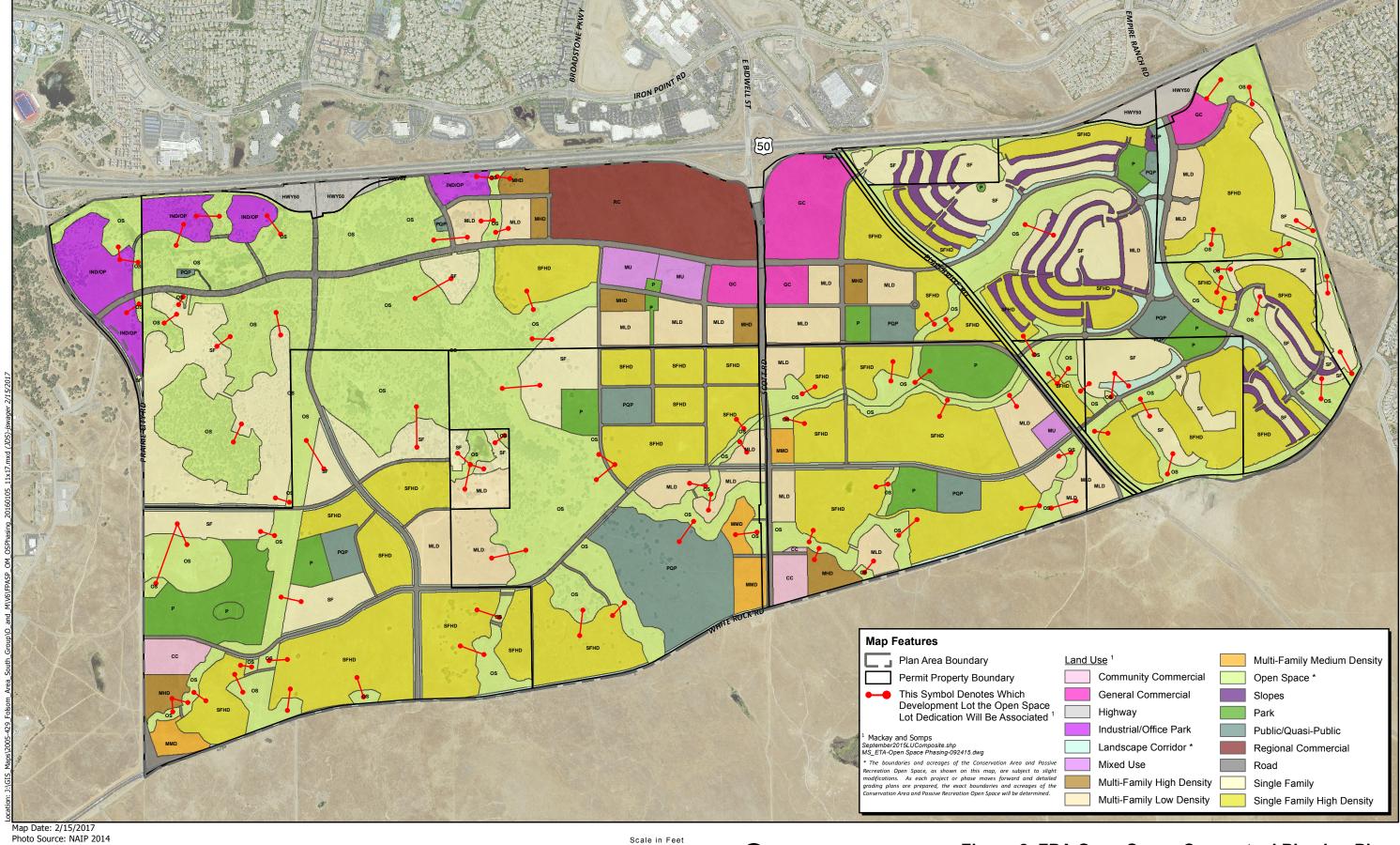


Figure 2. FPA Open Space Conceptual Phasing Plan

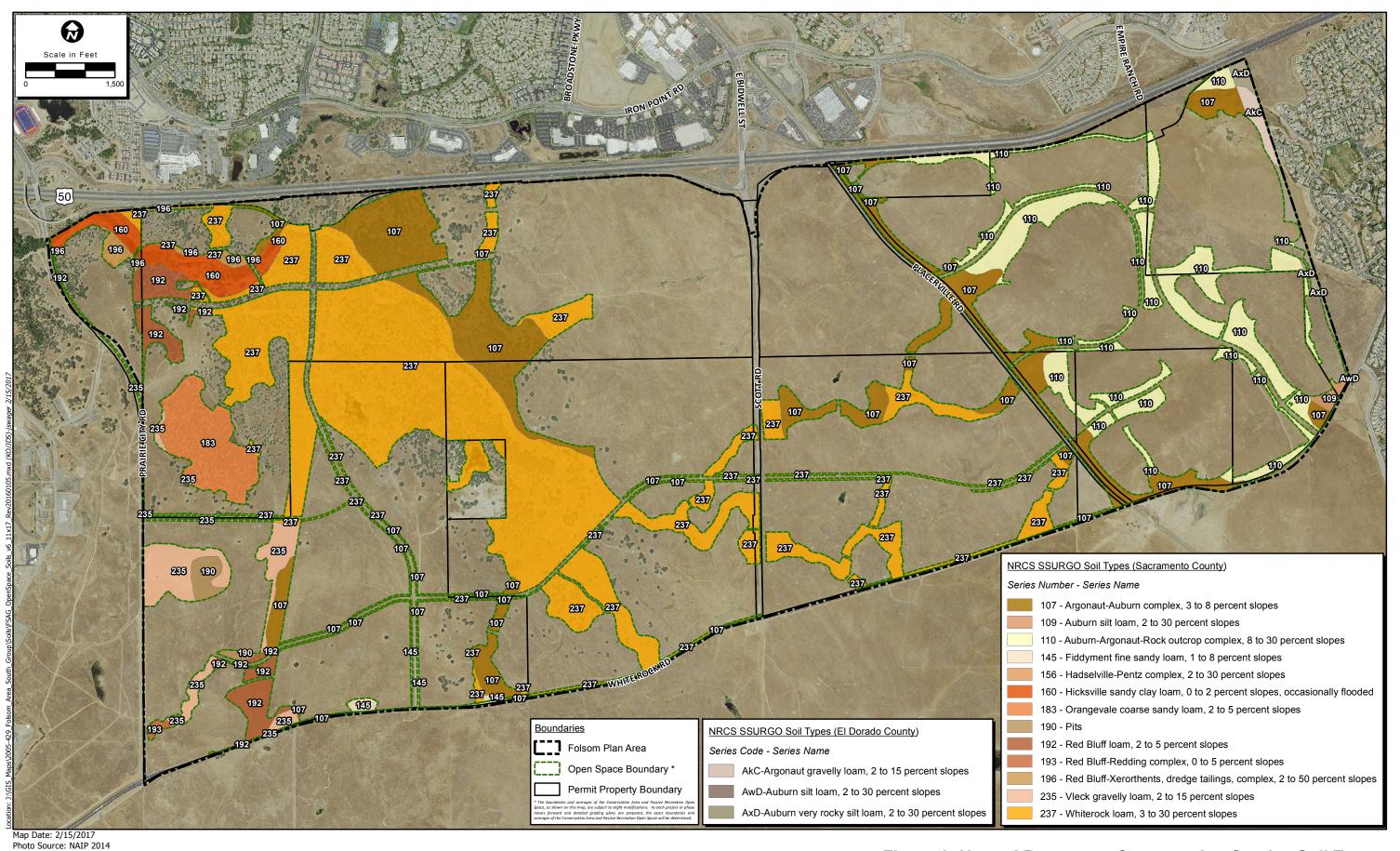
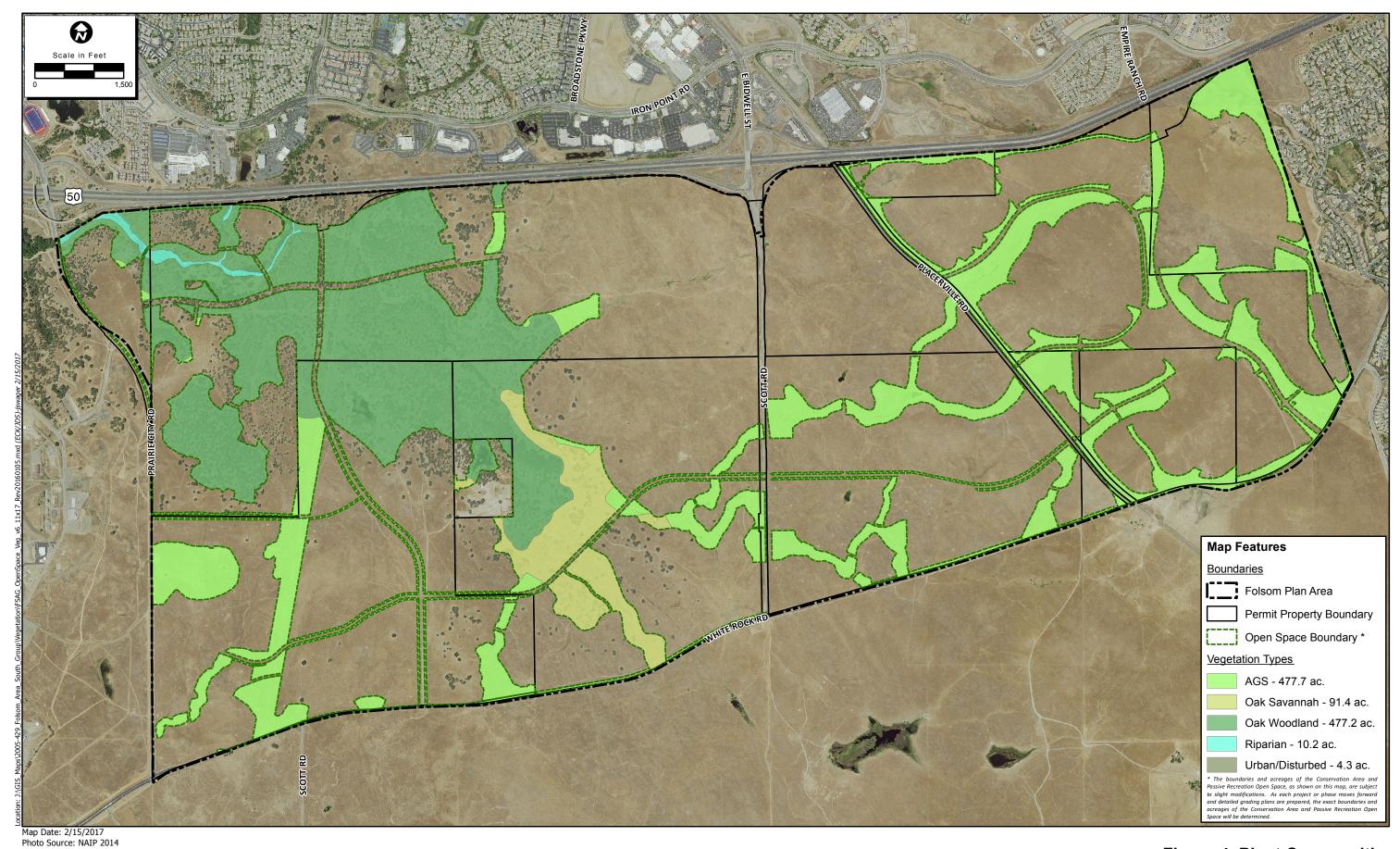


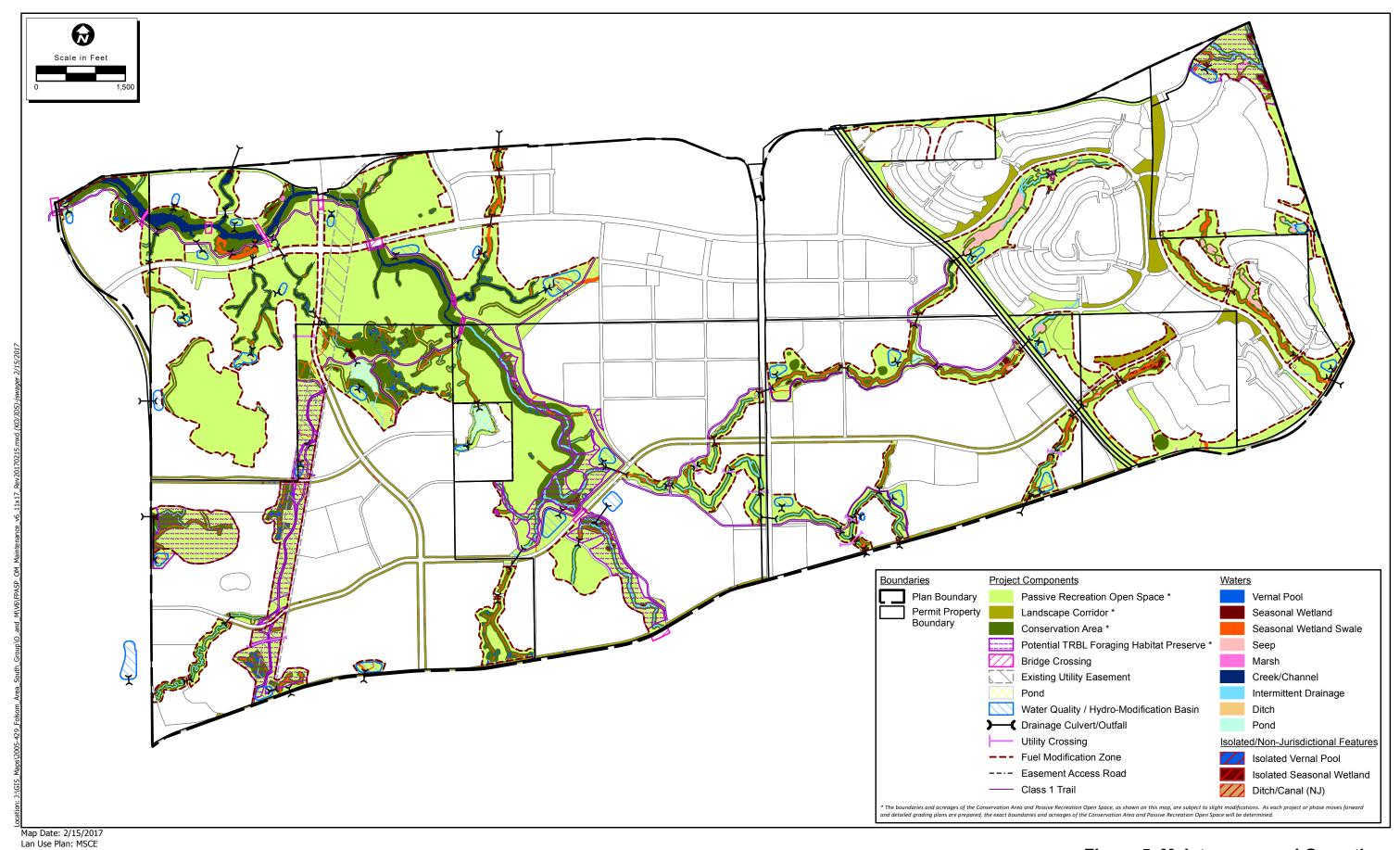


Figure 3. Natural Resources Conservation Service Soil Types



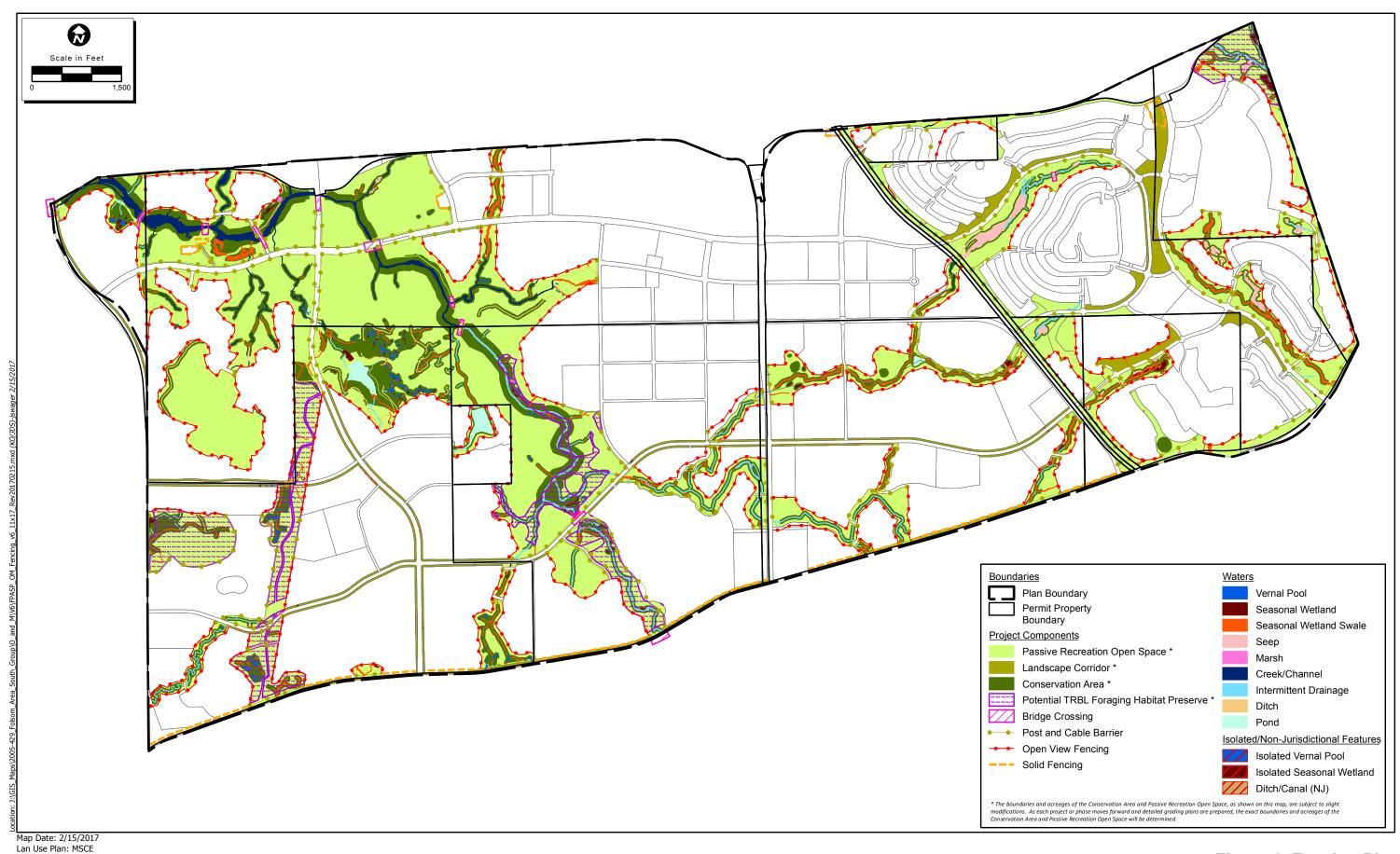
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Figure 4. Plant Communities



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Figure 5. Maintenance and Operations



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Figure 6. Fencing Plan

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