
ROBLA CREEK

STEWARDSHIP PROGRAM PLAN



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Table of Contents

Executive Summary	3
Introduction	5
Vision for Stewardship	6
Robla Creek Watershed Community and Stakeholders	7
Watershed Demographic Profile, Schools and Types of Businesses	7
Demographic Profile	7
Schools	7
Business Types	8
Active Programs, Organizations and Partners	8
Neighboring Watershed and Regional Programs	9
Robla Creek Watershed Resources and Issues	12
Watershed Setting	12
Natural Resources Values and Threats	13
Natural Resource Values	13
Threats to Natural Resource Values	15
Recreational Programs and Resources	16
Land Use and Future Planning	17
Land Use and Ownership Information	17
Land Use Planning Information	18
Community Issues, Concerns and Opportunities	19
Opportunities for Community Engagement and Partnership	21
Opportunities for Community Engagement and Partnership	21
Audiences	22
1. Businesses and Property Management Groups	22
2. Local Residents, Neighborhood Groups, and Interest Groups	23
3. K-12 Schools and Colleges	23
4. Service Groups and Churches	23
Potential Partners	24
Sacramento County Area Flood Control Agency (SAFCA)	24
Rio Linda Parks District	24
Sacramento Valley Conservancy	24
Coyle Family Trust	25
Urban Creeks Council (UCC)	25
Sacramento Weed Warriors (SWW)	25
Robla Park Community Association (RBCA)	25
Community Engagement Philosophy and Guiding Principles	27
Community Engagement Framework and Strategies	28
Businesses	28
Local Community – Residents, Neighborhood and Interest Groups	30
K-12 Schools and Colleges	32
Service Groups and Churches	33
Engagement and Outreach Tools and Materials	34
Recommendations for Material Development	35
Suggested Content and Distribution	35
Sample Brochure, Public Awareness Materials & Web Text	35

Sample Interpretive Signage	36
Self-Guided Brochure	36
Creating a Community Stewardship Work Plan	37
Natural Areas Management Plan Priorities and Recommendations	37
Evaluating and Prioritizing Actions for Community Participation.....	37
Suggested Pilot Projects and Program Elements for 2007-2008	39
Suggested Partnerships for 2007-2008	40
Special Considerations.....	40
Liability Issues	40
Access Needs and Possible Permit Requirements	41
Rollover Funding	41
Evaluation Measures	41
Long-term Program Development	42
National Review of Stewardship and Natural Area Programs in Cities	42
Other Local Program Structures and Costs.....	43
The American River Parkway Foundation/Sacramento Weed Warriors	45
Summary	46
Suggested Program Structure and Staffing	46
Assessment of Staff Skills and Competencies	48
Position Descriptions	49
Work Plan Development.....	49
Anticipated Budget and Costs.....	49
Possible Funding Sources:	50
Staff and Volunteer Training	51
References.....	52
Appendices.....	53
Appendix 1 – Schools Located Within the Vicinity of the Robla Creek Study Area & Contact Information For Interested Administrators & Teachers.....	54
Appendix 2 – Local Interest Groups Who Have An Interest In Robla Creek Stewardship...	55
Appendix 3 – Churches Located within the Vicinity of the Robla Creek Study Area	56
Appendix 4 – Potential Businesses and Business Affiliations That Could Provide Support .	57
Appendix 5 – Sacramento City College Service Learning Application	58
Appendix 6 – Sample E-Newsletter format, tri-fold brochure and website for the Robla Creek Stewardship Program	59
Appendix 7 – Suggested Prioritization Criteria for Volunteer-Based Stewardship Activities	60
Appendix 8 – Potential Permit Requirements.....	61
Appendix 9 – Volunteer Liability Agreements.....	62
Appendix 10 – Position Descriptions	63
Appendix 11 – Sample Volunteer Work plan Format For Activities Within Natural Areas..	64
Appendix 12 – Project One-Year and Five-Year Program Budgets.....	65
Appendix 13 –Possible Funding Sources	66
Appendix 14 – Community Meetings Agendas, Notes and Activity Graphics	67
Appendix 15 – Staff Training Plan and Associated Materials.....	68
Appendix 16 –Photographs of A Series of Nature in the City Interpretive Panels Used As A Part of Baxter Creek’s Stewardship Outreach	69

Executive Summary

The City of Sacramento is currently undertaking a planning effort to manage and protect hundreds of acres of natural areas that are under the City's jurisdiction. This program, referred to as the Natural Areas Program, includes a strategy for maintaining natural areas while reducing overall City maintenance activities and costs. It is envisioned that a key component of this program will be a greater role for volunteer stewardship and participation.

In anticipation of a greater need for volunteer stewardship participation, The Robla Creek Stewardship Plan was developed as a pilot project to define and describe volunteer participation in natural areas management. This plan, although it focuses on only one of the many parks in the City of Sacramento, is considered an important first step in defining, clarifying, and developing the role of volunteer stewardship in City parks, and can be used as a model for volunteer programs at other parks. This plan was commissioned and managed by the City of Sacramento and financed through a generous grant from the Department of Water Resources.

The Robla Creek Stewardship Plan outlines a framework for building a sustainable natural areas stewardship program; presents strategies for community engagement and partnerships; describes community interests and concerns; and identifies possible program structures, staffing, training needs and associated costs. The plan was developed in close cooperation with local residents. Public input on the plan was received during a series of community meetings, and one-on-one interviews were conducted with school faculty and administrators, and local business, environmental, and interest groups.

Based on the input received during development of this plan, there are a number of opportunities for developing and facilitating a successful community stewardship program within the Robla Creek Watershed. To get the program started and as a result of community and staff input, and project and prioritization procedures, we have identified the following suggested pilot projects and program elements for the planning period 2007 to 2008 (provided that funding is secured to support City staff involvement):

1. Development of the E-Newsletter, brochure and interpretive signage in support of the stewardship program.
2. Development of the community-based Watershed Watch program to monitor and report illegal garbage dumping, graffiti and other activities.
3. Development and implementation of a monthly work day program to implement priority project tasks and management actions.
4. Development of the Adopt-a-kilometer (park) program for Robla Creek, which would include outreaching to local businesses, property management groups and neighborhood associations.
5. Assessment of possible school/college partners who could become regular stewards of the area. This would include the development of a service learning component to the program.
6. Continued participation in Creeks Week and the development of one or more other special events that could further link and address priorities articulated by local community members

It is anticipated that these programs and activities will improve the health of the watershed; improving the recreational and aesthetic experiences of its residents; and beautify the adjoining

residential buffers through “on-the-ground” stewardship activities that yield tangible results. The program will also likely yield other less tangible outcomes including growth in individual learning; improved community spirit; and enhanced personal fulfillment and enjoyment.

The development of the more comprehensive Natural Areas Stewardship program provides numerous new opportunities for further volunteer participation. It is anticipated that the Robla Creek Stewardship Program alone could draw an additional 5,000 – 10,000 hours of support depending upon the diversity of programs offered and partnerships cultivated. This number could significantly expand if volunteers are integrated into the beautification and management of other natural areas. Expansion of the Natural Areas Program will necessitate the need for additional staffing and funding. Anticipated staffing needs to address the Natural Areas Program as well as Robla Creek include the addition of a part time Program coordinator, Planner, and a Parks Maintenance Worker 1 and the re-allocation of some duties and responsibilities of the current Program Coordinator to create a full-time Park Manager position. It is anticipated that the initial roll-out of the program will be more expensive than costs for subsequent years of the program. The Year one costs for the Natural Areas Program is estimated at \$454,652, of which the Robla Creek Program would cost \$99,056. It is anticipated that the larger City-wide Natural Areas Stewardship Program will cost an average of \$617,546 per year (after the initial roll out year described above) for a total 5-year program cost of \$3,087,731, of which the incremental cost of the Robla Creek Stewardship program costs \$194,869.

Introduction

Community participation in natural areas stewardship has been growing exponentially during the last 15 years. Volunteers contribute millions of hours of donated labor to conservation each year. According to a recent survey, an estimated two million Californians participated in volunteer workdays sponsored by community-based stewardship groups such as the “Adopt a Creek” or “Friends of a Local Parks” groups that have become ubiquitous throughout California.

Volunteerism is an integral component of the City of Sacramento’s (the City) programming - engaging hundreds of participants annually. Volunteers support park clean up efforts, recreation program delivery, and are the backbone of many special events. Participants range from senior citizens to local youth and represent a diversity of interests and backgrounds. The City provides a well-structured volunteer management program, with clearly defined position descriptions, staff leadership, training opportunities and recognition and retention strategies.

The City has recently launched a planning effort to develop strategies for managing and protecting the hundreds of acres natural park areas under the City’s jurisdiction. This program is referred to as the Natural Areas Program, and includes a survey and assessment of each of the City’s parklands, and development of a management strategy that will maintain natural areas while reducing overall maintenance activities and costs. Once the strategies are approved and funding secured for the Natural Areas Program, it is anticipated that there will be greater opportunities for volunteer stewardship and participation. It is expected that volunteer outreach and management for these activities will fall under the direction of the Department of Parks and Recreation.

Recognizing that the development of volunteer programming should be guided by City management priorities and community interest, the City commissioned the creation of the Robla Creek Stewardship Program Plan (Plan) through funding appropriated under a Department of Water Resources grant. Within this Plan, the goals are to outline a framework for building a sustainable natural areas stewardship program, to develop strategies for community engagement and partnerships, to understand community interest, and to identify possible program structures, staffing, training needs and associated costs. Initial planning involved local community members through a series of community meeting, school faculty and administrators, and local environmental and interest groups. Additional planning to support the development of the Robla Creek Stewardship Program will be done with continued community involvement. While the focus on the Plan is Robla Creek, it is anticipated that it will serve as a model for the development of other community-based natural areas stewardship programming throughout the City.

Through implementing the Robla Creek Stewardship Program Plan, City staff and officials will work cooperatively with the Robla Creek community, stakeholders and partners to build a mutually beneficial volunteer program. The program will provide opportunities for direct involvement of community members in the protection, beautification and restoration of the resources within the creek corridor, thereby building a greater sense of personal and community stewardship for the park’s resources. Integral to its success will be the provision of City staff leadership and resources to support and cultivate volunteer participation.

Vision for Stewardship

The Robla Creek Stewardship Program will be the first community-based volunteer program designed to help steward City of Sacramento-managed natural areas. Active involvement from both City staff and local community members is seen as critical to its success. Similarly, development of a shared vision for the program is critical to providing the foundation for its long-term focus and sustainability. While the Robla Creek Stewardship Program is not tasked with finalizing the vision statement for the program, we did collect and synthesize the following information to support this effort. During the January 31, 2007 community meeting, participants brainstormed elements that should be encompassed in the vision statement for the program.

The following is a list of the concepts that participants felt should be integrated into a vision statement for the program:

- Sustainability
- Beautifying community
- Lasting community involvement
- Preserving and improving the quality of life
- Building and connecting community to the natural setting
- Capturing values that promote a natural and “wild” setting that sustain a functional ecosystem
- Creating a safe and accessible environment
- Integrating education into programs and site experience
- Building an interactive outdoor experience
- Establishing a partner-based program with diverse stakeholders and a dedicated community
- Needing to balance “natural resource” values with inclusiveness and broad family participation

One community participant prepared a draft statement for consideration:

“The Robla Creek Stewardship Program will actively demonstrate the importance of preserving California’s beauty to a younger generation.”



We recommended that the City continue to collaboratively develop the Robla Creek Stewardship Program's vision statement during the next six months, using the above concepts and draft as a guide.

Robla Creek Watershed Community and Stakeholders

Watershed Demographic Profile, Schools and Types of Businesses

Demographic Profile

The last U. S. Census was conducted in 2000. Although conditions have changed in the Robla Creek Stewardship Program (RCSP) area since 2000, this information, coupled with the City of Sacramento's 2004 data reveals some of the demographic trends for the region. The primary zip code containing the Robla Creek Stewardship Program Study Area (RCSP Study Area) is 95838. According to the US Census (<http://factfinder.census.gov>), the population of zip code 95838 was 34,879 in 2000. The median age was 27 and the population was split at 49% male and 51% female. The average household size was 3.39 and the median household income was \$31,290. The mean travel time to work was 25 minutes and 56 percent of the population above 16 years old was employed. There were 10,900 total housing units in the 95,838 zip code area and the occupancy rate was 94 percent. Housing ownership was 54%. School enrollment for the entire area was 12,496, with 51% of that in grades 1 to 8, and 22% in high school. English was spoken at home by 66% of the residents.

The City of Sacramento also has some demographic data for the RCSP area, collected in 2004. This information is not directly comparable to the 2000 U.S. census data, but provides a more recent snapshot on the community composition. The City's 2004 demographic survey also includes population growth projections for 2009. Within 2 miles of the RCSP Study Area, the City records an estimated 26,848 residents¹. These are also split 49% male and 51% female. The age distribution was highest in the 10 to 19 years category and second highest in the 30 to 39 years category. The total number of occupied housing units was 8,219 in 2004. Most categories were projected to increase by 2009. The population is projected to increase to 30,367 and the number of housing units is projected to increase to 9,235.

Schools

Within two miles of the RCSP Study Area there are 22 schools with 13,758 students². In addition, four new schools are proposed. Two of the 22 existing schools are private, with a total of 50 students enrolled, so the majority of students attend public school. The schools are administered by six school districts: Del Paso Heights Elementary, Robla Elementary, North Sacramento Elementary, Rio Linda Elementary, Grant Union High School and Natomas Unified. Twelve of the schools are elementary, 2 are middle schools, 5 are high schools and one is a K-12 charter school. A list of schools is found in Appendix 1.

¹ <http://gis.cityofsacramento.org/website/sacsites/>

² City of Sacramento Geographic Information System data (2006)

Business Types

The City of Sacramento maintains a website (see footnote 1) which lists businesses by type and can be searched for a specific geographic area. Within 2 miles of the RCSP Study Area there are approximately 987 businesses listed in the variety of categories such as agriculture, communications, construction, manufacturing, retail, service, transportation and wholesale. The largest categories are retail, service, wholesale and construction.

Active Programs, Organizations and Partners

The following Community Associations were identified as either within the RCSP Study Area, or having a possible interest in the development of the Robla Creek Stewardship Program

The Robla Park Community Association

The Robla Creek Community Association (RBCA) formed in 2001 to improve the quality of life and beautification of the community surrounding Robla Park. The RBCA has worked on a number of community issues adjacent to the Robla Creek Stewardship Program Study Area, including public safety and crime prevention, historical research and facilitating clean up actions. The RBCA shares similar concerns surrounding illegal dumping and improper activities along the creek corridor and have a vested interested in reducing these incidents.

Contacts: Leo and MaryAnn Lujan

Address: P.O. Box 340232, Sacramento, CA 95834-0232

Phone: 916-925-5773

Website: <http://home.comcast.net/rpca/>

Valley View Acres Community Association

The goal of the Valley View Acres Community Association is to retain and cultivate our rural lifestyle, while surrounding agricultural tracts have become a rapidly expanding urban area. We have several Community events. The Association also facilitates a number of community gatherings, including a July 4th parade and an Easter egg hunt. Additionally, the Association has also established a community group for local youth in Valley View Acres.

Contacts: Tony Trujillo (president) and Wendy Garrison (website postings)

Address: 4911 Tunis Rd., Sacramento, CA 95835

Phone: 916-929-0658

Website: <http://hometown.aol.com/royalgfarms/index.html>

Natomas Community Association

The Natomas Community Association (NCA) is a volunteer, non-profit group formed 25 years ago to improve the quality of life in North and South Natomas, and the unincorporated areas in the Natomas Basin of Sacramento County, and to communicate their needs to City and County decision makers. Any person who resides, or is employed, in Natomas (north of the American River and west of Steelhead Creek), is automatically a member. The NCA's 16 directors are elected members who pledge to volunteer at least 3 hours a month, in addition to monthly Board meetings, to achieve NCA goals. Eight directors are elected at the annual meeting each January and hold office for two years. All residents are invited to attend monthly NCA board meetings on the fourth Wednesday to learn about community issues, share concerns, and explore means to resolve issues to the benefit of the entire community. The NCA frequently hosts "town halls" and "meet and greets." These are

events which feature a community topic of interest, local elected officials or others, and may include debates, presentations and question and answer sessions. [Information from website]

Contact: Barbara Graichen

Email: BGraichen@natomasCommunity.org

Website: www.natomascommunity.com

Neighboring Watershed and Regional Programs

Arcade Creek Watershed – Management and Stewardship

The City of Sacramento has recently funded development and implementation of a weed removal program for Arcade Creek. This program is anticipated to begin in 2007. Program elements include identification of top priority invasive plants that occur in the Arcade Creek corridor; weed mapping and GIS database development; development of a weed management plan that will help guide weed management efforts; and implementation of the top weed management activities (as possible within the context of the program funding and schedule). The program is expected to run for 2 years. The program is being implemented by the City of Sacramento, with assistance from the consulting firm of Jones & Stokes.

The RCSP planning area is located east of the Arcade Creek Watershed.

Dry Creek Conservancy

The Dry Creek Conservancy's mission is to preserve, protect, and restore the resources of the 100-square-mile Dry Creek Watershed and to promote a continuous trail and open space greenway connecting with the American River Parkway at Discovery Park and Folsom Lake, forming a 70-mile loop. The RCSP planning area is directly south of the westernmost part of Dry Creek.

The Dry Creek Greenway Regional Vision report (Foothill Associates 2004), states that the vision for the Dry Creek Greenway is to create a multifunction open space that includes beneficial uses in the areas of recreation, habitat, floodwater conveyance, water quality, and others. The Greenway vision consists of the following objectives:

- Preserve and enhance riparian and aquatic habitats,
- Conserve and protect significant historic, cultural and scenic resources,
- Connect the Dry Creek Parkway to the Folsom Lake State Recreation Area,
- Provide for the management of Greenway resources,
- Provide active and passive recreation opportunities,
- Preserve floodwater conveyance capacity and reduce property damage due to flooding,
- Work with existing plans and policies,
- Secure funding to sustain and complete the Greenway,
- Function as a local and regional asset, and
- Facilitate land use planning and management within the Greenway.

Contact: Greg Bates

Address: Dry Creek Conservancy

PO Box 1311

Roseville, CA 95678

Phone: 916-771-2013

Email: dcc@surewest.net
Website: <http://www.drycreekconservancy.org>

American River Parkway Foundation

The mission of the American River Parkway Foundation is to foster environmental stewardship and to facilitate volunteer opportunities on the American River Parkway that support the preservation, protection, enhancement and appreciation of the Parkway's natural resources. The Foundation is a non-profit corporation that was founded in 1983. It offers a diversity of volunteer opportunities including an Adopt-A-Parkway program that targets business and community support, an invasive plant control program which is implemented in partnership with the Sacramento Weed Warriors, and a number of special events.

The Foundation receives funding from the County of Sacramento and the Sacramento Area Flood Control Agency to help plant trees and manage weeds along the Parkway through community stewardship. The RCSP planning area is located east and northeast of the Parkway. The mission is similar to the Robla Creek Stewardship Program vision and volunteer engagement opportunities match possible future opportunities with the Robla Creek Watershed.

Contact: Annemarie Vincent
Address: 5700 Arden Way, Carmichael, CA 95608
Phone: 916-486-2733
Website: <http://www.arpf.org>

Natomas Basin Conservancy

The area serviced by the Natomas Basin Conservancy is directly west of Steelhead Creek and their mission to promote biological conservation matches well with the goals of the Robla Creek Stewardship Program.

The Natomas Basin Conservancy is a non-profit agency that was formed to develop, oversee, and manage lands acquired in support of the Natomas Basin Habitat Conservation Plan that was adopted in the 1990's in response to development within the Natomas Basin. The mission of The Natomas Basin Conservancy is to promote biological conservation along with economic development and the continuation of agriculture in the Natomas Basin. The Habitat Conservation Plan establishes a multi-species conservation program to mitigate the expected loss of habitat values and take of protected species that would result from urban development, operation irrigation and drainage systems, and rice farming. The goal of the Habitat Conservation Plan is to preserve, restore, and enhance habitat values in the Natomas Basin while allowing urban development to proceed according to local land use plans.

Contact: John Roberts (Executive Director)
Address: 2150 River Plaza Dr., Suite 460, Sacramento, CA 95833
Phone: 916-649-3331
Website: <http://www.natomasbasin.org>

Sacramento Valley Conservancy:

The Conservancy was founded in 1990 on two basic principles - that open lands are necessary for quality of life and that we must care for the land today so future generations may enjoy its physical

and spiritual benefits tomorrow. The Conservancy has a "hands-on" approach to conservation by working with communities to organize service projects such as cleaning up properties, building bird boxes, hanging signs or for conducting trail maintenance. The Conservancy also leads a number of hikes and programs throughout the Sacramento Valley to build stewardship and conservation interest. The Conservancy has several conservation easements within the RCSP planning area.

Contact: Aimee Rutledge (Executive Director)

Address: P.O. Box 163351, Sacramento, CA 95816

Phone: 916-492-0908

Website: www.sacramentovalleyconservancy.org

Robla Creek Watershed Resources and Issues

Watershed Setting

Robla Creek is located between Steelhead Creek and the confluence of Rio Linda Creek and the Magpie Creek Diversion Channel, and runs parallel to Dry Creek. Robla Creek and its adjacent lands provide some flood protection for the towns upstream, including Rio Linda and Elverta. The floodplain is confined by two levees: the Dry Creek levee (North) and the Robla Creek levee (South). The widest section between the two levees spans almost one mile.

The headwaters of Robla Creek originate near McClellan Business Park. Robla Creek receives runoff from the Magpie Creek Diversion Channel, as well as runoff from surrounding residential and industrial lands, eventually flowing into Steelhead Creek. The historic creek channel was modified and realigned approximately 20 years ago during the creation of the Bel Aqua water ski ponds (EDAW 2002). The re-aligned stream channel was reportedly too narrow to accommodate flood flows, and as a result, a levee was added and the channel was re-aligned to its current location to address the flooding issues. The levee, known as the Robla Creek North Levee extends from the intersection of Dry Creek Road and C Street, to the eastern side of the ski lakes, then traverses around the southern side of the ski lakes and to the north along the Rio Linda airport to G Street (EDAW 2002).

Floristically, the Robla Creek watershed encompasses the following natural plant communities: remnant riparian woodland/savannah; non-native annual grasslands; and emergent marsh wetlands, habitats that typify the Sacramento region.

The riparian areas support widely spaced trees that form an open-canopied overstory, with the canopy openings supporting clusters of small trees and shrubs such as buttonbush (*Cephalanthus occidentalis*), mule fat (*Baccharis salicifolia*) and narrow-leaved willow (*Salix exigua*). Native tree species observed in the study area include valley oak (*Quercus lobata*), California black walnut (*Juglans hindsii*), Oregon ash (*Fraxinus latifolia*), Fremont's cottonwood (*Populus fremontii*), and various willow species including Goodding's black willow (*Salix gooddingii*), red willow (*Salix laevigata*), and arroyo willow (*Salix lasiolepis*).

The annual grasslands support non-native grasses including Italian ryegrass (*Lolium multiflorum*), soft chess (*Bromus hordeaceus*), wild oat (*Avena fatua*), annual fescue (*Vulpia myuros*), as well as a variety of native and non-native forbs including butter and eggs (*Triphysaria eriantha* ssp. *eriantha*), brodiaea (*Brodiaea* sp.), California poppy (*Eschscholzia californica*), filaree (*Erodium moschatum*), vinegar weed (*Trichostema lanceolata*), winter vetch (*Vicia villosa*), cut leaf geranium (*Geranium dissectum*), and tarweed (*Hemizonia* sp.).

A mosaic of emergent marsh and seasonal wetland habitats occur in the lower inundated channels. These habitats support a variety of water-loving herbaceous plants such as Barbara sedge (*Carex barbara*), Baltic rush (*Juncus balticus*), common rush (*Juncus effusus*), Iris-leaved rush (*Juncus xiphioides*), and bulrush (*Scirpus americanus*).

Natural Resources Values and Threats

Natural Resource Values

Currently, the watershed is managed for its flood protection values, and is also used as a recreation corridor and nature area by neighbors and local residents. Natural resource values include:

- intrinsic open space scenic and recreational values;
- flood protection, floodwater attenuation, water purification and groundwater recharge values; and
- habitat values for dependent waterfowl and fish species, native plant and wildlife species.

Open space scenic and recreational values cannot be underestimated in the modern urban landscape. Open space areas provide a visual and aesthetic feature in a developed area. Open space corridors provide an important recreational opportunity for local residents. A nearby park or trail system can greatly increase property values, and local parks are often a part of the daily lives of local residents. Currently, recreational values including bird watching, hiking and dog walking, photography, and similar passive uses.

Rio Linda, Elverta, and surrounding areas are known to be at risk for flooding. Robla Creek provides a much-needed area for floodwaters to collect and settle, protecting nearby houses and businesses, and allowing for groundwater recharge. Robla Creek acts as a natural water purification system, with vegetation trapping sediments and other pollutants, improving overall water quality and clarity.

Robla Creek supports a surprising number of waterfowl species, and is a great place to see local and migrant birds. The native plant communities, although somewhat degraded, provide important food and shelter to common species of aquatic invertebrates, fish, amphibians, reptiles, birds, and mammals. The Robla Creek watershed also provides suitable habitat for special-status species, including giant garter snake, Swainson's hawk (*Buteo swainsonii*), and western pond turtle (*Clemmys marmorata*), although the presence of these species has not been confirmed in the Robla Creek watershed. In 2005, red-shouldered hawks, red-tailed hawks, Swainson's hawks, white-tailed kites and Cooper's hawks were observed foraging in the area, and some of these species may nest within the study area (Teddy 2005).

During the 2005 site monitoring survey, the following common wildlife was observed in the Robla Creek watershed (Teddy 2005).

Birds:

- Pied-billed Grebe (*Podilymbus podiceps*)
- Green Heron (*Butorides virescens*)
- Great Blue Herons (*Ardea herodias*)
- Great Egret (*Ardea alba*)
- Snowy Egret (*Egretta thula*)
- Canada Goose (*Branta Canadensis*)
- Mallard (*Anas platyrhynchos*)
- Cinnamon Teal (*Anas cyanoptera*)
- Blue-winged Teal (*Anas discors*)

- Turkey Vulture (*Cathartes aura*)
- Northern Harrier (*Circus cyaneus*)
- White-tailed Kite (*Elanus leucurus*)
- Red-tailed Hawk (*Buteo jamaicensis*)
- American Kestrel (*Falco sparverius*)
- California Quail (*Callipepla californica*)
- Ring-necked Pheasant (*Phasianus colchicus*)
- American Coot (*Fulica americana*)
- Killdeer (*Charadrius vociferous*)
- Black-necked Stilt (*Himantopus mexicanus*)
- Greater Yellowlegs (*Tringa melanolenca*)
- Mourning Dove (*Zenaida macroura*)
- Rock Dove (*Columba livia*)
- Black Phoebe (*Sayornis nigricans*)
- Western Kingbird (*Tyrannus verticalis*)
- Loggerhead Shrike (*Lanius ludovicianus*)
- Western Scrub-Jay (*Aphelocoma californica*)
- Yellow-billed Magpie (*Pica nuttalli*)
- American Crow (*Corvus brachyrhynchos*)
- Cliff Swallow (*Petrochelidon pyrrhonota*)
- Barn Swallow (*Hirundo rustica*)
- Marsh Wren (*Cistothorus palustris*)
- Northern Mockingbird (*Mimus polyglottos*)
- European Starling (*Sturnus vulgaris*)
- Savanna Sparrow (*Passerculus sandwichensis*)
- White-crowned Sparrow (*Zonotrichia atricapilla*)
- Song Sparrow (*Melospiza melodia*)
- Western Meadowlark (*Sturnella neglecta*)
- Red-winged Blackbird (*Agelaius phoeniceus*)
- Brewer's Blackbird (*Euphagus cyanocephalus*)
- House Finch (*Carpodacus mexicanus*)
- Swainson's Hawk (*Buteo swainsoni*)
- Domestic Duck (*Anas domesticus*)
- Common Snipe (*Gallinago gallinago*)

Mammals:

- Black-tailed jackrabbit (*Lepus californicus*)
- Muskrat (*Ondatra zibethica*)
- American Beaver (*Castor canadensis*)
- California Meadow Vole (*Microtus californicus*)

Reptiles/Amphibians:

- Common Garter Snake (*Thamnophis sirtalis*)

Threats to Natural Resource Values

Threats to these natural resource values include:

- overall site disturbance;
- fragmentation and degradation of native plant communities;
- beaver activity and related changes in hydrologic functioning;
- spread of invasive nonnative plant species; and
- soil erosion and channel down-cutting.

Observed signs of site degradation include soil disturbance, creek channel erosion, presence of invasive non-native species, and low native plant community diversity. Possible sources of observed degradation may include site disturbance resulting from the water ski pond construction project and related realignments of Robla Creek; construction of the flood control levees (resulting in a confinement of the natural floodplain meandering of Robla Creek); and beaver activity.

Although the natural plant communities present in the watershed typify the Sacramento region, they are considered remnant plant communities when compared to the condition of other nearby natural areas. Much denser and more floristically diverse mixed riparian forest is found along the America River, lower Dry Creek and other nearby waterways.

The Robla watershed has been highly impacted by hydrological modifications resulting from the presence of American beaver (*Castor canadensis*). In downstream areas along Steelhead Creek, beavers have built numerous dams, resulting in water backing up into both Robla and Dry Creeks. These changes in site hydrology reduce the ability of Robla Creek to absorb excess water during flooding events, and reduce the area's ability to provide flood protection. Changes in the depth and duration of ponding have also expanded the historic extent of emergent marsh and seasonal wetland habitats in lower Robla Creek, upstream of the confluence with Steelhead Creek.

Several nonnative invasive plant species have been detected in the Robla Creek Watershed, including red sesbania (*Sesbania punicea*), Chinese tallow (*Sapium sebiferum*), tree-of-heaven (*Ailanthus altissima*), Italian thistle (*Carduus pycnocephalus*), perennial pepperweed (*Lepidium latifolium*), milk thistle (*Silybum marianum*), poison hemlock (*Conium maculatum*) and yellow starthistle (*Centaurea solstitialis*). In addition, water primrose (*Ludwigia peploides*), an aquatic weed, is forming dense vegetation mats in the creek channel, choking the waterway and slowing flow rates. Aquatic weeds can also reduce overall water quality as large masses of vegetation decompose, increase the natural rate of nitrification of the overall aquatic ecosystem. These invasive nonnative species are problematic in nearby waterways, including the American River, Steelhead Creek, and Dry Creek and their tributaries. Aggressive non-native invasive plants control programs for these species are underway in Dry Creek watershed and the America River Parkway, and are planned for Arcade Creek, Steelhead Creek and other nearby waterways. Invasive plants form dense, monotypic stands of vegetation, displacing native plant communities, reducing habitat values for dependent fish and wildlife species, and reduce recreational values (for example, restricting shoreline access).

Soil erosion, including channel erosion and downcutting was observed in several locations in the Robla Creek watershed. Erosion occurs from both natural and human-induced sources. Regardless of the source, erosion can threaten resource values and should be controlled.

Recreational Programs and Resources

The City of Sacramento and Sacramento County offer a wide variety of recreational programs and resources to local residents. The City of Sacramento currently includes 74.9 acres of neighborhood parks and 77.9 acres of community parks in the North Sacramento area. Hansen Ranch encompasses an additional 245 acres. As of 2004, there were 120.4 acres of additional parks/open space planned in the North Sacramento area.

Several new recreational amenities are also planned in and adjacent to the Robla Creek watershed. For example, the City of Sacramento Parks and Recreation Master Plan includes the Robla Creek watershed in the North Sacramento Community Planning Area (North Sacramento). Existing and future recreational programs and resources include:

The City of Sacramento Bikeway Master Plan. This plan includes recommendations for future studies of bike corridors that pass near Robla Creek. Plans currently underway for Phase I in Sacramento County consist of approximately three miles each of paved Class I shared-use bicycle/pedestrian trails and equestrian trails, stretching from Dry Creek Road at Dry Creek Ranch to Elverta Road just west of 28th Street, passing through the Cherry Island Soccer Complex

The City of Sacramento Parks and Recreation Master Plan 2005-2010

The following information was excerpted from the City of Sacramento's web site at <http://www.cityofsacramento.org/parksandrecreation/masterplan/plan.html>.

The City of Sacramento Parks and Recreation Master Plan builds on work completed in the Phase I draft 2000 Master Plan and the 1989 Master Plan Update. The goals of the Master Plan (*not in priority order*) are to:

- Demonstrate the need for and benefits provided by the Department;
- Chart the growth, direction, priorities and agenda for the Department through the current decade (2010);
- Establish policies to guide decision making by City staff and officials;
- Demonstrate the Department's alignment with and contributions to achieving the City's Mission, Vision and Goals;
- Describe how the public can be involved with the Department;
- Strengthen the Department's ability to qualify for certain grant funding;
- Establish appropriate expectations for service delivery;

Portions of the Mater Plan that pertain to Robla Creek include:

- **Section 10. Natural Resource Management**
 - 10.1 Sustainable Guidelines: Develop and implement Sustainable Design and Maintenance Guidelines for parks and recreation/community facilities. Develop and implement design principles to govern development of amenities that are compatible with and protect natural resources.
 - 10.2 Interpretation: Develop and implement a natural resource interpretive and signage program. Develop demonstration areas as aids in educating the public on natural resource protection.
 - 10.3 Training/Maintenance Standards: Develop and implement new training and maintenance standards for protection of natural resources.

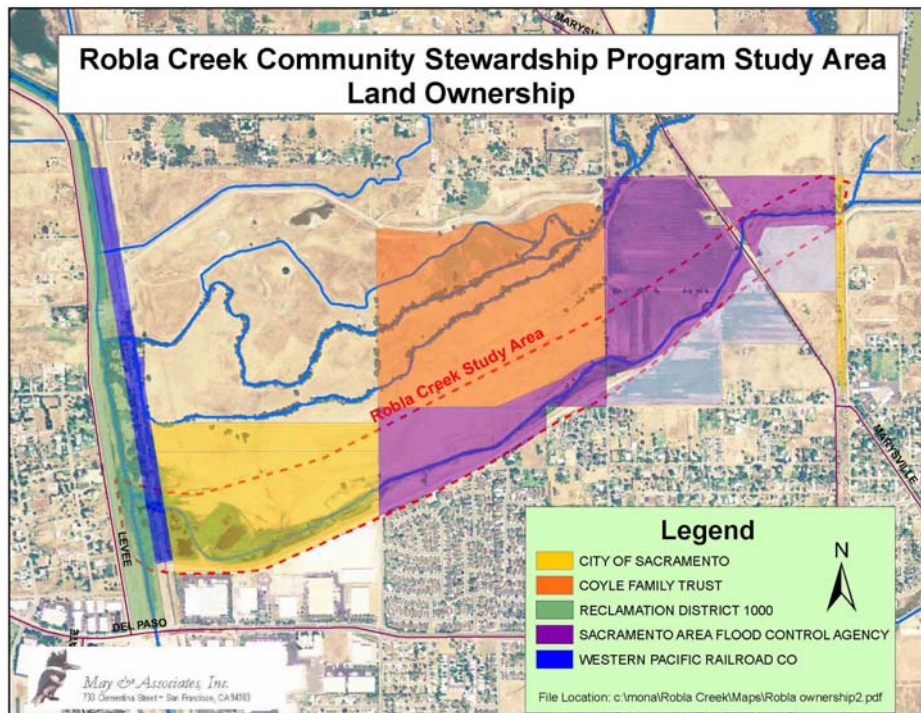
- **Section 11.0 Open Space, Water Corridors and Parkways** (see also 17.0: Trails, Bikeways and Bridges)
 - 11.2 Passive Recreation: Develop a plan for the Lower Dry Creek (Hansen Ranch) and other appropriate sites to provide passive recreation opportunities in a natural area.
 - 11.3 Open Space Planning: Participate in planning to ensure adequate open space and parkland for the City's new growth regions (such as Natomas Joint Vision).

- **Section 17.0 Trails, Bikeways and Bridges** (see also 11.0: Open Space, Water Corridors and Parkways)
 - 17.1 Sacramento River Trail: Develop and implement an acquisition plan for the proposed bike trail along the Sacramento River.

Land Use and Future Planning

Land Use and Ownership Information

The majority of the landowners within the RCSP Study Area are public entities (see figure 1). Along Steelhead Creek, Reclamation District 1000 and Western Pacific Railroad are the owners. To the east the City of Sacramento and SAFCA own large parcels. A large parcel on the north is owned by the Coyle Family Trust and other private entities own the land in the southeast portion of the RCSP Study Area.



Areas surrounding the study area are a mixture of residential and commercial uses. South of the Robla Creek levee, land use is predominately for relatively dense single family residential housing.

Lands to the west of the watershed are zoned commercial, and support light industrial uses. North of the Dry Creek levee, lands are primarily low density residential and are used predominantly for rural land uses. To the west of Steelhead Creek is the Sacramento County panhandle, which is a mixture of rural residential and commercial. Farther west is the rapidly developing North Natomas section of the City of Sacramento, an area that is predominately single family residential.

Land Use Planning Information

The following current and future planning studies are related to open space and natural areas

City of Sacramento General Plan

The City of Sacramento is currently revising their General Plan. The updated General Plan will be finished in early 2008. The RCSP area is currently zoned as A-OS, Agriculture-Open Space Zone. This is an exclusive agricultural zone designed for the long term preservation of agricultural and open space land. This zone is designated to prevent the premature development of land in this category to urban uses. The zoning of the RCSP would not be expected to change in the updated General Plan.

Hansen Ranch Master Plan

As noted in the April 2006 North Area Roundtable meeting minutes that are posted online (www.safca.org/collaboration/documents/MeetingSummaryApr12-06.pdf), Julia Cox, in the Landscape Architecture Department at UC Davis, was developing the Hansen Ranch Recreation Plan as her senior project. The Recreation Plan was being developed to complete a Master Plan for the property. The Recreation Plan has now been completed, however is under review by SAFCA, the City and other agencies. A completion date has not been established.

It is anticipated that the Hansen Ranch Master Plan will include an equestrian/pedestrian trail.

Dry Creek Parkway Recreation Master Plan

The Dry Creek Parkway Recreation Master Plan (Foothill Associates 2004) covers the entire Dry Creek watershed. The Parkway passes through the unincorporated communities of Antelope, Rio Linda, and Elverta. The boundary of the parkway encompasses the area 175' beyond of the normal top of bank for the Dry Creek channel, as well as Cherry Island Soccer Complex, Cherry Island Golf Course, Gibson Ranch, and Northbrook Park.

The objectives of the Dry Creek Parkway are to:

- preserve, protect, enhance, and interpret the natural and cultural resources of the corridor;
- provide a natural, continuous open space corridor from Placer County to the Sacramento city limits, and form part of the 70-mile regional greenway loop;
- retain the rural character of the surrounding Rio Linda/Elverta community;
- allow for the integration of active and passive recreational uses that will have minimal impacts on the natural resources; and
- preserve flood conveyance and capacity within the Dry Creek floodway.

The Dry Creek Parkway will also provide a combination of passive and active recreational opportunities for the surrounding communities and a significant addition to the linear trail corridor that currently includes the American River Parkway, the Ueda Parkway and the Sacramento Northern Bikeway. The Dry Creek Parkway will extend this corridor through northern Sacramento County to the Placer County line. Ultimately, it is anticipated that this greenbelt will be continued

easterly through Placer County and the City of Roseville to the City of Folsom and link up with the eastern end of the American River Parkway. When these critical parkway segments are completed, a seventy-mile greenway trail loop will be created enabling residents and visitors to the Sacramento/Placer County area to enjoy a regional parkway with trail systems that will provide recreation and transportation options for pedestrians, bicyclists and equestrians. The Dry Creek Parkway will also provide connections to a variety of other existing and planned County trail linkages in the Natomas, Rio Linda, Elverta, North Highlands, and Foothill Farms communities.

Community Issues, Concerns and Opportunities



The first meeting for development of the Robla Creek Stewardship Program Plan was held on January 9, 2007, at Taylor Street School. During the meeting, members of the community identified several issue areas and concerns for the Robla Creek Watershed and surrounding areas. Additionally, opportunities for stewardship and infrastructure improvements were also noted. These were further discussed during a second community meeting on January 31, 2007. The opportunities and concerns below reflect issues that were compiled following both meetings.

It is the intention of this Plan to identify volunteer activities and stewardship strategies that will address, resolve, or monitor some or all of the above issues and management actions as well as build on the stated opportunities. These actions and activities will be guided by the City-wide Natural Areas Management Plan, but presumably implemented as part of the Robla Creek Stewardship program.

Issues that cannot be resolved through the development of a holistic volunteer stewardship program will be identified and provided to City staff for consideration under future management and planning actions.

Opportunities for Stewardship, Improving Resource Values, and Potential Site Improvements:

- Existing waterfowl nesting area – high diversity of birds and wetland habitat
- Wetland and riparian woodland habitat restoration activities
- Interpretive signage and kiosk development and installation
- Possible installation of restrooms/amenities/trash receptacles to support community use
- Possible overlooks and picnic/gathering place (shade structure) areas – (*Note: concerns were expressed that there needs to be an integrated design for any site amenities so that the natural values of the area are not compromised and that the site is welcoming to a diversity of audiences*)

- Development of youth and college-aged service programs with a focus on stewardship
- Facilitation of naturalist walks through area to build interest and awareness
- Opportunity for improved public accessibility
- Guided fitness/recreational experience (PAR course equivalent)
- Opportunity to create an off-leash dog area that would be compatible with wetland protection (*Note: concerns were expressed that any off-leash dog areas would need to be compatible with larger wildlife protection goals*)

Community Concerns:

- Water quality in Robla Creek;
- Beavers and related tree damage and changes to water flows, ponding and flooding from beaver dams;
- Red sesbania and other invasive weed infestations threatening natural resource values;
- Fires;
- Vegetation management through continued livestock grazing, and possibly other management actions to address vegetation issues;
- Dog trespass into wildlife habitat;
- Graffiti;
- Illegal dumping and trash build up throughout area (especially at access points);
- Congregations of groups/gangs;
- Fence integrity;
- Future development in area; and
- Over-engineered additions/solutions (for flood control and amenities) that would preclude or impact ecological processes related to the floodplain.

Opportunities for Community Engagement and Partnership

The success of City's Natural Areas Stewardship Program will in large part be measured by the nature and sustainability of community engagement.

The Robla Creek Watershed and surrounding vicinity supports a primarily suburban community, business parks, schools and colleges and community recreation facilities. Traditional park settings draw a myriad of recreational users including youth and adult sports participants, dog walkers, skateboarders and picnickers. However few local opportunities exist for passive recreational experiences such as bird watching, hiking and community gardening. Robla Creek is unique in that it has potential to support these passive recreational values. Additionally, there is also a strong desire to engage students in meaningful service projects and outdoor educational experiences. Because of its location, Robla Creek could serve as an 'outdoor classroom' for various service and educational projects, providing opportunities for local environmentally-based experiences.



Vandalism and illegal dumping actions persist in some of the City and other agency-managed areas within the Robla Creek corridor, suggesting a need for increased staff presence and additional resources to monitor and manage these actions. Special events promoting environmental stewardship activities such as weed removal, habitat restoration and garbage removal in the City's natural areas (e.g. Creeks Week, etc.) have drawn community interest and participation both locally and regionally, and may be conducted in the Robla Creek corridor in the future.

Local schools have expressed interest in providing greater support for natural areas management. Grant Joint Union High School District for example, is seeking additional locations to create and monitor habitat for wood ducks and engage youth in environmental stewardship. The City currently receives water quality monitoring support from students at Mira Loma High School, a program that could be replicated in the Robla Creek Watershed by several interested schools.

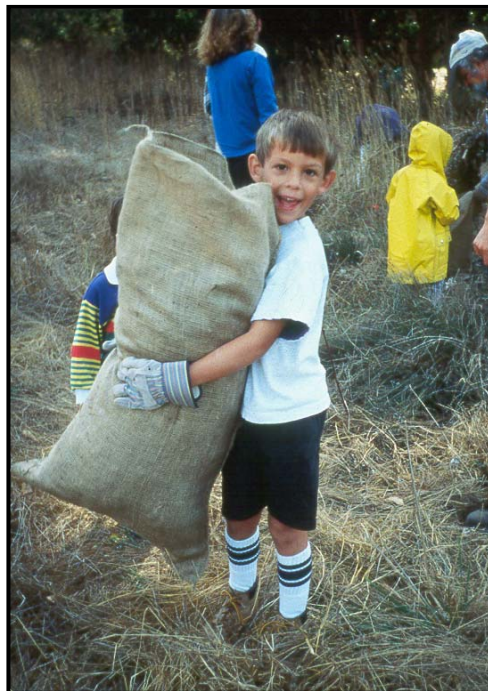
All of the above suggests that a number of opportunities exist for developing and facilitating a successful community stewardship program within the Robla Creek Watershed. Given that the Robla Creek Stewardship Program will be the first of its kind managed by the City, engaging and sustaining community participation will need to be an active process, yielding genuine participation and a shared investment that produces tangible outcomes for the benefit of individuals, communities, and park resources.

To be most successful, engagement must be consistent with the Parks and Recreation Department's mission and priorities while also reflecting those related interests and needs of the community served. The Long-term Program Development section of this Plan outlines activities and pilot projects that the nascent volunteer program could undertake to achieve these mutually supportive goals. The program elements identified later in this section were developed in close coordination with the Natural Areas Management Plan to help ensure consistency with City-wide Natural Area activities, and through integration of community interests articulated during community meetings and interviews performed as a part of the Plan's development.

It is anticipated that programs and activities will primarily focus on both improving the health of the watershed, recreational and aesthetic experiences of its residents and resources, and beautifying the adjoining residential buffers through "on-the-ground" stewardship activities that yield tangible results. These activities will likely include weed control, graffiti and garbage removal, fence repair, interpretive signage installation, and habitat restoration. The program will also likely yield other less tangible outcomes including growth in individual learning; improved community spirit; and enhanced personal fulfillment and enjoyment.

Audiences

Identification of potential community interests and "audiences" is critical for targeting volunteer involvement. Programming and outreach strategies should be built around an understanding of these audiences and their optimal communication pathways. The following groups have been identified as primary audiences for targeting as a part of the Robla Creek Stewardship Program development. These audiences were identified through conversations with participants at community meetings, stakeholder and school interviews, and through demographic and organizational research. While these are not the only audiences who are likely to both participate and benefit in volunteer-based activities, these four target groups will likely provide a viable foundation for the Robla Creek Stewardship program. Programs that could be developed to engage and meet the needs of these audiences are listed in later in this Plan.



1. Businesses and Property Management Groups

The local business and property management community could provide funding, services (e.g. printing fliers, preparing signs), and materials (e.g., fencing, lumber), donation and volunteer support, and would likely benefit from tax-deductible donations, community recognition, on-site marketing and staff involvement in local projects. Within two miles of the Robla Creek Stewardship Program Plan Study Area there are almost 1,000 businesses and numerous large apartment complexes managed by more than eight property management groups. Contacting all of these businesses for sponsorship or volunteer participation would require a significant investment of resources; however, during development of this plan, we have identified possible participants who might be targeted during future outreach efforts. Appendix 4 identifies those businesses that were

noted during community meetings as being good candidates for possible participation, are located within the immediate vicinity of Robla Creek, or have provided philanthropic support to local environmental stewardship programs. Additionally, contact information for local business affiliations such as rotary clubs is also provided.

2. Local Residents, Neighborhood Groups, and Interest Groups

This diverse audience includes both individuals and groups (such as the Robla Park Community Association) that have a vested interest in beautifying and improving the health and recreational opportunities within the Robla Creek watershed. For the purposes of this plan, “local” is primarily defined as communities and neighborhoods geographically located within the boundaries of District 2 with direct park access or indirect access through transportation corridors (pedestrian walkways, bikeways, park greenways, bus routes, etc.) to the Robla Creek Corridor. This audience will likely share an interest in stewardship activities undertaken in their community due to their proximity to the creek.

Outreach to this audience will likely require integrating information into existing community and school newsletters, providing stewardship program details on bulletin boards, website links and through the dissemination of brochures and announcements. Active neighborhood associations and groups are listed earlier in the Robla Creek Watershed Community and Stakeholders section. Local interest groups such as bicycle coalitions, equestrian users, etc. are listed in Appendix 2. A more detailed discussion on outreach materials for engaging this audience is provided later under Engagement and Outreach Tools and Materials.

3. K-12 Schools and Colleges

This audience is interlinked through a network of districts and affiliations through school-specific and district-wide newsletters and media. Communication pathways exist for engaging youth, teachers and families. This audience is seeking meaningful and educational activities to fulfill service



learning goals, develop career building schools, participate in mentor-based environmental learning and to build environmental and civic engagement through in-service projects. Volunteer stewardship and environmental stewardship programs such as the Arcade Creek water quality monitoring program (Mira Loma High School), the John Garcia Youth and Wildlife Project at Wolf Ranch (Grant Union Joint Unified School District), and the Service Learning Program (Sacramento City College) already exist, and some may be extended into Robla Creek. New programs can be built from or modeled specific to the needs and interests of the Robla Creek Stewardship Program based on these existing models. Appendix 1 contains a list of potentially interested school administrators and teachers compiled through interviews as a part of the development of this Plan.

4. Service Groups and Churches

This audience has a shared vision for community involvement and stewardship, and both service groups and churches provide an organizational structure to facilitate streamlined outreach and group participation. Outreach to many service groups can be done through already established networks such as the Volunteer Center

of Sacramento, One Brick, Community Impact, Volunteer Match, etc which have directories of projects and programs from which interested service groups and volunteers can select opportunities. Other more regionally-based service groups such as the Americorps (NCCC) and the Student Conservation Association (SCA) and others who already provide teams and interns in support of environmental projects could also provide sustained leadership and participation for the Robla Creek Stewardship Program. Additionally, groups such as Rotary and Lions Clubs often provide both service group and financial support.

Appendix 3 contains contact information for the majority of churches located within the Robla Creek Watershed and vicinity. These groups can be contacted to determine if their volunteer engagement and charitable interests are consistent with volunteer stewardship goals and activities offered through the Robla Creek Stewardship Program

Potential Partners

Members of the audiences listed above could evolve to become long-term program partners or sponsors. Partnership criteria should be developed during the early phases of the Robla Creek Stewardship Program to ensure that partners have similar goals, provide mutually beneficial contributions and are based on clear expectations. The following organizations and agencies are identified as potential partners based upon one or more of the following: shared or adjacent land ownership/management, similar resource/land management and education goals, and shared community and outreach interests.

Sacramento County Area Flood Control Agency (SAFCA)

SAFCA manages land within the Robla Creek Watershed and has a vested interest in maintaining the integrity of the flood control and levee system as well as the biological health of the watershed's resources. SAFCA has also fundraised significant resources to control infestations of red sesbania in the Dry Creek Watershed directly north of the Robla Creek area. SAFCA supports the active control of this species within Robla Creek Watershed to prevent seed transport into the Dry Creek treatment area. SAFCA also has some funding allocated to maintenance of their properties that could be used to support garbage clean up and weed removal events (van Riessen, pers. comm., 2007). SAFCA also oversees contracts for biological monitoring support at Hansen Ranch. Support from this contractor and other interested environmental leaders could be solicited as a part of the volunteer stewardship outreach strategy. A programmatic agreement identifying shared resources, liability agreements, vehicle and volunteer access, communication and support should be developed as a part of the implementation of the Robla Creek Stewardship Program.

Rio Linda Parks District

The Rio Linda Parks District currently provides on-site management support to part of the area, including the removal of illegally dumped materials. Don Schatzel (916-991-8110) should be contacted during the Stewardship Program's work plan development to determine how the Parks District could be integrated into the Program.

Sacramento Valley Conservancy

The Sacramento Valley Conservancy has several land easements within the Robla Creek Stewardship Program Plan Study Area and has a vested interest in resource protection and conservation. Discussion surrounding anticipated volunteer activities should occur on a continual basis to ensure that activities maximize resource protection and support habitat restoration goals. This could be

facilitated through quarterly or semi-annual work planning discussions. Additionally, Conservancy staff or volunteers could provide interpretive walks to build greater public awareness and interest for conservation in the area. Aimee Rutledge (916-492-8110) should be contacted during the Stewardship Program's work plan development to determine how best to coordinate access as well as how the Conservancy could be integrated into the Program.

Coyle Family Trust

The Coyle family has a long history of land management in the area and shares a strong conservation and sustainable agriculture land use ethic. Cub Coyle participated in the initial community meeting for the development of this Plan and expressed concern regarding water quality. Coyle shares similar interests to SAFCA regarding controlling invasive weeds and flooding, and also his concerns with regards to impacts to pasture land. An agreement identifying liability and access agreements and shared communication and support should be developed as a part of the implementation of the Robla Creek Stewardship Program.

Urban Creeks Council (UCC)

The Sacramento Chapter of the Urban Creeks Council (UCC) is dedicated to protecting and sharing the abundant natural treasures that make up the extensive creek system of the Sacramento region. The UCC provide public education programs and sponsors volunteer-based special events throughout the region. They have experience facilitating and leading volunteer involvement within a creek environment and can provide outreach and education support to both the City and volunteer stewards participating in the Robla Creek Stewardship Program.

Sacramento Weed Warriors (SWW)

The Sacramento Weed Warriors (SWW) is a volunteer stewardship project that is coordinated by the Sacramento Chapter of the California Native Plant Society (CNPS). The SWW provides leadership for volunteer-based weed control on the American River Parkway and in a number of other creeks, including Steelhead Creek. The SWW also provides educational outreach presentations to the public and schools about the effects of weeds on natural systems. This program has expertise leading volunteers in controlling red sesbania, the most prevalent weed in the Robla Creek Watershed, and has developed outreach materials that could be used to educate the public about the effects on this species. Robla Creek Stewardship work days could be jointly outreached and hosted with the SWW.



Robla Park Community Association (RBCA)

The Robla Creek Community Association (RBCA) formed in 2001 to improve the quality of life and beautification of the community surrounding Robla Park. The RBCA has worked on a number of community issues adjacent to the Robla Creek Stewardship Program Study Area, including public safety and crime prevention, historical research and facilitating clean up actions. The RBCA shares similar concerns surrounding illegal dumping and improper activities along the creek corridor and have a vested interested in reducing these incidents. The founders and active members provide a

good conduit to engaging their members and the surrounding community and would likely serve as a viable long-term community partner.

Community Engagement Philosophy and Guiding Principles

Volunteers have been, and will continue to play an integral role in the City of Sacramento's programming.

Volunteers compliment and support the work of full-time and seasonal staff, accomplish important tasks that would not otherwise be completed, and support programs that would either be limited or cease to exist without volunteer participation. In return, volunteers receive support, training, recognition, and resources to accomplish



project and program goals. Volunteers do not replace or displace paid staff, but rather enhance and augment programs and roles, often mobilizing support for City-endorsed community-based initiatives. City staff and agency partners recognize and value the work and contributions of volunteers in furthering the mandate, objectives and activities of the agencies.

The following principles were finalized and agreed upon by community meeting participants during the January 31, 2007 meeting. As the City moves forward with building volunteer support for the Robla Creek and other natural areas projects, the following principles will be used to guide community engagement. These principles will continue to evolve and also apply to community partners. Each agency and community partner should strive to:

- Understand the vision and goals of Robla Creek Stewardship Program and contribute meaningfully in support of achieving the program goals;
- Clearly define expectations and roles for volunteer participation;
- Build understanding and support common goals through open dialogue that includes active listening and constructive problem solving;
- Assure that participation is diverse, inclusive, welcoming and authentic;
- Assure that work activities and time together are both fun and productive;
- Always follow-through on commitments;
- Celebrate achievements both individual accomplishments and group success;
- Assure adequate staff and resources are allotted to support and maximize the effectiveness of community stewardship projects;
- Collaboratively build a program that commits to longevity; and
- Clearly define and address potential program liability issues and concerns, to include defining responsibilities for ensuring liability issues are addressed.

Community Engagement Framework and Strategies

The following program elements could be cultivated and offered within the Robla Creek Watershed to achieve community interests, agency management goals and meaningful community engagement and participation. These potential program opportunities are grouped by possible audience, as identified in Opportunities for Community Engagement and Partnership section, above. Please note that some program opportunities apply to one or more audiences and many could be modified to meet the need of the specific audience if desired. These programs respond to the realm of ideas shared during community meetings and interviews. Costs for administration and management are not included in this section, neither are anticipated roles and responsibilities of City staff and partners. These items are discussed later under Long-term Program Development

The information below provides a suggested suite of programs that could be offered to garner community interest and engagement. The number of program elements, and the ability to develop, publicize and offer these programs however, would depend upon the City's staffing capacity, funding, resources and community interest.

Businesses

The following is a list of potential programs that could be outreached to the business and foundation communities to build their support and engagement in the Robla Creek Stewardship Program. Although many more possible programs could be included, this list is intended to be a starting point for the City to built from during the development of the Program.

Adopt-A-Park: A number of agencies and non-profit organizations around the country have established "Adopt-a-Mile" or an "Adopt-a-feature" program to generate funding to support conservation, infrastructure, program management, or access needs. One of the most successful local programs is the American River Parkway Foundation's Adopt-the-Parkway program. Interested sponsors can adopt one-mile sections of the 22-mile parkway, sponsoring either the north or south bank (a total of 44 financial sponsorship slots are available). Sponsors can provide financial support, volunteer clean up support or both in their area of sponsorship. At present in 2007, financial sponsorship is offered at \$1,250 per mile section. If a fiscal sponsor elects to only provides financial support, a different service groups or other individuals/organizations can adopt the clean up responsibilities for the same section. Program implementation would require City staff involvement. This role would be similar to the City's existing "park steward" role. In recognition of the sponsor's commitment and support, signage is typically installed to publicize the contribution (see example photo).

Most of the sponsors participating in the Adopt-A-Parkway program learned about the opportunity through word of mouth, or by seeing the signage. Donations are managed by the American River Parkway Foundation, a non-profit corporation.



The Robla Creek corridor is approximately 3 kilometers (a little over a mile) in length. If this model was instituted, it is recommended that adopted segments are 1-kilometer instead of 1-mile. Given that current access to the creek corridor is only along the levee, (e.g. one sponsorship per kilometer). In future years, if a trail is constructed on the northern banks, the number of sponsorships could be expanded to six.

Site Amenity Sponsor: Community members and local user groups often donate funds in memory of a loved one or someone they wish to honor. Amenities typically include items such as park benches, picnic areas, tree plantings, trail bridges or boardwalks, and park interpretive signage. A number of improvements to the Robla Creek corridor were suggested during the community meetings, including picnic areas, shade structure, benches and restroom amenities. If deemed appropriate, and consistent with City policies, donations for these amenities could be advertised and solicited.

Stewardship Program Sponsorship: A number of the surrounding local businesses manufacture or distribute food, products, materials, tools or equipment that could be requested for donation to the Robla Creek Stewardship Program. Additionally, several companies including Java City and Fry's have formal community grants or donation programs that could be solicited. Also, a number of regional (and sometimes national) businesses accept requests for tools, food and product donations. For example, Odwalla frequently donates fruit drinks, and Power and Cliff bar often provide samples for volunteers participating in stewardship activities. If Stewardship Program sponsors are sought, it is recommended that it is done strategically and through one agency coordinator. Priority needs should be established and a master list of contacts, donations and needs maintained. Recognition could include noting sponsors at work days, thanking sponsors in newsletters and other communication. All solicitations would need to be made in coordination with City staff.

School Program Sponsorship: A number of business and philanthropic foundations offer funding and grants in support of engaging under-served youth in environmental programs. If it is determined that school-aged programming and service learning activities are a priority component of the Robla Creek Stewardship Program, it is recommended that the Rotary Club of North Sacramento and the Stewardship Foundation (manages PG&E-derived funds) be contacted. These types of funding typically require the completion of grant applications and often have strict guidelines and requirements for expending monies.

Internship Sponsor: Similar to the possible funding opportunity described above, large companies and foundations will often provide small grants to fund youth-based (16-23 years-old) internships, which are viewed as career development opportunities. Similarly, agencies typically have special hiring programs through which students can apply for part-time or temporary employment.

Corporate Team-Building: A number of large firms support team-building experiences associated with staff participation in outdoor adventure-based activities, including ecological stewardship programs. For example, companies including PG&E, the Gap, Levi Straus, REI, Wells Fargo and others have organized, funded and volunteered in large-scale habitat restoration activities throughout northern California, making significant impacts in their communities and the improvement of local watersheds. The recognition of these recreational and organizational development opportunities is growing and drawing greater interest from the business community. Corporate programs can be developed at Robla Creek and marketed to local businesses. Possible

partnerships could include students at City College or Sacramento State University studying outdoor or therapeutic recreation. The fact that Robla Creek is a small watershed with a large surrounding business community is beneficial for potentially drawing smaller local business who could return repeatedly.

Local Community – Residents, Neighborhood and Interest Groups

Drop-in and Public Programs: Regularly advertised and scheduled drop-in volunteer programs are perhaps the underlying fabric of most natural area stewardship programs. These programs



typically result in the development of a “core” volunteer team who can ultimately mentor new and infrequent volunteers during programs. Many “core” volunteers develop a “sense of place” and build advocacy and support for these stewardship efforts, with some even donating funding and other resources. Additionally, “core” volunteers often grow with the program and take on new responsibilities such as newsletter management, monitoring and surveying, and program leadership.

Drop-in programs offer the greatest flexibility to interested participants, who can schedule their involvement around the time of year, task, and/or friend’s participation. These programs could be led by a City staff person and community sponsor and/or intern, and offered at a frequency based upon the priority management and community needs. For example, if the priority management goal is to control red sesbania throughout the corridor then the work days might be scheduled to augment sesbania control activities implementation during anticipated group events prior to the weed setting seed. In contrast, if the priority management need is to remove graffiti from the creek corridor, then graffiti monitoring and removal may become a part of every drop-in work day.

Special Events: Special events can be offered or facilitated at a frequency based on community needs, coordination with larger regional activities, or in celebration of annual themes (such as Earth Day, Creek Week, Week of Caring, etc.). The following bulleted events may likely draw various different audiences and meet different community and agency needs.

- **Community Clean-Up Events** – this type of event could be used to build action and support around common community and agency issues, including those identified during the community meetings. Actions such as the removal of dumped materials, trash and graffiti, repair of the damaged fencing, and installation of site amenities could be undertaken jointly. Sponsorship for the type of event could be done in partnership with local neighborhood associations, such as the Robla Park Community Association. The need and volunteer interest for increased garbage and graffiti clean up was expressed at the community meetings held during the development of this Plan.
- **Thematic Large Group Events** (Earth Day, Week of Caring, Creek Week, etc.) – these types of events have a greater potential to draw mixes of local residents, interest group (such

as Audubon, Sierra Club, California Native Plant Society) members, students and businesses. Work plans should be developed to accommodate large groups with alternative activities available in case challenges arise or the initial work is completed quickly.

Watershed Watch: A number of the participants in the community meetings expressed interest in the initiation of a community watch (similar to a neighborhood watch or onsite monitoring) program as a part of the larger Robla Creek Stewardship Program. This volunteer opportunity would include regular walking and monitoring of the levee area and creek corridor to observe, note and report vandalism, illegal dumping or encampments, graffiti, inappropriate activities, and flood control and infrastructure problems. This program would be ideal for engaging existing users of the area and local residents. It would also likely draw support from businesses directly adjacent to the levee areas. This type of program could also be directly linked to the public works or public safety departments within the City. Reporting forms for graffiti and dumping already exist and could be modified to meet the specific needs of the Robla Creek Stewardship Program.

Water Quality Monitoring: The City does not currently perform water quality testing or monitoring at Robla Creek. The need for better understanding the water quality at Robla Creek was



identified during the January community meetings. The Utilities Department has expressed an interest in collecting water quality data for the watershed, but has no funding or staffing to support it. Other volunteer-based water quality monitoring programs exist in the region, including a program at Arcade Creek where students from Mira Loma High School conduct monitoring and report findings to the City. This type of activity could be undertaken by interested

residents, partners and/or students. Training and possibly equipment would need to be provided by the City, and the frequency, location of sampling points and reporting standards for monitoring would need to be established.

Service Project: A number of issues and needs identified during the community meetings could be addressed through the implementation of a discreet service project. For example, repair of the fencing or the installation of signage or a donated bench could be completed as a part of an Eagle Scout project. In addition to Boy and Girl Scouts, local colleges often require students complete a discreet service project (depending upon their major) as do some high schools. Developing and advertising a discreet list of service projects could facilitate their completion through this type of programming.

Adopt-a-Park: See discussion above under “businesses.” Sponsors for this type of program could also be neighborhood associations, interest groups and/or interested residents. For example a number of “families” and neighborhood associations are fiscal sponsors of the Adopt-A-Parkway program.

Site Amenity Sponsor: See discussion above under “businesses.” Sponsors for this type of program could also be neighborhood associations, interest groups and/or interested residents.

K-12 Schools and Colleges

Internships: Summer or work-study internships provide excellent mechanisms to integrate interested and diverse youth into natural areas stewardship programs. Typically these positions are held by college students or high school seniors who are interested in gaining career development experience or who are exploring the environmental field. Interns can undertake a specific project, develop and deliver interpretive materials to the public, and provide supporting leadership for work days and events. Interns typically require an increased level of supervision and mentoring, which would need to be provided by City staff or program partners. Focused outreach to life sciences professors and teachers would likely draw in a pool of potential interns for the Program.

Service Learning/Environmental Education Programs: Service learning programs provide an excellent vehicle for integrating community service with academic institutions. The Robla Creek Watershed and other natural areas would provide outdoor learning forums where students could actively engage in a diversity of habitat restoration and stewardship activities while gaining a better understanding of local ecology and an appreciation for civic engagement. Programs of this type have grown exponentially in the past decade throughout the country. As a result, strategies, methods and resources needed to organize and implement these programs are readily available. In addition to K-12 programs there also exists the potential for establishing connections to local after-school programming through organizations including YMCAs and Boys and Girls Centers, and to summer programming through summer day camps.



It should be noted that youth field programs typically need to be structured differently from adult programs. Youth programs often require an increased level of staffing, one or two large areas to work (versus a roving program), and typically require that approximately 25% (or more) of the time be spent on educational activities that build students capacity and understanding prior to engaging in field work. For youth it is generally most appropriate to focus on a monoculture of one weed species. These often tend to be perennials (e.g. red sesbania, Himalayan blackberry, perennial

pepperweed, etc.) or large annuals such as radish. Additionally, planting with youth takes a lot of organization of gear, laying out plants beforehand, and logistical considerations to minimize confusion. There is also more attention paid to educational games to teach restoration ecology concepts and vocabulary.

Given the topography, liability and land management issues, anticipated type and scale of work activities, it is recommended that 6th grade should be the minimum grade-level encouraged to participate. This should be re-evaluated once the program is adequately resourced.

A number of high school- and college-based service learning programs exist within the vicinity of the Robla Creek Stewardship Program Study Area. Grant Joint Unified High School District has a number of environmental service-based programs that involve students in waterfowl habitat improvements and monitoring and invasive plant control. Sacramento City College has a well-structured service learning program where students provide upward of 15 hours of service to one of more of their 50 partner agencies and organizations. Completion of the application in Appendix 5 would add the Robla Creek or other natural areas stewardship programs to the list of volunteer opportunities that students could select.

Water Quality and Ecological Monitoring: See discussion above regarding water quality monitoring. Colleges and high schools could develop programming surrounding other ecological and photo monitoring tasks. For example, American River College offers a natural resources field methods class. The Robla Creek watershed could provide an on-site resource for students to apply methods in wildlife monitoring, weed mapping, and erosion control surveying. This could provide long-term data for the Robla Creek Stewardship program and build increased college student involvement over time.

Special Events: See discussion above under “local community - residents, neighborhood and interest groups.”

Drop-in and Public Programs: See discussion above under “local community - residents, neighborhood and interest groups.”

Adopt-A-Park: See discussion above under “businesses.” Sponsors for this type of program could also be schools and colleges.

Service Groups and Churches

Group Programs: Group programs are typically scheduled based upon the interest and availability of either a targeted or requesting group. The number of group programs should directly correlate to the management needs and priorities. Group programs can vary in size, however it is recommended that a threshold for the maximum number of participants be established. Given the current City staffing and resources, liability and land management issues, site size, and anticipated type and scale of work activities, it is recommended that the maximum be somewhere between



30-45 adult participants. If youth are included in the group, a smaller number is recommended. Typically a staffing or volunteer leader ratio of 1:10 is recommended, depending upon the activity.

Drop-in and Public Programs: See discussion above under “local community - residents, neighborhood and interest groups.”

Special Events: See discussion above under “local community - residents, neighborhood and interest groups.”

Adopt-A-Park: See discussion above under “businesses.” Sponsors for this type of program could also be schools and colleges.

Engagement and Outreach Tools and Materials

Currently, prospective volunteers learn about opportunities with the City’s Department of Parks and Recreation through a number of sources.

- From web pages: www.sacvolunteers.org or other web pages on the City website, and several other local websites including www.handsonsacto.org, www.volunteersacramento.org, and www.doviasacramento.org.
- The City also highlights opportunities in its publications such as the Recreation and Community Service Programs Directory.
- Targeted recruitment is done through direct mailings email, phone, and presentations to neighborhood, service and school groups.
- Press releases for special events and announcements through the City-wide Volunteer Coordinator, Council Offices and Neighborhood Services Departments are also successful outreach methods.

A number of these engagement and outreach tools and materials could be used in support of the Robla Creek Stewardship Program. In addition, a list was developed and prioritized as a part of the January 9, 2007 community meeting. That list is included in Appendix 14. According to meeting participants and interviewees, the following outreach and engagement materials would likely best meet the needs of the Robla Creek Stewardship Program:



- Electronic communication, possibly in the form of an E-Newsletter;
- Brochure – a simple, compelling and concise tri-fold brochure;
- Website links to the City of Sacramento’s current website and community and school groups;
- Phone trees; and
- Articles and outreach bulletins in existing community and environmental newsletters.

Recommendations for Material Development

Based upon community response, as noted above, it is recommended that the City, in coordination with its partners and interested community members develop standard formats for the first three items listed above. A template was developed for the e-newsletter, tri-fold brochure, and website under this plan, and is included in Appendix 6. These templates should be finalized and standardized with other City of Sacramento graphics prior to use. In addition, the website template will have to be formatted by a website designer, then published on the web prior to use. The website can either be an independent website, or a link on one of the City of Sacramento's home pages. The Robla Park Community Association has a phone tree for its 300 members, and City staff could work with the Association to post program dates and stewardship opportunities on the Association's website or disseminate through their phone tree. Additionally, as the Robla Creek Stewardship Program grows, a program-specific phone tree could also be developed. The E-newsletter could be disseminated via a printed or an electronic version (or both) to schools and interested environmental and recreation groups as a tool to inform them about program schedules and highlights.

Suggested Content and Distribution

Local schools, colleges, service groups, churches, environmental groups and neighborhood associations provide an ideal structure for newsletter and brochure distribution. Contacts for many of these groups are provided in the appendices to this Plan. The City could initially explore distribution of stewardship program outreach materials through these groups to build awareness and reach potential volunteers. As the program evolves, a separate program specific mailing list would be developed for interested participants. Additionally, flyers and brochures could be posted at schools, local parks, businesses, community centers, libraries and other gathering places.

The following topics were identified for possible inclusion for a brochure and/or E-newsletter during interviews and the January 31 community meeting:

- Summary of natural history and how the landscape has evolved;
- Value of creeks (ecologically and aesthetically);
- Flora & fauna lists;
- Articles that describe seasonal changes within creek corridor;
- Map of local trails and access areas;
- Work party times and dates;
- Contact lists for reporting dumping, water quality issues, etc.;
- Volunteer information and contact lists;
- Contact information for other local community groups;
- Notes regarding other local planning activities and meetings;
- Volunteer highlights and thank you's; and
- Solicitations for donation and community needs.

It is recommended that the City continue to work with interested stakeholders to further refine this list prior to developing a brochure and E-Newsletter, and then develop draft copies for community feedback prior to distribution.

Sample Brochure, Public Awareness Materials & Web Text

Community members were asked to review a broad array of approximately 30 brochures, web designs and newsletter formats, including one that was drafted specific to the Robla Creek

Stewardship Program. They were then asked to select the designs that they felt were most pleasing and effective. Comments were noted and a copy of each of the selected formats is included in Appendix 6. Samples developed specifically for the Robla Creek Stewardship Program are also included in Appendix 6. These samples could be further developed with continued community input and review as a part of the Robla Creek Stewardship Program. Funding to print brochures could be acquired through business or agency sponsors.

Sample Interpretive Signage

All of the participating community members indicated that the development and installation of interpretive signage should be a high priority for the Robla Creek Stewardship Program. It was suggested that a number of signs be installed along the levee trail. The following interpretive concepts were identified during interviews, feedback from City staff and during community discussions.

- Stewardship provides mechanism for community and youth to explore “Nature in the City”;
- The natural areas represent a string of “green pearls” within the City’s parks;
- Protection and restoration of remnant natural areas provides refuge for wildlife;
- Experiencing natural areas provides great recreational values – solitude, exercise, nature viewing etc.; and
- Turning back time – stewardship engages people in helping reduce urban threats to open space.

Again, these concepts can be further developed as a part of the development of the stewardship program. Coordination with other land managers will also need to occur prior to signage installation. Funding to design and fabricate interpretive signage could be acquired by local businesses or agency sponsors.



Self-Guided Brochure

A number of community members and interviewees suggested that the City develop a brochure for a self-guided nature walk along the levee which could also be extended along the new trail on the northern side of the creek following its planning and construction. The self-guided walk could have 10-12 markers that would have numbers or icons correlating to the text in the brochure.

Interviewees suggested that this would be a great learning and outreach tool for schools as well as other interested groups. It was also suggested that perhaps the City could provide volunteer naturalists or students with backpacks that included the brochures to encourage bird watching, plant identification, etc. as the Robla Creek Stewardship Program evolved.

Creating a Community Stewardship Work Plan

The most effective volunteer stewardship programs are those that successfully address both management and community priorities. If programs are built from this foundation, it is often easier to leverage and allocate limited agency funding, build and sustain community involvement and demonstrate tangible shared results. Understanding, integrating and then prioritizing management and community needs can often be a difficult task. City staff often work at a regional level with limited staffing and funding. Priorities are set during the development of an annual work plan and adjusted based upon funding constraints, staffing, and unexpected issues.

Developing clear project prioritization criteria and a transparent evaluation process is considered essential for prioritizing resources and volunteer-based activities for the Robla Creek Stewardship Program. This following outlines both a prioritization process and suggested volunteer activity selection criteria. It also includes a summary of volunteer tasks that could be implemented to achieve the initial anticipated management goals for Robla Creek.

Natural Areas Management Plan Priorities and Recommendations

Currently the City is mapping, assessing and identifying management actions for all of its natural areas. This effort will provide the foundation for the development of a Natural Areas Management Plan. It is anticipated that the Natural Areas Management Plan will be completed in summer 2007. A preliminary assessment of Robla Creek was completed in March 2007 (Hart, pers. comm. 2007). It is anticipated that Robla Creek will rank high in the larger natural areas priorities because it supports some of the greatest wildlife values, wetland functions and hydrologic processes (Hart, pers. comm. 2007). Some of the management actions that will likely be included in the Plan are:

- Control of targeted non-native plant species;
- Revegetation with a diversity of native plant species along the toe of the levee slope where appropriate;
- Re-establishment of a vegetation canopy along the eastern section of the creek in areas that will not affect flood control capacity; and
- Continued removal of garbage from within creek and on levee areas.



The Natural Areas Management Plan will include prescriptions and techniques for performing these and other actions (Hart, pers. comm. 2007).

Evaluating and Prioritizing Actions for Community Participation



Suggested prioritization criteria were shared within community meeting participants on January 31, 2007. These criteria were developed based upon our collective experience prioritizing previous projects throughout the state of California, and on the site-specific conditions noted at Robla Creek. Meeting participants and City staff provided feedback on the suggested criteria and the revised criteria can be found in Appendix 7.

Additionally, the following prioritization process was briefly discussed. It is recommended that this process be adaptively refined based upon the needs of the Robla Creek Stewardship Program. It is envisioned that this process could also be expanded to the larger natural areas program following the development of the Natural Areas Management Plan and other associated community stewardship programs.

The suggested prioritization process includes the following steps. These steps could be modified or augmented to meet the needs of the program:

1. Create a Team Representing Stakeholders and Key Staff Members From Each Land Management Agency.

It is suggested that this team be comprised of the Park Superintendent, the Parks Maintenance Program Coordinator, one or more Park Maintenance Workers (who are supporting natural areas management), a Planning Department representative, a SAFCA and Flood Control District Representative and a community stakeholder who is participating with the Robla Creek Stewardship Program.

2. Synthesize the Natural Areas Management Recommendations Into Task-Oriented and Visual Formats.

Following the completion of the Natural Areas Management Plan, the Park Superintendent or Planning Department representative should synthesize relevant tasks and management actions for Robla Creek into both a tabular and map-based format for the team to review and discuss. Additionally, resource, flood control and access information should be projected on a series of maps to aid discussion.

3. Solicit and Synthesize List of Suggested Projects and Tasks Developed by Community Stakeholders.

A number of projects and tasks were identified by community meeting participants. These should be reviewed by the team and added to the list of potential tasks and management actions where appropriate. Additionally, a mechanism should be developed to document project requests from stewardship program participants.

4. Conduct Team Meeting to Review Prioritization Criteria and Potential Project Tasks and Management Actions.

The team should review and refine the suggested criteria based upon appropriateness and applicability. Once agreement is reached, the potential project tasks and management actions should be evaluated against the prioritization criteria to develop a list of possible project priorities for the fiscal year's work plan as well as future planning.

5. Assess Capacity, Capabilities, and Planning Timeframe, Adjust Projects Accordingly.

Following the development of a prioritized list, it is recommended that a smaller team of City staff

within the Parks Maintenance Division assess the feasibility of including the prioritized list of project tasks and management actions in the Division's annual work plan. This assessment would be based on budgets, staffing, appropriateness for volunteers and other capacities to successfully implement the selected project with available staff, contractors, or both.

6. Gather Any Remaining Technical Data Necessary to Finalize Decisions

As the proposed project tasks and management actions are further refined, technical or planning questions may surface that necessitate additional data collection, community input or planning efforts. Funds and staffing capacity to complete any of these efforts would need to be factored into the prioritization and work plan development process.

7. Prepare List of Project Priorities

Based on the initial list of projects tasks and management actions, capacity, the capabilities and timeframe assessment, and the additional technical data, a list of "final" project priorities should be developed and circulated to team for review and comment.

8. Finalize List of Projects Tasks and Management Actions

After receiving final input from the team, a final list of approved project tasks and management actions that meet project selection criteria is developed and integrated into an annual work plan.

9. Evaluate Which Tasks Can Be Performed By Volunteers

The annual work plan should be reviewed by the Maintenance Worker I supporting the Robla Creek area and the Program Coordinator to determine which tasks are appropriate for volunteers.

Suggested criteria for determining whether or not the tasks are appropriate for volunteers include (but are not limited to):

- Can the activities be performed using tools that are appropriate for volunteers?
- Can the activities be performed safely by volunteers?
- Is their community interest in performing the activities?
- How many volunteers are needed to perform the activity and is there City leadership capacity to train and oversee the volunteers?
- Can the volunteer clearly visualize the impact s/he has made through his/her volunteer contribution?

Suggested Pilot Projects and Program Elements for 2007-2008

Several programs for community members and interested volunteers were scheduled for April 2007 based upon community interest expressed during the public meetings and interviews. A naturalist walk was scheduled on April 18, 2007 and an invasive non-native plant control project (pulling red sesbania) at Robla Creek is scheduled as a part of the 2007 Creeks Week celebration that is sponsored by the Sacramento Urban Creeks Council.

The following pilot projects and program elements are suggested for the planning period 2007 to 2008 (provided that funding is secured to support City staff involvement).

1. The development of the E-Newsletter, brochure and interpretive signage in support of the stewardship program.
2. The development of the community-based Watershed Watch program to monitor and report illegal garbage dumping, graffiti and other activities.

3. The development and implementation of a monthly work day program to implement priority project tasks and management actions.
4. The development of the Adopt-a-mile (park) program for Robla Creek, which would include outreaching to local businesses, property management groups and neighborhood associations.
5. An assessment of possible school/college partners who could become regular stewards of the area. This would include the development of a service learning component to the program.
6. The continued participation in Creeks Week and the development of one or more other special events that could further link and address priorities articulated by local community members

Suggested Partnerships for 2007-2008

It is recommended that partnerships with the following organizations be explored during the planning period 2007 to 2008. The recommendations are based upon anticipated level of interest, compatibility with the stewardship program’s objectives, and proximity to Robla Creek.

1. Sacramento Urban Creeks Council
2. Robla Neighborhood Association
3. Grant Union Joint High School District
4. Norwood Junior High School
5. American River College



Special Considerations

Liability Issues

The City of Sacramento has its own liability forms for volunteers participating in City-sponsored activities. The Short-Term Volunteer Information and Agreement form is located in Appendix 10. All volunteers are also covered by the City Workers Compensation policy. Participating youth are required to have permission forms signed by a parent (or guardian) prior to participation. This form is also found in Appendix 9.

All volunteers who access the area via the levee road will also be required to complete a Temporary Use and Hold Harmless Agreement provided by SAFCA (Appendix 9).

The City also has collaborative agreements with some participating volunteer groups such as Americorps’ NCCC programs or volunteer matching agencies such as the Volunteer Center of Sacramento which address liability issues.

Access Needs and Possible Permit Requirements

Currently much of the creek habitat where volunteers would likely remove invasive non-native plants is fenced. These fences are for cattle control (the area is currently grazed to assist with rangeland weeds). A preliminary discussion with SAFCA indicates that installing gates to facilitate volunteer access should not be an issue, however they would need to remain locked and funding would be identified for gate installation (van Riessen, pers. comm., 2007).

Permits may also be required for some of the volunteer stewardship activities. Table 1 in Appendix 8 correlates possible volunteer stewardship activities with potential permit requirements. It is recommended that City and SAFCA staff review and revise this table following the completion of the Natural Areas Management Plan. Permits will likely be required for the implementation of Natural Areas Management Plan, and permit requests should also include volunteer-based activities.

Rollover Funding

It is conceivable that the Robla Creek Stewardship Program will receive funding from a variety of sources including corporate donations, grants, philanthropic gifts and government funds. Donations will likely come from the Adopt-A-Park program once it is initiated. Currently the City budgeting process does not allow for the rollover of donated funds across fiscal years, which could be problematic if the donated funds have not all been spent. Therefore it will be important to establish a budgetary mechanism that allows for the accumulation of donated funds over a period of more than one fiscal year.

One possible alternative would be to explore the feasibility of fiscal sponsorship for the Robla Creek Stewardship Program through Gifts to Share Inc. Gifts to Share, Inc. is a nonprofit organization supporting the City of Sacramento's park, recreation, cultural, educational and neighborhood improvement programs and facilities, and those of its partners. Director Lori Harder suggested that when the Robla Creek Stewardship Program has evolved to the point that a fundraising plan has been developed, and two people (volunteers and/or staff) have been identified to undertake responsibility for both fundraising and authorizing, or making recommendations, on the expenditure of the funds (can include a fund transfer or reimbursement to City operating budgets), then a fiscal sponsorship application should be completed for review and approval.

Evaluation Measures

It is recommended that several evaluation measures be developed to assess whether or not

- the work plan goals are being achieved;
- projects are appropriate for volunteer participation;
- volunteer satisfaction is high; and
- project tasks are age-appropriate.

This will be important during the early development of the program to help guide and strengthen the program as volunteer participation increases. It will also be critical for understanding which activities are best suited for volunteer participation and which are better suited for staff or contractors. These assessment measures may also be needed for acquiring grant funding.

Long-term Program Development



Following their inception, natural area stewardship programs typically require 5-7 years to reach equilibrium when budgets, staffing needs and community needs and expectations are adequately understood. This is provided that the program goals and scope are clearly defined, and that program growth and content is consistently evaluated and findings are adaptively integrated. This period allows for community leadership and participation to mature and

for an appropriate program structure to develop.

This section provides background information on other natural area stewardship programs, specifically those linked to municipalities that have evolved over the past 20 years. It outlines surveys and program contacts that can be used to further inform the City of Sacramento's natural areas program development, and when available, program goals, staffing requirements and funding requirements for those programs.

Following this are suggestions for a program structure for the Robla Creek Stewardship Program, and the anticipated budget.

National Review of Stewardship and Natural Area Programs in Cities

In 2004, the City of Ann Arbor (Michigan) undertook a comprehensive survey of local natural areas programs around the country. This survey gathered basic information about urban natural area programs within the United States and Canada, with the goal of creating a comprehensive list that could be used as a foundation for networking between programs. The survey covered 54 of the most developed and active programs known at that time (note: other natural area and stewardship programs have developed since 2007) Forty-one of the 54 programs responded to the survey. Table 2 includes the cities supporting the largest programs at that time.

City	Population (2004)	Year Established	Program Name
New York, NY	8,000,000	Unknown	Natural Resources Group
Chicago, IL	3,000,000	2001	Nature Areas
Toronto, ONT	3,000,000	1998	High Park Woodland Restoration Program
Miami Dade, FL	2,253,362	1990	Natural Resources Management
San Diego, CA	2,000,000	1989	Park Ranger Program
Philadelphia, PA	1,500,000	1997	Natural Lands, Restoration and Environmental Ed. Program
Phoenix, AZ	1,472,930	2000	Natural Resources Division
Calgary, ALB	900,000	2000	Natural Area Management Section
San Francisco, CA	750,000	1997	Natural Areas Program and Presidio Natural Resources

Toledo, OH	750,000	2000	Metropolitan Park District Land Management Division
Indianapolis, IN	700,000	1991	Land Stewardship
Albuquerque, NM	598,000	1984	Open Space Management
Washington, DC	572,000	1978	Natural Resource Management/Non-native Plants
Nashville, TN	570,000	2004	Natural Areas Program
Portland, OR	520,000	1988	Natural Areas Program
Boston, MA	500,000	2001	Urban Wilds Program

Source: City of Ann Arbor, MI, 2004 *Note that not all of the programs covered in the Ann Arbor survey are purely local government operated, some are state or non-governmental efforts*

While each of the above programs have varying objectives and management priorities, the majority include volunteer engagement, long-term stewardship activities, the removal of non-native invasive weeds, revegetation with native plants, trail construction and management and habitat restoration. A number also include natural area beautification projects such as the installation of site amenities such as kiosks, interpretative signs and benches.

The survey also presents comparative annual budget information for the programs (which include capital and programmatic costs, however these were not differentiated during the study). Annual budgets of the responding programs ranged from \$5.6M (Phoenix) to less than \$50,000 (numerous programs). The annual budget per acre under management ranged from \$4,500 (Chicago) to less than \$100 (numerous programs). The study did not identify specific habitat restoration and volunteer stewardship program activities and goals therefore it is difficult to determine actual costs that can be transferred specifically to the City of Sacramento's natural areas program as a whole, and Robla Creek specifically. The study however, does provide a foundation document, benchmarks and contacts to Parks and Recreation staff to help guide the future development of a natural areas stewardship program for the City of Sacramento.

Below is a brief listing of several natural areas and stewardship programs, their program focus, estimated annual costs and contact information. These programs are either operated by municipalities or have similar program and volunteer engagement goals, and may provide excellent references for City of Sacramento staff during future program development.

Other Local Program Structures and Costs

San Francisco Natural Areas Program

The San Francisco Natural Areas Program manages the 31 natural areas found primarily in the central and southern portions of the City of San Francisco. The diversity of natural areas range in size from less than 1 acre to almost 400 acres, and collectively cover approximately 1,100 acres. The program has an annual budget of \$1.07M and ten full-time staff, including one program supervisor, one volunteer coordinator, and eight gardeners (with specific resource management skills). The program was formerly established by the Recreation and Parks Commission in 1995 through the encouragement of local non-profit, environmental and community groups, and last year engaged

more than 12,000 hours of volunteer support. The program is operated under the San Francisco Recreation and Park Department. The program's mission is twofold: to preserve, restore, and enhance natural areas, and to develop and support community-based site stewardship of these areas.

City of Boston, Urban Wilds Initiative

The Urban Wilds Initiative is organized under the Boston Parks and Recreation Department. Forty city-owned natural areas, containing over 250 acres of open space are managed under the Initiative. The city is currently developing an Urban Wilds and Natural Areas Management Plan, which will be a comprehensive master plan to guide activities for natural area site management, program development, and administration.

Program elements include basic litter pick-up; vegetation management (weed removal, tree pruning, habitat restoration); trail maintenance; signage installation and monitoring; graffiti abatement and fence installation and repair. Currently the City is developing administrative, fiscal, and programmatic resources to ensure on-going, long-term maintenance and management of city-owned urban wilds and other natural areas.

Volunteer stewardship is an integral component of the Initiative and the City has already established a long-term partnership with EarthWorks, a local nonprofit organization that raises funds and organizes volunteers for restoration efforts in the natural areas. Partnerships with non-profit organizations such as the California Native Plant Society, Audubon and Earthworks may also provide a strong volunteer core for Robla Creek and other natural areas in Sacramento.

City of Philadelphia, Fairmount Park Environment, Stewardship and Education Division

The Fairmount Park Commission (FPC) manages the Fairmount Park system, which is comprised of 63 regional and neighborhood parks throughout Philadelphia, Pennsylvania. The Environment, Stewardship and Education Division undertakes environmental restoration activities throughout the 9,200-acre park system, primarily on the 5,600 acres of natural lands in the system's seven largest watershed and estuary parks. From 2000 through 2006, the city completed a number of contracted restoration projects at over 300 sites (316 acres total), many of which engaged volunteers and community groups. These projects have included planting trees and other native vegetation; stream channel restoration; erosion repair; and invasive plant control.

Portland Metro, Natural Areas Program

The Portland, Oregon region supports one of the most successful and ambitious natural areas and volunteer stewardship programs in the country. Metro is a regional government agency that has jurisdiction over the 25 cities in the Portland metropolitan area. The agency addresses regional issues such as land use planning and watershed management. In November 2006, voters in the Metro area passed a \$227.4 million bond measure devoted to acquiring and restoring natural areas throughout the region. The bond measure is



designed to preserve natural areas and protect rivers and streams at the regional, local and neighborhood level: The 2006 natural areas bond measure includes a \$15 million capital grants program to fund neighborhood projects. The purpose of the Nature in Neighborhoods capital grants program is to provide opportunities for the community to actively protect fish and wildlife habitat and water quality near where people live and work. The program will engage schools, community groups, non profit organizations, park providers and others in neighborhood projects that benefit nature.

The 2006 bond measure was modeled after a 1995 \$135.6 million bond measure with a similar focus, which enabled government agencies to acquire approximately 8,000 acres and fund over 100 local projects.

Seattle - King County, Open Space System

King County (containing Seattle) Parks and Recreation Division manages approximately 16,000 acres of active (Parks) and passive (Natural Resource Lands) recreation areas, with more than 8,000 acres managed as a part of the Natural Resource Lands program. Volunteer stewardship has grown significantly in this area during the past decade, with a larger number of friends of and watershed groups providing support in habitat restoration and park beautification projects. Volunteers are managed under non-profit affiliate organizations, City and County programs and through augmented leadership provided by programs such as Americorps.

In 2004, the county developed the King County Open Space System plan and has been developing individual site management and maintenance plans, although recent budget constraints have limited progress. Regarding funding, a local tax was passed in 2003 and generated funds were estimated to begin at \$11.5 million in 2004 and increase to approximately \$12.2 million in 2007. It is estimated that these funds comprise roughly half of the total annual budget needed to operate and maintain the open space system.

The American River Parkway Foundation/Sacramento Weed Warriors

In 1997, Sacramento Area Flood Control Agency (SAFCA) in partnership with County Parks contracted with Eva Butler and Associates to develop the American River Parkway (ARP) Invasive Plant Management Plan (IPMP). The Sacramento Weed Warriors (SWW)³ under the initial guidance of Eva Butler, conducted several pilot weed management projects during that early planning effort, which was completed under in 2000. Tasks under the IPMP were broken into several phases, with Phase I removing five of the most invasive non-native plant species within the floodplain of the ARP. In 2002, the SWW received funding through grants secured by SAFCA and Sacramento County Parks to conduct components of the Phase I IPMP implementation. Following the completion of Phase I, the American River Parkway Foundation was identified as the leading organization to receive Phase II funding. The Foundation worked with the SWW to create a more sustainable volunteer engagement and management structure, employing a volunteer coordinator to build a sustainable volunteer base in partnership with the SWW program. The program continues to sustain weed removal efforts and currently supports tree planting and other priority habitat restoration programs identified by the County and SAFCA. The annual budget is below \$250,000, and the program engages more than 36,000 hours of volunteer support.

³ The SWW is a volunteer-based collaborative focused on the control and removal of invasive non-native plants throughout the Sacramento community. The program was founded by Eva Butler.

The American River Parkway Foundation also provides a mechanism for community members and groups to adopt (both financially and through community service) one-mile sections of the parkway.

Site Stewardship Program – Golden Gate National Parks Conservancy, Golden Gate National Recreation Area, San Francisco, California.

The Site Stewardship Program was created in 1993 to bring people together to protect and restore ecologically sensitive areas within the Golden Gate National Parks. The program focuses its efforts on four high priority park sites (approximately 3,000 acres), all of which support endangered species. Volunteers and students actively restore native species, habitats and natural processes, thereby actively becoming part of the stewardship solution.

The program is operated by the Golden Gate National Parks Conservancy (non-profit association in support of the Golden Gate National Recreation Area), and has an annual budget of approximately \$280,000 and three full-time staff, including one program director, one volunteer coordinator, and one restoration ecologist. The program also employs 4 full-time interns.

Summary

As identified in Table 2 and the discussion above, natural area programs are growing in popularity in urban jurisdictions as both communities and municipalities recognize the value of remnant historic ecosystems and undeveloped parkland. Some of the above programs have developed organically through community interest and advocacy, others have responded to regulatory requirements and some have followed many different pathways in establishing overall program goals, system-wide practices, and park-specific work plans. This is important to consider when determining the best natural areas and stewardship program structure for Sacramento. Success will hinge on continued communication with invested community groups, adaptive management based upon program evaluations and adequate funding to meet community and management goals. Additionally, the program may change when large capital projects are implemented, or following the amelioration of initial resource threats.

Below is a suggested program structure for the Robla Creek Stewardship Program.

Suggested Program Structure and Staffing

Currently the Parks Maintenance Division has one volunteer coordinator who responds to local community and youth volunteer requests; provides training and oversight for long-term volunteers and interns; organizes group and youth work days; coordinates staff and volunteers in support of special events; develops systems and volunteer management policies and procedures consistent with the larger City's programs and manages all of the volunteer program's operational and budget requirements. Additionally, the volunteer coordinator works in partnership with other park maintenance staff to deliver volunteer programs. The current park's maintenance volunteer program has already received more than 20,000 hours of support in fiscal year 2007 (without active recruitment), and continues to grow annually (Mier, pers. comm., 2007).

The development of a natural areas stewardship program provides numerous new opportunities for further volunteer participation. It is anticipated that the Robla Creek Stewardship Program alone could draw an additional 5,000 – 10,000 hours of support depending upon the diversity of programs

offered and partnerships cultivated. This number could significantly expand if volunteers are integrated into the beautification and management of other natural areas.

On-site management and leadership of volunteers is critical to the natural area stewardship program's success. Currently, park maintenance staff provides considerable on-site leadership for volunteer projects within the park's district. At present however, only a few of the staff have experience working with natural areas management, and none are conducting management activities within the City's natural areas (Giammona, pers. comm., 2007). Maintenance staffing and training would also need to increase to support the development and growth of a natural areas stewardship program (Giammona, pers. comm., 2007).

Given this, it is recommended that the following steps be taken to support the implementation of the Robla Creek Stewardship Program. This can be further expanded to meet the needs of the larger natural areas program following the Robla Creek pilot.

1. A **Program Coordinator** should facilitate the volunteer recruitment, coordination and management for the Robla Creek Stewardship Program. This person will be responsible for working closely with key community stakeholders to develop and facilitate a tiered program structure that can be developed over the next 3-5 years. This will include targeting audiences and implementing program elements as described within this Plan. It is suggested that the position be a full time position that initially focuses approximately 16 hours/week in support of the Robla Creek Stewardship Program for the first two years, and supports the large Park Maintenance Division volunteer program needs with the remaining time. The position would reside within the Parks Maintenance Division.
2. The new Program Coordinator should work for a **Program Supervisor** (currently not a staff position) within the Division. This position will be critical to managing all of the Division's growing volunteer programs, ensuring that the appropriate systems, training and policies are in place, and initiating the implementation of the Adopt-a-Park program. The Program Supervisor will also assume the responsibility of evaluating the pilot natural areas program and adapting the program structure and budget to meet the needs of the larger natural areas program.

Given the current responsibilities, skills and expertise of the current Program Coordinator (Julie Mier), it is recommended that she assume the role of Program Supervisor and that the proposed part-time Program Coordinator position identified above assume some of her current job responsibilities, or a second coordinator position be hired.

3. As the stewardship program grows, a new **Park Maintenance Worker with Qualified Applicator's Certificate** should be assigned part-time (8-12 hours/week) to provide on-site stewardship program support and volunteer program leadership at Robla Creek. This position would work closely with the new Program Coordinator and Natural Resource Specialist to facilitate and deliver community programs and address maintenance and natural area management priorities. The staff person would also provide broader natural areas management support within the larger respective park maintenance management zone. This position is currently not filled, and could be filled by either an existing park maintenance worker who has experience in natural areas management or by a newly hired staff person.

It is also recommended that a Park Maintenance Worker with a Qualified Applicator's Certificate with natural areas management experience (see competencies below) be hired for each park maintenance management zone to work on priority management actions identified in the soon to be completed Natural Areas Management Plan.

4. The **Natural Resource Specialist** position (formerly held by Amy van Riessen) should be filled. This position will be critical in working collaboratively with the Parks Maintenance Division to develop site-specific natural area plans; ensure compliance and regulatory permitting requirements are met; facilitate community engagement, meetings and support in developing other natural areas stewardship plans; and working with other planning staff on issues such as how best to integrate natural and urban landscape planning, visitor and equestrian access, circulation patterns, etc.. The position will also be critical in working with the new Program Supervisor to develop partnership agreements and Memorandums of Understanding/Agreement when necessary. The Natural Resource Specialist must have a strong background in ecological restoration and open space management.

Assessment of Staff Skills and Competencies

This section outlines specific skills and competencies of the Program Coordinator, and Parks Maintenance staff members should possess in support of the Robla Creek program. It does not address the Program Supervisor or Natural Resource Specialist positions as the current skills and competencies required by the positions will meet the natural areas program management needs. These additional skills and competencies should be articulated in the recruitment announcements for the positions.

Program Coordinator:

Additional Qualifications:

- Knowledge of local ecology, natural history or habitat restoration activities

Additional Abilities:

- Develop and deliver basic training programs;
- Prepare presentations for community groups and meetings;
- Engage in strenuous physical activity, including periods of standing, walking, climbing, and lifting and carrying heavy objects; and
- Facilitate volunteer program and project planning

Additional Experience and Education:

- Successful completion of college level courses (minimum twelve (12) units) in environmental science, natural resources, biology, or other related field; and
- One year of successful coordination for resource or park-based volunteer program.

Parks Maintenance Worker with Qualified Applicator's Certificate:

Additional Qualifications:

- Knowledge of local ecology, natural history or habitat restoration activities
- Knowledge, or ability to learn local native and invasive non-native flora
- Knowledge of integrated pest management principles and applications

Additional Abilities:

- Lead volunteer and youth programs in natural area settings;
- Engage in strenuous physical activity, including periods of standing, walking, climbing, and lifting and carrying heavy objects;
- Learn and identify targeted weeds and weed removal techniques and tools used in natural areas;
- Ability to successfully meet the requirements and pass the test to obtain a pesticide applicators license; and
- Document work completed (e.g. volunteer hours, weeds removed, etc.)
- Speak before groups (primarily volunteer groups)

Position Descriptions

The existing City of Sacramento position descriptions with the inclusion of the recommendations above will meet the program staffing needs. These position descriptions are included in Appendix 10. Appendix 10 also contains a list of typical duties performed by the Natural Resources Specialist which should be used as a foundation for developing that position description.

Work Plan Development

It is anticipated that the Natural Areas Management Plan (currently under development) will identify and prioritize tasks and management actions for each identified natural areas. Following the development of the Natural Areas Management Plan it is anticipated that prioritization process (as proposed earlier in this document) would be undertaken to develop a work plan for Robla Creek. It is recommended that the natural areas-based Park Maintenance Worker with a Qualified Applicator's Certificate and the new Program Coordinator participated in the development of the work plan to identify potential volunteer projects (see example work plan in Appendix 11). The prioritized work plan would serve as a tool for volunteer recruitment, placement and communicating shared expectations and goals with local community stakeholders. It could also be used for budgeting and possible fundraising (e.g. funds from the Adopt-a-Park program could be used to support these priorities).

The Program Coordinator would continue to work with key community stakeholders to also prepare/revise a list of priority tasks, some of which are included early in this document. The compilation of these tasks would be reviewed through the previously described prioritization process on an annual basis.

Anticipated Budget and Costs

The Robla Creek Stewardship Program is integrally linked to the Natural Areas Program, therefore, developing a separate budget solely for Robla is difficult. For example, a maintenance worker may be needed only a few hours on Robla, but will cover an entire jurisdiction or specific zone maintenance unit of the Natural Areas Program. Therefore, this section presents BOTH the budget for the entire Natural Areas Program, and also notes the incremental budgetary line items that the Robla site would add to the overall Natural Areas Budget.

This section is intended to provide the City of Sacramento with a working budget and conceptual task and staffing descriptions sufficient to support the City's efforts to re-organize, staff, and fund the encompassing Natural Areas Program. At present, the City has a very successful Volunteer Coordinator position. Based on the anticipated rise in volunteer hours from implementation of the

Robla Creek Stewardship program, as well as similar stewardship programs and habitat restoration efforts at other City parks that will be described in the future Natural Areas program, we believe it would be in the best interest of the City to proactively re-allocate job responsibilities from the Volunteer Coordinator to a full-time Program Supervisor, a part time Program Coordinator, a Natural Resource Specialist, and several Parks Maintenance Worker with a Qualified Applicator's Certificate positions that would serve various management zones within the Natural Areas Program. These positions will each fulfill some staffing needs at Robla Creek, but it is important to note that the Robla Creek Stewardship Program, in and of itself, would not justify the need to staff and fund the new positions.

This section therefore outlines a one-year and five-year budget for the Natural Areas Program, and then provides the incremental budgetary amount attributed to the Robla Creek Stewardship Program. Refer to Appendix 12 for detailed cost estimates for the one and five year programs. The budgets should be re-evaluated by City staff following the completion of the Natural Areas Management Plan. The budget is designed to serve as a template and foundation for developing a sustainable natural areas stewardship program.

Appendix 12 outlines a one-year budget for the roll-out of the Robla Creek Stewardship Program and the first year staffing costs for the implementation of the Natural Areas Management Plan. It is anticipated that the initial roll-out of the program will be more expensive than costs for subsequent years of the program. The Year one costs for the Natural Areas Program is estimated at \$454,652, of which the Robla Creek Program would cost \$97,056.

Appendix 12 also includes a five-year budget for Natural Areas Management that would follow behind their initial roll out of the program. It is anticipated that the Natural Areas Program will cost an average of \$617,546 per year (after the initial roll out year described above) for a total 5-year program cost of \$3,087,731, of which the incremental cost of the Robla Creek Stewardship program costs \$194,869.

Possible Funding Sources:

Although at first glance the cost of the Natural Areas Program appears relatively large, there are several funding sources that could offset some, or all of the expense of the program. Each of the funding sources described in Appendix 13 have different requirements and funding cycles, therefore, it is prudent for the City of Sacramento to engage the services of a professional grant writer or funding solicitor to assist with securing necessary funds. Some funding sources require a private or federal match, while others will not fund staff or management activities, but rather focus on specific projects. The process can be complicated, however it can and has been successfully undertaken by a variety of other non-profit agencies, Cities, and Counties, and is a very real possibility to fund some or all of the larger Natural Areas Program and the Robla Creek Stewardship Program.

Appendix 13 lists possible funding sources that could be explored to fund natural area restoration and invasive species-based stewardship projects. Appendix 13 does not include potential business donations (see Appendix 4 for potential businesses to solicit funds from) and funding opportunities from the Adopt-a-Park Program or potential philanthropic gifts. Additionally, Appendix 13 does not include potential funders such as REI, the Stewardship Council, Oracle or other businesses that are already previously identified in this document.

Staff and Volunteer Training

The City has both a volunteer orientation and training program and a professional development program where staff can take training courses through City University. Additional training courses associated with natural areas management should be developed to build staff and volunteer capacity. These courses could include (but are not limited to):

- Native plant and weed identification
- Weed control techniques
- Leading volunteer activities in natural areas
- Water quality monitoring
- Native plant seed collection and revegetation
- Natural history of the Sacramento region
- Interpretive training and public speaking for volunteer program delivery

Appendix 15 includes a training syllabus and materials used for a training scheduled for May that will introduce park maintenance staff to working with volunteers in natural areas and stewardship-based projects.

References

(Note: need to add stewardship references)

Area West Environmental. 2005. Delineation of Waters of the U.S. for the Ueda Parkway Project, Sacramento County, California. Prepared for City of Sacramento Department of Parks and Recreation.

EDAW. 2003. Rio Linda Creek Conservation Area Management and Maintenance Plan (RLCCAMMP). Prepared for SAFCA on October 28, 2003.

EDAW. 2004. Mitigation and Monitoring Plan for the Magpie Creek Diversion Channel Enhancement Project. Prepared for SAFCA.

EDAW. 2005. North Area Raptor Nest Locations. Map.

Foothill Associates. 2003. The Dry Creek Parkway Recreation Master Plan. Prepared for County of Sacramento Regional Parks, Recreation and Open Space Department.

Foothill Associates. 2004. Dry Creek Greenway Regional Vision. Prepared for Pacer County Planning Department.

SAFCA. 2005. Rio Linda Creek Conservation Area 2004 Monitoring Report

SAFCA. 2006. Rio Linda Creek Conservation Area 2005 Monitoring Report

Teddy, K. 2005. Robla Creek Enhancement Plan. A Senior Project/Thesis Presented to the Faculty of the Landscape Architecture Program at the University of California, Davis.

Appendices

Appendix 1 – Schools Located Within the Vicinity of the Robla Creek Study Area & Contact Information For Interested Administrators & Teachers

Appendix 1: Schools Within Two Miles of the Robla Creek Community Stewardship Program Area & Interested Administrators and Faculty

SCHOOL NAME	ADDRESS	CITY	ZIPCODE	PHONE (916)	SCHOOL DISTRICT	ENROLLMENT
Grant West High School	1221 South Ave	Sacramento	95838	286-1200	Grant Joint Union High School	2156
Del Paso Heights Elementary School	590 Morey Ave	Sacramento	95838	641-5304	Del Paso Heights Elementary	556
North Avenue Elementary School	1281 North Ave	Sacramento	95838	925-1330	Del Paso Heights Elementary	337
Natomas Park Elementary School	4700 Crest Dr	Sacramento	95833	928-5234	Natomas Unified	1049
Bell Avenue Elementary School	1900 Bell Ave	Sacramento	95838	922-0202	Robla Elementary	415
Glenwood Elementary School	201 Jessie Ave	Sacramento	95838	922-2767	Robla Elementary	418
Main Avenue Elementary School	1400 Main Ave	Sacramento	95838	929-9559	Robla Elementary	320
Robla Elementary School	5200 Rose St	Sacramento	95838	991-1006	Robla Elementary	425
Taylor Street Elementary School	4350 Taylor St	Sacramento	95838	927-5340	Robla Elementary	497
Natomas Charter 19 Charter School	4600 Blackrock Dr	Sacramento	95835	928-5353	Natomas Unified	1046
Garden Valley Elementary School	3601 Larchwood Dr	Sacramento	95834	641-5333	Del Paso Heights Elementary	420
Michael J. Castori Elementary School	1801 South Ave	Sacramento	95838	263-8355	North Sacramento Elementary	570
Discovery High School	3401 Fong Ranch Rd	Sacramento	95834	928-5200	Natomas Unified	141
Grant Union High School	1400 Grand Ave	Sacramento	95838	286-1000	Grant Joint Union High School	2156
Norwood Middle School	4601 Norwood Ave	Sacramento	95838	649-6600	Grant Joint Union High School	656
Vista Nueva Career and Technical High School	2035 North Ave	Sacramento	95838	286-1100	Grant Joint Union High School	262
Slavic Gospel Private School*	4659 Dry Creek Rd.	Sacramento	95838	952-9680	N/A	41
Regency Park Elementary School	5901 Bridgecross Dr.	Sacramento	95835	566-1660	Rio Linda Union Elementary	441
Gospel Assembly Christian Academy*	1541 Jessie Ave.	Sacramento	95838	920-5830	N/A	9
Rio Linda Elementary	631 L St	Rio Linda	95673	991-3182	Rio Linda Union Elementary	336
Rio Linda Jr. High School	1101 G St Rio Linda	Rio Linda	95673	286-1601	Grant Joint Union High School	589
Rio Linda High School	6309 Dry Creek Rd	Rio Linda	95673	286-4500	Grant Joint Union High School	1918

***Private Schools**

Contact information for interested educators/administrators

Sue Robbins, Program Assistant
 Educational Options Department
 Grant Joint Union High School District
 5201 Arnold Avenue
 McClellan, CA 95652
 916-643-9891
 916-643-9893 Fax

Randy Orzalli
 Education Programs Director
 Grant Joint Union High School District
 5201 Arnold Avenue
 McClellan, CA 95652
 916-643-9891
 916-643-9893 Fax

Roxanne Mitchell
 Principal
 Norwood Junior High School
 4601 Norwood Ave.,
 Sacramento, CA 95838
 916-649-6617
 916-649-6696 Fax

Brian Gillespie
 Jennifer Neale, PhD
 Dept of Natural Resources & Biology
 American River College
 4700 College Oak Drive
 Sacramento, CA 94581
 916-484-8183

Appendix 2 – Local Interest Groups Who Have An Interest In Robla Creek Stewardship

Appendix 2. Robla Creek Other Possible Local Interest Groups - Contact List

Organization	Phone	Contact Person	Title	E-mail Address	Mailing Address
Special Interest					
CNPS of Sacramento Valley	(916) 213-4682	Frank Wallace	Habitat Enhancement Chair	frankw2@pacbell.net	
Community Service					
Rotary of North Sacramento	916-925-2787	Katie Sisay	Community Relations Chair	jlemmon@lawtml.com *** needs to be updated	
Kiwanis		General E-mail		arkiwanis@yahoo.com	
Rotary of Sacramento	(916) 721-1400	D.Timothy Pinkney	Director, Service & Outreach		
Junior League-Sacramento	(916) 921-1096	Shannon Young	President	shannoneyoung@comcast.net	778 University Ave, Sacramento, CA 95825
Sacramento Millenium Lions Club	(916) 396-7363	Rose Ochoa	Secretary	roseochoa1@yahoo.com	P.O. Box 661223 Sacramento, CA 95866-1223
Sacramento Elks Club	(916) 422-8351	Marilyn Facha	Facility Coordinator		
Sacramento Region Community Foundation	(916) 921-7723	Arlene Wilson-Grant	Field of interest Grant Coordinator	arlene@sacregcf.org	740 University Avenue, Suite 110 Sacramento, CA 95825
Professional Organizations					
Association of Professional Landscape Designers		Shilo Nielsen	Secretary, Sacramento District	elegantharvest@directcon.net	

**Note this list augments groups that are currently listed within the Stewardship Plan

Appendix 3 – Churches Located within the Vicinity of the Robla Creek Study Area

Appendix 3. Churches and other Religious Groups

Organization	Phone	Contact Person	Title	E-mail	Address
Slavic Independent Fund Baptist -	(916) 921-5910				4649 Dry Creek Rd, Sacramento, CA 95838
Macedonia Baptist Church	(916) 929-8755				700 Benton Ave, Sacramento, CA 95838
Church of Christ North	(916) 923-1147				4191 Norwood Ave, Sacramento, CA 95838
Allen Chapel AME Church	(916) 922-5077				1239 Grand Ave, Sacramento, CA
Unitarian Universalist Society of Sacramento	483-9283 x 202 (916) 921-5910	David McMorris	Business Admin. Office		2425 Sierra Blvd. Sacramento, CA 95825
Slavic Independent Fund Baptist	(916) 925-6791				4649 Dry Creek Rd, Sacramento, CA
Church of Christ	(916) 920-2449				4042 May St, Sacramento, CA
St Peter's Chapel Spiritual Church	(916) 928-0599				3736 Rio Linda Blvd, Sacramento, CA
St Peter's Chapel Spiritual Church	(916) 925-6803				1419 N Market Blvd # 5, Sacramento, CA
Del Paso Church of God	(916) 927-5934				4039 Balsam St, Sacramento, CA
Peace Lutheran Church	(916) 927-9091				924 San Juan Rd, Sacramento, CA
Christian Life Family Worship	(916) 920-8079				4350 Raley Blvd, Sacramento, CA
Bible Way Overcoming Church					3947 Rio Linda Blvd, Sacramento, CA

Appendix 4 – Potential Businesses and Business Affiliations That Could Provide Support

Appendix 4. Potential Business Partners- Contact List

Business Name	Phone #	Fax #	Address	Email	Contact Person
ADI	916-929-8700		709 Del Paso Road Sacramento, CA 95834		Michele Naphone
AKT Development Corporation	916-383-2500		7700 College Town Drive Sacramento, CA 95826		Nicki Don
Angie's Gift's	(916) 923-5262		2411 Northgate Blvd, Sacramento, CA		Angie Lee
Badger John's Huntin' Stuff	(916) 489-1022		2633 El Camino Ave, Sacramento, CA		John Barrett
Bag King	(888) 655-2247		725 Del Paso Rd # W, Sacramento, CA 95834		Jeff ____ (they refused to give his last name)
Balloon Creations by Carolyn	(916) 928-0881		4741 Pell Dr # 5, Sacramento, CA		
Barnes & Noble Booksellers Natomas	(916) 285-0387		3561 N Freeway Blvd, Sacramento, CA		Neil Marubashi
Bell Aqua by Ultimate Water Sports	(916) 991-9100		5845 Dry Creek Rd, Rio Linda, CA 95673		Dave ??? (Service Manager)
Blaine Tech Services	(916) 925-2913		4731 PELL DR #5 SACRAMENTO, CA 95838		Josh Kerns (regional manager)
Budweiser	Couldn't find contact information for this company				
Buzz Oates	916-381-3843		8615 Elder Creek Road Sacramento, CA 95828		Philip Oates (charity manager)
Capitol Lighting Plastics	(916) 564-2788		271 Opportunity St # C, Sacramento, CA		Collin Millard
Carpet Pros	(916) 646-9200		834 Striker Ave, Sacramento, CA		Zhenouf Azimi
CGRS Inc.	(916) 991-1100		5444 DRY CREEK RD SACRAMENTO, CA 95838		David Channey
Champs Sports	(916) 649-1389		1689 Arden Way, Sacramento, CA		Rob Barberson
Clark Pest Control	800-936-3339				Joe Clark (corporate owner)
Comtech	916-568-7800		120 Main Avenue Sacramento, CA 95838		Bob Dowdle
Consolidated Western Construction	(916) 921-4900				Charlene Noyer
Creative Design Interiors	(916) 641-1121		737 Del Paso Rd, Sacramento, CA		
Double D's Florist & Gifts	(916) 992-1824		727 M St., Rio Linda CA		? she seemed interested...
EBARA	916-920-5451		51 Main Avenue Sacramento, CA 95838		
Frys Electronics Inc.	(916) 286-5800		Manuel Valerio/ Community Relations Manager/ Fry's Electronics, Inc/ 600 E. Brokaw Rd/ San Jose, CA 95112		Manuel Valerio
Fry's Farm and Feed Supply	(530) 628-5335				Steve Bailey

Business Name	Phone #	Fax #	Address	Email	Contact Person
Gleason's Industries	1 800 488-3471	916-563-7666	Corporate Office: 3013 Douglas Blvd./ Suite 230/ Roseville, CA 95661		?
Granite Construction Company	916-855-4495		4291 Bradshaw Road Sacramento, CA 95827		Rachelle Burton
Ibex-Integrative Business Environment Inc	(916) 564-5799		1562 Juliesse Ave # Q, Sacramento, CA		
Iwe Sports	(916) 646-3474		4221 Northgate Blvd # 4, Sacramento, CA 95834		Anthony Wong
Java City	(877) 528-2248		Java City / c/o Donations Department / 1300 Del Paso Road / Sacramento, CA 95834		Donations Department
Jones and Stokes	(916) 737-3000		2600 V St Sacramento, CA 95818		Terra Nance
Kraft	Couldn't find contact information for this company				
L & M Pacific, Inc.	(916) 922-5556		1900 RAILROAD DR SACRAMENTO, CA 95815		
Lions Gate Hotel And Conference Center	916 640-0814				
Modern Waste Solutions Inc	(916) 447-6800		1636 KATHLEEN AV #A SACRAMENTO, CA 95815		Landon Goodman
Platt Electric Supply Inc	(916) 928-0929		4201 S Market Ct, Sacramento, CA		Harvey Platt
REI	(916) 924-8900		1790 Expo Parkway		Larry Mesa
SASCO	916-830-3780		135 Main Avenue Sacramento, CA 95838		
Shaw Environmental, Inc.	916-565-4358		1326 North Market Blvd. SACRAMENTO, CA 95834		Charles Medsing
Sunset Lawn Chapel of the Chimes	916-922-5833		4701 Marsyville Blvd. Sacramento, CA 95838		Dan Kellerhall (General Manager)
Teichert	916-386-6800		8811 Kiefer Boulevard Sacramento, CA 95826		Scott Oliver
Tru Green Chem Lawn	(408) 944-9784		1700 N Market Blvd # 103, Sacramento, CA 95834		Jannette Grant (HR department)
US Health Works Business Group	916-929-6161		4700 Northgate Boulevard Suite 100 Sacramento, CA 95834		Daniel Pilvorria (manager)
Water Rite Irrigation	916-925-3629		4807 Rio Linda Boulevard, Sacramento, CA 95838		
Wayne Perry Inc.	(916) 646-9680		30 MAIN AV #5 SACRAMENTO, CA 95838		Ed Smith
Wordmaster	916-923-1000		120 Main Avenue Suite A1 Sacramento, CA 95838		John Fenton (owner)

Appendix 5 – Sacramento City College Service Learning Application

SERVICE-LEARNING ACTIVITY AND TIME LOG



Sacramento City College

Student's name _____ phone _____
community site _____ scc course _____
community site address _____
site supervisor _____ site phone _____
start date _____ end date _____

date worked _____	total# of hours _____
date worked _____	total# of hours _____
date worked _____	total# of hours _____
date worked _____	total# of hours _____
date worked _____	total# of hours _____
date worked _____	total# of hours _____

Total Hours _____

Learning objectives

- A. Learning objective for knowledge and understanding (acquisition of information, facts, theories or ideas as applied to course content.)
- B. Learning objective for skills (developing specific skills such as interviewing, teaching, communicating, listening, analyzing data etc.)
- C. Learning objective for attitudes and values (formation or clarification of personal values or feelings.)

Write your objectives below:

1. _____
2. _____
3. _____

I hereby certify that I have satisfactorily worked the total hours indicated above.

I hereby certify the above named student has satisfactorily worked the total hours.

Student Signature

Agency Supervisor signature

Appendix 6 – Sample E-Newsletter format, tri-fold brochure and website for the Robla Creek Stewardship Program



ROBLA CREEK STEWARDSHIP PROGRAM
Building Community Through Stewardship

Robla Creek Stewardship Program

E-News Update

Upcoming Events:

- *Wildlife Walks!*
- *Community Work Day!*

Volume I, Issue I

Newsletter Date

- **Taylor Street School Students make a difference!** Taylor Street students participate in the December weed pulling events. Over 12 students and teachers pull 12 garbage bags of weeds from the creek!
- **Neighborhood Watch** Looking for volunteers to patrol parking areas. Contact XXXXX if interested.
- **Sacramento Community College offers Credits** for participation in the Robla Creek Habitat Restoration Program. Contact XXX for more information.
- **Audubon Society to lead Birdwatching Tour** at Robla on January XX, 2007 (See story at right)
- **Upcoming Stewardship Planning Meetings—Mark Your Calendars!**
 - Feb XX, 2007,
 - March XX 2007,
 - April XX, 2007

Audubon Society to Lead Wildlife Walk January XX, 2007

This story can fit 175-225 words.

The purpose of a newsletter is to provide specialized information to a targeted audience. Newsletters can be a great way to market your product or service, and also create credibility and build your organization's identity among peers, members, employees, or vendors.

First, determine the audience of the newsletter. This could be anyone who might benefit from

the information it contains, for example, employees or people interested in purchasing a product or requesting your service.

You can compile a mailing list from business reply cards, customer information sheets, business cards collected at trade shows, or membership lists. You might consider purchasing a mailing list from a company.

If you explore the Publisher catalog, you will find many publications that match the style of

your newsletter.

Next, establish how much time and money you can spend on your newsletter. These factors will help determine how frequently you publish the newsletter and its length. It's recommended that you publish your newsletter at least quarterly so that it's considered a consistent source of information. Your customers or employees will look forward to its arrival.

Community Work Day Scheduled for January XX, 2007

Please join us for a fun-filled day at Robla Creek! We plan to pick up litter along the XXX trail from **9 AM to 3PM on Sunday XX, 2007.** With your help we can finish pulling red sesbania near XXXXX. Children and Young adults welcome. Please bring water, work clothes and gloves, and comfort-

able shoes.....

This story can fit 75-125 words. Your headline is an important part of the newsletter and should be considered carefully.

In a few words, it should accurately represent the contents of the story and draw readers into

the story. Develop the headline before you write the story. This way, the headline will help you keep the story focused.

Examples of possible headlines include Product Wins Industry Award, New Product Can Save You Time!, Membership Drive Exceeds Goals, and New Office

Contact Us!

Stewardship Program Coordinator:

Name:
Phone #

City of Sacramento Volunteer Coordinator:

Julie Mier
XXX-XXX-XXXX

City of Sacramento's Natural Areas Program:

The Robla Creek Stewardship Program is brought to you by the City of Sacramento Parks and Recreation and your neighbors Department.

XXXXXXXXXXXXXXXXXXXXXXXXXXXX
 XXXXXXXXXXXXXXXXXXXXXXXXXXXX
 XXXXXXXXXXXXXXXXXXXXXXXXXXXX



Volunteer Training Offered

This story can fit 150-200 words.

One benefit of using your newsletter as a promotional tool is that you can reuse content from other marketing materials, such as press releases, market studies, and reports.

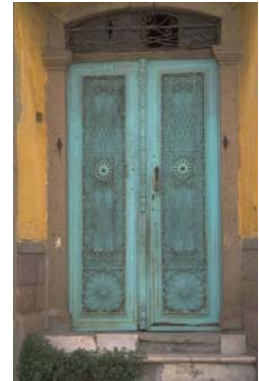
While your main goal of distributing a newsletter might be to sell your product or service, the key to a successful newsletter is making it useful to your readers.

A great way to add useful content to your newsletter is to develop and write your own articles, or include a calendar of upcoming events or a special offer that promotes a new product.

You can also research articles or find "filler" articles by accessing the World Wide Web. You can write about a variety of topics but try to keep your articles short.

Much of the content you put in your newsletter can also be used for your Web site. Micro-

soft Publisher offers a simple way to convert your newsletter to a Web publication. So, when you're finished writing your newsletter, convert it to a Web site and post it.



Caption describing picture or graphic.

Wood Duck Boxes Built by Local High School Students

This story can fit 100-150 words.

The subject matter that appears in newsletters is virtually endless. You can include stories that focus on current technologies or innovations in your field.

You may also want to note business or economic trends, or make predictions for your customers or clients.

If the newsletter is distributed

internally, you might comment upon new procedures or improvements to the business. Sales figures or earnings will show how your business is growing.

Some newsletters include a column that is updated every issue, for instance, an advice column, a book review, a letter from the president, or an editorial. You can also profile new employees or top customers or vendors.

“To catch the reader's attention, place an interesting sentence or quote from the story here.”

Tips to Prevent Pollution

This story can fit 75-125 words.

Selecting pictures or graphics is an important part of adding content to your newsletter.

Think about your article and ask yourself if the picture supports or enhances the message you're trying to convey. Avoid selecting images that appear to be out of context.

Microsoft Publisher includes thousands of clip art images

from which you can choose and import into your newsletter. There are also several tools you can use to draw shapes and symbols.

Once you have chosen an image, place it close to the article. Be sure to place the caption of the image near the image.



Caption describing picture or graphic.

Contact Us:

Robla Creek Stewardship Program
Coordinator: XXXXXXXXXXXX

City of Sacramento
Volunteer Coordinator:
XXXXXXXXXXXXXXXXXXXX

Helpful Online Resources:

Robla Creek Web Site:
XXXXXXXXXX

Reporting Trash and Dumping:
XXXXXX

Volunteer Events Calendar:
XXXXXX

OTHER TEXT HERE

XXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXX
XX



Robla Creek Stewardship Program

OVERVIEW

Who Are We?

The Robla Creek Stewardship program represents neighbors, students, teachers, nature lovers, community groups, and local businesses—everyone who enjoys the outdoors and wants to get involved in their community!

*Get Involved!
Help Build Your Community!*

Volunteer Opportunities:

- WEED REMOVAL
- PLANTING
- PARK CLEAN UP
- YOUTH AND EDUCATIONAL PROGRAMS
- TRAIL MAINTENANCE
- NEIGHBORHOOD WATCH
- ADOPT-A-PARK

This Program was developed through a generous grant from the XXXXXX and is supported by the City of Sacramento and generous contributions from



Robla Creek Stewardship Program
Building Community
Through Stewardship



City of Sacramento
Dept. of Parks and Recreation
915 I Street, Fifth Floor
Phone: 916-
Fax: 555-555-5555

Robla Creek Stewardship Program

Building Community through Stewardship



Robla Creek is an small urban creek with big wildlife and recreational values! It is located in Northern Sacramento County, near the communities of Robla and Rio Linda. Come enjoy this wetland treasure!

Who Are We?

The Robla Creek Stewardship program represents neighbors, students, teachers, nature lovers, community groups, and local businesses-- everyone who enjoys the outdoors and wants to get involved in their community!



Location

Text here text here Text here text here Text here text here Text here text here Text here text here Text here text here Text here text here Text here text here Text here text here Text here text here

History

Text here text here Text here text here Text here text here Text here text here Text here text here Text here text here Text here text here Text here text here Text here text here Text here text here

Natural Resource and Recreational Values

Text here text here Text here text here Text here text here Text here text here Text here text here Text here text here Text here text here Text here text here Text here text here Text here text here

The Future

Text here text here Text here text here Text here text here Text here text here Text here text here Text here text here Text here text here Text here text here Text here text here Text here text here

WE NEED YOUR HELP!

The City of Sacramento offers a variety of volunteer activities including wildlife walks, youth training programs, trail maintenance events, neighborhood watch programs, park clean-up days, weed pulling and planting events, and XXXXXXXX Call our Program Coordinator or Click on the Volunteer Opportunities Link for an e-newsletter of past activities and upcoming events!

YES I WANT TO GET INVOLVED!



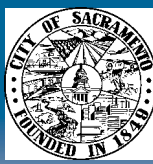
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Robla Creek Stewardship Program

Building Community Through Stewardship

Phone: 555-555-5555
Fax: 555-555-5555
Email: xyz@microsoft.com



Robla Creek Stewardship Program

Building Community through Stewardship

Home

Welcome to the Robla Creek Stewardship Program Home Page!

Robla Creek is an small urban creek with big wildlife and recreational values! It is located in Northern Sacramento County, near the communities of Robla and Rio Linda. Come experience and enjoy this wetland treasure!

Who Are We? The Robla Creek Stewardship program represents neighbors, students, teachers, nature lovers, community groups, and local businesses— everyone who enjoys the outdoors and wants to get involved in their community!

Want to Get Involved? The City of Sacramento offers a variety of volunteer activities including wildlife walks, youth training programs, trail maintenance events, neighborhood watch programs, park clean-up days, weed pulling and planting events, and XXXXXX. Call our Program Coordinator or Click on the Volunteer Opportunities Link for an e-newsletter of past activities and upcoming events!



Robla Creek

- Home
- Volunteer Opportunities
- Natural Areas Program
- Contact Us
- Frequently Asked Questions
- Sponsorship



Park Clean-Up Days



Planting Events



Wildlife Walks



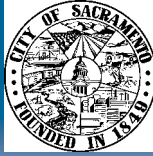
Youth Education Programs



Weed Removal Events

To Download the ENewsletter, Click [HERE](#)

Contact Us:
 City of Sacramento
 Dept. of Parks and Recreation
 915 I Street, Fifth Floor
 Phone: 916-
 Fax: 555-555-5555
 E-mail: someone@example.com



Robla Creek Stewardship Program

Building Community through Stewardship

Volunteer Opportunities

- Home
- **Volunteer Opportunities**
- Natural Areas Program
- Contact Us
- Frequently Asked Questions
- Sponsorship

January 2007

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

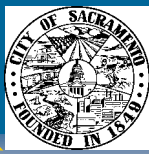
Public Planning
Meeting #2

To Download the ENewsletter,
[Click HERE](#)

Contact Us:
City of Sacramento
Dept. of Parks and Recreation
915 I Street, Fifth Floor
Phone: 916-
Fax: 555-555-5555
E-mail: someone@example.com

Schedule of Events

- > **01/31/07 — Robla Creek Stewardship Plan Development,**
- > **Public Meeting #2.** Location: Taylor Street School Cafeteria from 6:15-7:30PM. Refreshments Provided. Public Welcome. Help us Plan the program!
[More details...](#)
- > 00/00/00 — Type the date of an upcoming event. Type the name of the event, the time, location, and a phone number to call for more information.
[More details...](#)
- > 00/00/00 — Type the date of an upcoming event. Type the name of the event, the time, location, and a phone number to call for more information.
[More details...](#)
- > 00/00/00 — Type the date of an upcoming event. Type the name of the event, the time, location, and a phone number to call for more information.
[More details...](#)



Robla Creek Stewardship Program

Building Community through Stewardship

Natural Areas Program

List your current projects, clients, or activities. To add more projects, copy and paste additional text

- Home
- Volunteer Opportunities
- **Natural Areas Program**
- Contact Us
- Frequently Asked Questions
- Sponsorship



Park Clean Up Events

Park Clean-Up Events include the annual Sacramento Creek Week Clean Up and Monthly Litter Patrols. Come Spend a few hours making Robla Creek cleaner!

> [More details...](#)

Youth and Educational Programs

Robla Creek Offers opportunities for youth in-service projects, outdoor and science education, and college-level studies. For information on K12 programs, contact



> [More details...](#)



Wildlife Walks

Attend a Wildlife Walk! The Audubon Society, XXX, and XXX offer seasonal tours of Robla. Come and learn about the wildlife and plants that live in our park!

> [More details...](#)

Weed Removal and Planting Events

Hands-on weed removal and planting events are a good way for the entire family to learn about habitat restoration! Come get your hands dirty and help restore



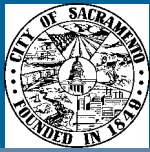
> [More details...](#)



Trail and Park Maintenance

Trail and Park Maintenance Events include half-day and full day family, youth in-service, and business service events. Contact XXX fore more information about

> [More details...](#)



Robla Creek Stewardship Program

Building Community through Stewardship

Contact Us

DEPARTMENT OF
PARKS AND
RECREATION

Contact Information:

Robla Creek Stewardship Program Coordinator:

City of Sacramento Volunteer Coordinator:

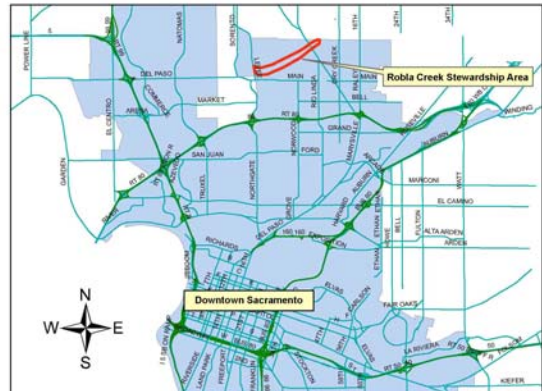
District 2 City Council Representative:

Other Organizations:

Robla Park Community Association

Sacramento Weed Warriors

- Home
- Volunteer Opportunities
- Natural Areas Program
- **Contact Us**
- Frequently Asked Questions
- Sponsorship



To Download the ENewsletter, Click [HERE](#)

Contact Us:

City of Sacramento
Dept. of Parks and Recreation
915 I Street, Fifth Floor
Phone: 916-
Fax: 555-555-5555
E-mail: someone@example.com



Frequently Asked Questions

- Home
- Volunteer Opportunities
- Natural Areas Program
- Contact Us
- **Frequently Asked Questions**
- Sponsorship

How Do I Report Trash Dumping?

To report illegal dumping, contact XXXXX at XXX-XXX-XXXX.

How Do I Report a Crime?

In the event of emergency, dial 911. For Local Police and Sheriff Patrols, contact XXXXXXXX

How Do I Sign Up for Volunteer Events?

Type a brief answer to the question. To add more questions, copy and paste additional text boxes.

How Do I Find Out More about the City of Sacramento's

Type a brief answer to the question. To add more questions, copy and paste additional text boxes.

Other Frequently Asked Questions

Where is Robla Creek?

What Recreational Activities are Allowed there?

Hours of Operation?

Parking?

To Download the ENewsletter, Click [HERE](#)

Contact Us:

City of Sacramento
Dept. of Parks and Recreation
915 I Street, Fifth Floor
Phone: 916-
Fax: 555-555-5555
E-mail: someone@example.com



Sponsorship

DEPARTMENT OF
PARKS AND
RECREATION

How Do I Become a Creek Steward?

- Home
- Volunteer Opportunities
- Natural Areas Program
- Contact Us
- Frequently Asked Questions
- **Sponsorship**

Creek Stewards are an important link between the community and the City of Sacramento. Through the Partners in Parks (PIPS) Program, you can help!

Besides having fun, Creek Stewards

- Have a long-term connection with their park or area
- Adopt and care for a specific reach or park of the park
- Receive special training and support from the City and others
- Provide suggestions on projects and improvements
- Act as liaisons between neighbors and City staff
- Alert the City or responsible agency when problems arise.

Can Businesses Sponsor?

Businesses can contribute to the Robla Creek Stewardship program in several ways:

- Financial contributions (Adopt-A-Creek, donations, employee matching programs)
- Staff Work Days (Creek Week, Corporate Events)
- Contributions of Materials or Services (fencing, lumber, printing, etc)

To Download the ENewsletter, Click [HERE](#)

Contact Us:
City of Sacramento
Dept. of Parks and Recreation
915 I Street, Fifth Floor
Phone: 916-
Fax: 555-555-5555
E-mail: someone@example.com

Appendix 7 – Suggested Prioritization Criteria for Volunteer-Based Stewardship Activities

APPENDIX 7. Suggested Project Selection and Ranking Criteria for Volunteer-Based Actions

SCORING SCALE (0=Lowest score and 3=highest possible ranking.

3 - this project meets all the applicable criteria for this category

2 - this project meets most of the applicable criteria for this category

1 - this project meets a few of the applicable criteria for this category

0 - this project does not meet any of the criteria for this category

n/a - this project does not have any relevance to this criteria category (e.g. a polygon that includes invasive plant removal only, would receive an n/a for the trails criteria).

<u>Criteria</u>	<u>Rank</u>
<p>1. Improves the Park's Natural Area Functions and Values</p> <ul style="list-style-type: none"> a. Wildlife, waterfowl, native riparian woodlands, locally rare species b. Wetlands c. Improves a Special Ecological Area, rare or sensitive vegetation communities, and/or unique geologic feature d. Improves flood conveyance or decreases channel obstructions 	
<p>2. Improves the Recreational Values or Uses of the Park</p> <ul style="list-style-type: none"> a. Improves Recreational Values (e.g. number of recreational uses such as bird watching, dog walking, etc) b. Improves visitor access or visitor experience (e.g. interpretive signs, trail amenities such as shade structures, picnic tables etc.) c. Improves or increases overall visitation (numbers of visitors per week/day/month) 	
<p>3. Reduces Maintenance Needs (Staff or Volunteer)</p> <ul style="list-style-type: none"> a. Project reduces need for ongoing maintenance (e.g. trail repairs, fencing repairs) b. Improves the integrity of the site (well-marked trails, safe parking and walking areas, clearly marked dogs on leash areas) c. Reduces trespass, unwanted site uses d. Reduces sedimentation, erosion and resource trampling disturbance e. Improves public safety 	
<p>4. Public and Staff Support</p> <ul style="list-style-type: none"> a. Provides volunteer, educational, or recreational opportunities b. Provides for increased volunteer/stewardship opportunities c. Improves visitor and recreational experiences e. Increases understanding and support for Park's Natural Areas Program f. Already has City of Sacramento Staff support, or could get support from Staff and Councilmember 	
<p>5. Potential for Funding</p> <ul style="list-style-type: none"> a. Funding available (in part) through other programs/projects b. Funding potential c. Future leverage "quotient" 	

<p>6. Fulfills Community Interest (or Goal)</p> <ul style="list-style-type: none"> a. Addresses priority community interest or goal b. Reduces community problem or issues c. Has community support 	
<p>7. Leverages Community & Partner Resources</p> <ul style="list-style-type: none"> a. Leverages existing community resources (funding, volunteerism, materials, etc.) b. Leverages partner resources (funding, equipment, staff, etc.) 	
<p>8. Potential for Implementation Success, Project Feasibility</p> <ul style="list-style-type: none"> a. Project can be accomplished within reasonable timeframe (“project readiness”) b. High level of outcome for effort expended (Staff and volunteer) 	
<p>City Staff Ranking and Additional Criteria</p>	Rank
<p>9. Integrates with Existing Projects</p>	
<p>10. Consistency with Other Volunteer Projects Already Underway and with City Staff Capacity</p> <ul style="list-style-type: none"> a. Adds support to existing City Park programs b. City Maintenance and Volunteer staff capacity/in line with project values c. Reduces maintenance crises d. Compatible with internal organizational priorities 	
Total Score	

Appendix 8 – Potential Permit Requirements

Appendix 8
 Type of Permit or Agreement Likely Required for Volunteer Activities Within Robla Creek (to be confirmed by City and SAFCA staff)

Activity	CEQA CADX	City of Sacramento Liability Waiver	County of Sacramento Access Agreement	SAFCA Access Agreement	American River Flood Control Levee Access Agreement	DFG Streambed Alteration Agreement	DFG 2081 Permit	USFWS Endangered Species Act Compliance Biological Opinion or Finding of No Effect	US Army Corps of Engineers Section 404 Wetland Permit	Regional Water Quality Control Board 401 Water Quality Certification	Department of Water Resources Flood Conveyance Permit
Litter Pick up		X	X	X	X						
Neighborhood watch		X	X	X	X						
New Fence/Restrooms/signs	X	X	X	X	X						
Picnic Facilities/shade structure	X	X	X	X	X						
K-12 School Service Programs		X	X	X	X						
College Research Projects	P	X	X	X	X	P	P	P	P	P	P
Weed removal within the creek	X	X	X	X	X	P	P	P	P	P	P
Wildlife walk		X	X	X	X						
Planting within the creek	X	X	X	X	X	P	P	P	P	P	X

Appendix 9 – Volunteer Liability Agreements

**City of Sacramento Short-term Volunteer
Information and Agreement Form**

Dates of Service: _____

Total Hours: _____

Name: _____

Group/Agency _____

Address: _____

City: _____ Zip: _____

Home Phone: _____ Work/Cell Phone: _____

E-mail Address: _____

Emergency Contact: _____ Phone: _____

Relationship to Volunteer: _____

Medical Insurance Provider: _____

Insurance ID Number: _____

All Volunteers Must Complete This Section

Volunteer Agreement

I _____, choose to participate in the _____, as a volunteer and understand that my services are donated to the City of Sacramento (City) without contemplation of compensation or future employment, and given for humanitarian, religious or charitable reasons. I understand that I am covered under the City's workers' compensation insurance in the event of an injury from rendering a volunteer service. I will report any injury or incident to my supervisor immediately. I agree to abide by any rules and directions provided by those helping to administer _____.

Signature of Participant: _____ Date: _____

All Volunteers Under 18 Years of Age Must Have Parent or Legal Guardian Complete This Section

Consent of Parent or Legal Guardian for Minor's Participation as a Volunteer

I, _____, the parent or legal guardian of _____ choose to permit _____ to participate in the _____ as a volunteer. I understand that my child's or ward's services are being offered on a voluntary basis without anticipation of any financial remuneration. I agree that he/she will abide by any rules and directions provided by those helping to administer _____. I understand that my child is covered under the City's workers' compensation insurance in the event of an injury from rendering a volunteer service. He/She will report any injury or incident to his/her supervisor immediately.

Signature of Parent or Legal Guardian : _____ Date: _____

CONSENT OF PARENT OR LEGAL GUARDIAN TO MEDICAL, DENTAL, OR HOSPITAL

CARE OF MINOR VOLUNTEER: I, _____ the parent or legal guardian of _____, a minor, who was born on _____, authorize medical, dental, surgical or hospital care, treatment, or diagnosis of said minor and I agree to pay for any medical, dental, surgical, or hospital diagnosis, treatment, or care rendered to or for said minor.

Signature of Parent or Legal Guardian: _____ Date: _____

Consent of Parent or Legal Guardian to Use of Image of Minor Volunteer in Public Relations:

Photos, videos of _____, my child or ward, may be used in City of Sacramento Public Relations.

Signature of Parent or Legal Guardian: _____ Date: _____

**CITY OF SACRAMENTO
VOLUNTEER STATEMENTS
(Must be signed by volunteer and supervisor)**

- I agree to conform to rules and regulations of the City of Sacramento. I understand that I will begin service on a reciprocal trial basis. I agree to participate in orientation and training. I understand that a law enforcement clearance may be obtained and that references may be contacted. I am authorizing the City of Sacramento to contact my references.
- I understand my volunteer schedule and realize the City is depending on my services. If, for a serious reason, I cannot keep my commitments I will notify my supervisor in advance.
- I agree and understand that any work I perform within the scope of this agreement will be provided on a voluntary basis and that I do not expect payment or other compensation for performing such work. I also understand that a volunteer position does not constitute an employee-employer relationship with the City of Sacramento, and that I serve at the discretion of the City Manager or designee.
- If I am currently a City employee I know that any volunteer work to be performed is outside of my regular job classification and is separate from any paid work responsibility.
- I agree not to divulge any information regarding persons who are receiving services or other assistance from the City or otherwise involved in my volunteer services. I recognize that unauthorized release of confidential information may make me subject to a criminal action.
- I understand that I am fully responsible for maintaining my own personal records of time volunteered to the City for the purposes of internships, community service, etc, subject to my supervisor's verification. At the end of my volunteer service I can have my supervisor sign a letter documenting hours donated, and I understand that the City will maintain no permanent record of this time. I understand that I will be required to sign in and out.
- I understand that I am covered under the City's workers' compensation insurance in the unlikely event of an injury from rendering a volunteer service. I will report any injury or incident to my supervisor immediately.
- I understand that the City has a zero-tolerance policy against any type of harassment or discrimination. I agree to comply with this policy, and recognize that I will also be protected by it.
- I understand that the City has a zero-tolerance policy against any type of violence, threat or intimidation, implied or actual, in the workplace. I agree to comply with this policy, and recognize that I will also be protected by it.
- I understand that the City has a zero-tolerance policy against any use of, or being under the influence of, illegal drugs or alcohol in the workplace. I agree to comply with this policy.
- I understand that the City is not responsible for loss or damage to personal belongings.

Volunteer signature

Date

Parent/Guardian Signature
(If under age 18)

Date

Supervisor signature

Date

**SACRAMENTO AREA FLOOD CONTROL AGENCY
TEMPORARY USE PERMIT AND HOLD HARMLESS AGREEMENT**

This Permit grants to the Permittee named below the temporary right to access and use the designated lands and/or easements (collectively "property") held by the Sacramento Area Flood Control Agency ("SAFCA"). This right is subject to the listed terms and conditions.

Part One: Activity Information

1. Permittee (name and organization): _____
2. Address: _____
3. Phone Number(s): (wk): _____ (cel): _____ (fax): _____
4. Description of Activity: _____

5. Dates/Times of Activity: _____
6. Location of Activity: _____

7. Other (attach additional sheets as necessary): _____

Part Two: Terms of Entry

8. The permission granted under this Permit is strictly limited to the activity described above.
9. This Permit does not include the right to pass over or occupy property not belonging to or under the control of SAFCA. Permittee shall obtain any other necessary approvals from other landowners or regulatory agencies.
10. Maximum speed limit on levees is ten (10) miles per hour.
11. Permittee agrees to exercise reasonable care to protect and avoid damage to persons and property and to maintain neat, orderly, and sanitary condition on SAFCA property. Permittee shall take all reasonable precautions to prevent and suppress fires, and to prevent polluting of waters on or in vicinity of SAFCA lands. Permittee shall observe all applicable Federal, State, and local laws and regulations, including regulations for the protection of the environment. Permittee shall immediately report to SAFCA any dangerous conditions observed.
12. SAFCA reserves the right to take any action it deems necessary in the event of an emergency. In exercising this reserved power, SAFCA shall have no liability or responsibility to Permittee, its employees or representatives.

- 13. Permittee shall indemnify, defend, and hold harmless SAFCA, its Board of Directors, employees and representatives against and from any and all demands, claims, or liabilities of any nature whatsoever, including, but not limited to, damages to property, injuries to or death of persons and costs of defense, arising directly or indirectly from, or in any way connected with Permittee's use and occupancy of SAFCA property or with the activities described in this Permit. Permittee shall replace or repair any SAFCA property damaged as a result of the exercise of this Permit and, if needed, restore the SAFCA property used by Permittee to its condition prior to entry of Permittee, all to the satisfaction of SAFCA.
- 14. SAFCA reserves the right to revoke this Permit at any time.
- 15. A copy of this Permit shall be available onsite during the time of Permittee's occupancy of the SAFCA property.

PERMITTEE CERTIFICATION AND ACKNOWLEDGMENT:

I CERTIFY that the information given by me in this Permit application is true, complete, and correct to the best of my knowledge and belief and is given in good faith. I acknowledge that I am required to comply with all of the above-described conditions as well as any other conditions provided by the authorized SAFCA officer when this Permit is issued.

Agreed by: _____
 Sign (Permittee)

Print Name (Permittee)

Dated: _____

SAFCA APPROVAL:

By: _____
 Sacramento Area Flood Control Agency

Dated: _____

Appendix 10 – Position Descriptions



CITY OF SACRAMENTO
Established Date: Mar 7, 2007
Revision Date: Mar 17, 2007

Park Maintenance Worker

Class Code:
03927

SALARY RANGE

\$10.10 - \$14.20
Hourly

\$1,749.80 - \$2,461.97
Monthly

\$20,997.60 - \$29,543.70
Annually

DEFINITION:

Incumbents are trained in and assist higher level park maintenance personnel in park maintenance and construction work in City park and recreation areas. The Park Maintenance Worker series provides for four levels ranging from the training level to the journey level including lead responsibility to the working supervisory level.

DISTINGUISHING CHARACTERISTICS:

Incumbents in the Park Maintenance Worker classification are trained in and assist in the most routine park maintenance and construction work in City park and recreation areas. Incumbents are generally assigned as a member of a park maintenance crew.

SUPERVISION RECEIVED AND EXERCISED:

Incumbents work under direct supervision and will receive very specific instructions on all work assignments from higher-level park maintenance personnel. Work is reviewed for completeness and accuracy.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

Depending upon assignment, incumbents will assist higher-level park maintenance personnel in duties which may include, but are not limited to, the following:

- Weeds, cultivates, plants, fertilizes, and irrigates lawns and flower beds.
- Mows, aerate, and edges lawn areas using power and hand tools.
- Rakes, sweeps and vacuums leaves, lawn clippings, etc., using power blower and hand tools.
- Prunes and trims hedges, bushes, and other shrubbery.
- Cleans and maintains public facilities in City park and recreation areas.
- Operates small power equipment and machinery including chain saws, rototillers, lawnmowers, aerators, hedgers, spreaders, and other equipment.
- Provides exceptional customer service to those contacted in the course of work.
- Other related duties may also be performed; not all duties listed are necessarily performed by each individual holding this classification.

QUALIFICATIONS:**Education:**

Ability to read and write the English language at a level necessary for efficient job performance.

Experience:

Some paid experience performing landscape maintenance duties.

KNOWLEDGE, SKILLS, AND ABILITIES:**Knowledge of:**

The use and purpose of common hand tools used in grounds maintenance.

Ability to:

- Understand and carry out oral and written instructions.
- Perform heavy manual laboring duties.
- Learn to operate various park maintenance equipment and machinery.
- Learn the proper method of planting, cultivating and pruning for hedges, trees, shrubs, lawns, and flowerbeds.
- Learn to identify potential safety hazards in parks and recreation areas.
- Learn common practices, methods, and materials used in gardening and horticultural work.
- Learn the proper method of spraying various pesticides, herbicides, fungicides, and other related chemicals in City park and recreation areas.
- Work in inclement weather conditions.

SPECIAL QUALIFICATIONS**Driver License:**

Possession of a valid California Class C Driver is required for some assignments at time of appointment and is a condition of continued employment. Loss of the Class C Driver License is cause for discipline. Individuals who do not meet this requirement due to physical disability will be reviewed on a case-by-case basis.

PROBATIONARY PERIOD

Employees must complete six (6) months of probation at a satisfactory performance level prior to gaining permanent status.

CLASS HISTORY:

Adopted: 3/6/07

Revised:

Title Change:

Maintenance Update:

Abolished:
Class Code:



CITY OF SACRAMENTO
Established Date: May 8, 1999

Program Coordinator

Class Code:
16210

SALARY RANGE

\$15.25 - \$21.46
Hourly

\$2,643.00 - \$3,720.00
Monthly

\$31,716.00 - \$44,640.00
Annually

DEFINITION:

To coordinate and direct recreation, educational enrichment, child care, elder care, special events, or other special community programs and activities in a facility or site, or to coordinate and direct a City-wide program or service in a special programming area.

SUPERVISION RECEIVED AND EXERCISED

Direction is provided by a higher-level professional or management position. Responsibilities may include the direct or indirect supervision of lower-level positions.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

EXAMPLES OF DUTIES

Depending upon assignment, duties may include, but are not limited to, the following:

- Plan, organize, coordinate, and direct various recreation, educational enrichment, child care, elder care, special events, or other community service activities and programs at neighborhood recreation, sports, or community facilities.
- Design, evaluate, and recommend continuance, modification, or cancellation of recreation, educational, child care, elder care, special events, and community service activities and programs.
- Plan, organize, coordinate, and direct a City-wide recreation, educational enrichment, child care, elder care, special event, or community service program.
- Determine facility, equipment, scheduling, and staffing requirements for programs and events.
- Coordinate departmental activities with related activities of other departments or outside agencies and groups.
- Determine needs and priorities of neighborhoods/customers and plan programs consistent with those needs and priorities.
- Provide information and referrals to the neighborhoods/customers concerning available programs, including the development and distribution of brochures, flyers, and other promotional materials.
- Provide workshop instruction and in-service training for lower-level staff.
- Prepare and maintain written reports, records, and memorandums related to assigned programs or facilities.
- Prepare and compile materials for obtaining grant funds.
- Coordinate and conduct part-time and seasonal recruitments.

- Make oral presentations to various groups and/or boards.
- Develop and coordinate fund-raising events.
- Supervise recreation leaders, volunteers, and other assigned personnel in activities.
- Manage and operate a sports facility or a neighborhood community center.
- Respond to inquiries from the public and other agencies.
- Interview, select, evaluate, and oversee participants and activities related to the program.
- Perform related duties as required.

QUALIFICATIONS:

Knowledge of:

- Recreation, educational enrichment, child care, elder care, special events, or other community service activities, such as aquatics, sports, games, arts, crafts, dramatics, music, or other special community programs.
- Principles of supervision and training.
- First aid and safety practices.
- English usage, spelling, grammar, and punctuation. Common computer software packages.
- Organization, procedures, and operating details of the department.
- Facilities, equipment, and staffing needed to provide recreation, educational enrichment, child care, elder care, special events, or special community services to the community.

Ability to:

- Read, write, and speak the English language at a level necessary for efficient job performance.
- Organize and direct a variety of recreation, educational enrichment, child care, elder care, special events, or special community service activities and programs.
- Establish and maintain cooperative relationships with those contacted in the course of work.
- Keep records and prepare reports.
- Express and relate ideas clearly and concisely, both orally and in writing.
- Plan, assign, coordinate, schedule, and supervise the work of lower-level personnel.
- Speak before groups.
- Develop program-related policies and procedures.
- Compile and prepare grant funding request materials.

Experience and Education:

Two years of leadership experience in a recreational, educational, child care, elder care, special events, or community service setting, which included responsibilities such as organizing and providing general guidance over the activities of children, teenagers, and adults.

Successful completion of college-level courses with major course work in recreation, education, child development, gerontology, or a closely related field may substitute for the experience requirement on a year-for-year basis. Completion of thirty (30) semester units is equivalent to one year of experience.

SPECIAL QUALIFICATIONS

Possession of a valid California Class C Driver License at the time of appointment. Loss of the Class C License is cause for discipline. Individuals who do not meet this requirement due to a physical disability will be considered for accommodation on a case-by-case basis.

For child-care and elder-care positions, candidates must meet qualifications in accordance with current laws and regulations.

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Adopted: 5/8/99

Revised:

Title Change:

Maintenance Update: 12/2/05

Abolished:

Class Code: 16210



CITY OF SACRAMENTO
Established Date: May 8, 1999

Program Supervisor

Class Code:
15091

SALARY RANGE

\$20.06 - \$28.23
Hourly

\$3,477.00 - \$4,893.00
Monthly

\$41,724.00 - \$58,716.00
Annually

DEFINITION:

To perform professional and supervisory work in a variety of neighborhood and community services, such as recreation, educational enrichment, child care, elder care, camp services, human services, or other special community programs.

SUPERVISION RECEIVED AND EXERCISED

Direction is provided by a higher-level position. Responsibilities include the direct supervision of lower-level personnel.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

EXAMPLES OF DUTIES

Depending upon assignment, duties may include, but are not limited to, the following:

- Plan, schedule, and direct the work of employees and volunteers.
- Provide direction and general supervision to lower-level staff.
- Plan and participate in the in-service training of subordinate staff.
- Coordinate the recruitment and selection of part-time and seasonal personnel.
- Prepare schedules and assignments, organize work, and set priorities.
- Review and evaluate the work of subordinates.
- Design, evaluate, and recommend continuance, modification, or cancellation of programs and services.
- Establish procedures and guidelines for sites and programs.
- Prepare and submit preliminary budgets, new equipment specifications, and routine and special reports.
- Provide leadership in planning, staffing, reporting, and adopting rules and regulations for activities and programs.
- Analyze the program needs of the city, community, or neighborhood.
- Coordinate with supervisors on staff coverage needs and, as directed, work with others in the scheduling and presentation of various city-wide activities and events.
- Make presentations, provide guidance, and maintain effective relations with public and private groups, engaging their cooperation and assistance in various phases of the overall program.
- Assist in conducting special studies and investigations, and prepare reports in the functions and procedures of programming.
- For the Camp Sacramento position, must reside at camp and supervise the daily

operations of camp during the approximately 16-26 week summer season; participate in maintaining facilities, grounds, and equipment.

- Perform related duties as required.

QUALIFICATIONS:

Knowledge of:

- Philosophy, principles, and practices of public programs impacting neighborhoods.
- Regulations and policies governing various programs.
- First aid and safety procedures and requirements.
- Major sports, games, arts and crafts, dramatics, music, and other recreational activities suitable for children, adolescents, and adults.
- Facilities and equipment needed in broad and comprehensive programs.
- Principles of supervision and training.
- Organization, procedures, and operating details of the department.

Ability to:

- Plan, coordinate, and direct various types of neighborhood and community service programs.
- Plan, assign, coordinate, schedule, and supervise the work of lower-level personnel.
- Review and analyze program effectiveness, and recommend and implement procedures to improve programs.
- Analyze, interpret, and apply State and departmental regulations and policies.
- Effectively participate in a continuing in-service training program.
- Instruct individuals in various activities.
- Speak before groups.
- Maintain records and prepare reports.
- Establish and maintain cooperative working relationships with employees, school officials, and the general public.

Experience:

Two years of experience developing and implementing community and neighborhood programs in recreation, education, child care, elder care, camp services, human services, or other special community programs.

Education:

A Bachelor's Degree from an accredited college or university with course work in recreation, education, child development, gerontology, or a closely related field.

SPECIAL QUALIFICATIONS

Possession of a valid California Class C Driver License at the time of appointment. Loss of the Class C License is cause for discipline. Individuals who do not meet this requirement due to physical disability will be considered for accommodation on a case-by-case basis.

For positions at Camp Sacramento and in accordance with California Health and Safety Code, candidates must be at least 25 years of age at the time of appointment.

For child-care and elder-care positions, candidates must meet qualifications in accordance with current laws and regulations.

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Adopted: 1/1/67

Revised: 2/21/79; 2/17/81; 2/99

Title Change: 2/21/79 Recreation Supv. I - from Recreation Supervisor, 10/14/80

Recreation Supv. II - from Sr. Recreation Supv., 2/99- from Recreation Supervisor I/II, Child Care Program, Supervisor, Camp Sacramento Supervisor, and Senior Citizens Services Supervisor

Maintenance Update: 3/4/88

Abolished:

Class Code: 15091

***Appendix 11 – Sample Volunteer Work plan Format For Activities
Within Natural Areas***

Brooks Park Natural Area Annual Work Plan

Site Objectives**

Maintain and enhance native grassland and dune scrub habitats
 Enhance habitat for wildlife
 Improve access on designated trails
 Keep open space clean
 Assess effectiveness of actions

Location	Actions**	Season	Estimated number of work days / year	Work performed by	Date completed
MA-1a, MA-2c	Reduce radish, mustard – hand removal	Spring – Fall	6	Volunteers, NAP	
	Reduce Ehrharta, oxalis, cat's ears – spray	Winter - Spring	3	Volunteers, NAP	
	Prevent recruitment of invasive trees – hand removal	Spring	1	Volunteers, NAP	
MA-2a	Reduce ehrharta, cape ivy – hand removal	Year around	3	Volunteers, NAP	
	Enhance oak-scrub mosaic by planting and direct seeding	Winter	1	Volunteers, NAP	
MA-2b	Enhance dune scrub by planting and direct seeding	Winter	1	Volunteers, NAP	
MA-2c	Enhance grassland by planting and direct seeding	Winter	1	Volunteers, NAP	
All Areas	Pick up trash and dumped debris as needed	Year around	At all site visits	Volunteers, NAP	

Primary Preparer(s): Colette Todorov

Last Revised: October 2005

* This work plan is based on the Significant Natural Resource Areas Management Plan (Draft Plan 2005) and the 1995 SNRAM. See Section 6.6 of the 2005 Draft Plan for an overview of the site conditions, values and objectives and the 20-year implementation plan.

** Actions presented in this plan reflect the priorities described in the 2005 Draft Plan and existing resources including staff, volunteers and capital funds

FINAL DRAFT

SIGNIFICANT NATURAL RESOURCE AREAS MANAGEMENT PLAN

Appendix

J-1

FEBRUARY 2006

SAN FRANCISCO RECREATION AND PARK DEPARTMENT

Appendix 12 – Project One-Year and Five-Year Program Budgets

Based upon FY07 costs

**Robla Creek Stewardship Program Plan & Natural Areas Management Plan Implementation (Staffing) & Associated Park Maintenance
Division Volunteer Management - Estimated Year One Budget**

	Specific Cost Linked Directly with Robla Creek	Cost Linked to Parks Maintenance Volunteer Operations	Cost Directly Linked to Larger Natural Areas Management	Total by line item
Salaries plus 36% benefits				
Program Supervisor - assume annual salary = \$70,933	\$ 70,933	70,933		\$ 70,933
Program Coordinator - assume annual salary = \$39,645 \$ (Robla = 16 hours per week; Larger Volunteer Program = 24 hours per week)	21,567	32,350		\$ 53,917
Park Maintenance Worker with QAC - assume annual salary = \$26,246 \$ (Robla = 8 hours per week; Larger NAP Program = 32 hours per week)	17,847		\$ 26,771	\$ 44,618
Park Maintenance Worker with QAC - assume annual salary - \$26,246 (Larger NAP Program - A total of 3 addtl' staff, 1 staff per maintenance management zone)			\$ 107,084	\$ 107,084
Natural Resources Specialist - assume annual salary = \$66,000 \$ (Robla = 8 hours per week; Larger NAP Program = 32 hours per week)	17,952		\$ 71,808	\$ 89,760
Personnel expenses	\$ 57,366	\$ 103,283	\$ 205,663	\$ 366,312
Contractor - naturalist and interpretive walk support	2,500			\$ 2,500
Supplies - field, education, information	3,250	3,750		\$ 7,000
Water quality monitoring kits	325			\$ 325
Supplies - tools & equipment	1,400	10,500		\$ 11,900
Outreach Materials	2,750	5,400		\$ 8,150
Printing & Promotions	2,200	6,100		\$ 8,300
Interns	3,175			\$ 3,175
Supplies/uniforms	1,750	5,000		\$ 6,750
Staff development	550	500		\$ 1,050
Volunteer training	650	1,000		\$ 1,650
Volunteer appreciation	9,300	13,000		\$ 22,300
Interpretive sign development and fabrication	8,400			\$ 8,400
Green waste and garbage disposal	850	2,400		\$ 3,250
Personal protective equipment	700	1,000		\$ 1,700
Non-personnel expenses	\$ 39,690	\$ 48,650	\$ -	\$ 88,340
Total Expenses	\$ 97,056	\$ 151,933	\$ 205,663	\$ 454,652

Note: This budget includes year one staffing (not direct) costs associated with the implementation of the larger Natural Areas Management Plan. The budget also assumes that volunteer stewardship is piloted at Robla Creek and not within other natural areas.

Based upon FY07 costs with annual 6% increase in staffing costs

Appendix 12 - Robla Creek Stewardship Program Plan & Natural Areas Management Plan Implementation (Staffing & Stewardship) & Associated Park Maintenance Division Volunteer Management - Estimated 5-Year Budget

Salaries plus 36% benefits (Note: year 1 salaries are noted, however budget includes 6% annual increase)	Specific Cost Linked Directly with Robla Creek	Cost Linked to Parks Maintenance Volunteer Operations	Cost Directly Linked to Larger Natural Areas Management	Total by line item
Program Supervisor - assume annual salary = \$70,993	\$	544,264		\$ 544,264
Program Coordinator - assume annual salary = \$39,645 \$ Years 1&2 (Robla = .4 FTE; Larger Volunteer Program = .6 FTE); Years 3-5 (Robla integrated into larger NAP program = 1FTE; Larger Volunteer Program 1FTE)	44,428 \$	259,508 \$	192,867 \$	\$ 496,803
Park Maintenance Worker with QAC - assume annual salary - \$26,246 \$ (Robla integrated into larger NAP Program by the end of year 2 - A total of 5 FTE required for years 3-5)	18,383		901,400 \$	\$ 919,783
Natural Resources Specialist - assume annual salary = \$66,000 \$ Years 1&2 (Robla = .2 FTE; Larger NAP Program = .8 FTE); Years 3-5 (Robla integrated into larger NAP program = 1FTE)	36,981		469,004 \$	\$ 505,985
Personnel expenses	\$ 99,792 \$	803,773 \$	1,563,272 \$	\$ 2,466,836
Contractor - naturalist and interpretive walk support	\$ 5,150		16,737.50 \$	\$ 21,888
Supplies - field, education, information	\$ 7,313	\$ 11,250	23,765.63 \$	\$ 42,328
Water quality monitoring kits	\$ 488		975 \$	\$ 1,463
Supplies - tools & equipment	\$ 3,150	\$ 57,750	10,237.50 \$	\$ 71,138
Outreach Materials	\$ 2,750	\$ 32,400	8,937.50 \$	\$ 44,088
Printing & Promotions	\$ 5,500	\$ 36,600	17,875.00 \$	\$ 59,975
Interns	\$ 9,525	\$ 10,500	30,956.25 \$	\$ 50,981
Supplies/uniforms	\$ 4,375	\$ 30,000	14,218.75 \$	\$ 48,594
Staff development	\$ 1,133	\$ 3,000	3,682.25 \$	\$ 7,815
Volunteer training	\$ 1,950	\$ 7,500	6,337.50 \$	\$ 15,788
Volunteer appreciation	\$ 27,900	\$ 52,000	48,825.00 \$	\$ 128,725
Interpretive sign development and fabrication	\$ 17,304		56,238.00 \$	\$ 73,542
Green waste and garbage disposal	\$ 1,913	\$ 14,400	6,215.63 \$	\$ 22,528
Personal protective equipment	\$ 2,100	\$ 6,000	6,825 \$	\$ 14,925
Non-personnel expenses - (Note: Assumes Robla Creek is integrated into larger NAP Program by end of year 2)	\$ 95,077 \$	261,400 \$	264,418 \$	\$ 620,895
Total Expenses	\$ 194,869 \$	1,065,173 \$	1,827,689 \$	\$ 3,087,731

Note: This budget includes five year staffing & volunteer program costs associated with the implementation of the Natural Areas Management Plan. The budget also assumes a 6% annual increase in staff costs, and that volunteer stewardship is piloted at Robla Creek for the first 2 years and then integrated into larger NAP program

Appendix 13 –Possible Funding Sources

APPENDIX 13 – POSSIBLE FUNDING SOURCES

FEDERAL SOURCES

Army Corps of Engineers - Sections 1135 & 206: Section 1135 funds are available for the restoration and acquisition of wetlands previously affected by an Army Corps project. For more information, contact the Army Corps of Engineers at 415-977-8703. Section 206 funds provide for the restoration of aquatic ecosystem structure and function. Projects usually include the manipulation of the hydrology in and along bodies of water, including wetlands and riparian areas. No relationship to an existing Corps project is required. Contact Jay Kinberger 415 977-8773.

Central Valley Project Improvement Act/Bureau of Reclamation: A variety of funding programs are available for the acquisition, restoration, and study of wetlands and other water resources in the Central Valley. Contact Chuck Solomon at the Bureau of Reclamation at 916-978-5052. The Bureau of Reclamation also has a wetlands program with grant funding. Contact Bob Shaffer at 916-414-6459.

Environmental Protection Agency: Various grants in the range of \$25,000-\$350,000 are available through the EPA for watershed planning, restoration and stewardship studies for state, tribal and local governments. Grants are also available for Environmental justice issues, Pollution prevention, Brownfields assessment, Community/Economic development and Environmental education. Their public information line is 415-947-8000 and may be reached at Environmental Protection Agency, Region 9; 75 Hawthorne Street; San Francisco, CA 94105.

Watershed Grants: The United States Environmental Protection Agency (USEPA) has announced the availability of up to \$21 million in federal funds for watershed grants. This is a nationally competitive grant program to encourage community-based approaches to watershed management. The majority of funds will be made available in the form of grants (between \$300,000 and \$1,300,000) for specific watershed "studies" or "demonstrations". Similar to last year's competitive process, nominations for Watershed Initiative grants are accepted from Governors and Tribal Leaders only. Nominations were due to USEPA on or before Jan. 15, 2004. Each state's Governor is allowed to submit 2 in-state watershed nominations and unlimited interstate nominations to their USEPA Regional Office for this competition.

Wetlands Protection - Program Development Grants:

The purpose and special emphasis of this grant program is to provide funding for projects which develop: 1) comprehensive wetland monitoring programs using environmental indicators, assess biological health, estimate wetland losses, gains, and functions; 2) ecologically effective compensatory mitigation for unavoidable impacts; 3) protection for isolated wetlands and other sensitive aquatic resources; and 4) tribal wetland conservation plans. Development of Habitat Conservation Plans, projects set forth by other federal agencies, or long-term planning projects not connected to near-term implementation are a low priority. For additional information, please contact Cheryl McGovern at (415) 972-3415 .

Land and Water Conservation Fund (LWCF): The Land and Water Conservation Fund is the largest source of federal money for parks, wildlife, and open space land acquisition. Its funding comes primarily from offshore oil and gas drilling receipts, with an authorized expenditure of \$900 million each year. Under the act, a portion of the money is intended to go to federal land purchases and a portion to the states as matching grants for state and local park projects. Congress generally has appropriated only a fraction of the \$900 million authorized, however,

significant strides have been taken in recent years to increase the levels of the Land and Water Conservation Fund. Contact your Congressional representative or regional office of any of the federal agencies for more specific information.

Landowner Incentive Program Grant Proposals: The Fish and Wildlife Service requests proposals under the Landowner Incentive Program pending a Department of the Interior and Related Agencies Appropriations Act 2004 allocation of funds for conservation grants to States, the District of Columbia, Puerto Rico, Guam, the United States Virgin Islands, the Northern Mariana Islands, and American Samoa (hereafter referred to collectively as States), and Tribes. These grants are available for conservation efforts to be carried out on private lands, to provide technical or financial assistance to private landowners for the purpose of benefiting Federally listed, proposed, or candidate species, or other at-risk species on private lands. Assistance must be to protect, restore, or manage habitat on private lands. This program is administered through State Wildlife Agencies, but the work must occur on private lands (this generally includes non-profits in the USFWS definition). For any further information about Landowner Incentive Program, contact: The Division of Federal Aid FederalAid@fws.gov.

2004 Neotropical Migratory Bird Conservation Act Grants Program Grants: The grant application for the FY2004 Neotrop program is now available at <http://birdhabitat.fws.gov>. This program particularly pertains to projects that include upland habitats or those with riparian habitats. For 2004, almost \$1 mil. will be available for US projects. Habitat work (including monitoring, education and outreach, and other) will be considered. In the US and Mexico, wetland projects will generally not be considered, so as not to compete with the larger NAWCA program. A Neotrop project on upland could make a nice complement to a wetland conservation project. Proposals are expected to contribute directly to the continental bird conservation plans as developed by bird initiatives. Furthermore, proposals that develop or support international partnerships for shared priorities, especially between the US and Mexico, have been funded at a higher proportion than proposals strictly within the US. Note that they are not accepting paper this time! **Check back for upcoming deadlines.**

North American Wetlands Conservation Act (NAWCA): NAWCA provides federal funds specifically to "conserve North American wetland ecosystems and waterfowl and the other migratory birds and fish and wildlife that depend on such habitats." (PL 101-233) Eligible projects include acquisition and restoration of wetlands, among other activities. Proposals require a 50/50 nonfederal match.

- 2004 NAWCA **Standard Grants:** New application instructions are available on the NAWCA web site at <http://birdhabitat.fws.gov>. Click on Wetlands Grants Program and then click on U.S. Standard Grants. For additional information, contact Rodicia McKnight at 703-358-2266/ rodecia_mcknight@fws.gov or David Buie at david_buie@fws.gov.
- 2004 NAWCA **Small Grants** In conjunction with the Standard Grants program, the North American Wetlands Conservation Council (Council) has created a Small Grants program. The objective is to promote long-term wetlands conservation activities through encouraging participation by new grantees and partners who may not otherwise be able to compete in the Standard Grants program. From 1996, when the program began, about 203 projects have been selected for funding for a total of about \$8.6 million. For 2004, with the approval of the Migratory Bird Conservation Commission, the Council is establishing a \$2.0 million Small Grants funding goal for high quality proposals.

NPS Rivers, Trails, and Conservation Assistance Program The National Park Service (NPS) has just announced that the Rivers, Trails, and Conservation Assistance Program (RTCA) is now accepting applications for 2004 technical assistance. This program helps to fulfill the National

Park Service's mission of preserving the nation's natural and cultural resources by cooperating with partners to extend the benefits of NPS expertise beyond the boundaries of the national parks to benefit conservation and outdoor recreation throughout the country. RTCA staff can assist in a variety of ways from a one time telephone consultation to longer term project involvement. For more information call Barbara Rice at 510-817-1449. **Deadline is July 1st** each year although NPS likes to work with project proponents prior to the deadline.

Partners for Fish & Wildlife Program: The F&WS Partners for Fish & Wildlife Program works in voluntary partnership with private landowners to restore ecological habitat. The Program provides advice on the design and location of potential restoration as well as financial assistance to implement the projects. A dollar-for-dollar cost share is sought. Contact Deb Schlafmann, Partners for Fish and Wildlife & Habitat Conservation, California/Nevada Operations Office, 916/414-6464, 916/414-6462 Fax

Private Stewardship Grant Program: The U.S. Fish and Wildlife Service is seeking proposals for the Private Stewardship Grant Program which supports on-the-ground conservation projects on private land that benefit federally listed, proposed, or candidate species, or other at-risk species. A cost share of at least 10% of total project cost is sought. This may be a source of funding for partners who work with private land owners. For more information on how to apply, visit http://endangered.fws.gov/grants/private_stewardship/index.html FY 2004 proposals must be received by the appropriate regional office. Also, be sure to read the letter, "Clarification of Eligibility Criteria."

http://endangered.fws.gov/grants/private_stewardship/FY2004/clarification.pdf> For further information, contact: Michael Fris, Program Contact, 916/414-6464, U.S. Fish and Wildlife Service, Federal Building, 2800 Cottage Way, Room W-2606 Sacramento, CA 95825-1846.

U.S. Department of Agriculture, Natural Resource Conservation Service (NRCS)

Wetlands Reserve Program (WRP): Funds are available through the U.S. Department of Agriculture, Natural Resource Conservation Service for the acquisition of conservation easements on agricultural lands. Both permanent and 30-year easements can be purchased under the WRP, with priority given to projects that maximize wildlife values. Funds for wetland restoration are also available. Contact: Alan Forkey, Wetlands Biologist, 530-792-5653 or your local NRCS field office.

- **Farm Bill:** Significant funds are available to Joint Venture partners through Farm Bill funding even if they have a project that remotely qualifies. Applicable Farm Bill programs include WHIP, WRP and NRCS (above). For more information, read [How to Apply for Farm Bill Funding](#).
- **Wildlife Habitat Incentive Program (WHIP):** WHIP is a voluntary program for private landowners who want to develop or improve fish and wildlife habitat on their property. The Natural Resources Conservation Service (NRCS) administers the program, providing technical assistance and up to 75% of the cost of the project. Contact your local NRCS field office for more information.

Watershed Assistance Grants (WAG): The River Network allocated funding to build capacity of existing or new watershed partnerships to protect and restore their watersheds.

STATE PROGRAMS

CALFED Bay-Delta Program: This program is comprised of both state and federal agencies

that have been charged with finding a solution to the long-standing water wars in the Delta. Ecosystem restoration is a major component of the program and over \$100 million has been allocated to date. Projects and programs must be within the Bay Delta and its tributary watersheds, and local, state and federal agencies, non-profits and individuals are eligible to apply. Future RFPs will be released in January. A wide range of grant amounts have been allocated, from a few thousand to millions. Call Rebecca Fauver at 916-654-1334 for more information. CALFED Bay-Delta Program, 1416 Ninth Street, Suite 1155, Sacramento, CA 95814.

California Farmlands Conservancy Program: The CA Farmlands Conservancy Program (formerly the Agricultural Land Stewardship Program) within the State Department of Conservation provides long-term protection of farmland through grants to for the purchase of agricultural conservation easements, fee title acquisition projects, policy/planning projects and land improvement projects. Local agencies and non-profits are eligible to apply. Contact: Charles Tyson, Program Coordinator, Office of Land Conservation, 801 K Street, MS 13-71, Sacramento CA 95814. 916-324-0862.

Caltrans Mitigation: Caltrans frequently looks for wetlands projects that can be used to mitigate approved highway projects. Contact your local Caltrans office.

Department of Conservation Watershed Coordinator Grant Program The Request for Proposals (RFP) for the Watershed Coordinator Grant Program is now available on the Department's website. The Grant Program is open to locally based nonprofit groups with 501(c)(3) status, special districts and local governments. The Program is not open to federal or state agencies. To receive a hard copy of the RFP, please send a request to rcd@consvr.ca.gov.

Department of Fish and Game (DFG) Fines: DFG collects fine monies for fish and game code violations. County fish and game committees typically administer these funds. Contact your local Fish and Game office for information.

Environmental Enhancement and Mitigation Program (EEM): Established in 1989, the EEM Program requires the state to spend an additional \$10 million a year over a 10- year period from FY 1991-92 to FY 2000-01 beyond what is legally required to mitigate the effects of transportation facility development. Grants are available for projects that mitigate, directly or indirectly, the environmental impacts of transportation facilities. This program awards funds in the following three categories: Highway Landscape and Urban Forestry, Resource Lands, and Roadside Recreation. Local, state, or federal agency, non-profit organizations, or public/private partnership are eligible to apply. Requests are generally limited to \$250,000. No matching funds are required, although matching funds greatly strengthen your application. Contact: Bill Borden, California Resources Agency, 1416 Ninth Street, Room 1311, Sacramento, 95814, 916-653-5656.

Habitat Conservation Fund: The California Department of Parks and Recreation administers this grant program for local public agencies for the acquisition and restoration of wildlife habitats and significant natural areas. Eligible projects include acquisition/restoration of deer/mountain lion, rare, threatened and endangered species, wetlands, riparian, anadromous fish and trout habitat and urban trail/wildlife corridor projects. Contact Odel King at 916-653-8758, California Department of Parks and Recreation; PO Box 942896; Sacramento, 94296-0007.

PROPOSITION 12 FUNDING. Passage of Proposition 12 in March 2000 increased funding to existing programs or established new sources of funds for parks and recreational resources. Following is a list of the agencies administering Proposition 12 funds, names of funding

programs, and contact information.

- Department of Parks and Recreation: Urban Recreational and Cultural Centers, Museums, and Facilities for Wildlife or Environmental Education Program - Per Capita Program - Roberti-Z'berg-Harris Program - Non-Motorized Trails - Murray Hayden Urban Parks and Youth Services Program - Riparian and Riverine Program - Zoos and Aquariums Program. Please call (916) 653-7423 or visit the [program website](#).
- California Conservation Corps: [Project Funds](#). Please call (916) 341-3153
- Wildlife Conservation Board: [Project Funds](#). Please call (916) 653-7664
- Department of Conservation: [Project Funds](#). Please call (916) 322-1080
- Department of Fish and Game: [Project Funds](#). Please call (916) 653-7664
- Resources Agency: [Project Funds](#). Please call (916) 653-5656

State Water Resources Control Board (SWRCB)

Nonpoint Source & Water Quality Planning Programs: SWRCB offers funding (grants and loans) for projects that improve or protect water quality that is impaired or threatened by non-point source pollution through the NPS section of the SWRCB. State and local agencies and non-profits may apply. For more information, contact Paul Roggensack (loans to address water quality associated with discharges and estuary enhancement) at 916-657-0673, Paul Lillebo [205(j) planning grants] at 916-657-1031, or Lauma Jurkevics [319(h) implementation grants] at 916-657-0518. NOTE: Last month, EPA published new guidelines for the National Nonpoint Source (NPS) Program implemented under section 319 of the Clean Water Act. These guidelines replace all previous NPS grants guidelines beginning in fiscal year 2004. The guidelines focus approximately one-half of section 319 dollars on the remediation of impaired waters through the development of total maximum daily loads (TMDLs), and the development and implementation of watershed-based plans. These plans provide an analytical framework for assessing the sources of water pollution; estimating the amount of pollutant reduction needed to achieve water quality standards; identifying the management measures whose implementation will enable those reductions to be achieved; and identifying financial and regulatory tools, as appropriate, that will enable the watershed plan's goals to be achieved. The guidelines were published in the Federal Register on Oct. 23, 2003 and are posted on EPA's NPS web site at: <http://www.epa.gov/fedrgstr/EPA-WATER/2003/October/Day-23/w26755.htm>.

Watershed Grants: The State Water Resources Control Board and the California Environmental Protection Agency are now jointly soliciting grant proposals for screening, selection, and recommendation to the Governor. Upon approval by the Governor, two in-state proposals and selected interstate proposals can be forwarded to the USEPA for the funding competition. Tribal leaders may also submit nominations directly to the USEPA. Applicants must meet the USEPA Watershed Initiative grant criteria to be eligible and competitive for funding. The criteria are very restrictive and potential nominees should read the 'Question and Answer' document (under 'Call for 2004 Nominations') at the [USEPA website](#) before considering whether to put in the time and effort needed to apply. Criteria for selection and other information can be found at the USEPA website. The December 4, 2003 deadline has passed. Submitted nominations will be reviewed by staff from the California Environmental Protection Agency, the California Resources Agency, the Department of Water Resources, and the Water Resources Control Board. For additional information, please contact Ken Coulter at the State Water Resources Control Board at (916) 341-5496 and Sam Ziegler at USEPA at (415) 972-3399.

Transportation Enhancement Activities Program: The federal Transportation Equity Act for the 21st Century (TEA-21) extends the life and intent of ISTEA through 2003, including the requirement that states spend a minimum of 10% of their Surface Transportation Program funds

on "transportation enhancements" or conservation-related projects such as the acquisition of scenic lands, easements, and historic sites, construction of bicycle trails, removal of outdoor advertising, and archeological/historic preservation. Eligible projects must relate to a transportation facility and be above and beyond normal transportation projects or mitigation. Non-federal matching funds are required. California's TEA funds are separated into four pots, with the bulk of the funding available through regional transportation planning agencies. Local, state, and federal agencies are eligible to receive funding; non-profits are encouraged to submit joint applications. Application deadlines vary. Contact: Marsha Mason, Caltrans TEA Office, 1120 N Street, Sacramento, 95814, 916-654-5275 or your local regional transportation planning agency.

Urban Park Program: Eligible projects: Acquisition or development, or both, of property for new urban parks or new recreational or multipurpose facilities. Funds available: \$130,690,000. Match Requirement: Applicants that provide a commitment for matching contributions will be more competitive in this program. Eligible applicants: (1) Heavily urbanized counties (population of 500,000 or more and a density of at least 1,100 persons per sq. mile) [Note: Heavily urbanized counties include the counties of Alameda, Contra Costa, Los Angeles, Orange, Sacramento, San Francisco, San Mateo, and Santa Clara]. (2) Cities, districts, as defined, and joint powers authorities located in a heavily urbanized county. (3) Cities with a population of 100,000 or more that are not in a heavily urbanized county [Note: cities with a population of 100,000 or more that are not in a heavily urbanized county include the cities of Bakersfield, Chula Vista, Corona, Escondido, Fairfield, Fontana, Fresno, Modesto, Moreno Valley, Oceanside, Ontario, Oxnard, Rancho Cucamonga, Riverside, Salinas, San Bernardino, San Buenaventura, San Diego, Santa Rosa, Simi Valley, Stockton, Thousand Oaks, and Vallejo]. (4) Non-profit organizations in all of the above.

Wildlife Conservation Board (WCB) Inland Wetlands and Riparian Habitat Conservation Programs:

- WCB acquires and restores wildlife habitat throughout California.
- WCB also manages the Inland Wetlands Program for the acquisition and restoration of wetlands in the Central Valley and the Riparian Habitat Conservation Program that focuses on protecting and restoring riparian systems throughout the state. For more information on available funding, contact Marilyn Cundiff-Gee (Inland Wetlands) or Scott Clemons (Riparian) at 916-445-8448.
- With the passage of Prop 50, an unspecified amount of funding will be available through the Wildlife Conservation Board on a continuous basis. Stay tuned for more details.

LOCAL SOURCES

Assessments: An assessment may also be referred to as a "special" or "benefit" assessment, and involves the levying of a charge on property owners to provide financing for public improvements. A Landscaping and Lighting Act Assessment District is specifically designed to fund landscaping, street lighting, and open space acquisition/improvement projects. For example, Proposition KK approved by voters in 1994, created a landscaping and lighting assessment district in Eastern Contra Costa County that is used by the East Bay Regional Park District and its municipal partners to fund open space and trail improvements in this portion of the Park District.

Flood Control Districts: The acquisition and restoration of wetlands is increasingly recognized as providing both environmental and flood control benefits. Contact your local district to

determine if funds are available.

General Obligation Bonds: Cities, counties, and recreation and park districts have authority to issue bonds for park and open space purposes. If approved, bonds and the interest they incur are re-paid through an increase in property taxes. Current law requires passage by a 2/3 vote - bonds issued to fund specific, popular projects are more likely to be approved.

Local Park Districts: Many local or regional park districts are actively involved in acquiring and restoring wetland and riparian habitat. For more information, contact your local park district office.

PRIVATE ORGANIZATIONS

The California Wildlands Grassroots Fund was established by the San Francisco-based Tides Foundation to support the efforts of activists to preserve California's wildlands. The Fund supports conservationists advocating for the permanent protection of intact wildlands on both public and private lands in order to help preserve California's wilderness and native biological diversity. CWGF defines "wildlands" as natural habitats, privately or publicly owned, that are (or have the potential to be) permanently preserved through legislation or deed restrictions. The Fund provides a broad range of support to promote the ability of activists and organizations to protect wildernesses throughout the state. Specifically, it focuses on small nonprofit organizations (budgets of \$100,000 or less) and individual activists (with a sponsoring organization) that show a demonstrated ability and commitment to conserve California's natural landscapes, ecosystems, plants, and wildlife; and geographic areas and advocacy efforts that have not received significant foundation support. The typical grant award is between \$1,000-\$3,500, with a maximum award of \$5,000. There is an open deadline for these grants.

The Candle Foundation: Seeks innovative, high-impact, low-overhead projects for which beneficiaries are chosen on a nonreligious, nonpolitical, nonethnic basis. A sample program that has been funded in the past is watershed education for inner-city students. The Candle Foundation supports grant-seekers throughout North America with some preference given to areas in which there are Candle offices. Grants ranging from \$1,000 to \$10,000 are awarded in five categories: Community investment; Education and information dissemination; Hunger and homelessness; Medical research; Preventive health services. There is an open deadline for these grants.

Community Technology Foundation of California Grants: The goal of our General Grants program is to be responsive to the efforts of community-based organizations in designing and integrating telecommunications and technology into their programs. We believe that underserved communities drive and know best how to incorporate technology into their lives, identify barriers in access, and propose community-building and problem solving strategies. The Foundation conducts two grant rounds per year, but we accept General Grants proposals year round from qualified applicants. We greatly appreciate early proposal submissions.

Ducks Unlimited: Ducks Unlimited (DU) provides technical assistance, matching funds and help in securing grants for the completion of wetland habitat restoration projects on both public and private land. Call the Western Regional Office of DU at 916-852-2000.

The E. Alexander Bergstrom Memorial Research Award from the Association of Field Ornithologists: The purpose of this award is to promote field studies of birds, by helping to support a specific research or analysis project. Approximately five Domestic awards (maximum

\$1000 each) and two or three Latin American Awards (maximum \$1500 each) will be awarded annually. Applications may be made for a grant of AFO mist nets in lieu of a cash award. Applications may be submitted in English, Spanish, or Portuguese. Visit their [website](#) or call (979) 480-0999 for further details. **The 2003 deadline has passed; the next deadline t.b.a.**

The Five-Star Restoration Challenge Grants Request for Proposals is now open. Applications must be postmarked by March 1, 2004. Click on the links for .pdf versions of the [RFP](#) and [Application](#). This is a national program (including Puerto Rico, and Virgin Islands) open to all small-scale wetland, riparian and coastal restoration projects that have an educational component, monitoring plan, and diverse strong partnerships with ideally five organizations that contribute funding, land, technical assistance, workforce support or in-kind contributions. The partners can include local, state or tribal governments, local businesses, corporations, schools, foundations, conservation organizations, non-profits or youth organizations.

For more information go to:

http://www.nmfs.noaa.gov/habitat/restoration/projects_programs/crp/partners/nfwf.html#5star
<http://www.epa.gov/owow/wetlands/restore/5star/>

The Home Depot Foundation: Supports a wide range of nonprofit organizations throughout the U.S. and Canada in the communities where company associates live and work. The Foundation focuses on organizations that create or rehabilitate affordable housing, assist at-risk youth, protect the environment, and prepare for and respond to disasters. Applications are accepted four times a year. The Foundation only considers unsolicited requests that match its eligibility requirements.

National Geographic Society Education Foundation Grant: The Foundation's grants facilitate work in the classroom, school, district, and/or community. Projects that feature outreach to urban areas are particularly encouraged. Two broad categories: 1) promoting geographic knowledge through education, and 2) promoting stewardship of natural and cultural resources. Applications are accepted from any current teacher or administrator in an accredited K-12 school within the United States. Online applications are strongly encouraged.

National Fish and Wildlife Foundation (NFWF):

- Funds are available for acquiring significant resource lands for the protection and restoration of sensitive fish, wildlife and plant species within NFWF's Wetlands and Private Lands and Wildlife and Habitat Initiatives. Other NFWF programs provide funds for projects that include Conservation Education, Fisheries Conservation and Management and Neotropical Migratory Bird Conservation.
- Eligible Applicants: Federal, state and local governments, educational institutions, and nonprofit organizations. Deadlines, request amount and matching requirements vary from program to program.
Contact: David Brunner, NFWF, 28 2nd Street, San Francisco, CA 94105; 415-778-0999.
- Pathways To Nature is a partnership between the nearly 300 Wild Birds Unlimited, Inc. retail stores and National Fish and Wildlife Foundation. In 2003, the Pathways To Nature program seeks to award one grant of up to \$200,000 for an education exhibit or wildlife watching structure or tour. Funds must be matched on a minimum 1:1 basis with cash or contributed goods and services. The project must include a "naming" opportunity for Wild Birds Unlimited. Projects must be located at major (minimum 100,000 visitors annually) nature tourism destinations for birders. Send a brief (not to exceed 200 words) project description to Peter Stangel, National Fish and Wildlife Foundation at stangel@nfwf.org. There is no deadline for submissions, and full applications will be distributed by invitation only. <http://www.pathwaystonature.com/>

- The Five-Star Restoration Challenge Grants Request for Proposals is now open. Click on the links for .pdf versions of the RFP and Application. This is a national program (including Puerto Rico, and Virgin Islands) open to all small-scale wetland, riparian and coastal restoration projects that have an educational component, monitoring plan, and diverse strong partnerships with ideally five organizations that contribute funding, land, technical assistance, workforce support or in-kind contributions. The partners can include local, state or tribal governments, local businesses, corporations, schools, foundations, conservation organizations, non-profits or youth organizations. For more information go to:
http://www.nmfs.noaa.gov/habitat/restoration/projects_programs/crp/partners/nfwf.html#5star.
- Nature of Learning Start-Up Grants: The Nature of Learning is a new community-based environmental education initiative that seeks to use National Wildlife Refuges and other natural areas as outdoor classrooms to promote a greater understanding of local conservation issues; encourage an interdisciplinary approach to learning that seeks to enhance student academic achievement; utilize field experiences and student-led stewardship projects to connect classroom lessons to real-world issues; and involve a partnership among local schools, community groups, natural resource professionals, and local businesses. The program will award grants of up to \$5,000 on a competitive basis to support start-up expenses. Programs must involve a partnership among a local school(s), community group (e.g., refuge support group), and National Wildlife Refuge. For more information, visit <http://www.nfwf.org/programs/tnol.htm>. Application deadline: **next deadline t.b.a.**
- Bring Back the Natives: Supports on-the-ground habitat restoration projects that benefit native aquatic species (e.g., native fish, aquatic insects, mollusks, and amphibians) in their historic range. Application deadline: **next deadline t.b.a.** For more information, contact krystyna.wolniakowski@nfwf.org or visit http://www.nfwf.org/programs/grant_apply.htm.

The Nature of Learning Start-Up Grants: The Nature of Learning is a new community-based environmental education initiative that seeks to use National Wildlife Refuges and other natural areas as outdoor classrooms to promote a greater understanding of local conservation issues; encourage an interdisciplinary approach to learning that seeks to enhance student academic achievement; utilize field experiences and student-led stewardship projects to connect classroom lessons to real-world issues; and involve a partnership among local schools, community groups, natural resource professionals, and local businesses. The program will award grants of up to \$5,000 on a competitive basis to support start-up expenses. Programs must involve a partnership among a local school(s), community group (e.g., refuge support group), and National Wildlife Refuge.

The Northern California Environmental Grassroots Fund was established in 2003 by a consortium of foundations to support community-based grassroots environmental efforts throughout Northern California. The Fund's goal is to award small grants (\$5000 or less) to small organizations (with budgets of \$100,000 or less) that are currently underserved by most funding strategies. For the first year, the Fund anticipates four grant cycles, about 3 months apart. In each cycle, the Fund will award approximately 10 grants, totaling \$30,000 each cycle. Geographic Scope: Northern California (Includes the entire Sierra Nevada Mountains, Central Valley, Central Coast, and North Coast) Organizational Size: Annual budget of \$100,000 or less (for exceptions, see application) Issues: Include, but are not limited to: Environmental health and justice, land management and urban sprawl, habitat and wilderness protection, sustainable forestry, water resources, agriculture, and pollution. Strategies: General support for organizations with an environmental mission, or project support for strategies such as community-based advocacy,

technical assistance, litigation, restoration projects, organizing expenses, grassroots campaigns, and environmental education. Tax status: Applicants may show proof of nonprofit status, be sponsored by another nonprofit, or ask for sponsorship from the fund. Deadlines: Submit the completed application and attachments by mail, postmarked by the deadline date: March 31, June 30, September 30, or December 31. If you are uncertain if your organization is eligible, please e-mail us before applying: grassroots@rosefdn.org

Packard Foundation: The foundation's Conserving California Landscapes Initiatives funds habitat protection and watershed projects in the Central Valley, Sierra, and Central Coast. For more information and grant guidelines, call 650-948-7658.

Project AWARE Foundation: The Project AWARE Foundation conserves underwater environments through education, advocacy and action. The Foundation funds projects that have a direct benefit to the aquatic environment such as: public education, grassroots conservation and enhancement projects, environmentally focused research that leads to conservation measures, public awareness initiatives, environmental assessment and monitoring projects, and volunteer-supported community activism. The Micro Grant Program provides funding for local grassroots efforts up to \$1,000. The Macro Grant Program provides funding for regional, national, or international efforts in excess of \$1,000 but not more than \$10,000. Support is provided for community groups and grassroots organizations around the world. Deadlines for submitting applications are February 15, May 15, August 15, and November 15, annually. Visit the above website for more information or to access application instructions.

Temper oft he Times Foundation, Inc.: Provides \$500 to \$15,000 grants to nonprofits to do environmental advertising or publication.

The Tiffany and Co. Foundation Environmental Conservation: The Foundation supports organizations dedicated to conservation of natural resources, an area of vital concern because it is from the natural world that the company draws the raw materials and the inspiration that are at the heart of Tiffany. Partnering with environmental groups that study how to protect our natural resources around the globe will lead to better understanding of how to conserve them. In addition, the Foundation considers groups who concentrate on social responsibility in the area of urban growth and minimizing the negative effects on the environment. The Board of Directors of The Tiffany and Co. Foundation meets annually in January and July. **The next deadline t.b.a.**

Appendix 13 - Potential Sources of Funding for Non-native Invasive Species For Watershed Projects (Note Some of the Coastal Listings Do Not Apply)

General Search Lists

CA: Welcome to GetGrants!

<http://getgrants.ca.gov/>

Identifies Grant Programs within State of California Agencies and Departments through a single search, without being required to know the name of the responsible entity.

Catalog of Federal Domestic Assistance: <http://12.46.245.173/cfda/cfda.html>

Database of all Federal programs available to State and local governments (including the District of Columbia); federally recognized Indian tribal governments; Territories (and possessions) of the United States; domestic public, quasi-public, and private profit and nonprofit organizations and institutions; specialized groups; and individuals.

Coastal Habitat Restoration: <http://www.csc.noaa.gov/lcr/rhodeisland/html/fund/fundana.htm>

List of long standing sources of funding for projects (mostly restoration work). Funds available every year.

Federal Funding for Watershed Protection: <http://cfpub.epa.gov/fedfund/>

Searchable database of financial assistance sources (grants, loans, cost-sharing) available to fund a variety of watershed protection projects.

Grants: <http://www.bigdatabase.com/>

North America's most comprehensive source of fundraising information, opportunities and resources for charities and non-profit organizations.

Invasivespecies.gov: <http://www.invasivespecies.gov/toolkit/grants.shtml>

Grants presented on this Web site are not inclusive of all available grants for invasive species management, prevention and research. The information provided is as accurate as possible, but is subject to change.

Appendix 13 - Potential Sources of Funding for Non-native Invasive Species For Watershed Projects (Note Some of the Coastal Listings Do Not Apply)

Local Government Environmental Assistance Network: <http://www.lgean.org/html/wn8>

What's New keeps local government officials abreast of current environmental funding opportunities, federal policy updates, important legislative activities, new reports and publications, and other available tools and resources.

SWRCB Division of Financial Assistance: <http://www.swrcb.ca.gov/cwphome/>

Clean Beaches Initiative Projects, State Revolving Fund (SRF) Priority List

SWRCB Financial Assistance sub-site: <http://www.swrcb.ca.gov/funding/index.html>

Additional programs from Prop 13, Non-Point Source/Clean Water Act (NPS/CWA), and Prop 40/50 funded programs.

Specific Sites

American Sportfishing Association's FishAmerica Restoration Grants:

<http://www.fishamerica.org/content/conservation/fishamerica/>

Funds marine and anadromous fish habitat restoration projects which benefit recreationally fished species. During open announcements, applications should be directed to the FishAmerica Foundation. (NOAA is a partner.)

Proposals due May 28, 2004

Bay-Delta Science Consortium RFPs: <http://www.baydeltaconsortium.org/RFPnews>

Grants up to \$25,000. **January 20, 2004 round closed.**

Conservation Assistance Tools: <http://cat.sonoran.org/>

Dam removal and fish passage: <http://www.amrivers.org/feature/restorationgrants.htm>

Funds voluntary dam removal and fish passage projects in California, the Northeast and the Mid-Atlantic states. During open announcements, applications should be directed to American Rivers. (NOAA is a partner.)

Closed April 1, 2004

Appendix 13 - Potential Sources of Funding for Non-native Invasive Species For Watershed Projects (Note Some of the Coastal Listings Do Not Apply)

DWR Urban Streams Restoration Program:

<http://www.watershedrestoration.water.ca.gov/urbanstreams/>

Assists communities in reducing damages from stream bank and watershed instability and floods while restoring the environmental and aesthetic values of streams; encourages stewardship and maintenance of streams by the community.

EPA Environmental Education Grants Program: <http://www.epa.gov/enviroed/grants.html>

Supports environmental education projects to enhance public awareness, knowledge, and skills to make informed decisions about environmental quality.

EPA Region 9: <http://www.epa.gov/region9/funding/index.html>

Financial assistance grants to support a variety of environmental programs and activities.

Event Sponsorship: <http://www.tomsofmaine.com/toms/community/rivers2003/>

Tom's of Maine - promotes natural care products and supports the river conservation movement. Grants generally range from \$1,000 - \$10,000.

Grant writing and financial management courses:

The Grantsmanship Center: <http://www.tgci.org>

Cal State Fullerton: www.csufextension.org (Feasibility Studies and Proposal Writing)

Free Grantwriting Information: The Foundation Center <http://www.fdncenter.org>

Institute for Sustainable Forestry's California Salmon Partnership Grants:

<http://www.isf-sw.org/>

Funds projects benefiting salmonids in coastal California and the Klamath basin. Applicants must be communities or tribal, community-based or community-led organizations working to recover local watershed anadromous salmonid stocks. During open announcements, applications should be directed to the Institute for Sustainable Forestry. (NOAA is a partner.)

Closed March 17, 2003

Appendix 13 - Potential Sources of Funding for Non-native Invasive Species For Watershed Projects (Note Some of the Coastal Listings Do Not Apply)

National Fish and Wildlife Foundation (NFWF) Five-Star Restoration Challenge Grants Program: <http://www.nfwf.org>

Funds community-based wetland, riparian and coastal habitat restoration projects. During open announcements, applications are directed to NFWF. (EPA & NOAA are partners). Provides modest financial assistance. Project sites can be public land, such as parks, streams, and school campuses, or private land, such as corporate facilities. Projects involving only research, monitoring, or planning are not eligible for funding. Open to any public or private entity.
Closed March 1, 2004

NFWF General Challenge Grant Program: <http://www.nfwf.org/programs/guidelines.htm>

NOAA partners with The National Fish and Wildlife Foundation (NFWF) to fund many types of projects that benefit living marine resources, including fishery habitat restoration projects. During open announcements, applications should be directed to NFWF. (NOAA is a partner.)
Pre-Proposals due annually June and October

NFWF Native Plant Conservation Initiative (NPCI): <http://www.nfwf.org/programs/npci.htm>

Grants of federal dollars will be provided to non-profit organizations and agencies at all levels of government to promote the conservation of native plants. (Plant Conservation Alliance is a partner.) Request for Proposals includes two separate grant cycles, with application dates
December 1 and July 15.

NFWF Pacific Grassroots Salmon Initiative: http://www.nfwf.org/programs/PGSI_RFP.htm

Funds projects to protect and restore chinook and coho salmon and steelhead stocks. During open announcements, applications should be directed to NFWF. (NOAA is a partner.)
Closed July 1, 2003

NFWF Pulling Together: A Public/Private Partnership for Invasive and Noxious Plant Management: <http://www.nfwf.org/programs/pti.htm>

Federally funded program with partnerships between federal, state and local agencies, private landowners and interested groups to develop long term weed management projects. Program goals are to prevent, manage, or eradicate invasive and noxious plants through a coordinated program of public/private partnerships; and to increase public awareness of the adverse impacts of invasive and noxious plants. (BLM, DoD, NPS, APHIS, FS, FWS are partners.)

Appendix 13 - Potential Sources of Funding for Non-native Invasive Species For Watershed Projects (Note Some of the Coastal Listings Do Not Apply)

National Oceanic and Atmospheric Administration (NOAA) Coastal Services Center:

<http://www.csc.noaa.gov/funding/>

The NOAA Coastal Services Center annually issues a Broad Area Announcement detailing the availability of competitive funding from the Center. This announcement consists of several independent opportunities to provide the coastal management community with a clear overview of grants from the Center. The most recent Broad Area Announcement was published in the Federal Register on June 10, 2002.

Closed March 15, 2004

NOAA Community-based Restoration Program Individual Project Grants:

http://www.nmfs.noaa.gov/habitat/restoration/projects_programs/crp/partners_funding/callforprojects.html

Provides funds for individual grass-roots marine habitat restoration projects that will benefit living marine resources including anadromous fish species, commercial and recreational resources, and endangered and threatened species. During open announcements, applications are directed to the NOAA Restoration Center. **Closed September 12, 2003**

NOAA Community-based Habitat Restoration National and Regional Partnership Grants:

http://www.nmfs.noaa.gov/habitat/restoration/projects_programs/crp/partners_funding/natregpart.html

Provides one-on-one technical and permitting assistance in restoring habitats required by marine and anadromous fish, endangered species, and other living marine resources partnerships.

Closed December 5, 2003

NOAA-related Funding Opportunities outside the NOAA Community-based Restoration Program: [Omnibus Notice Announcing the Availability of Grant Funds for 2004](#)

The National Oceanic and Atmospheric Administration (NOAA) announces the availability of grant funds for Fiscal Year 2004. The purpose of this notice is to provide the general public with a single source of program and application information related to the Agency's competitive grant offerings, and it contains the information about those programs required to be published in the Federal Register. This omnibus notice is designed to replace the multiple Federal Register notices that traditionally advertised the availability of NOAA's discretionary funds for its various programs.

Status: Multiple Grants are Currently Open

Appendix 13 - Potential Sources of Funding for Non-native Invasive Species For Watershed Projects (Note Some of the Coastal Listings Do Not Apply)

Northern California Environmental Grassroots Fund: grassroots@rosefdn.org

Established in 2003 by a consortium of foundations to support community-based grassroots environmental efforts throughout Northern California (Includes the entire Sierra Nevada Mountains, Central Valley, Central Coast, and North Coast). Small grants (\$5000 or less) to small organizations (with budgets of \$100,000 or less) that are currently underserved by most funding strategies. Nonprofit status, be sponsored by another nonprofit, or ask for sponsorship from the fund. **Four grant cycles, about 3 months apart.**

David and Lucile Packard Foundation: <http://www.packard.org/index.cgi?page=consci-cs>

Provides grants to nonprofit organizations. The Foundation provides national and international grants, and also has a special focus on the Northern California Counties of San Mateo, Santa Clara, Santa Cruz, and Monterey.

Private Foundations: <http://www.environmentalgrants.com/>

Rapid Response Proposal Funding (California Sea Grant College Program): http://www-csgc.ucsd.edu/PROPOSAL/RAPID_RESP/IndxRR.html

Rapid response proposals may be submitted at any time during the year and are restricted to one year or less. Total Project Costs over \$9,999 will be sent to NOAA for review and approval.

San Francisco Bay Watershed: <http://www.ifrfish.org/>

Projects benefiting marine and anadromous biological resources in SF Bay. During open announcements, applications should be directed to the Institute for Fisheries Resources. (NOAA is a partner.) **Closed January 23, 2004**

San Francisco Estuary Institute Aquatic Pesticide Monitoring Program (APMP):
www.sfei.org/apmp/docs/APMP_NonChem_RFP.pdf

APMP is administered by the San Francisco Estuary Institute, a nonprofit organization based in Oakland, California. Projects are to be conducted in California waters by **October of 2003**. (www.sfei.org).

Appendix 13 - Potential Sources of Funding for Non-native Invasive Species For Watershed Projects (Note Some of the Coastal Listings Do Not Apply)

The Nature Conservancy Grant Program: <http://nature.org/>

Funds marine and anadromous fish habitat restoration projects. The applicant must be a TNC local chapter. Organizations that have project ideas should contact their local TNC chapter to discuss forming a partnership to apply for project funds under this request for proposals. (NOAA is a partner.) **Closed May 30, 2003**

Trout Unlimited Embrace-A-Stream Grants: <http://www.tu.org/index.asp>

Funds coastal projects benefitting anadromous fish submitted to TU's Embrace-A-Stream program. The applicant must be a TU local chapter. Organizations that have project ideas should contact their local TU chapter to discuss forming a partnership to apply for project funds under this RFP. (NOAA is a partner.) **Closed December 22, 2003**

USFWS Partners for Fish & Wildlife Program: <http://attra.ncat.org/guide/pfw.htm>

Voluntary partnerships with private landowners to restore ecological habitat, usually on a cost-share basis.

Debra Schlafmann
(Asst: Dan Strait)
Partners for Fish and Wildlife & Habitat Conservation
2800 Cottage Way, W-2610
Sacramento, CA 95825
916-414-6446
FAX: 916-414-6462

USFWS Private Stewardship Grants Program:
http://endangered.fws.gov/grants/private_stewardship/

Available to private landowners and is a true granting program. Technical assistance and design can be provided with projects but typically are not.

Michael Fris, Program Contact, 916/414-6464
U.S. Fish and Wildlife Service
Federal Building
2800 Cottage Way, Room W-2606
Sacramento, CA 95825-1846

Appendix 13 - Potential Sources of Funding for Non-native Invasive Species For Watershed Projects (Note Some of the Coastal Listings Do Not Apply)

Weed Management Areas: <http://www.weedcenter.org/grants/overview.html>

Applied Science Case Studies, Seed Money for Research into Invasive Plants, Fire and Invasive Plants; and Information Synthesis and Assessment.

Deadlines are March 7 for Weed Management Area Grants and March 21 for others.

Wildlife Habitat Incentives Program (WHIP): <http://www.nrcs.usda.gov/programs/whip/>

Technical and financial assistance for landowners (both private and public) to develop upland, wetland, riparian and aquatic habitat areas for wildlife. Grant monies are provided through the Farm Bill. Past applicants have applied and received funding for the removal of exotic plants in their project areas.

Watershed Initiative Grants: <http://www.epa.gov/owow/watershed/initiative>

Competitive grant program to encourage the protection and restoration of the country's water resources.

Appendix 14 – Community Meetings Agendas, Notes and Activity Graphics

Robla Creek Stewardship Program Plan

January 9, 2007 Community Meeting

Notes Transcribed from Boards Used As a Part of 3 Interactive “Stations”

STATION 1: COMMUNITY-IDENTIFIED OPPORTUNITIES AND ISSUES

Robla Creek Stewardship Program Plan Mapping and Program Discussion

[Note: community members identified the following as important opportunities and issues; locations were identified and recorded on maps where appropriate.]

Opportunities and Values (in and around project area)

- Existing waterfowl nesting area – high diversity of birds and wetland habitat
- Opportunity for wetland and riparian woodland habitat restoration activities
- Opportunity for interpretive signage and kiosk development and installation
- Opportunity for possible installation of restrooms/amenities to support community use
- Opportunity for creating possible overlooks and picnic/gathering place (shade structure) areas
- Opportunity for development of youth and college-aged service programs with a focus on stewardship
- Opportunity for facilitating naturalist walks through area to build interest and awareness
- Opportunity to create an off-leash dog area that would be compatible with wetland protection

Issues and Concerns (in and around project area)

- Water quality in Robla Creek
- Beavers
- Red sesbania and other invasive weed infestations
- Fires
- Need for grazing or other management to address vegetation issues
- Dog trespass into wildlife habitat
- Graffiti
- Illegal dumping and trash build up throughout area (especially at access points)
- Congregations of groups/gangs
- Fence integrity
- Future development in area

STATION 2: VOLUNTEERISM

Current Volunteer Activities (undertaken by 1/9/07 meeting attendees)

- Locking up Robla Park Area (8-9pm in evenings) – with City Park & Rec. Dept.
- Dog rescue – WOOFF
- Food and medical support for families in need – Loaves and Fishes, Broderick Christian Center

- Food delivery and driving clients to appointments – Breaking Barriers

Possible Volunteer Opportunities (that if offered might generate community interest and participation)

[Note: community members were given 3 voting “dots” and voted for the volunteer opportunities that interested them most (votes could be cast in any manner they wished – e.g. they could place 3 dots by an opportunity or 1 dot by 3 opportunities.)]

- Weed Removal (3 votes)
- Planting (3 votes)
- Park Clean Up (3 votes)
- Trail Maintenance (2 votes)
- Nature Walks (bird watching etc.) (2 votes)
- Neighborhood Watch (2 votes)

The following did not receive any votes:

- Monitoring
- Leading youth/volunteer programs

STATION 3: PARTNERSHIP AND COMMUNICATION

Possible Program Partners

- Industrial Parks
- Norwood Junior High Leadership Program
- Sacramento City College (Service/Field Ecology Certificate)
- American River College
- Church Groups (River Church)
- Builders in Area (e.g. AKT, Buzz Oates, Teichert, Granite Construction Companies)
- Rio Linda Parks and Recreation District
- Sacramento State University
- Boy Scout Troops (POC: Nancy Thomson – get contact from Julie)
- Audubon Society
- Ducks Unlimited

Best Ways to Reach Community Members

[Note: community members were given 3 voting “dots” and voted for the communication pathway that was best for them (votes could be cast in any manner they wished – e.g. they could place 3 dots by a specific pathway or 1 dot by 3 pathways.)]

- Electronic mail (5 votes)
- Flyer/Mailing (4 votes)
- Postings at Schools/Institutions (3 votes)
- Robla School District (2 votes)
- Website Postings (1 vote)

- Phone (1 vote)
- Community Meetings (1 vote)
- Service Groups (1 vote)

The following did not receive any votes

- Neighborhood Groups
- Youth Affiliations (Boy Scouts/YMCA etc.)
- Merchant Associations
- Chamber of Commerce
- Grant/Norwood School District

Existing Communication Links

Community Newsletters:

The following schools all have weekly newsletters (Glenwood Estates, Taylor School, Bell School, Main Ave. School, Robla School)

Phone-trees:

Robla Park Community Association

Community Bulletin Boards:

All of schools listed above have bulletin boards.

Other:

- Local church groups have newsletters and/or phone trees – should identify which churches might be interested in publicizing events
- Moose Lodge has a playroom and area for information sharing
- McClellan Air Force Base – should research if there are existing mechanisms to publicize information
- Rotary, Lions and other clubs/organizations should be researched

Robla Creek Stewardship Program Plan

January 31, 2007 Community Meeting

Notes Transcribed from Boards Used As a Part of 4 Interactive “Stations”

STATION 1: COMMUNITY-IDENTIFIED OPPORTUNITIES AND ISSUES

Opportunities and Values (in and around project area) [Note: community reviewed opportunities and values from 1-9-07 meeting and revised. The revisions are incorporated into the text below]

- Existing waterfowl nesting area – high diversity of birds and wetland habitat
- Opportunity for wetland and riparian woodland habitat restoration activities
- Opportunity for interpretive signage and kiosk development and installation
- Opportunity for possible installation of restrooms/amenities/trash receptacles to support community use
- Opportunity for creating possible overlooks and picnic/gathering place (shade structure) areas – (*Note: concerns were expressed that there needs to be an integrated design for any site amenities so that the natural values of the area are not compromised and that the site is welcoming to a diversity of audiences*)
- Opportunity for development of youth and college-aged service programs with a focus on stewardship
- Opportunity for facilitating naturalist walks through area to build interest and awareness
- Opportunity for improved accessibility
- Opportunity for guided fitness/recreational experience (PAR course equivalent)
- Opportunity to create an off-leash dog area that would be compatible with wetland protection [*Note: concerns were expressed that any off-leash dog areas would need to be compatible with larger wildlife protection goals*]

Issues and Concerns (in and around project area)

- Water quality in Robla Creek
- Beavers and related tree damage and changes to water flows, ponding and flooding from beavers
- Red sesbania and other invasive weed infestations
- Fires
- Vegetation management through continued livestock grazing, and possibly other management actions to address vegetation issues
- Dog trespass into wildlife habitat
- Graffiti
- Illegal dumping and trash build up throughout area (especially at access points)
- Congregations of groups/gangs
- Fence integrity
- Future development in area
- Over-engineered additions/solutions (for flood control and amenities) that would preclude or impact ecological processes related to the floodplain.

STATION 2: AUDIENCES & COMMUNICATION PATHWAYS

Suggested audiences and community engagement strategies

[Note: community members were asked to review the 4 audience “groupings” and provide feedback. Additionally, audiences reviewed the proposed engagement strategies for each audience type.

The four audiences were confirmed and further defined.

- Businesses
- Local community – residents, neighborhood groups, interest groups and apartment management companies
- K-12 schools and colleges (broken into the following groupings – K-5, 6-8, 9-12, colleges)
- Service groups (to include boy/girl scouts), environmental organizations (non-profits) and churches

Meeting participants agreed with the 13 proposed engagement programs and stressed that ideally the initial program delivery would engage all of the audiences (e.g. we select engagement delivery systems that capture the broadest audiences therefore maximizing participation).

Review of web-, E newsletter, and brochure design concepts

Community members were asked to review a broad array of brochures, web designs and newsletter formats, including one that was drafted specific to the Robla Creek Stewardship Program. They were then asked to select the designs that they felt were most pleasing and effective. Comments were noted and a draft web page format, brochure and E-newsletter will be developed and included in the final Plan.

STATION 3: GUIDING PRINCIPLES AND VISION STATEMENT

Suggested guiding principles

DRAFT COMMUNITY ENGAGEMENT PRINCIPLES

Community participants reviewed and commented on the following guiding principles and statement for their application. Below is the revised statement and set of guiding principles:

Statement: As the City moves forward with building volunteer support for the Robla Creek and other natural areas projects, the following principles will be used to guide community engagement. These principles will continue to evolve and also apply to community partners. Each agency and community partner will strive to:

- ✓ **Understand the vision and goals of Robla Creek Stewardship Program and contribute meaningfully in support of achieving these;**
- ✓ **Ensure time is taken to clearly define expectations and roles;**
- ✓ **Build understanding and support common goals through open dialogue that includes active listening and constructive problem solving;**

- ✓ **Assure that participation is diverse, inclusive, welcoming and authentic;**
- ✓ **Assure that work activities and time together are both fun and productive;**
- ✓ **Always follow-through on commitments;**
- ✓ **Celebrate achievements both individual accomplishments and group success;**
- ✓ **Assure adequate staff and resources are allotted to support and maximize the effectiveness of community stewardship projects;**
- ✓ **Collaboratively build a program that commits to longevity**
- ✓ **Clearly define and address potential program liability issues and concerns, to include defining responsibilities for ensuring liability issues are addressed.**

Vision statement development

The community participants discussed the role of a “vision statement” and brainstormed elements that should be included in its development. The following is a list of the concepts that should be integrated into the vision statement:

- Sustainability
- Beautifying community
- Lasting community involvement
- Preserve and improve quality of life
- Building and connecting community to the natural setting
- Capturing values that promote a natural and “wild” setting that sustain a functional ecosystem
- Creating a safe and accessible environment
- Integrating education into programs and site experience
- Building an interactive outdoor experience
- Establishing a partner-based program with diverse stakeholders and a dedicated community
- Needs to balance the “natural” values and inclusiveness of broad family participation

One community participant prepared a draft statement for consideration:

“The Robla Creek Stewardship Program will actively demonstrate the importance of preserving California’s beauty to a younger generation.”

The text above will be used to develop the vision statement for the Program. It will be shared and further discussed at the May 23rd community meeting.

STATION 4: PRIORITIZATION CRITERIA

The table of proposed prioritization criteria was shared and briefly discussed. The participants agreed that it will be important to have a defined set of criteria that can be used to help prioritize between projects as natural areas stewardship grows within the City parks. No additions or changes were made.

Community participants were provided with draft text from the 1-5-07 review draft version of the Robla Creek Stewardship Program Plan. Participants were asked to contact either the supporting consultants or the City with comments or questions.

Below are some additional notes that were captured during conversations during the meeting:

Contact for Valley View Neighborhood Association

MaryAnn Lujan suggested contacting Barbara Graichen who is now with the Natomas community association. Her number is 991-2177 and her e-mail is natomas@aol.com. The president for the Valley View Neighborhood Association is Tony Trujillo (listed on website).

- MaryAnn mentioned the Leadership Program at Norwood Jr. High
- MaryAnn also would like a map of the area on the meeting mailer for people to know what area is being discussed
- MaryAnn would like us to send the meeting materials to Sandy Sheedy's office. She was willing to hand carry hard copies to her also.

Charlotte, would like electronic file of draft
She suggested we include Rio Linda also
Bob Bastian is an historian
A knowledgeable woman with the Rose Society

Other issues, Flooding, Transfer station planned in area

Hard copy reports went to:

Cub Coyle
Brian
Leo Lujan
Maxamillian

Appendix 15 – Staff Training Plan and Associated Materials

INTRODUCTORY TRAINING PROGRAM

FOR VOLUNTEER STEWARDSHIP ACTIVITIES IN
CITY OF SACRAMENTO NATURAL AREAS,

Robla Creek



Prepared for:

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April 25, 2007

TABLE OF CONTENTS

Training Overview	3
Managing Natural Areas	4
Volunteer Stewardship in Natural Areas.....	5
Volunteer Participation in Natural Areas Stewardship	5
Anticipated Audiences Served By the Robla Creek Stewardship Program	6
Anticipated Types of Volunteer Programs Provided As a Part of the Robla Creek Stewardship Program	7
Understanding Volunteer Motivations and Community Interest	7
Introduction to the Robla Creek Watershed.....	10
Natural Resources Values and Threats.....	11
Introduction to Native Plant Communities within Watershed	13
Introduction to Invasive Non-Native Species	14
Fennel (Foeniculum vulgare)	16
Himalayan blackberry (Rubus discolor)	17
Italian thistle (Carduus pycnocephalus)	18
Pampas grasses (Cortaderia jubata & Cortaderia selloana).....	19
Perennial Pepperweed (Lepidium latifolium)	20
Poison Hemlock (Conium maculatum)	21
Red Sesbania	22
Tree-of-heaven (Ailanthus altissima).....	23
Integrating Volunteer Stewardship into Natural Areas Management	24
Developing an Annual Work Plan	24
Identifying Roles for Volunteers.....	24
Pro-actively Directing Volunteer Interest	25
Important Considerations	29
Frequently Asked Questions about Invasive Non-Native Plant Removal Activities.....	30
Evaluation.....	32
Appendix 1	34
Appendix 2 – Glossary	36
Appendix 3 - Weed Resources	39

Training Overview

This training program is designed to provide park maintenance staff with an introduction to managing volunteers who will be working in the City of Sacramento's Natural Areas. This training was prepared for Robla Creek, but can be adapted to any of the City's Natural Areas.

The training manual includes an overview of Robla Creek's natural resources, an introduction to volunteer management, an overview of ways to motivate and inspire volunteers, a work plan, and plant identification information. While most of the manual contains background information and supporting text, several sections include "hand-outs" and other reproducible resource sections that can be reproduced and distributed to staff and volunteers.

This training focuses specifically on the volunteer stewardship program for the Robla Creek Watershed.

The training provides an introduction to:

- What is a natural area and the natural areas management plan;
- The setting, location and resources within the natural area (this manual specifically addresses Robla Creek);
- Threats to the health of the biological and physical resources within the natural area;
- Local native and non-native plant identification;
- Treatments appropriate for volunteers for controlling non-native plants;
- Strategies for facilitating a successful volunteer workday;
- Methods for developing an annual workplan that integrates volunteer support;
- Important considerations when running a volunteer program in a natural setting; and
- Identification of the public audience and stewardship programs elements that will likely be a part of the Robla Creek Stewardship Program.

Following the completion of the training, staff will successfully be able to:

- Define a natural area;
- Identify the types of vegetation communities found within the Robla Creek Watershed;
- Identify the target invasive non-native plant species that are known from the Robla Creek Watershed;
- Describe invasive plant control techniques appropriate for volunteers to administer;
- Identify the appropriate volunteer-to-staff ratio;
- Understand important considerations when running a volunteer work event in a natural areas setting;
- Describe how volunteer participation can be integrated into the Natural Areas program;
- Be familiar with commonly asked questions, and be able to respond to public questions that may be encountered during volunteer programs within natural areas; and
- Identify possible audiences and program elements for the Robla Creek Stewardship Program

Managing Natural Areas

What are “Natural Areas?”

The City of Sacramento has a diverse array of parks and open spaces, a portion of which are Natural Areas. Natural Areas are remnants of Sacramento’s historic landscape and typically support native plants, animals, and birds that are indicative of the local area, and of the greater Central Valley bioregion. In most cases these historic landscapes have been fragmented, altered, or disturbed over time but still support enough of their historic character to warrant protection and management. Natural Areas typically support diverse natural habitat functions such as supporting native plants and wildlife species richness, natural functions such as water purification and natural flood control. They typically support rich and diverse plant and animal communities that differ dramatically from the flora and fauna of disturbed and non-native plant communities. In many cases these areas are the only places where wildlife both common and uncommon wildlife can live and breed including red-tailed hawks, and Swainson’s hawks, great-horned owl, and garter snakes. Natural Areas do not typically include lawns, ornamental flower-beds, or planted forests.

Currently the City is mapping, assessing and identifying management actions for all of its natural areas. This effort will provide the foundation for the development of a Natural Areas Management Plan. It is anticipated that the Natural Areas Management Plan will be completed in summer 2007. Based on preliminary results, the Robla Creek area supports the following natural communities; oak woodland and oak savannah, riparian woodland, creek, non-native annual grassland, emergent marsh, and some small rock piles and outcrops.

What is Biodiversity and Why is it Important to Preserve These Sites?

Simply stated, biodiversity is the variety and variability of life. Biodiversity is important because it represents the web of life in which humans exist and upon which we depend. Usually, biodiversity is measured by the number of different plant and animal species in an area. The greater the number, the greater the richness of a site. In general, natural areas support many more species (including native and non-native) than do disturbed, developed, or non-native areas.

Why Preserve Nature in the Middle of a Big City?

People of all ages find refuge in parks and open spaces. Urban environments typically are noisy, active, and have lots of concrete and asphalt areas while parks and open spaces typically offer a quieter, serene, and natural landscape. Natural Areas also provide city residents with diverse recreational and educational opportunities, and help provide the residents with a sense of “place”.

During the past three decades, Natural Areas and School Stewardship Programs have evolved throughout the country providing community members with an opportunity to act locally on global environmental issues. It is anticipated that the Natural Areas Program at Robla Creek will offer residents with opportunities to experience and learn about the nature that exists in their own backyard and neighborhood through the development and implementation of an active natural areas stewardship program.



Anticipated Priority Management Actions for Robla Creek

A preliminary natural resource assessment of Robla Creek was completed in March 2007. It is anticipated that Robla Creek will rank high in the larger natural areas priorities because it supports some of the greatest wildlife values, wetland functions and hydrologic processes. (Hart, pers. comm. 2007)

Some of the management actions that will likely be included in the Natural Areas Management Plan (Hart, pers. comm. 2007) are:

- Control of targeted non-native plant species;
- Revegetation with a diversity of native plant species along the toe of the levee slope (where appropriate);
- Re-establishment of a vegetation canopy along the eastern section of the creek in areas that will not affect flood control capacity; and
- Continued removal of garbage from within creek and on levee areas.

The Natural Areas Management Plan will include prescriptions and techniques for performing these and other actions (Hart, pers. comm. 2007). These more detailed management actions should complement, and in some cases add details to the general information presented in this report.

Volunteer Stewardship in Natural Areas

Volunteer Participation in Natural Areas Stewardship

Community participation in natural areas stewardship has been growing exponentially during the last 15 years. Volunteers contribute millions of hours of donated labor to conservation each year. According to a recent survey, an estimated two million Californians participated in volunteer workdays sponsored by community-based stewardship groups such as the “Adopt a Creek” or “Friends of a Local Parks” groups that have become ubiquitous throughout California.

Natural area programs are growing in popularity in urban jurisdictions as both communities and municipalities recognize the value of remnant historic ecosystems and undeveloped parkland. Some programs have developed organically through community interest and advocacy, others have responded to regulatory requirements and some have followed many different pathways in establishing overall program goals, system-wide practices, and park-specific work plans.

The City of Sacramento is currently undertaking a planning effort to manage and protect hundreds of acres of natural areas that are under the City’s jurisdiction. This program, referred to as the Natural Areas Program, includes a strategy for maintaining natural areas while reducing overall City maintenance activities and costs. It is envisioned that a key component of this program will be a greater role for volunteer stewardship and participation.

In anticipation of a greater need for volunteer stewardship participation, The Robla Creek Stewardship Plan (May & Associates, Inc. 2007) was developed as a pilot project to define and describe volunteer participation in natural areas management. This plan, although it focuses on only one of the many parks in the City of Sacramento, is considered an important first step in defining, clarifying, and

developing the role of volunteer stewardship in City parks, and can be used as a model for volunteer programs at other parks.

Anticipated Audiences Served By the Robla Creek Stewardship Program

The Robla Creek Watershed and surrounding vicinity supports a primarily suburban community, business parks, schools and colleges and community recreation facilities. Traditional park settings draw a myriad of recreational users including youth and adult sports participants, dog walkers, skateboarders and picnickers. However few local opportunities exist for passive recreational experiences such as bird watching, hiking and community gardening. Robla Creek is unique in that it has potential to support these passive recreational values. Additionally, there is also a strong desire to engage students in meaningful service projects and outdoor educational experiences, Because of its location, Robla Creek could serve as an ‘outdoor classroom’ for various service and educational projects, providing opportunities for local environmentally-based experiences.

The following groups have been identified as primary audiences for targeting as a part of the Robla Creek Stewardship Program development. These audiences were identified through conversations with participants at community meetings, stakeholder and school interviews, and through demographic and organizational research. While these are not the only audiences who are likely to both participate and benefit in volunteer-based activities, these four target groups will likely provide a viable foundation for the Robla Creek Stewardship program.

1. Businesses and Property Management Groups

The local business and property management community could provide funding, services (e.g. printing fliers, preparing signs), and materials (e.g., fencing, lumber), donation and volunteer support, and would likely benefit from tax-deductible donations, community recognition, on-site marketing and staff involvement in local projects. Within two miles of the Robla Creek Stewardship Program Plan Study Area there are almost 1,000 businesses and numerous large apartment complexes managed by more than eight property management groups.

2. Local Residents, Neighborhood Groups, and Interest Groups

This diverse audience includes both individuals and groups (such as the Robla Park Community Association) that have a vested interest in beautifying and improving the health and recreational opportunities within the Robla Creek watershed. For the purposes of this plan, “local” is primarily defined as communities and neighborhoods geographically located within the boundaries of District 2 with direct park access or indirect access through transportation corridors (pedestrian walkways, bikeways, park greenways, bus routes, etc.) to the Robla Creek Corridor. This audience will likely share an interest in stewardship activities undertaken in their community due to their proximity to the creek.

3. K-12 Schools and Colleges

This audience is seeking meaningful and educational activities to fulfill service learning goals, develop career building schools, participate in mentor-based environmental learning and to build environmental and civic engagement through in-service projects. Volunteer stewardship and environmental stewardship programs such as the Arcade Creek water quality monitoring program (Mira Loma High School), the John Garcia Youth and Wildlife Project at Wolf Ranch (Grant Union Joint Unified School District), and the Service Learning Program (Sacramento City College) already exist, and some may be extended into Robla Creek. New programs can be built from or modeled specific to the needs and interests of the Robla Creek Stewardship Program based on these existing models.

4. Service Groups and Churches

This audience has a shared vision for community involvement and stewardship, and both service groups and churches provide an organizational structure to facilitate streamlined outreach and group participation.

Anticipated Types of Volunteer Programs Provided As a Part of the Robla Creek Stewardship Program

The following is a selected group of program elements that could be facilitated by Park Maintenance staff within the Robla Creek Watershed to achieve community interests, agency management goals and meaningful community engagement and participation. These programs respond to the realm of ideas shared during community meetings and interviews and will likely evolve as the Natural Areas Stewardship Program grows. A more detailed list of program elements is included within the Robla Creek Stewardship Management Plan.

- **Drop-In and Public Programs** - Regularly advertised and scheduled drop-in volunteer programs typically result in the development of a “core” volunteer team who can ultimately mentor new and infrequent volunteers during programs. Drop-in programs offer the greatest flexibility to interested participants, who can schedule their involvement around the time of year, task, and/or friend’s participation.
- **Special Events** - Special events can be offered or facilitated at a frequency based on community needs, coordination with larger regional activities, or in celebration of annual themes (such as Earth Day, Creek Week, Week of Caring, etc.).
- **Service Projects** - Boy and Girl Scouts, local colleges often require students complete a discreet service project, as do some high schools. Discreet projects can often be best accomplished through this type of volunteer support.
- **Group Programs** - Group programs are typically scheduled based upon the interest and availability of either a targeted or requesting group. The number of group programs should directly correlate to the management needs and priorities and can vary in size; however it is recommended that a threshold for the maximum number of participants be established.

Understanding Volunteer Motivations and Community Interest

One key to facilitating a successful volunteer program is recognizing that each volunteer is unique and is participating in the stewardship program for their own personal reasons. Some volunteers may be driven by their passion for your program or the work site; others may want to engage based upon a community interest or academic requirement, while others may be seeking a sense of community. Whatever the reason for their involvement, volunteers will need your leadership and support.

Volunteer motivations are as diverse of the services that the volunteers provide. Studies examining volunteer participation in natural areas stewardship indicate that the following motivations rank within the top ten reasons why people participate in these types of programs:

1. Help solve environmental problems.
2. Express care for the earth and the environment.

3. Improve my community.
4. Provide for a better place for future generations.
5. Enjoy the beauty of the natural environment.
6. Learn new things.
7. Participate in opportunities that bring me closer to nature.
8. Upset to see impacted natural environments.
9. Desire to do something worthwhile and useful for others.
10. Desire to feel productive.

Recognizing and understanding these motivations can help program managers better outreach their program priorities to interested volunteers, and deliver more effective programs by framing programs to address these needs and desires

At the same time, it is also important to understand what retains and “connects” volunteers to a natural areas or stewardship-based program. A recent San Francisco Bay Area study (Farrell, 2003) indicates that the three highest ranked values that volunteers sought in order to retain their volunteer participation in natural areas programs were:

1. Continued education opportunities;
2. Social connection and feeling like “a part of a community”; and
3. Opportunities for career development.

As the volunteer stewardship program grows, volunteer retention becomes increasingly important to building the leadership capacity of the program. Building a program that incorporates and highlights one or more of the three elements discussed above will likely lead to increased retention and participation.

Additionally, findings from a phone survey (GGNRA, 1996, unpub. data) targeting natural areas stewards in the mid 1990’s found that many volunteers noted that they would return to a work day activity if they learned something new. Plant walks, educational talks and tours of the natural areas sites were noted as the kinds of activities that people particularly enjoyed.

Equally as important is understanding local community concerns and volunteer interests. This will help build ensure relevance and project connection to community priorities. The following community interests and concerns were identified during the development of the Robla Creek Stewardship Program Plan.

Opportunities for Stewardship, Improving Resource Values, and Potential Site Improvements:

The first meeting for development of the Robla Creek Stewardship Program Plan was held on January 9, 2007, at Taylor Street School. During the meeting, members of the community identified several issue areas and concerns for the Robla Creek Watershed and surrounding areas. Additionally, opportunities for stewardship and infrastructure improvements were also noted. These were further discussed during a second community meeting on January 31, 2007. The opportunities and concerns below reflect issues that were compiled following both meetings.

- Existing waterfowl nesting area – high diversity of birds and wetland habitat
- Wetland and riparian woodland habitat restoration activities
- Interpretive signage and kiosk development and installation
- Possible installation of restrooms/amenities/trash receptacles to support community use

- Possible overlooks and picnic/gathering place (shade structure) areas – *(Note: concerns were expressed that there needs to be an integrated design for any site amenities so that the natural values of the area are not compromised and that the site is welcoming to a diversity of audiences)*
- Development of youth and college-aged service programs with a focus on stewardship
- Facilitation of naturalist walks through area to build interest and awareness
- Opportunity for improved public accessibility
- Guided fitness/recreational experience (PAR course equivalent)
- Opportunity to create an off-leash dog area that would be compatible with wetland protection *(Note: concerns were expressed that any off-leash dog areas would need to be compatible with larger wildlife protection goals)*

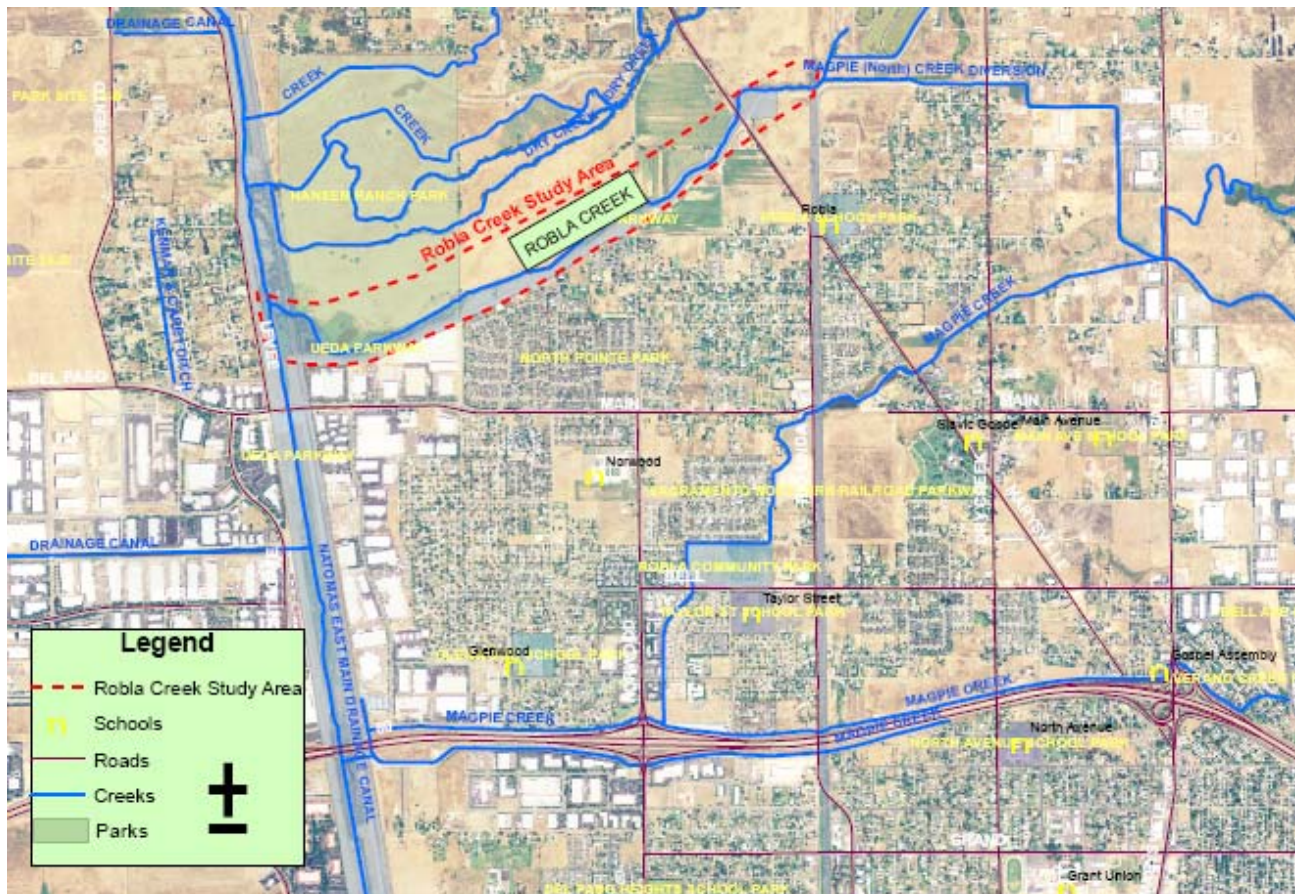
Community Concerns:

- Water quality in Robla Creek;
- Beavers and related tree damage and changes to water flows, ponding and flooding from beaver dams;
- Red sesbania and other invasive weed infestations threatening natural resource values;
- Fires;
- Vegetation management through continued livestock grazing, and possibly other management actions to address vegetation issues;
- Dog trespass into wildlife habitat;
- Graffiti;
- Illegal dumping and trash build up throughout area (especially at access points);
- Congregations of groups/gangs;
- Fence integrity;
- Future development in area; and
- Over-engineered additions/solutions (for flood control and amenities) that would preclude or impact ecological processes related to the floodplain.

Introduction to the Robla Creek Watershed

Robla Creek is located between Steelhead Creek and the confluence of Rio Linda Creek and the Magpie Creek Diversion Channel, and runs parallel to Dry Creek. Robla Creek and its adjacent lands provide some flood protection for the towns upstream, including Rio Linda and Elverta. The floodplain is confined by two levees: the Dry Creek levee (North) and the Robla Creek levee (South). The widest section between the two levees spans almost one mile.

The headwaters of Robla Creek originate near McClellan Business Park. Robla Creek receives runoff from the Magpie Creek Diversion Channel, as well as runoff from surrounding residential and industrial lands, eventually flowing into Steelhead Creek. The historic creek channel was modified and realigned approximately 20 years ago during the creation of the Bel Aqua water ski ponds (EDAW 2002). The re-aligned stream channel was reportedly too narrow to accommodate flood flows, and as a result, a levee was added and the channel was re-aligned to its current location to address the flooding issues. The levee, known as the Robla Creek North Levee extends from the intersection of Dry Creek Road and C Street, to the eastern side of the ski lakes, then traverses around the southern side of the ski lakes and to the north along the Rio Linda airport to G Street (EDAW 2002).



Natural Resources Values and Threats

Natural Resource Values

Currently, the watershed is managed for its flood protection values, and is also used as a recreation corridor and nature area by neighbors and local residents. Natural resource values include:

- intrinsic open space scenic and recreational values;
- flood protection, floodwater attenuation, water purification and groundwater recharge values; and
- habitat values for dependent waterfowl and fish species, native plant and wildlife species.

Rio Linda, Elverta, and surrounding areas are known to be at risk for flooding. Robla Creek provides a much-needed area for floodwaters to collect and settle, protecting nearby houses and businesses, and allowing for groundwater recharge. Robla Creek acts as a natural water purification system, with vegetation trapping sediments and other pollutants, improving overall water quality and clarity.

The native plant communities, although somewhat degraded, provide important food and shelter to common species of aquatic invertebrates, fish, amphibians, reptiles, birds, and mammals. The Robla Creek watershed also provides suitable habitat for special-status species, including giant garter snake, Swainson's hawk (*Buteo swainsonii*), and western pond turtle (*Clemmys marmorata*), although the presence of these species has not been confirmed in the Robla Creek watershed. In 2005, red-shouldered hawks, red-tailed hawks, Swainson's hawks, white-tailed kites and Cooper's hawks were observed foraging in the area, and some of these species may nest within the study area (Teddy 2005).

Appendix 1 includes a list of common wildlife observed in the Robla Creek Watershed during a 2005 site monitoring survey (Teddy 2005).

Threats to Natural Resource Values

Threats to these natural resource values include:

- overall site disturbance;
- fragmentation and degradation of native plant communities;
- beaver activity and related changes in hydrologic functioning;
- spread of invasive nonnative plant species; and
- soil erosion and channel down-cutting.

Observed signs of site degradation include soil disturbance, creek channel erosion, presence of invasive non-native species, and low native plant community diversity. Possible sources of observed degradation may include site disturbance resulting from the water ski pond construction project and related realignments of Robla Creek; construction of the flood control levees (resulting in a confinement of the natural floodplain meandering of Robla Creek); and beaver activity.

Although the natural plant communities present in the watershed typify the Sacramento region, they are considered remnant plant communities when compared to the condition of other nearby natural areas. Much denser and more floristically diverse mixed riparian forest is found along the America River, lower Dry Creek and other nearby waterways.

The Robla watershed has been highly impacted by hydrological modifications resulting from the presence of American beaver (*Castor canadensis*). In downstream areas along Steelhead Creek, beavers have built numerous dams, resulting in water backing up into both Robla and Dry Creeks. These changes in site hydrology reduce the ability of Robla Creek to absorb excess water during flooding events, and reduce the area's ability to provide flood protection. Changes in the depth and duration of ponding have also expanded the historic extent of emergent marsh and seasonal wetland habitats in lower Robla Creek, upstream of the confluence with Steelhead Creek.

Several nonnative invasive plant species have been detected in the Robla Creek Watershed. Invasive plants form dense, monotypic stands of vegetation, displacing native plant communities, reducing habitat values for dependent fish and wildlife species, and reduce recreational values (for example, restricting shoreline access). A listing of targeted priority invasive non-native plants and suggested control treatments are listing later in the manual. These invasive nonnative species are also problematic in nearby waterways, including the American River, Steelhead Creek, and Dry Creek and their tributaries.

Soil erosion, including channel erosion and downcutting was observed in several locations in the Robla Creek watershed. Erosion occurs from both natural and human-induced sources. Regardless of the source, erosion can threaten resource values and should be controlled.

Introduction to Native Plant Communities within the Robla Creek Watershed

Floristically, the Robla Creek watershed encompasses the following natural plant communities: remnant riparian woodland and oak savannah; non-native annual grasslands; and emergent marsh wetlands, habitats that typify the Sacramento region.

The riparian areas support widely spaced trees that form an open-canopied overstory, with the canopy openings supporting clusters of small trees and shrubs such as buttonbush (*Cephalanthus occidentalis*), mule fat (*Baccharis salicifolia*) and narrow-leaved willow (*Salix exigua*). Native tree species observed in the study area include valley oak (*Quercus lobata*), California black walnut (*Juglans hindsii*), Oregon ash (*Fraxinus latifolia*), Fremont's cottonwood (*Populus fremontii*), and various willow species including Goodding's black willow (*Salix gooddingii*), red willow (*Salix laevigata*), and arroyo willow (*Salix lasiolepis*).

The annual grasslands support non-native grasses including Italian ryegrass (*Lolium multiflorum*), soft chess (*Bromus hordeaceus*), wild oat (*Avena fatua*), annual fescue (*Vulpia myuros*), as well as a variety of native and non-native forbs including butter and eggs (*Triphysaria eriantha* ssp. *eriantha*), brodiaea (*Brodiaea* sp.), California poppy (*Eschscholzia californica*), filaree (*Erodium moschatum*), vinegar weed (*Trichostema lanceolata*), winter vetch (*Vicia villosa*), cut leaf geranium (*Geranium dissectum*), and tarweed (*Hemizonia* sp.).

A mosaic of emergent marsh and seasonal wetland habitats occur in the lower inundated channels. These habitats support a variety of water-loving herbaceous plants such as Barbara sedge (*Carex barbarae*), Baltic rush (*Juncus balticus*), common rush (*Juncus effusus*), Iris-leaved rush (*Juncus xiphioides*), and bulrush (*Scirpus americanus*).



Introduction to Invasive Non-Native Species

Preservation of natural areas requires the active removal of invasive non-native plant species. Throughout history, humans have moved plants and animals around the globe, out of the environments in which they evolved and into different areas. Sometimes species have been introduced intentionally, like iceplant to stabilize soils, or unintentionally like the Norwegian rat. A small proportion of the plants and animals introduced, have the capability to spread and become problematic in our natural areas. Of the thousands of plants in the nursery trade, only a handful are considered to be “invasive” weeds. These plant species are capable of spreading rapidly and displacing native plants because they are adapted to similar climatic conditions, lack predators or pests and/or have other characteristics that make them successful. If left unmanaged and untreated, many natural areas would become over-run with only a few invasive plants. Many of the animals and birds that rely on the diversity of native habitats would go extinct. At this point in human history, the balance has been tipped and natural areas cannot take care of themselves. The current thought among land managers is that active management is necessary to restore the health of natural areas so that the native plant communities can persist in sufficient numbers and densities to out-compete invasive species.

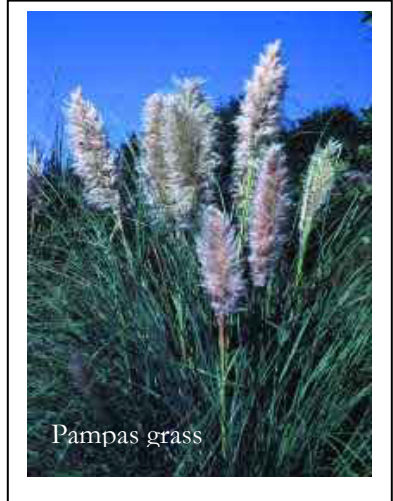
A number of invasive non-native plants species are found within the Robla Creek Watershed. These species include red sesbania (*Sesbania punicea*), Chinese tallow (*Sapium sebiferum*), tree-of-heaven (*Ailanthus altissima*), Italian thistle (*Carduus pycnocephalus*), perennial pepperweed (*Lepidium latifolium*), milk thistle (*Silybum marianum*), poison hemlock (*Conium maculatum*) and yellow starthistle (*Centaurea solstitialis*). In addition, water primrose (*Ludwigia peploides*), an aquatic weed, is forming dense vegetation mats in the creek channel, choking the waterway and slowing flow rates. Aquatic weeds can also reduce overall water quality as large masses of vegetation decompose, increase the natural rate of nitrification of the overall aquatic ecosystem.

The upcoming Natural Areas Management Plan will identify and prioritize these and other non-native species for control. In the interim period before the Natural Areas Management Plan is approved, the following section identifies eight priority invasive non-native plants species that can be controlled through volunteer stewardship activities. This section includes species identification information, suggested control techniques for both volunteers and staff, and disposal and maintenance recommendations. Most of the presented material is a compilation of edited excerpts from the Weed Workers Handbook (2002). These techniques and recommendations should be augmented with more detailed information and recommendations that will be presented in the future Natural Areas Management Plan training program.

The following is a list of targeted problematic invasive plant species that are known from Robla Creek:

- *Fennel*
- *Himalayan Blackberry*
- *Italian Thistle*
- *Pampas Grass*
- *Perennial Pepperweed*
- *Poison Hemlock*
- *Red Sesbania*
- *Tree of Heaven*

Images of Invasive Non-Native Plant Species Described in This Section



Fennel (*Foeniculum vulgare*) - Also known as **sweet fennel, anise**

Identification:

This erect perennial herb grows 4-10 feet tall and smells like anise or licorice. It is commonly found in annual and perennial grasslands, open, disturbed areas, chaparral, and along watercourses. The branching stems – smooth, stout, and grayish-green – are marked with long vertical grooves, and are jointed and sheathed by leaves at the nodes. The leaves are dissected into fine, feathery strands like dill leaves, to about 5 inches long. Small, yellow flowers appear in umbel-shaped inflorescences sometime between April and August, depending on site conditions. Aromatic seeds are produced in pairs during summer until September. These are light green to brown, flattened and ribbed, measuring a half-inch long.

Reproduction:

Reproduction occurs from both seeds and the root crown. Flowers first appear 1.5-2 years after germination and seeds will germinate at almost any time of the year. Within 2 years, one plant can produce over 100,000 seeds. Seeds are commonly spread by water, or by clothing, animals, vehicles, and machinery.

Removal/Control:

Key factors:

- 1) Seed production is very high, and seeds remain viable in the soil for several years
- 2) Resprouts from the crown & root system typically 4-10 inches below soil surface
- 3) Mowing can stimulate increased growth if done during the wrong season

Treatment option #1 (Appropriate for Volunteers):

Dig out individual plants with shovels, hand picks, and pulaskis, preferably when the soil is still wet and before seed set.

Treatment option #2 (Appropriate for Volunteers):

Remove the upper portion of the root crown (generally the top 6 inches) using shovels or pulaskis, just before fruiting. This reduces the number of resprouts.

Treatment option #3:

Mowing can be effective if done repeatedly, with the first mowing in March to April. If you wait for resprouts to come through, you can then kill the plant by applying Roundup at the recommended dosage (see label). Applying too soon after mowing will be ineffective.

Treatment option #4:

For the first green seedlings that emerge after dormancy (around March-May) you can also apply a 2% dilution of Roundup.

To consider:

- 1) Digging is feasible only where infestations are light, as it creates a lot of soil disturbance and fennel seeds tend to germinate in soils exposed to sunlight.
- 2) The deep taproot and bulb serve as a large energy store, so cutting won't kill the weed, although it will control it temporarily.
- 3) Reports from the field suggest that fennel can be eradicated within 4 years if it is mowed roughly 4 times a year, every 3 months, beginning in March-April. Some seed heads lie prostrate and are therefore difficult to get. Mowing *during* seed set encourages seed spread and should therefore be avoided.
- 4) Spray before the plant bolts (around June). A repeat application may be needed for best results.

Follow-up:

Remove any ripe seeds from the site. If using the digging technique, mulch the exposed soil with a 2-inch layer of rice straw to minimize soil disturbance. This will suppress future seedlings, which need light to grow. In chaparral areas, revegetate with native shrubs immediately to discourage fennel from re-establishing. Check for seedling growth twice a year, particularly in late winter/early spring.

Disposal: Fennel stalks can be piled on site to minimize costs. Small clumps of fennel are sometimes eaten by deer and rabbits.

Himalayan blackberry (*Rubus discolor*) - Also known as *Armenian blackberry*

Identification:

This perennial shrubby vine is commonly found in riparian woodlands, disturbed open areas, and along streams. It forms mounds up to 10 feet tall, with arching or trailing, thorny stems that become woody and reach up to 40 feet long. These areas are often impenetrable. The canes (stems) range from green to deep red, turning woody with age. The leaves are toothed or serrated along the edges, broad, and have a mat of fine hairs underneath that lend a whitish appearance. Leaves on flowering stems have 5 leaflets. White (or sometimes pinkish) flowers with 5 petals and many yellow stamens bloom from June to August. Edible berries ripen and turn black in August to September. To distinguish Himalayan blackberry from the native species, look for the square stems, and few large, hooked or curving thorns, 3-5 leaflets, and larger fruits that ripen later than the native sort. Native blackberry (*Rubus ursinus*) is a much smaller plant with rounded stems, many small thorns, smaller fruit, and just 3 leaflets.

Reproduction:

Himalayan blackberry reproduces in a variety of ways. It can spread vegetatively by rooting from the cane tips or from nodes along the canes, from rhizomes or root fragments, and the crown. Canes bear fruit in their second year and then die. Every year the crown produces new canes to replace the dead ones. Bumblebees and honeybees pollinate the flowers. Seeds are viable and tend to be dispersed by mammals or seed-loving birds whose digestive tracts scarify the hard seed coating and promote germination. Seeds germinate in the spring and fall, and remain viable for several years. An individual plant can live 25 years.

Removal/Control:

Key factors:

- 1) Abundant seed production & seeds viable for several years.
- 2) Fast-growing stems.
- 3) Resprouts from the crown and root fragments left in the soil.
- 4) Thrives in moist areas.

Treatment option #1 (Appropriate for Volunteers):

Cut stems with loppers close to the rootball. Dig out central cluster of canes with a Pulaski or shovel, and remove as much of the root as possible. Small infestations can be covered with mulch or plastic to solarise the remaining vegetation and help reduce the number of resprouts.

Treatment option #2:

Mow repeatedly using a tri-blade brushcutter to cut the canes; use McCleods to clear the vegetation. The best time to do this is when flowers are in bloom but before the fruit sets.

Treatment option #3:

Cut stems to about 1 foot and paint stumps with 100% concentration of Roundup immediately after cutting.

To consider:

1) Interconnecting lateral roots can reach over 30 feet long and 2-3 feet deep, so, given that effective removal means pulling up *all* roots, expect slow progress and considerable soil disturbance. Dense thickets and painful thorns also make working with blackberry labor-intensive and uncomfortable, so control may be feasible only in sensitive habitat or small infestations working from the outside in. Wear protective clothing. 2) Mowing encourages new growth but may be effective if repeated over a number of years. 3) Use Rodeo (instead of Roundup) near water.

Disposal:

Transfer stems and roots to a site where they can be left to decompose, making sure that all berries have been removed. Alternatively, burn the debris or trim it into small enough pieces to dispose of in green waste pickup cans.

Follow-up:

Regardless of the method used, follow-up is essential. Immediate revegetation with quick-growing shrubs and trees is recommended, with periodic visits to the site to check for seedlings or regrowth. After canes are removed, one option is to hoe the soil or use a rototiller. This will clear out any roots, but is practical only for small infestations. Goats will also graze on younger plants.

Italian thistle (*Carduus pycnocephalus*) - Also known as *slender thistle*

Identification:

Italian thistle is a winter annual or biennial broadleaf that grows 1-6 ft tall with erect spiny-winged stems. The leaves are lanceolate and measure up to 6 inches. They are pinnately divided, with a spine at the tip of each lobe and the longest and hardest spine at the tip of the leaf. Both the stems and the underside of the leaves have a cobwebby down. Pink to purple (but rarely white) flowers appear from September to December. These flowers are borne in clusters of generally 2-5 at the branch tips. Each flower's cylindrical head measures only a half-inch across, making them much narrower than the flowers of bull or artichoke thistle.

Reproduction:

Italian thistle reproduces only by seed. There are two types of seed: inner and outer. Inner seeds are cream-colored, sticky at first, striped, and have bristles; outer seeds are smooth, yellowish to brown, and have no bristles. Most inner seeds are wind-dispersed, and can travel several hundred ft away. The seeds also have a thin gummy coating, which allows them to attach to animals and machinery. The germination rate is high, and germination typically takes place in the fall. Outer seeds generally remain in the flower head until it drops. These seeds persist in the soil for up to 10 years.

Removal/Control:

Key factors:

- 1) Very high seed production.
- 2) Seed longevity up to 10 years.
- 3) High germination rate.
- 4) Resprouts from root portions left in the soil.

Treatment option #1 (Appropriate for Volunteers):

Pull individual plants by hand once the flowering stems have bolted but before flowers are produced. Alternatively, dig the plants out with a pick or shovel. The plant can also be cut just below the crown with a small pick or trowel. The latter might be easier in summer when the ground is too hard for pulling stems by hand.

Treatment option #2:

Mow with a brushcutter or weed whacker before the thistle begins to flower. Repeat the treatment into early summer to ensure plant reserves have been reduced.

Treatment option #3:

Using a backpack sprayer, apply full-strength Roundup on the plants before they go to seed, generally around mid-spring. Alternatively, you can use a wick-type applicator to swab the leaves with herbicide.

To consider:

- 1) Pulling plants by hand is very labor-intensive. Unless you have a lot of volunteers to help, it may only be feasible for small infestations. Remember to wear gloves! Digging is reported to be effective at killing Italian thistle, but will cause considerable soil disturbance, which is exactly what the plant is attracted to.
- 2) Roundup is a non-selective herbicide, so it shouldn't be used near desirable vegetation or sensitive habitat. Spraying will give better coverage on the leaves; a wick-type applicator reduces herbicide drift but is less thorough and therefore requires more labor. Roundup is not reported to be the most effective herbicide available, but it breaks down quicker than other herbicides. Some professionals mix Roundup with Stalker to increase effectiveness of treatment.

Disposal:

Seed heads should be removed off-site and can either be burned or bagged. The stems can be composted or piled and solarized with plastic.

Follow-up:

Whichever treatment you choose, return to the site at least twice a year for a period of several years to monitor seedling growth and prevent further seed production.

Pampas grasses (*Cortaderia jubata* & *Cortaderia selloana*)

Identification:

The leaf blades of *C. jubata* grow 3-5 feet tall, while the flowering stalks tower above the mass of spreading leaves at the base and can reach 20 feet. The dark green blades have razor-like edges and tend to droop. The inflorescence – a showy plume ranging from pink to violet turning creamy white or golden in maturity – typically appears from July to September. *C. selloana* is a shorter-growing grass, reaching up to 12 feet or so. Its flowering stems grow roughly level with the leaf blades, giving the grass a more rounded appearance than *C. jubata*. Its leaves are narrower and gray-green in color, while the plumes are paler (generally pale pink to silvery white) than those of jubata grass.

Reproduction:

C. jubata reproduces asexually from female plants. Thousands of seeds that are genetically identical to the mother plant are then wind-dispersed. Plants typically live for over a decade, and within their lifetime will develop huge root masses. *C. selloana* also has male and female plants, but it reproduces sexually, so both sexes are necessary for the female to produce seed. Given a tendency in the past to select the female flowers for their showy plumes, infestation of *C. selloana* has been less widespread in California than in other states. Both grasses can spread vegetatively from tillers or fragments of a mature plant that root in moist soil.

Removal/Control:

Key factors (for both species):

- 1) Resprouts will grow from roots left in the ground.
- 2) Thrives in moist areas so keep pulled vegetation away from water.
- 3) Seed production is prolific.
- 4) Seeds remain viable approximately 9-12 months.

Treatment option #1 (Appropriate for Volunteers) :

Pull seedlings by hand with the help of a pick, Pulaski, or shovel. For larger plants, cut back the blades and stems with a Pulaski (or chainsaw, depending on the size of the grass), and dig out the root crown. Some land managers stress removing the root ball (the juicy, onion-like bulb) but report no resprouts from the stringy roots left in the ground. The root ball should, however, be turned upside down to dry out in the sun, away from the soil (to prevent resprouts). Cut the plumes when they are still pink or purple – August to October near the coast, earlier farther inland and in hotter areas.

Treatment option #2:

Apply a 2% dilution of Roundup on any green growth when the plant is actively growing (between November and July).

To consider:

- 1) The leaf margins are sharp, so wearing gloves and long sleeves is recommended.
- 2) Spraying does minimize soil disturbance, especially on rocky slopes, but you need to spray thoroughly for best results. Success is reported both with and without herbicides.

Disposal:

Some practitioners advise taking the grasses off-site to prevent resprouting. Others suggest simply drying the grass out by turning the uprooted mass upside down and leaving it in place. Alternatively, you can cut the plumes and lay them on top of cut grass leaves. To prevent the seeds from being blown away, make a “pampas sandwich” by covering the seed heads with a second layer of foliage. This way you won’t have to haul heavy bags off-site, especially in steep, remote areas. If you prefer to carry them off-site, you’ll need to dispose of the plumes before the seeds disperse. Given that jubata seeds don’t need to be pollinated, it’s important to cover or remove them as soon as possible.

Follow-up:

Check for resprouts twice a year.

Perennial Pepperweed (*Lepidium latifolium*) - Also known as *tall whitetop, broadleaf peppergrass*

Identification:

This very adaptable, rapid-growing perennial herb forms dense stands, and is commonly found in or adjacent to marshy, freshwater, or riparian areas. An erect and branching plant, perennial pepperweed reaches 1-3 feet, but grows taller in moist conditions. The alternate leaves are lanceolate, toothed or smooth-edged, typically gray-green, and covered in a waxy layer. Leaves are larger further down the stem. Small, white 4-petaled flowers bloom in terminal clusters from June to September. The seedpods, which mature in August and September, are reddish-brown, flattened, slightly hairy, approximately 1/6th inch long, and have 2 tiny seeds inside. Seeds are dispersed by water, machinery, and passing animals or people. The thick roots look like straggly parsnips and grow up to a length of 10 feet, making removal extremely difficult.

Reproduction:

Perennial pepperweed spreads primarily from underground roots, although seed production is very high. Seed viability is not known, but is not thought to be more than 2 years.

Removal/Control:

Perennial pepperweed is probably one of the most difficult invasive plants to remove. If you see a new infestation, act immediately! Most non-chemical methods are reported to have little impact on controlling this weed once it has become established.

Key factors:

- 1) Large, deep, and vigorous perennial root system.
- 2) Resprouts from small root fragments left in the soil.
- 3) Produces thousands of tiny, viable seeds, although they appear to be short-lived.
- 4) Accumulates thick layer of dead biomass.

Treatment option #1 (Appropriate for Volunteers):

Pull plants by hand, preferably when the soil is moist and loose, and grub out as much of the root as possible.

Treatment option #2:

Mow or brushcut close to the ground when plants are at the flowerbud stage. (Removing only the top growth will stimulate regrowth.) Let the peppergrass grow back to the flowerbud stage and mow a second time. Then spray a 2% solution of Roundup to the remaining stems. Alternatively, you can use a wick-type applicator to prevent herbicide drift.

Treatment option #3 (Appropriate for Volunteers):

Cut this plant back prior to flowering, and then covered the root system with cardboard or landscape fabric to reduce the plant's ability to resprout.

To consider:

- 1) Hand pulling is feasible only for seedlings of young infestations and can soon become problematic, as there are no individual roots to pull but just one continuous mass of deep, interconnecting roots. Moreover, the roots frequently break off because they are so entrenched in the soil. Mechanical removal is not recommended given the plant's ability to spread easily from root fragments.
- 2) Roundup is not reported to be effective as a foliar application because the leaves have a waxy coating. Use Rodeo in areas near water.

Disposal:

Keep roots away from waterways to minimize further infestations downstream. Wash equipment and vehicles after leaving the site. Carefully pile pulled materials within the treated area (do not transport to other areas), solarize with plastic, and monitor the disposal site for 1-3 years. Foliar spray of the pile may be required to prevent spread from the disposal pile.

Follow-up:

Regular follow-up is essential as the roots can lie dormant underground for several years. Return to the site in early spring and late summer to check for regrowth and to remove rosettes. Scrape litter from the soil surface to allow other species to grow. You may need soil remediation before planting native species.

Poison Hemlock (*Conium maculatum*)

Identification:

This is an erect biennial, sometimes perennial, related to fennel. It is often found on open slopes, disturbed sites, and roadsides. Poison hemlock forms a rosette in the first year, then tall stems and flowers in the second year. It generally reaches 3-8 feet in height. Bright green, triangular, opposite leaves are pinnately compound (or fern-like). The stalks – resembling fennel – are tall, ribbed, hollow, and often purple-spotted. The foliage, when crushed, has an unpleasant odor. Unlike wild carrot, poison hemlock has no hairs on its leaves and stems. Small, 5-petaled, white flowers appear in umbels June-July, with fruits following in August-September.

Reproduction:

Poison hemlock reproduces by seed only, with each plant producing roughly 1,000 of them. The seeds are spread most effectively by birds, animals, and water, but passing machinery and vehicles also aid seed spread. Dispersal occurs between September and February, and germination takes place from late summer to early spring.

Removal/Control:

Key factors:

- 1) Usually a biennial, so no need to remove entire root system.
- 2) Seeds are thought to be viable for up to 5 years.
- 3) Prefers rich soils in moist conditions.

Treatment option #1 (Appropriate for Volunteers):

Pull plants by hand during the rainy season, as taproots can break later in the year when soil is dry. Using a hand pick, hit below the crown and remove the upper portion (as opposed to the whole root). *(Important Note: Volunteers should wash hands prior to eating due to the toxins within the plant)*

Treatment option #2:

Mow to height of 3-4 inches in early April and then repeat a month later. For shrubs that have become woody, you may need a tractor-type mower or brush-cutter. Repeat for several years.

To consider:

- 1) Practitioners have reported difficulty in removing large stands of poison hemlock by hand and have tended to focus on small infestations. Poison hemlock is toxic to the skin and respiratory system, so wearing gloves and a mask is advised.
- 2) Mowing won't eradicate the weed, but it will help reduce the size of infestations by weakening the plant reserves and eliminating seed production.

Follow-up:

Some practitioners have reported little success with mulching in areas where plants have been pulled, as large seedlings will bolt straight through. Others recommend laying a thick mulch (about 4 inches deep). Revegetate the weeded area with native shrubs such as coyote bush and tree lupine. Follow-up on any regrowth can be done by hand.

Disposal:

Cut vegetation can be left on-site.

Red Sesbania (*Sesbania punicea*)

Identification:

Red sesbania (*Sesbania punicea*) is a small tree with beautiful red pea-like flowers that form clusters and a large spongy seed pod. It can flower and set seed in less than a year. This rapidly spreading invasive riparian plant is native to South American rivers, deltas, and lakes. It was recently introduced in California as an ornamental plant, but has since escaped into the wildlands invading the California Central Valley, spreading rapidly down waterways via floating pods containing seeds that may be viable for many years. It forms dense impenetrable stands. Its rate of spread is extremely rapid, and (as reported from observations of other infestations worldwide), it can completely fill an entire river system. In addition, because it grows immediately adjacent to the water, it substantially increases vegetation biomass along the water's edge, increasing stream roughness and decreasing flow rates and flood capacity. It also restricts recreational access to the water's edge, affecting fishermen, kayakers, and others. The plant is toxic to wildlife (and presumably humans). It is known to displace native riparian species, further degrading the quality and extent of this fragile habitat type locally and regionally.

Reproduction:

The plant spreads by seed. The seed pods float in water and can readily be transported downstream by current and wave action. Red sesbania appears to be able to establish itself along the shoreline as soon as it makes contact with moist soils. Red sesbania forms dense, single-species stands along rivers, creeks, streams, and ponds, and there is some evidence that it is rapidly adapting to drier conditions, possibly allowing it to spread into placer tailings and drier riparian forests and woodlands.

Removal/Control:

Key factors:

Red sesbania is found growing in wet areas and in recently exposed creek banks and sand bars. Its seeds float, therefore removal of the entire plant prior to flowering and seed set is critical to successful control. If Seed pods are present, they should be hand pulled and bagged to prevent spread.

Treatment option #1 (Appropriate for Volunteers):

The preferred control method for individual plants, small patches, and red sesbania seedlings up to 3 inches in diameter is to hand pull the entire plant, root and all, using a weed wrench while soils are moist and before plants flower and set seed. Several treatments will be required each year (typically in late spring, early summer, late summer, and early fall) because the plant germinates in "waves" when flood waters reside and more wet creek banks are exposed.

Treatment Option #2:

The preferred treatment for larger red sesbania plants over 3 inches in diameter and for well established dense infestations is a cut and paint application or a foliar spray application of herbicides. If a foliar spray application is selected, the applicator should use a small nozzle, small area/low volume application setting to carefully apply herbicide to localized areas (e.g. individual plants and small clusters). Because most of the red sesbania seedlings will be within 25 feet of flowing water, an application of 5% Aquamaster™ mixed with a dye to facilitate identification is recommended

To consider:

Follow-up:

Several years of follow up (5 to 10 years) will be required to fully eradicate the long-lived seedbank. Each year, 3 to 4 treatments (handpulling) of new seedlings should be undertaken in May, June, July, and late September or early October, with timing adjusted to start with the first observed seedling flush, and continue until the first winter rains.

Disposal: The pulled material should be disposed of in an upland location outside the floodplain. While brushpiles are decomposing, they should be monitored to make sure no red sesbania seedlings get established at the disposal site.

Tree-of-heaven (*Ailanthus altissima*) - Also known as *Chinese sumac*

Identification:

This deciduous tree grows 30-65 feet tall and is most commonly found in coastal, riparian, and disturbed areas. It has a broad, dome-shaped crown, and its trunk reaches 2-3 feet in diameter. The leaves are large and pinnately compound (arranged like a feather), alternate, and measure 1-3 feet long. Each leaf is made up of 11-25 smaller lance-shaped leaflets, which have 2-4 rounded teeth near the base. The leaves when crushed have an unpleasant odor, which may be secreted from the glands on the leaflets. The bark is gray and smooth, becoming darker and more scarred with age. The twigs are stout and pale chestnut-brown with rounded buds.

Reproduction:

Tree-of-heaven reproduces in two ways: sexually (by flowering, pollination, and seeds), and asexually by vegetative sprouting from stumps and root suckers. Clusters of small, yellowish green flowers appear in June near the tips of branches. Female flowers have a strong odor. Female trees bear winged fruits in September and October. The flat, twisted, papery fruit turns from pink to reddish-brown with age and hangs in large clusters that can last throughout the winter. Measuring 1-2 inches long, each bears a single seed inside. Tree-of-heaven is a prolific seed-bearer, with a single female tree producing over 300,000 seeds per year. These are wind-dispersed, but can also spread by water, birds, and machinery. Trees become productive between 10 and 20 years of age. An individual will live only up to 50 years, although new root sprouts often prolong the tree's life span.

Removal/Control:

Key factors:

- 1) Many resprouts from cut stumps, and suckers from lateral roots.
- 2) Copious production of viable seeds & seeds viable for no more than 1 year.
- 3) Rapid growth.

Treatment option #1 (Appropriate for Volunteers):

The simplest method is to remove seedlings before they produce a taproot (roughly 3 months after germination) while the soil is moist and loose. Like acacias, saplings with trunks less than 2 inches in diameter can often be removed with weed wrenches.

Treatment option #2 (Appropriate for Volunteers):

If a taproot has already formed, you may need to dig around it to completely remove the root system and prevent resprouts. Grubbing the rootstocks out can be an effective way of eradicating the plant.

Treatment option #3 (Appropriate for Volunteers):

Cut stems early in the growing season and then again a second time at the end of the growing season. The idea is to attack the plant before it produces seed and to exhaust the plant's energy reserves.

Treatment option #4:

For more mature plants, cut trunks or stems with a chainsaw and paint a 15-40% Roundup solution on stump immediately after cutting.

To consider:

- 1) Resprouts can grow up to 50 feet away from the tree, so digging up rootstocks can create considerable disturbance on-site.
- 2) Grubbing out the taproot is a slow method best used to control small infestations. Make sure you remove the entire root, as any portion left in the soil can produce a new plant.
- 3) To have success with stem cutting, you need to cut several times in the growing season. Cut stems tend to resprout heavily.

Disposal: The slash can be piled for wildlife cover or put through a chipper to use as mulch. Seeds should be bagged and disposed of safely.

Follow-up: You'll need to cut resprouts repeatedly for 3 to 4 years to eventually kill off the plant's root system. New seedlings and root suckers can be either pulled or sprayed with Roundup (2%) the following year.

Integrating Volunteer Stewardship into Natural Areas Management

Developing an Annual Work Plan

The most effective volunteer stewardship programs are those that successfully address both management and community priorities. If programs are built from this foundation, it is often easier to leverage and allocate limited agency funding, build and sustain community involvement and demonstrate tangible shared results. However, understanding, integrating and then prioritizing management and community needs can often be a difficult task.

The Robla Creek Stewardship Program Plan outlines project prioritization criteria and an evaluation process for prioritizing resources and volunteer-based activities for the Robla Creek Stewardship Program. It also includes both a prioritization process and suggested volunteer activity selection criteria as well as potential pilot projects and program elements that could be initially undertaken. The list below includes pilot projects/programs that involve on-the-ground stewardship activities.

1. The development of the community-based Watershed Watch program to monitor and report illegal garbage dumping, graffiti and other activities.
2. The development and implementation of monthly work day events to implement priority project tasks and management actions included within the Natural Areas Plan.
 - a. Control targeted invasive non-native plants.
 - b. Revegetate priority wetland and upland habitat areas.
 - c. Remove garbage and other waste.
3. The continued participation in Creeks Week and the development of one or more other special events that could further link and address priorities articulated by local community members

Identifying Roles for Volunteers

Using the three projects/programs listed above, the following activity can be used to determine what actions could be directly linked with volunteer participation. Table 1 highlights the assessment of potential actions/tasks that would need to be accomplished as a part of the targeted invasive non-native plan control program. Column 4 indicates which actions/tasks could likely be performed by volunteers.

Criteria used for determining whether or not the tasks were appropriate for volunteers included (but was not limited to):

- Can the activities be performed using tools that are appropriate for volunteers?
- Can the activities be performed safely by volunteers?
- Is their community interest in performing the activities?
- How many volunteers are needed to perform the activity and is there City leadership capacity to train and oversee the volunteers?
- Can the volunteer clearly visualize the impact she/he has made through his/her volunteer contribution?

The same activity could also be performed for a 3 or 5-year planning.

Following the development of Table 1, a second activity as described in Table 2 could be performed to help both the Volunteer Coordinator and community stakeholders clearly understand the requested volunteer needs. The table can be adjusted as needed to meet the shared agency and community goals.

Pro-actively Directing Volunteer Interest

Below is a list of some basic principles and methods that can be used to help guide work day activities so that you are able to effectively direct and manage volunteer activities.

Develop a List of Priority¹ Projects: these can be distributed to interested volunteer and service groups to guide their interest and participation.

Give an Assignment in Terms of Results: don't just give the volunteers a task, share with them what will be accomplished and how the results of their efforts will fit into the overall goals of the program. Emphasize the importance of the project.

Determine the Criteria for Success: clearly articulate what defines the success of the project action. For example: the goal may be to remove all of the red sesbania from the project area, however the criteria may include, disposal above the high water line, removal of the root to prevent resprouting, removal of flowering plants prior to non-flowering plants etc. Clear articulation of the success criteria will reduce work in the long-term.

Provide a List of Additional Tasks (that can be conducted if Planned Work is Completed Early): the rule of thumb is to plan for an additional 25% of activities so as to keep volunteers engaged in meaningful and directed work if they complete work early.

¹ See Robla Creek Stewardship Program Plan discussion regarding methods for integrating community and agency needs into prioritizing projects

TABLE 1

SHORT – TERM (ONE-YEAR) WORK PLAN – Targeted Invasive Species Control at Robla Creek

Objectives	Steps/Actions/Tasks to Accomplish Objectives	Season	Can This Be Accomplished by a Volunteer?	Priority for Accomplishment
Control targeted non-native plant species	Review Natural Areas Plan to identify priority invasive non-native plants	Any season prior to initiating work	Yes	1
	Assess permit requirements for invasive non-native plants control and secure necessary permits.	Prior to initiating control work	No	2
	Map and/or locate non-native plants	Spring/Summer	Yes	3
	Prepare optimal control activity timeline and anticipated human resource (contractor, volunteer work groups, etc.) needs.	Prior or concurrent to initiating work	No	4
	Treat/control mature red sesbania	Spring/Summer	Yes (mechanical)	5
	Design guided access for volunteer programs (e.g. gates for strategic entry into site)	Winter/Spring prior to installation	No	8
	Gain approval and construct gates with locks to facilitate volunteer program access.	Summer/Fall	Maybe (needs evaluation)	9
	Treat/control mature perennial pepperweed	Summer	Yes (mechanical)	6
	Monitor for resprouting and germinating plants	Summer & Winter	Yes	7

TABLE 2

GROUP AND INDIVIDUAL VOLUNTEER PROJECTS– Targeted Invasive Species Control at Robla Creek

Project	Date Needed to Be Accomplished	Number of Volunteers Needed	Type of Volunteer Requested	Group Scheduled	Date Accomplished
Map and locate targeted red sesbania and perennial pepperweed	June 1, 2007	2-4	Trained college student or adult		
Remove mature red sesbania from floodplain habitat	Prior to seed set (est. July 1, 2007)	25 (for 4 hours)	High school or adult		
Remove mature red sesbania from along creek corridor to Rio Linda Blvd.	Prior to seed set (est. July 1, 2007)	3 groups or 15 or less (for 3-4 hours each)	Middle or high school or adult		
Remove perennial pepperweed patch near inlet area	Prior to seed set (est. June 15, 2007)	2 groups of 10 or less (3 hours each)	High school or adult		
Monitor and remove resprouting and germinating plants	Ongoing through early fall	2-4	Trained college student or adult		

Volunteer Workdays

Basic Guiding Principles and Standards for Hosting Volunteer Work Groups

As a leader of a work day event, your role is to prepare and guide the day's activities, and to inspire those who attend the event.

For many people who attend the work day, this may be their first volunteer or restoration experience – or possibly their first time to the site. It is important, therefore to create a positive and meaningful experience so that those individuals will want to return. Furthermore, it is important to keep long-term volunteers inspired, as they provide the foundation for your volunteer stewardship program.

The following is a brief checklist of guiding principles that should be incorporated or modified as a standard for managing volunteer work days in natural area settings.

All volunteer groups and events will have:

1. A well-planned work event

- Work closely with the Parks Department's Volunteer Coordinator to schedule group and identify a point of contact.
- Assess work site ahead of time to identify activities and assemble all appropriate tools.
- Carefully choose the work site and match the work activities to the needs and abilities of the group

2. A well-trained, courteous and enthusiastic leader

It is recommended that both staff and volunteer work leaders must have completed the following trainings, and that the individuals are desirous to work with volunteers in a natural areas setting:

- Volunteer Management
- How to Lead a Volunteer Work Group
- Invasive Non-Native Plant Identification and Removal
- First Aide
- Tool Use and Safety

Remember, volunteers will look to the leader as a role model. It is important to **work with** volunteers and **not just direct** them as you are facilitating the activities.

3. A well-staffed work event

It is suggested that volunteer-based natural areas activities maintain an average of 1:10 ratio of staff to volunteers. For students and children, aim for 1:7, for adults the ratio can be a bit higher.

Leaders work directly with the volunteer group and stay on site throughout event

4. A general introduction and icebreaker at every work day event

It is recommended that an ice-breaker or general orientation to the site is provided at every work day. The orientation could include:

- Background information on site/project
- Why volunteer participation is important/ critical
- Specifics on work for the day
- Introduce volunteers to each other
- Details: restroom, ticks, poison oak, safety, etc.

Verbally and visually demonstrate the work objectives and activities to all of the volunteers prior to beginning the work day. Additionally, show volunteers how to take care of the resources (plants, tools, etc.) so they are helpful and not harmful while working. This can be done in small groups or for the entire group at one time. This is critical for building participant confidence, ensuring work is conducted as planned and with the level of quality the leader desires.

5. **Snack break and small informative talk (if work is over 2 hours)**
6. **Plenty of water, first aide, sunscreen, and radio/cell phone are on site.**
7. **Appropriate tools and personal protective gear (gloves etc.)**
8. **Opportunity for volunteers to fill out a program evaluation, as well as workday staff and volunteers to evaluate specific volunteer group(s).**
9. **Closing activity (to include summary of work accomplished, acknowledgement and appreciation, invitation for group to return).**
10. **Thank you note/ call and distribute digital images**

Important Considerations

Leading Programs in the Field

The following are some considerations that will help ensure that volunteers remain safe and have a positive experience while participating in volunteer stewardship activities within natural areas:

- Always have volunteers wear close toed shoes and long pants (and long sleeved shirts when appropriate) when working in vegetation.
- When planning a volunteer workday, scope the site for patches of poison oak, and flag it off with caution tape. AVOID working in it – better safe than sorry where volunteers are concerned! Sometimes even a conscientious planner will not be able to see poison oak hiding in other vegetation. Bring poison oak preventative lotions such as Technu out to every program just in case!
- Allow sufficient space between volunteers. Volunteers should always be at least an arm's length apart. Tools can accidentally slip out of hands and tool heads can fly off. When workers are walking with tools, allow plenty of room for stumbling.
- If possible, stretch and warm up prior to working. In particular, have volunteers stretch their arms and back, and any other muscle areas that will be in use. Periodically stretch throughout the day.

- Always be aware of work pace. For each person, there is an optimum speed for each task on any given day. This pace can and will vary from day to day, depending on a variety of factors, like air temperature, the required personal protective equipment, etc. Observe volunteer abilities and don't ask volunteers to exceed their work capacity.
- Make sure volunteers know their limitations. The limits of physical output are determined by the individual's size, height, weight, and body type. There are limits to performance that, when exceeded, can lead to unsafe work situations. You can only reach so far or lift so much. If the task requires a volunteer to go beyond these limits, then they need help. This help might come in the form of a tool that increases efficiency or someone else to provide an extra hand.
- When descending steep slopes, teach volunteers to maintain an erect posture. Have volunteers walk slowly and deliberately, stopping often to decide upon footing and the developing route. Avoid volunteers walking directly below another person to avoid rocks or debris that may be dislodged from above.
- When working in streambeds, volunteers must wear proper equipment such as wading boots or waders. In cold weather, volunteers should wear warm layers underneath the waders to stay warm. A walking stick improves stability in a current. Wet logs and rocks could be slippery and should be avoided. Streams should be cross-cut at shallow riffles, avoiding deeper areas.

Typical Adult/Youth & Staff/Adult Ratios

It is suggested that volunteer-based natural areas activities maintain an average of 1:10 ratio of staff to volunteers. For students and children, aim for 1:6 or 1:7, for adults the ratio can be a bit higher. This is very important for projects where groups are spread across a creek corridor or are completing multiple tasks. A high staff to volunteer ratio ensures that projects are implemented effectively and consistent with agency guidelines and expectations. Higher ratios also help promote increased interactions and communication between volunteers and agency representatives (or volunteer leaders) as well as increased opportunities for educational sharing.

Some Useful Tips for Improving Community Participation in Volunteer Work Parties

- Have a consistent schedule (e.g., 10:00 A.M. on the first Saturday of every month).
- Use dramatic before-and-after photographs to demonstrate the impact of volunteer labor.
- Print and distribute flyers for your monthly work party.
- Produce a calendar of upcoming work parties and post it in appropriate newsletters, list serves, and Web sites.
- Offer other educational opportunities to your volunteers (field trips, walks with experts).
- Cultivate fellow volunteer leaders who can help lead work days in your absence.
- Have a presence at appropriate community events (e.g., neighborhood street fairs).
- Honor frequent volunteer participants with a gift (mug, T-shirt, cap).
- Find ways to celebrate successes (Cake and ice cream event, joke gifts, certificates of achievement, group praise etc.).

Frequently Asked Questions about Invasive Non-Native Plant Removal Activities

The following are some questions that program leaders and volunteers typically receive from interested members of the public or volunteers. Brief answers are provided, and it is recommended that more specific answers be developed to address local concerns as the program evolves.

Does the park staff know you're doing this? Yes, they are quite supportive of this project. They are especially concerned about these weeds because they threaten some sensitive areas that they're trying to protect.

That plant is pretty, why are you removing it? Pretty, yes, but it can have harmful effects on our natural environment. Many other plants—and the animals that need them—are being crowded out by this plant species. Some invasive plants are easy to hate because they're ugly or prickly, but many are quite beautiful. In fact, many of these plants were brought here originally for use as ornamentals, without knowing that later they would become such problems.

Are all weeds bad? Not all plants that we call *weeds* are a problem ecologically. Not all of the “weeds” that grow in your yard are a problem here in the park, although some are. But it's true that wildland weeds have a negative ecological effect. Plants are not inherently good or bad—remember, each of these weeds naturally grows somewhere. Back there, it might even be threatened by invasive plants from somewhere else—perhaps even California! The difference between an invasive plant and a weed is that the invasive plant displaces all the other plants and causes some sort of measureable harm to the environment. Weeds in contrast are just plants that are growing somewhere where we do not want them to grow. Some plants simply have the ability to do more damage than good in the natural environment in a particular place.

Since most of us humans are from somewhere else, does this mean we should be removed? Definitely not. We're working on plants, and in fact many non-native plants do just fine here. It is a very small percentage that actually takes off in the landscape at the expense of many other organisms. This is typically because the climate suits it, and because native animals or insects don't eat the plant, giving it a competitive advantage over other plants. Weed work is about supporting natural diversity—removing these few invasive problem plant species allows hundreds of others to flourish.

What will happen if we do nothing? Some of these invasive plant infestations have the potential to become a virtual monoculture, forming patches where almost no other plants grow. The diverse mix of plants and animals that were here before is then lost.

What will happen to the animals that are using those invasive plants? Usually, the animals are using invasive plants for food or shelter because the native plants that historically served that purpose are gone or greatly reduced. If we restore those plants as the invasive plants are removed, the animals can begin using the native plants again.

How can I get involved? Glad you asked. We have materials right here with contact information to make it easy for you to get involved.

When confronted with questions like these, keep in mind that you often have only a minute or two to answer the question. Using the **ABC's** of interpretation—know your **Audience**, keep it **Basic**, remember the **Context**—will help you have a creative, constructive conversation. It's some of the most important work you'll do!

Evaluation

Two types of evaluations are recommended for this program, 1) an evaluation of the effectiveness of the volunteer program to attract, retain, and inspire participants, and 2) an evaluation of the effectiveness of the volunteer's work efforts.

The first type of evaluation can be conducted in many ways, for simplicity, we suggest the following:

- **Track volunteer hours.** Measure actual hours worked against established work hour projections that are established annually or monthly.
- **Track numbers of volunteers.** Measure actual numbers of participants and look for increases over time.
- **Track repeat participation.** Keep a list of participants and track the number of volunteers who come back to participate again- repeated participation means your program is interesting enough for people to come back and is a good measure of how the overall program is maturing and growing its leaders.
- **Track acres (or square feet) treated. Record number of invasive plants removed or number of native plants planted onsite.** Mark up an aerial photo indicating which areas were treated and the date, number of volunteers and hours of treatment. Numerically and spatially tracking the amount of work performed will help in planning for future events.

The second type of evaluation is related to the effectiveness of the work performed. There are many many ways to evaluate work. For simplicity, select a simple, repeatable system of site monitoring that includes the following:

- **Establish Permanent Photopoints** at logical (and easily located) places throughout the site. The sites should be selected to show the full range of conditions at the site (e.g., types of natural communities, elevations middle and ends of the site, entrances, high use areas etc),. Readily accessible places such as fence posts, edges of buildings, creek banks, trees or other permanent features that anyone can locate over time are a good starting point!. As necessary, add other photopoints in areas that illustrate a “before” condition that you are trying to contrast with an “after” condition. For example, pick a site that shows the very thickets part of a red sesbania infestation so that the photos will show how the site changes over time (hopefully from dense sesbania to sesbania seedlings, to no sesbania at all!). The location of the photopoints should be clearly marked in the field with fence posts, lath and flagging, rebar stakes and bright paint, or similar permanent marking. A compass bearing and direction should be recorded to indicate the direction and angle of the photopoint. Take a set of Baseline Condition photographs before you start any work to document what the site originally looked like! Prepare a binder with your pictures, and take the previous year's photos with you to help frame each year's pictures in a similar way.
- **Measure and Assess the Treated Area Annually.** Although there are several ways to measure and assess work, the following system is recommended as an easy starting point to take data over time in a manner that will help you spot shifts in vegetation trends over time. This system, while not a rigorous scientific investigation will help you to spot trends in the condition of the site over time.
 1. Establish the end point of a transect at one or many of the permanent photodocumentation site or sites that are within your treatment area. Lay out a 100 foot tape in the same direction each time (use a compass bearing or align the tape in a logical

manner such as North-South etc.). Walk along the transect and record all of the plant species that you see. Also record the “cover class” i.e. the amount of area that each species occupies along your transect as follows:

- a. 1= extremely uncommon, only 0-10% cover of the area observed.
 - b. 2= uncommon, 10 to 20% cover of the area observed.
 - c. 3= less than common, 20 to 30% cover of the area observed.
 - d. 4= common, cover of 30-50% of the area observed
 - e. 5=abundant, cover of over 50% of the area observed.
2. Mark up an aerial photo or map. Show the extent of native plant communities and weed infestations. Over time, the size of these areas will change, and the field maps can be used to calculate
 3. Note the overall condition of the site (e.g. are there many weed re-sprouts or seedlings? Do you see any new weed species? Are there more native plants? Is there trash? Is there more or less beaver damage? Is there erosion or creek bank downcutting?
- **Compare Monitoring Data Annually.** For photos, compare pictures taken at the same photopoints over time- a picture is worth a thousand words! For monitoring data, compare the overall number of species present (species richness); the abundance of both key native plants such as oak trees and key invasive plants such as red sesbania- look for trends upwards in native plants and downwards in invasive plants! Don't get discouraged if a single year's data does not show site improvement- remember, there are good years and bad years in plant reproduction as well- the overall goal is success over time! Compare your field maps of plant communities- is the size of the desirable native plant communities shrinking or growing? Are the weed infestation areas the same or smaller? These field maps can also help you focus your future work on problem areas.
 - **Adapt the Monitoring Program as Necessary Over Time.** What you monitor should be dictated by what you are most interested in tracking. If one type of monitoring does not give you enough data to make decisions, try a different approach!

Appendix 1

Birds:

- Pied-billed Grebe (*Podilymbus podiceps*)
- Green Heron (*Butorides virescens*)
- Great Blue Herons (*Ardea herodias*)
- Great Egret (*Ardea alba*)
- Snowy Egret (*Egretta thula*)
- Canada Goose (*Branta Canadensis*)
- Mallard (*Anas platyrhynchos*)
- Cinnamon Teal (*Anas cyanoptera*)
- Blue-winged Teal (*Anas discors*)
- Turkey Vulture (*Cathartes aura*)
- Northern Harrier (*Circus cyaneus*)
- White-tailed Kite (*Elanus leucurus*)
- Red-tailed Hawk (*Buteo jamaicensis*)
- American Kestrel (*Falco sparverius*)
- California Quail (*Callipepla californica*)
- Ring-necked Pheasant (*Phasianus colchicus*)
- American Coot (*Fulica americana*)
- Killdeer (*Charadrius vociferous*)
- Black-necked Stilt (*Himantopus mexicanus*)
- Greater Yellowlegs (*Tringa melanoleuca*)
- Mourning Dove (*Zenaida macroura*)
- Rock Dove (*Columba livia*)
- Black Phoebe (*Sayornis nigricans*)
- Western Kingbird (*Tyrannus verticalis*)
- Loggerhead Shrike (*Lanius ludovicianus*)
- Western Scrub-Jay (*Aphelocoma californica*)
- Yellow-billed Magpie (*Pica nuttalli*)
- American Crow (*Corvus brachyrhynchos*)
- Cliff Swallow (*Petrochelidon pyrrhonota*)
- Barn Swallow (*Hirundo rustica*)
- Marsh Wren (*Cistothorus palustris*)
- Northern Mockingbird (*Mimus polyglottos*)
- European Starling (*Sturnus vulgaris*)
- Savanna Sparrow (*Passerculus sandwichensis*)
- White-crowned Sparrow (*Zonotrichia atricapilla*)
- Song Sparrow (*Melospiza melodia*)
- Western Meadowlark (*Sturnella neglecta*)
- Red-winged Blackbird (*Agelaius phoeniceus*)
- Brewer's Blackbird (*Euphagus cyanocephalus*)
- House Finch (*Carpodacus mexicanus*)
- Swainson's Hawk (*Buteo swainsoni*)
- Domestic Duck (*Anas domesticus*)
- Common Snipe (*Gallinago gallinago*)

Mammals:

- Black-tailed jackrabbit (*Lepus californicus*)
- Muskrat (*Ondatra zibethica*)
- American Beaver (*Castor canadensis*)
- California Meadow Vole (*Microtus californicus*)

Reptiles/Amphibians:

- Common Garter Snake (*Thamnophis sirtalis*)

Appendix 2 – Glossary

Terms in **bold print** within definitions are themselves defined in the glossary.

Allelopathic—producing substances (allelochemicals) that are toxic to or inhibit the growth of other plants

Annual—a plant whose entire life cycle (**germination**, growth, flowering, setting seed, death) occurs within one year (contrast **biennial**, **perennial**)

Biennial—a plant that lives two years, flowering and setting seed in the second year (contrast **annual**, **perennial**)

Biomass—informally, a volume (not mass) of living or dead organic material (for the purposes of this book, all that “stuff” a weed worker must deal with). Technically, *biomass* refers to the weight of all living matter per given unit area. Weight of dead organic material is most properly called *necromass*.

Bolting—rapid elongation of a shoot just before flowering

Bunchgrass—a **perennial** grass that cannot spread vegetatively; all of the buds are located at ground level, at the base of the stems

Containment—a control strategy short of **eradication** aimed at preventing or limiting the spread of an invasive species

Eradication—complete elimination of a species, including seeds, from a given area; local extinction

Foliar—pertaining to leaves (foliage). Foliar application of an herbicide means the herbicide is sprayed on the leaves.

Germination—sprouting of a seed or spore

Herbaceous—adjective describing non-woody plants, whether **annual**, **biennial**, or **perennial** (noun form: herb)

Hybridize—to interbreed with different species or sub-species

Invasive plant—a successfully reproducing species of plant that is, or has the potential to become, unacceptably abundant in a particular plant community. Invasive plants in native ecosystems may alter plant community composition, structure, and function and diminish habitat value.

Lateral roots—underground roots spreading outward rather than downward (contrast **taproot**)

Monospecific—single-species; e.g. a stand of a single plant species containing no other plant species (or, containing very few other plant species--the term is often used somewhat loosely, rather than strictly literally)

Native plant—a plant species or sub-species that evolved in its present location or dispersed to its present location unaided by humans

Naturalized plant—a non-native plant species that reproduces successfully and is thoroughly established in its introduced range. Plants considered “naturalized” are usually not considered “invasive.” They may have minimal ecological impact, or be restricted to disturbed habitats such as lawns and roadsides, rather than able to spread into relatively undisturbed habitat.

Non-native plant—a plant found outside the evolved or historic range of its species; not all non-native plants are **invasive**. *Note:* plants and seeds may be dispersed to new locations over long distances by wind, water, and birds. Such newcomers could be considered non-native unless and until they survive, reproduce, and over generations, co-evolve with their new ecosystem. For the purposes of this book, non-native plants are those introduced by humans, whether deliberately or unintentionally.

Perennial—a plant that lives more than one year (contrast **annual**, **biennial**)

Rhizome—a horizontal stem growing below the soil surface; may store carbohydrates or function in **vegetative reproduction** (compare **stolon**, **runner**)

Riparian—pertaining to or growing along watercourses

Rootball—a non-technical term referring to the major bulk of a compact root system, (e.g., the dense mass of roots of *Cortaderia spp.* excluding the slender roots extending from the main mass)

Root crown—a non-technical term referring to the top portion of the underground root system

Seedbank—viable seeds in the soil

Semi-shrub—a generally **herbaceous**, **perennial** plant capable of developing woody stems

Sensitive habitat—areas of special concern due to the presence of rare, threatened, or endangered species, or of vulnerable features such as watercourses

Stolon—a stem that creeps along the ground and roots at the **nodes** or tip, giving rise to a new plant through **vegetative reproduction**

Sucker—a shoot originating from below ground, e.g., from a root

Taproot—a larger, main root, usually vertical, from which smaller roots branch out; typically found in dicots and not in grasses

Tiller—an erect shoot originating underground; (verb:) to reproduce vegetatively through tiller production

Viability—ability of a seed to germinate. *Note:* the length of time a seed remains viable varies widely between species and depends on environmental conditions affecting the seed. Plants producing seeds that remain viable for many years in the soil are said to have high **seedbank** longevity.

Appendix 3 - Weed Resources

The resources section focuses on statewide and local organizations. They are either good sources of online weed information or they offer first-hand experience of removing weeds. A few print publications are listed as well as some sources for tools.

General Websites

<http://tncweeds.ucdavis.edu/>

A collaboration between UC Davis and the Nature Conservancy, this site includes detailed information on many invasive species, tools, control methods, events, and a listserv.

<http://wric.ucdavis.edu/>

The Weed Research and Information Center at UC Davis carries out research in and disseminates information on weed management to benefit agriculture and natural areas.

www.cal-ipc.org

The California Invasive Plant Council (Cal-IPC) works to protect California wildlands from invasive plants through research, restoration, and education. The site includes a listserv.

www.thewatershedproject.org

The Watershed Project offers outreach programs on creeks, wetlands, and watersheds to the public and educators in the San Francisco Bay Area.

<http://plants.usda.gov>

The US Department of Agriculture's is a national plant database that includes invasive species.

www.invasivespecies.gov

This site lists invasive species activities and programs at the federal and state level.

www.ice.ucdavis.edu/nrpi/

Co-managed by UC Davis and the California Biodiversity Council, the Natural Resource Project Inventory (NRPI) is a database of noxious weed control projects in California.

Species-Specific Websites

A search of the Web will yield multiple sources of information regarding a specific weed; here are a few sites focused on particular species.

<http://ceres.ca.gov/tadn/>

Team Arundo del Norte is a forum of organizations dedicated to controlling *Arundo donax* (giant reed) in Central and Northern California. Its Web site provides comprehensive information on ways to remove *A. donax*.

www.noivyleague.com

A website dedicated to English ivy eradication.

www.ipm.ucdavis.edu

UC Davis' online IPM website provides detailed information on removing yellow starthistle, invasive blackberries, and other weeds.

Print Publications

Noxious Times is a quarterly magazine published by the California Department of Food and Agriculture with information on noxious weed control throughout California. Visit www.cdfa.ca.gov.

Cal-IPC News is published four times a year by the California Invasive Plant Council. See www.cal-ipc.org.

Tools & Equipment

www.lampdesign.com

The Root Talon is designed for pulling up small tree saplings.

www.canonbal.org/weed.html

The Weed Wrench is suitable for pulling up broom.

www.flameeng.com/Vapor_Torch_Kits.html

The Vapor Torch can be used to kill thistles at the rosette stage.

Organizations

www.sercal.org

The California Society for Ecological Restoration is dedicated to restoring California's damaged ecosystems, and offers conferences, workshops, and educational activities.

www.cnps.org

The California Native Plant Society (CNPS) promotes the preservation of California's native flora. Several local chapters in the Bay Area offer events, including weed removal activities: Yerba Buena (for San Francisco and northern San Mateo County), Napa, Marin, Santa Clara, and the East Bay.

www.weedcenter.org

The Center for Invasive Plant Management's website includes funding opportunities for groups interested in developing a weed management area.

Agencies

www.nps.gov/goga

The Golden Gate National Recreation Area is the largest urban national park in the United States, and offers many education and volunteer opportunities.

www.parks.ca.gov

California State Parks aims to preserve the state's biological diversity and protect its natural and cultural resources.

www.cdfa.ca.gov/wma

Weed Management Areas (WMAs) are local organizations that bring together landowners and managers to coordinate efforts against invasive weeds. WMAs exist in most of the Bay Area counties. The website lists weed control projects in each WMA.

www.cdpr.ca.gov

The California Department of Pesticide Regulation's website features links on integrated pest management, pesticide licensing, pest management grants, and general pesticide information.

***Appendix 16 –Photographs of A Series of Nature in the City
Interpretive Panels Used As A Part of Baxter Creek’s Stewardship
Outreach***

APPENDIX 15 – SAMPLE INTERPRETIVE SIGNAGE FROM SIMILAR CREEK SETTING –
 BAXTER CREEK, EL CERRITO, CA







BAXTER CREEK GATEWAY PARK

from a creek to a ditch...

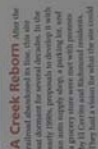
For years, this stretch of Baxter Creek was thought of as nothing more than a ditch — it had been straightened, had little vegetation along its banks, and had become a dumping ground. Fortunately, community residents saw life in the “ditch.” Active community members helped make it what it is today — a healthy stream with native riparian habitat and a community gathering place.

The Rancho Years This land became part of Rancho San Pablo in 1823, owned by the Mexican government. In 1847, the United States Army bought Rancho San Pablo from the Mexican government. El Cerrito, north to Lafayette, the Rancho's 12,000 acres were mostly used for grazing cattle, sheep, and horses. The creek was straightened to help with the movement of livestock.

Railroad Days During the late 1800s, the California Pacific Railroad was built through the area. The railroad was primarily used for transporting goods and passengers. The creek was straightened to help with the movement of livestock.

A Creek Reborn After the 1990s, proposals to develop it with a gateway area were met with opposition by El Cerrito and local residents. In 1994, a community study led to the creation of a gateway area and a natural park.

Prehistory The early human presence in the area is well documented. The first human presence in the area is well documented. The first human presence in the area is well documented.





Why? At the
Alameda Corridor

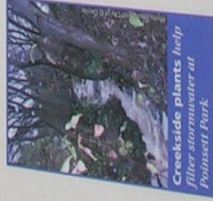


Why? At the
Alameda Corridor



clean water:

Restored streams, riparian areas, and the people living in the Baxter Creek watershed all play a role in keeping the water that flows to the Bay safe for fish, wildlife, and humans.



Creekside plants help filter stormwater at Pointsett Park.



Look for this message on storm drains near you.



Baxter Creek flows into the Bay at Stone Marsh.

trees, streams & you

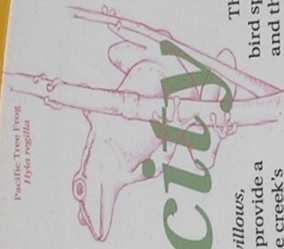
- When you see trash in a creek or about to enter a storm drain, please pick it up. Plastic, styrofoam and other trash ends up in the Bay and ocean, where it harms wildlife.
- Please pick up after your pet. In wet weather, pet waste — high in bacteria — washes into storm drains and creeks.
- Wash your car at the car wash, where the runoff will be routed to a water treatment facility, or on your lawn so the soap can infiltrate and degrade. Never wash your car on the street, where the runoff flows into storm drains and on to the Bay.

Stormwater often contains oil, grease, copper from brake linings, bacteria, and chemical fertilizers and pesticides. Restored creeks help the city of El Cerrito improve its stormwater runoff in a cost-effective, natural way. While creekside trees and shrubs help filter pollutants, we need to do our part, too.

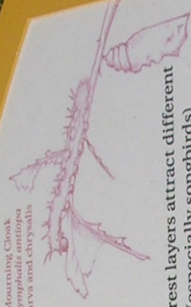
Red Flowering Currant
Ribes sanguinalis



Pacific Tree Frog
Hyla regilla



Mourning Dove
Quercus laevis
Leaves and acorns



nature in the city

Get wild — close to home.

With open space such as this protected creek, urban residents can enjoy nature close to home. The more restoration we complete, the more wildlife habitat and corridors we create — bit by bit. Here at Baxter Creek we have restored a riparian (creekside) ecosystem by planting native trees, shrubs, and grasses along the creek. The creek itself was reshaped too, with pools and riffles for creek critters.



Mature riparian habitat on Wildcat Creek



Typical oak grassland in East Bay hills

Closest to the creek, *willows*, *alders*, and *big leaf maples* provide a tree canopy that shades the creek's water, keeping it cool for aquatic life. In the water, fallen leaves provide nutrients for insects that form the base of the creek's food web. Back on the banks, *dogwood*, *buckeye*, and *ninebark* make up the middle layer of the riparian forest. *Blackberry*, *currant*, and *native grasses* form an understory.

These forest layers attract different bird species (especially songbirds) and the beneficial insects they feed on. Upslope from the creek's banks, *coast live oaks* provide another canopy, with an understory of native grasses and wildflowers. This oak grassland also provides habitat for insects and birds, and traps and filters pollutants. As you walk around, see how many plants you can identify...

Landscape architect's cross-section of Baxter Creek Gateway Park shows vegetation zones.

