

## 7.0 OUTDOOR AND NATURE EDUCATION PROGRAMS

The education of visitors is an important component of the resource management program as many of the potential human impacts upon resources can stem from a lack of understanding of the often complex relationships between human activities and natural processes in the environment. Additionally, the ecosystem supports a large variety of bird, reptile and amphibian species, as well as mammals such as black bear, bobcat, and mountain lion providing unique opportunities to see wildlife otherwise extirpated from the Los Angeles basin. The presence of these large animals highlights the need to instate visitor warning and safety programs to protect visitors and wildlife from each other.

Providing a diverse range of outdoor and nature interpretation, education and stewardship programs that appeals to a broad spectrum of interests will increase the public's understanding and appreciation of the significant natural and cultural resources and convey information about the Project Area and the nature of the land it was established to protect. This can be accomplished by augmenting the high quality interpretive facilities and programs currently provided through Canyon Park. This center provides the public with trail maps, public safety information, and rules and regulations; information about local wildlife and habitats, and San Gabriel Mountains watershed characteristics. This information is currently oriented primarily to Canyon Park visitors.

### 7.1 INFORMATIONAL SIGNS AND BROCHURES

Information signs fall into two categories: regulatory and informational. Adequate signing and mapping helps inform visitors regarding appropriate visitor etiquette, while literature in the form of brochures and maps can serve as useful information tools. Trail use also lends itself to an active recreational experience that can be enhanced by educating trail users on the local environment using interpretive displays and programs to convey information about the Project Area. Several of these information tools are currently in place in Canyon Park.

As the existing City internet site link to Canyon Park demonstrates, the internet also provides an opportunity to communicate information to a broad spectrum of visitors who may be considering a visit to the Project Area.

#### 7.1.1 Informational Signs - Management Strategies

##### *Use of Information Signs to Promote an Understanding of the Project Area:*

1. Use signs to post use restrictions and regulations, and promote awareness of trail safety and etiquette as a means of reducing trail conflicts.
2. Use directional signs at trail intersections to identify trails, indicate trail lengths, and destination points.
3. Post warning signs about potential safety hazards from wildlife, such as bears, mountain lions and snakes, as well as poison oak, ticks, and steep slopes.

4. Develop a uniform signage system to create a unifying image throughout the *Hillside Wilderness Preserve* and the *Hillside Recreation* planning areas.

***Use of Park Brochures/Literature/Exhibits to Promote an Understanding of the Project Area:***

1. Continue to disseminate information through the Nature Center using exhibits, brochures and other educational materials to explain the geology, plant communities, wildlife habitat, history and pre-history of the San Gabriel Mountains.
2. Revise Canyon Park literature so that the *Hillside Wilderness Preserve* and the *Hillside Recreation* planning areas are presented in maps and brochures as a unified system. Include information regarding public access and recreation opportunities, accessibility (as well as barriers to or restriction on accessibility), regulations and hours of operation.
3. Expand upon the resources now offered by developing an interpretive sign program and/or brochures that would enable park staff to disseminate information as trails are developed and opened to the public.
4. Create a resources information hub to disseminate information to both the public and the scientific communities. Canyon Park Nature Center would be a viable hub option since it already displays much information on the natural and cultural resources of the Project Area.

***Use of the Internet to Promote an Understanding of the Project Area:***

1. Continue to expand upon the City internet site for Canyon Park to fully incorporate the *Hillside Wilderness Preserve* and the *Hillside Recreation* planning areas. In addition to information on Canyon Park facilities, hours, fees, rules and regulations, directions, events and wilderness hazards that the public can download and print, incorporate:
  - Topographic maps as an overlay to aerial photographs with trails, key access points and destinations.
  - Plant lists, bird lists, butterfly lists and wildlife sightings.
  - Fire safety information for residents who live adjacent to the Project Area (e.g., appropriate landscaping, emergency exits), as well as visitors.
2. Augment the volunteer link to encourage participation in resource preservation, facility maintenance and visitor enjoyment and safety.

### **7.1.2 Recommended Near-Term (1–5 years) Educational Sign Components**

The guiding principles for developing the educational sign component is based on the mission statement: “Provide stewardship of the Hillside Wilderness Preserve and Hillside Recreation Area natural resources.” Canyon Park Staff developed the thematic sign approach by using their insights regarding the history of the Project Area, natural resources present, best practices on thematic development suggested from the National Association for Interpretation, and the technical skills of the staff.

The following over-all theme is proposed to provide this sense of stewardship with: “***Man-made and natural forces can unite to provide an ecosystem of symbiotic co-existence in the Monrovia Foothills.***” This theme is further broken down into the following sub-themes with messages of

preservation, understanding of non-native vegetation, respect of the wildlife that share the hillsides with people, and a clear message on trail safety.

***The Message on Preservation*** highlights preservation and will convey a respect and care of the land that Monrovia's residents voted to protect with the passage of Measures A and B in 2000.

- Sub-theme: "Man's footprints on land, if placed carefully, can be positive."
- Location and Description: Located a short distance from trailheads with the following message: "*Treat the world well...It was not given to you by your parents...It was lent to you by your children: Kenyan proverb.*" The Monrovia past and current history of preservation efforts would be detailed, and visitors would be encouraged to join an environmental consortium of volunteers dedicated to preserve the land.

***The Message on Non-Native Plants Effect on Native Habitat*** speaks to non-native plants and would describe the positive effects of restoring a habitat where plants and animals are able to have a symbiotic relationship. This message would encourage proactive efforts by volunteers to work at re-establishing native vegetation.

- Sub-theme: "Non-native plants are a threat to the well-being of native plants and animals."
- Location and Description: Depending on the possible trail design, signage would be placed near the location of Braunton's milk vetch, an endangered plant species. Another alternative or additional possibility could be to place signage in an area where restoration is taking place, such as near a Tree of Heaven outcropping. The relationship between wildlife and the native plants and the negative results of invasive non-native plants would be described. An appeal to become personally involved in restoration would be made.

***The Message on Sharing Habitat with Large Wild Mammals*** speaks to the importance of humans understanding that larger animals such as the mountain lion and black bear share the urban edge and help to establish the balance of nature.

- Sub-theme: "Basic needs to survive are universal, no matter your size or shape."
- Location and Description: Signage would be located where specific grant monies were obtained because of the desire to save deer, and mountain lion habitat. Another possibility is to place a sign near telephone poles where a bear has been using it as a scratching post. Over all, the basic needs of every living creature would be graphically described: food, water, shelter, and space. Visitors would be reminded about how to peaceably co-exist on the urban edge by using "Living with Wildlife" guidelines. ([www.monroviacanyonpark.org](http://www.monroviacanyonpark.org))

***The Message on Trail Safety*** addresses trail safety and educates visitors on the importance of respecting and avoiding the wildlife and plants that co-exist in the foothills. This message would include snakes, ticks, poison oak, etc. The message would convey individual responsibility to be a good steward of the Project Area, which would include not smoking, removing plants or wildlife.

- Sub-theme: "Humans and animals can co-exist if proper environmental roles are understood."
- Location and Description: Located at major trailheads, this information sign would remind visitors of the trail routes, and general instructions on how to deal with rattlesnakes, poison oak, ticks, mountain lions, and black bear. A clear understanding of the importance of every creature

to maintain a good balance in nature would be emphasized, including the personal responsibility of human visitors.

### **7.1.3 Recommended Information Media**

A new separate brochure should be created to cover many of the educational sign component recommendations presented above in Section 7.1.2, including the flora, fauna and safety aspects of the Project Area.

City Staff could investigate the creation of a virtual tour of the entire Project Area, including its natural and cultural resources. Subjects will include geology, biology, and botany, along with a look at the Native Americans to present-day people who have left their foot-prints in Monrovia Canyon.

## **7.2 RESOURCE STEWARDSHIP**

Resource stewardship comes into play on several levels including basic management of recreation facilities, ecosystems, and retention of cultural collections and record keeping. Resource stewardship could be supported in a large degree by volunteers with proper training and guidance by City staff.

Canyon Park in the Hillside Recreation Area is supported by volunteers with oversight by Canyon Park staff. This group participates in a variety of volunteer activities as described in Section 3.7. Their work could be expanded to also include activities in the Hillside Wilderness Preserve. A description of staffing responsibilities and increased staffing levels is outlined in Section 7.3.

### **7.2.1 Resource Stewardship - Management Strategies**

#### ***Use and Training of Volunteers to Promote Resource Stewardship:***

1. Expand the Canyon Park volunteer program to provide a uniform presence throughout the Project Area.
2. Expand the Canyon Park volunteer base to support activities in the Hillside Recreation and/or Hillside Wilderness Preserve such as:
  - Volunteer patrol to ensure compliance with the rules and regulations.
  - Guided walking/bicycling tours.
  - Trail and slope stabilization maintenance.
  - Environmental Education
  - Preparation of educational/interpretive materials

#### ***Strategies to Promote Biological Resources Stewardship and Education:***

The Monrovia Hillside Wilderness Preserve and Hillside Recreation Area is characterized by a varied topography containing a complex system of drainages and canyon watercourses that is largely comprised of pristine native habitat. The Project Area includes populations of threatened or under-protected vegetation communities, such as coastal sage scrub, oak woodlands and riparian areas. These unique ecological conditions provide opportunities to develop a wide range of stewardship and

education programs. Recommended management strategies to promote biological resources stewardship and education are described below.

1. Continue to offer outdoor youth science education programs at the Nature Center.
2. Develop additional programs explaining the importance of Project Area ecosystems. Programs should focus on ways to co-exist by minimizing impacts on wildlife and native habitat associated with development and use within and along the southern boundary.
3. Expand upon the established volunteer program to incorporate programs that will support long-term preservation of the biological resources within the Project Area including:
  - Identification and eradication of ornamental landscape plants and exotic, invasive non-native weed species that have become established in former use areas.
  - Habitat restoration and revegetation activities.
  - Biologic inventories to record bird counts, observations, etc.
  - Documentation of biological resources through the creation of a database and GIS mapping system.
4. Seek new volunteers with expertise in biological resources by contacting:
  - Local professional societies such as the California Native Plant Society or the American Society of Landscape Architects.
  - Faculty and students found at Los Angeles based colleges and universities including UCLA and California State Polytechnic University Pomona.
5. Involve local school field biology programs in the survey and subsequent recordation processes.
6. Seek support from Trask Boy Scouts Camp (some of the Eagle Scouts may be interested in field biology and/or native plant restoration) and the Canyon Park volunteer corps as there may be untapped expertise within these groups.
7. Schedule routine patrols in biologically sensitive areas to monitor any potential effects on the resources occurring as a result of natural ecological processes and/or visitor and management practices (e.g., creation of illegal trails that could potentially erode site components and produce negative effects on sites).

***Strategies to Promote Cultural Resources Stewardship and Record Management:***

Given the existence of a wide cross-section of site types in the Project Area, the Canyon Park Nature Center should play an integral role in the protection of any cultural resources found in the Project Area as well as the collection and record management of those resources. Recommended management strategies to promote cultural resources stewardship and record management are described below.

1. Establish a volunteer program to assist with the identification, and artifact analysis, and the creation of a database and GIS mapping system to accommodate proper recordation of cultural resources from the Project Area.
2. Seek new volunteers with expertise in cultural resources by contacting:
  - Local professional societies such as the Monrovia Historical Society.

- Faculty and students found at Los Angeles based colleges and universities including USC, UCLA, and California State Los Angeles that have anthropology programs with a focus in archaeology.
3. Work with local archaeologists to create a volunteer training manual for working with archaeological collections.
  4. Involve locally run archaeological field schools in the survey, recordation, and subsequent curation processes.
  5. Seek support from Trask Boy Scouts Camp (some of the Eagle Scouts may be interested in working on a project that involves the archaeological resources) and the Canyon Park volunteer corps as there may be untapped expertise within these groups.
  6. Schedule routine patrols in culturally sensitive areas to help evaluate potential effects on known archaeological sites occurring as a result of the natural weathering and erosion of sites, as well as the impacts of visitors (e.g., indiscriminate collection and/or vandalism of sites).
  7. Train volunteers in the use of GPS mapping technology to assist in the location and recordation of resources identified in the Project Area.
  8. While only one prehistoric site has been recorded, the Project Area has never been systematically surveyed. With this in mind, staff should partner with local Native Americans to develop a Native American stewardship program so that an evaluation of sacred sites or resources that are deemed important can be protected. Native American groups may also be interested in participating in a volunteer capacity to assist with cultural resource surveys of the Project Area.

***Strategies to Promote a Good Neighbor Policy:***

A significant component of a management program should include outreach to landowners (adjacent properties and in-holdings) throughout planning and construction phases and on an ongoing basis. This means assigned City Staff will need to cultivate and sustain an ongoing relationship with the landowners with a stake in Project Area management practices.

One of the key management areas will be the access points, as they will serve as the local interface between the Project Area and the surrounding neighborhoods. A second key management consideration is the potential for residential activities within and along the southern boundary of the Project Area to adversely impact wildlife and the native habitat. Likewise, visitors accessing the Project Area have the potential to affect local neighbors. Programs that explain the importance of the Project Area ecosystems and present ways for visitors, neighbors and wildlife to co-exist will go a long way toward improving relations with the community and preservation of the resources people value and have worked diligently to protect. Recommended management strategies to promote a good neighbor policy are described below.

1. Provide educational materials and presentations on urban edge effects to residents who live in the vicinity of the Project Area and to various organizations including schools, recreation and civic groups. These educational materials should include information about invasive landscape plants, non-point source water pollution, conflicts between domestic pets and wildlife, urban wildlife coexistence, wildfire risk and prevention and visitor use etiquette.
2. Provide educational material to visitors that promote awareness of the needs of adjacent neighbors (e.g., parking, litter free environment, fire safe environment) and appropriate etiquette for addressing these needs.

3. Distribute information on urban edge effects and user etiquette at entry points, the Nature Center and City offices.
4. Conduct interpretive talks geared to local residents regarding the resources in the Project Area and the impacts human intrusions can have on the resources.
5. Provide neighborhood forums that meet on as needed basis. These forums should provide residents an opportunity to address management and maintenance as well as any neighborhood concerns and make recommendations to the City.
6. Train site stewards (including neighborhood groups and Neighborhood Watch volunteers) in incident report preparation. Refer to Section 3.7 for a description of the current volunteer training program that could serve as a framework for new programs.
7. Create clear boundaries between the public recreation facilities (e.g., trails) and private property lines. Fencing is one management tool that can help delineate boundaries, focus access from public trailheads, reduce casual access points from private land, and control trespass onto private land. Fencing may also have adverse impacts on animal movement. In places where fencing is constructed for visitor management or resource protection purposes, wildlife-friendly fencing such as smooth wire or post and dowel should be used.

### **7.2.2 Recommended School Curriculum Programs**

*Near-Term (1–5 years).* City Park Staff should investigate the possibilities of expanding the environmental curriculum outreach to MUSD 2<sup>nd</sup> grade students in their classrooms. Using the California State Science Standards and addressing state testing requirements, the program will instill a personal sense of “green” stewardship and include concepts of reducing, reusing, and recycling. The concepts will be related directly to effects on wildlife and our natural world.

City Park Staff should investigate the possibility of expanding the environmental curriculum to include transporting all 6<sup>th</sup> grade students and their science teachers to Canyon Park for on-site education programs. Park staff would assist in the curriculum, the Cabin/Conference Center would be used as a classroom, and the Park resources would provide the lab environment.

City Park Staff should investigate a joint collaboration with the U.S. Forest Service to provide career path training in the form of overnight camping exposure in the Hillside Recreation Area for middle school students.

### **7.2.3 Recommended Near-Term (1–5 Years) Family Hikes and Campouts**

City Park Staff should investigate the possibility of holding summer family hikes and campouts in the Hillside Recreation Area to promote family togetherness in the outdoors. This would provide exposure to the physical and mental benefits that exist in the natural world. Families could create a scrapbook of their collective memoirs reflecting on their camping experience together.

In 2011, City Park staff will host a 100<sup>th</sup> Year Anniversary recognizing the first volunteers who built the road, picnic grounds and trails to the Canyon Park Waterfall. Families will be invited to pack a picnic basket and re-live the history of the Canyon. As they step back in time, they will see pack mules, horseless carriages, woodcarvers, weavers, storytellers, Native Americans and more.

## 7.2.4 Recommended Conservation Programs

**Mid-Term (6–10 years).** Since stewardship of the natural resources is a key component of the mission statement, a formal restoration program should be proposed using a Memorandum of Understanding (MOU) with local colleges and universities. The Hillside Wilderness Preserve could be used as a lab extension for botany and biology classes. The possibility of joining with the U.S. Forest Service in their career path program may extend to the Regional Occupational Program (ROP) classes at Monrovia High School.

**Long-Term (11 – 20 years).** In the long-term, the City should pursue conservation programs with a stewardship component, which could include overnight resident tent camping in the Hillside Recreation Area for College and MUSD middle and high school students. Along with completing a minimum of a 4-hour restoration service project, students could use field guides to identify native and non-native plants and observe wildlife and habitat interactions. The conservation program could be offered in both the Hillside Wilderness Preserve and the Hillside Recreation Area (with camping only in Hillside Recreation Area).

## 7.3 STAFFING

Seasonal staff may include paid staff, youth corps, volunteers, interns or a combination of these personnel. This approach for allocating staff resources provides a cost effective operational approach for managing a preserve and its associated environmental setting with limited financial and staff resources.

According to Department of Community Services Strategic Plan, increased staff would be necessary to implement and maintain the guiding principles for the management of the Project Area through the mission statement and core values; “To protect the Hillside Wilderness Preserve and Hillside Recreation natural resources through educational and passive recreational opportunities.” The Strategic Plan identifies a Park Naturalist position and two Park Specialists to monitor wildlife and vegetation, manage visitor access, perform routine patrol and supervision, visitor education and interpretation and facility maintenance. Due to the acreage the Strategic Plan also recommends a vehicle be dedicated to the Project Area to ensure more frequent and effective patrols.

Administration and management of the Project Area would continue to be the responsibility of the Monrovia Canyon Parks staff. At present, 8 staff members, including a full time Park Program and Resource Supervisor, a full time Park Naturalist, two part time Park Specialists, and four part time Park Interns provide enforcement, management and maintenance for Canyon Park. As described in Section 8.0, the City of Monrovia Fire Department with their inter-agency partners provide fire protection services to the Project Area. The City’s police department would continue to be responsible for the adjacent neighborhoods and would respond to staff’s request for law enforcement support.

Low-impact trail facilities within the Hillside Wilderness Preserve could present new issues related to administration, management, and enforcement. Strategies for managing public recreation use of the Project Area are included below.

1. Provide an intermittent, or as needed, uniformed presence along trail routes. This “presence” may take several forms – City staff, volunteer patrols, or work crews. The Canyon Park staff should



have the authority to cite violations to City ordinances that affect the use of the Project Area (e.g. smoking, off leash laws).

2. Promote a positive image of the Project Area within the community by providing maintenance including:
  - Performing general maintenance (litter clean-up, emptying trash cans).
  - Maintaining and updating information in kiosks.
  - Maintaining picnic tables, benches and other amenities.
  - Maintaining gates, bollards, and fencing.
3. Initiate an Adopt a Park/Trail program to give families, schools, community groups, and businesses an opportunity to help steward the Project Area. Use the Resource Management Plan as a guide to identify potential adoption sites, such as a trail segment. Enlist the volunteer group to visit their site several times during the year (typically 3-6). Work could include trash pick-up, trail construction/maintenance, weed control, or wildlife habitat enhancement. Training and coordination should be provided by City staff.
4. Initiate an Adopt-an-Open Space program to give families, schools, community groups, and businesses an opportunity to help steward the open space system. The Resource Management Plan could be used as a guide to identify a variety of potential adoption sites, such as weed abatement sites or species protection/enhancement sites. Work could include weed control, wildlife habitat enhancement, and other restoration/conservation activities.