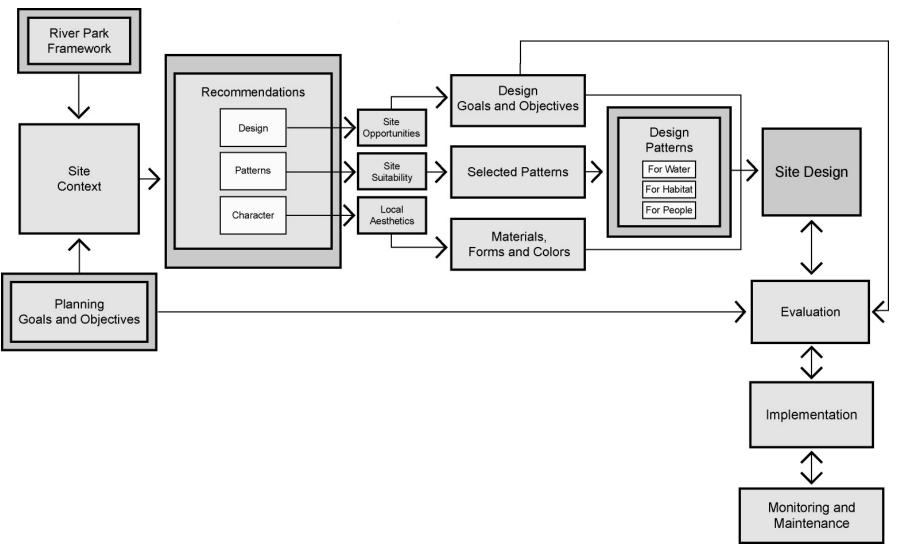


**Conceptual Plan** 



Site Design Flowchart

The development of the San Diego River Park Conceptual Plan proceeds directly from the planning goals and objectives, outlining the specific priorities of the design process. The planning goals and objectives differ from the project goals, which were formulated in a first step of the project, in that they were generated in response to the specific opportunities discovered in the analysis for the river park.

The San Diego River Park Conceptual Plan consists of three primary components:

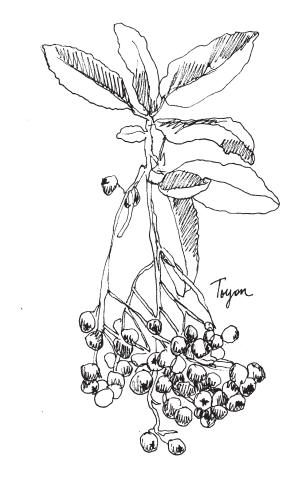
- River Park Framework
- Design Patterns
- Recommendations

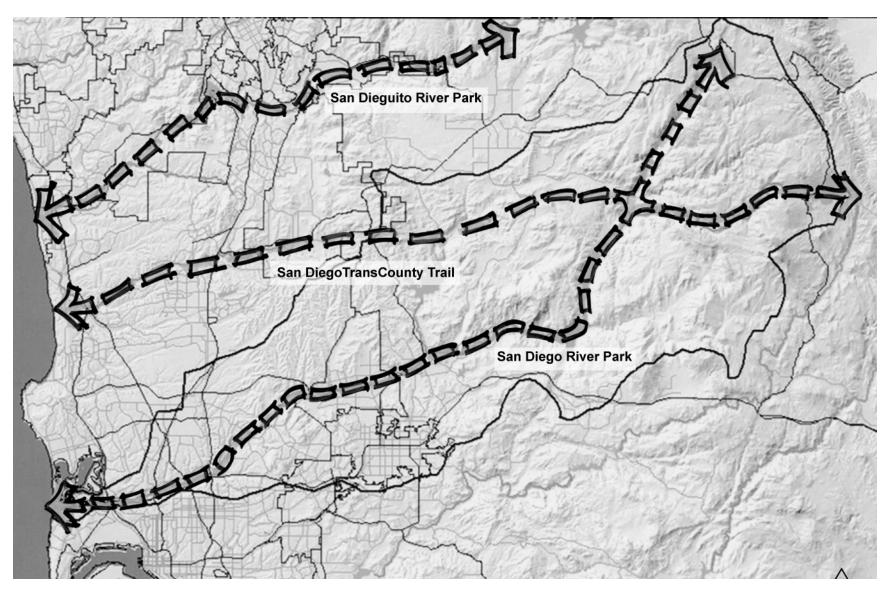
The three pieces of the conceptual plan work together to guide future design of the river park. The River Park Framework illustrates the overall vision for the river park. Design Patterns provide a vocabulary with which to achieve this vision. Recommendations provide specific design guidance for each reach.

|                        | Goals  | Objectives  |
|------------------------|--|---|
| Historical Recognition | To preserve and celebrate the San Diego River's historic resources             | 1. Develop partnerships with existing historical resources  2. Enhance preservation of historic and cultural resources  3. Facilitate education about the river's rich history  |
| Water Management       | To support the natural stream processes of the San Diego River                 | Support sediment transport processes and manage erosion     Work toward decreasing river water volumes and increasing groundwater volumes     Improve water quality     Educate the public about how their actions impact the river environment   |
| Habitat Enhancement    | To preserve and enhance riparian habitat throughout the San Diego River Park   | 1. Enhance native habitat 2. Maintain and improve habitat connectivity throughout the park and maintain connectivity for bobcats in the upper reaches 3. Integrate recreation in such a way as to minimize impacts on sensitive species 4. Facilitate education about the river environment   |
| Recreation             | To provide access to recreation activities throughout the San Diego River Park | 1. Connect existing recreational facilities  2. Provide a continuous trail along the length of the San Diego River  3. Provide additional recreational opportunities and improve trail connectivity from the region into the river park  4. Maintain and improve the natural aesthetics of the river corridor  5. Enhance educational opportunities along the river |

# PLANNING GOALS AND OBJECTIVES

Planning goals and objectives, based on opportunities for the river park, were developed for each of the four critical issues: historical recognition, water management, habitat enhancement and recreation. When viewed collectively, these planning goals and objectives form the basis for the subsequent River Park Framework and Design Patterns for the San Diego River Park.





San Diego River Park context with local regional trails

# **RIVER PARK FRAMEWORK**

## **Process**

The development of the River Park
Framework proceeded directly from the
planning goals and objectives and is
firmly rooted in the river park's context,
community involvement and the project goals. The framework illustrates the
manifestation of the fully implemented
San Diego River Park.

# **Regional Context**

The proposed San Diego River Park does not exist in isolation. It will be an important piece of a regional system of trails, parks and open spaces serving the San Diego region. Its relationships with and connections to existing facilities can greatly enhance its functioning. Trail linkages will be provided to the San Diego Trans-County Trail and into the Cleveland National Forest. Habitat linkages can be provided to connect the river park along San Vicente Creek to preserved areas in the north include San Dieguito River Park, to Famosa Slough to the south and along Alvarado Creek to the Adobe Falls area.

## Overview

The Conceptual Plan for the San Diego River Park represents the vision for the river park as a whole. Stretching from the western end of El Capitan Reservoir to the Pacific Ocean just south of Mission Bay, the river park provides greatly expanded opportunities for historical recognition, water management, habitat enhancement and recreation. Continuous trails unify the park and connect the public open spaces located along the river corridor.

## Historical Recognition

Historical cultural sites can be recognized and preserved within the river park, giving the public greater understanding of the historical value of the San Diego River. These sites include:

- Town of Julian Historic District
- Old wooden flume from Cuyamaca Reservoir
- Mission Dam and Flume National Historic Landmark
- Mission San Diego de Alcala State Historic Landmark
- Old Town San Diego State Historic Park
- Atlkwanen, Sinyau-tehwir, Kosmit, Anyaha, Witlimak, Senyaweche, Nipaguay, Cosoy, and Paulpa Kumeyaay Villages

To promote these locations, a Historical Interpretive Tour is proposed linking all of these sites along a self-guided tour. The layout of the tour can also highlight historical transportation routes along the river. Interpretive signage at historical locations will provide information about the history, context, significance and preservation of the sites. When seen as a part of the whole tour, these signs will provide a clear indication of the river's important role in California history. Seen individually, they will educate and inform park visitors about the significance of a given spot, and perhaps, inspire park users to visit other areas on the Historical Interpretive Tour in the future. The Historical Interpretive Tour has the potential to become a transect through time, educating the public about the San Diego River's important role in local history.

# Water Management

Water management is a critical function of the proposed river park. Generally depicted in the graphic as a net to hold, slow and filter water as it enters the river.

improved water management in the river park can provide an enhanced riparian environment. Throughout all areas of the proposed river park, management practices are implemented to improve the hydrological function of the river. Described in detail in River Park Design Patterns for water, some of these practices include maintaining natural river character to support sediment transport processes, maintaining permeable surfaces to reduce runoff into the river and to allow for increased groundwater infiltration, preserving riparian habitat and its natural filtration processes, using vegetative swales to catch and filter runoff from impervious surfaces and using plantbased phytoremediation to pull toxins from groundwater.

The river park provides an outstanding opportunity for public education about water management-related issues. Residents and businesses often engage in activities that are harmful to the river environment only because they are unaware of the adverse consequences of their actions. By taking opportunities to make natural river park processes visible and by using signage to explain these processes, the park can help to create a better-informed public who can then become better stewards of the San Diego River.

# Wildlife and Habitat

The proposed San Diego River Park provides connected habitat from the large pubic landholdings in the headwaters through rural, suburban and urban environments all the way to the ocean. Habitat restoration can be coordinated throughout the park, and a wildlife corridor can be maintained along the length of the park and connecting along San Vicente Creek to large habitat areas to the north, This allows for the movement of

birds, small animals, reptiles, insects and plants, ensuring better genetic health for the communities within the river park. A corridor for bobcat movement can be maintained between the headwaters and Mission Trails Regional Park, helping to ensure long-term habitat quality within the regional park. Buffering can be used to reduce habitat disturbances and to account for the needs of sensitive species, including rare, threatened or endangered wildlife. Ornamental plantings should be composed of predominantly native species, thus increasing the resources available for native fauna.

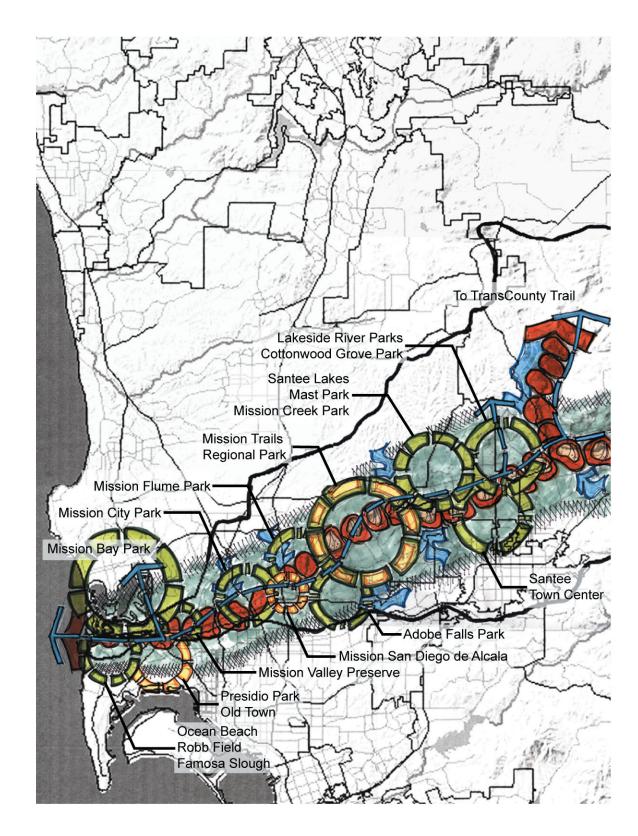
The creation of the river park offers many opportunities for community education and research. Interpretive signage can help the public identify and better understand local wildlife and plants. The park will provide a living laboratory for nature observations and field trips. Community groups, school groups and others can learn about native habitat and propagation techniques by participating in restoration efforts. Local schools and universities can be involved in researching the long term benefits of the establishment of a riparian park in an suburban and urban setting, adding to an increasingly important body of knowledge.

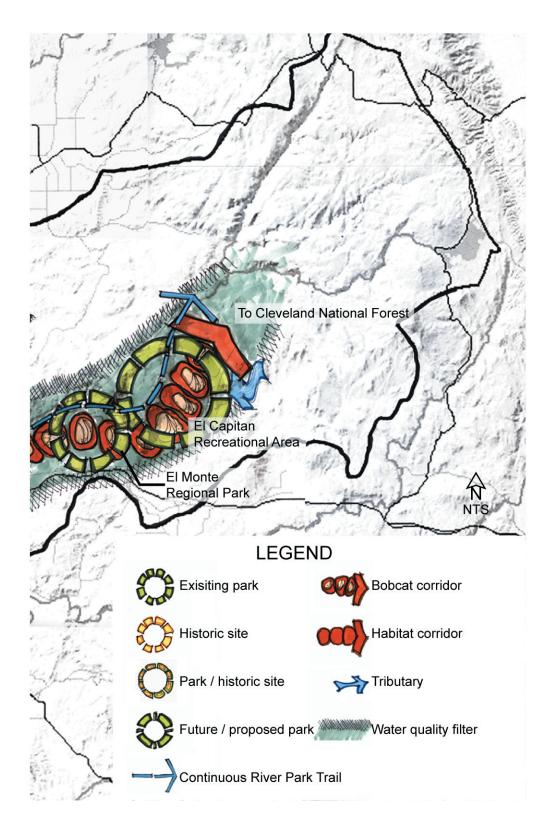


## Recreation

The establishment of the San Diego River Park will greatly enhance the current recreational opportunities for the people of the San Diego region. The river park will connect existing recreational areas into a cohesive recreational system. These recreational areas include:

- El Capitan Reservoir
- El Monte County Park
- Cactus Park
- Santee Town Center
- Mission Creek Park
- Mast Park
- Santee Lakes Regional Park
- Mission Trails Regional Park
- FSDRIP
- Adobe Falls
- Mission Valley Preserve
- Presidio Park
- Old Town San Diego State Historic Park
- Mission Bay Park
- Famosa Slough
- Robb Field Recreation Center
- Dusty Rhodes Park
- Dog Beach





San Diego River Park Framework illustrating the overall vision of the Conceptual Plan.

This is a conceptual image, land and / or easement acquisition is necessiary for implementation

Existing isolated trails in Santee, Mission Trails Regional Park, Mission Valley and the estuary will be connected into a unified trail system. In densely populated areas such as Mission Valley and in rapidly growing areas such as Lakeside, additional recreational resources are badly needed. By providing recreational opportunities in areas that serve the multiple functions of historic preservation, water management and habitat preservation, recreational resources can be made more cost-effective. The San Diego River Park Trail, a connected trail for bicycles and pedestrians along the length of the park, will serve as the unifying thread of the river park and will offer not only recreational opportunities and better access to existing park facilities, but will also offer commuters a sustainable alternative to driving.

A connected recreational system throughout the San Diego River watershed will be a great asset to the local community, providing thousands of people access to Southern California's dwindling natural environments. Recreational fields, picnic areas, playgrounds, horse trails, and wildlife view spots, as described in River Park Design Patterns for people, listed below, can all be accommodated here in a sustainable and harmonious way.

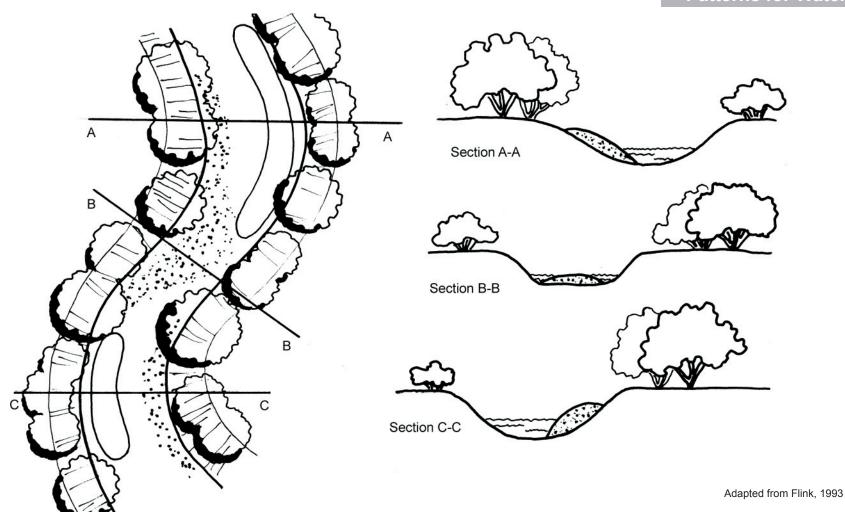


# **DESIGN PATTERNS**

## **Process**

To facilitate the planning of this large river park, covering many jurisdictions and incorporating both existing and future parks, Design Patterns were developed to ensure that future designs are sensitive to the unique characteristics and needs of the San Diego River. Based on the planning goals and objectives for the river park, these patterns provide a design language for use within the park. The use of these patterns will ensure that the river park is developed in a cohesive and sensitive manner.

The Design Patterns are organized into three broad categories: patterns for water, habitat and people. In the description of each Design Pattern, the purpose for the inclusion of each pattern in the river park design is included. This is followed by descriptions of the appropriate placement and guidelines for each pattern. Finally, associated patterns likely accompany each pattern are presented.



# W-1. Stream Meanders Purpose

To stabilize the natural flow, form and function of a stream. By maintaining the natural physical configuration of a stream, water velocity can be reduced, thus decreasing erosion potential and sediment removal, water quality can be improved by allowing more time for natural cleansing processes, and habitat can be improved by providing an increased variety of aquatic and terrestrial environments. Allowing enough room for

natural stream processes to work can reduce construction and maintenance costs.

#### **Placement**

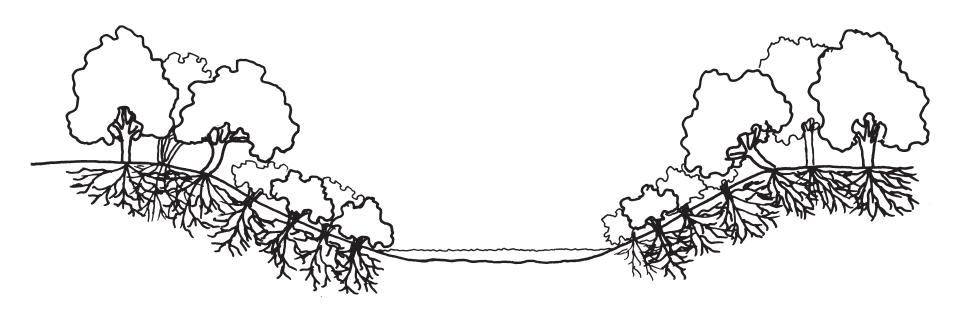
Stream meanders, as opposed to straight river channels, should be maintained and created in the river and its tributaries wherever possible. Surface drainage areas should also meander. Meanders require increased stream corridor width, which is beneficial to habitat as well as water quality and quantity.

#### Guidelines

- Discourage stream straightening and channelization as solutions to flooding issues
- Restore natural meanders in the river and all tributaries
- Slow and capture stormwater runoff before it enters streams and becomes a flooding problem
- Preserve the flood plain and allow natural processes to clean and slow stormwater
- Use meanders as a way to increase the length and area

of stream channels, providing for better stormwater management, better water quality and better habitat

- Stream bank restoration (W-2)
- Habitat restoration (H-1)



# W-2. Stream Bank Restoration

# Purpose

To enhance the natural form and functioning of the river and its tributaries by improving soils and topsoil formation, reducing erosion, improving habitat, and improving water quality. Maintenance costs are reduced when healthy stream banks resist erosion. The aesthetic environment for park visitors can also be improved by providing lush riverside vegetation.

## **Placement**

Stream bank restoration should occur at locations on the river or its tributaries that are without vegetation, eroding, or in an otherwise degraded state.

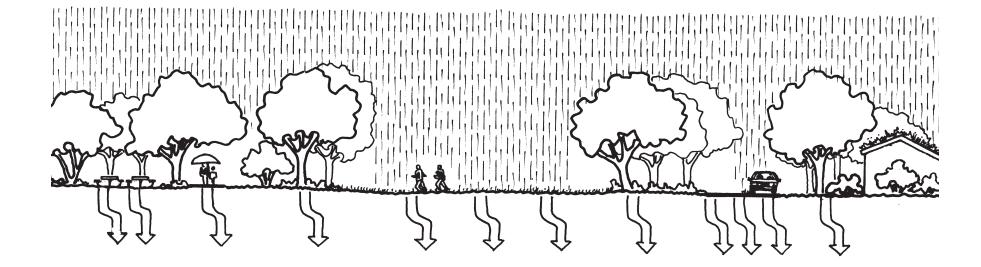
## **Guidelines**

- Use native riparian vegetation to secure banks
- Discourage using rocks to prevent stream bank erosion; a healthy vegetative community functions better
- Use vegetation to regulate

the microclimate of stream

- Use biotechnical engineering techniques (whole plants or their parts) to secure unstable slopes and banks, such as willow waddling or woody debris
- Discourage channelization and dam construction
- Include signage to educate the public about the restoration process

- Stream meanders (W-1)
- Habitat restoration (H-1)
- Interpretive signage (P-11c)



# W-3. Infiltration Zones

## **Purpose**

To slow and decrease storm water runoff into the river, reducing flooding and erosion and increasing groundwater infiltration, by bringing water into prolonged contact with soil at every possible opportunity. Green roofs, roof surfaces planted with drought tolerant vegetation, are a type of above ground infiltration zone.

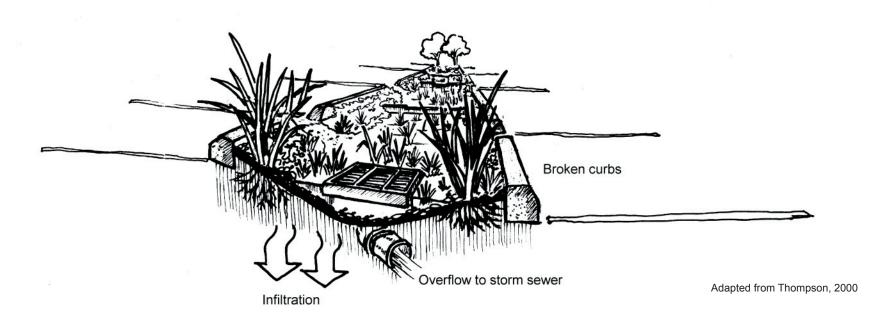
## **Placement**

Infiltration zones should replace paved and impervious surfaces at all possible opportunities. Parking areas and paths should be unpaved when appropriate. New buildings should be constructed with vegetative green roofs, and older buildings should be considered for retrofitting.

## Guidelines

- Preserve existing permeable areas
- Use planted or permeable surfaces to replace paved areas ranging from parking lots to access roads, to trails and staging areas
- Use green roofs

- Parking areas (P-4)
- Playgrounds (P-16)
- Recreational fields (P-20)
- Golf courses (P-21)
- Trails (P-6)
- Picnic areas (P-17)
- Amphitheaters ((P-18)
- Access points (P-1)
- Maintenance centers (P-15)



# W-4. Vegetative Swales Purpose

To slow, filter and clean stormwater runoff and to increase groundwater infiltration.

## **Placement**

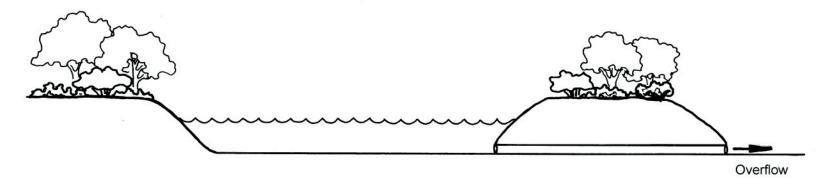
Vegetative swales should be located at the edges of all impermeable or paved surfaces and horse trails within the river park, especially along roads, parking areas and horse facilities.

#### Guidelines

- Maintain desired vegetation in swale at all times, fine bladed grass and legume mixtures are most effective at pollutant removal
- If swale vegetation is not native, it should not be spreading or invasive
- Remove woody volunteer plants to keep swale clear
- Utilize "broken" curbs or no curbs along edges of impermeable surfaces to allow runoff to flow into swale areas

- Design swale areas to contain and filter the most polluted runoff, collected the first five minutes of a small storm event.
- Utilize a raised drain inlet at the lowest point in the buffer area to allow for overflow drainage
- Keep free of trash and debris
- Include signage to educate the public about the function of the swale

- Parking (P-4)
- Commercial edges (P-22)
- Interpretive signage (P-11c)
- San Diego River Park Trail (P-6a)
- Horse Facilities (P-5)
- Bike facilities (P-2)



Adapted from Ferguson, 1998

# W-5. Dry Detention Basins

## **Purpose**

To decrease runoff into the river and to recharge the aquifer by creating topographic depression areas for infiltration. Dry detention basins are typically dry depressions except after a major rainstorm when they temporarily fill with stormwater. These basins slow the rate at which stormwater from developments enters streams and rivers

and thus help prevent flooding. However, dry detention basins are not very effective at removing pollutants.

#### **Placement**

Dry detention basins should be located in areas where groundwater recharge is necessary and where increased infiltration will not lead to further spreading of contaminated groundwater. Basins should only be designed in areas with highly permeable soils or where the aquifer is at or near the surface.

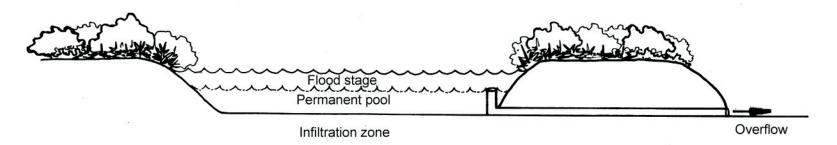
Detention and retention
basins can be located to collect runoff from impermeable
surfaces in the river park.

#### Guidelines

- Plant with vegetation that can withstand periods of extreme wet and dry
- Inspect basins after storm event to remove debris
- Keep vegetation on edges to decrease erosion
- Monitor for sediment accumulation

- Remove sediment accumulation when necessary, approximately every 5-10 years
- Include signage to educate the public about the purposes of basins

- Parking (P-4)
- Commercial edges (P-22)
- Interpretive signage (P-11c)
- Native landscaping (H-6)



Adapted from Ferguson, 1998

# W-6. Retention Basins / Wetlands

#### **Purpose:**

To decrease runoff into the river, to recharge the aquifer by creating topographic depression areas for infiltration, and to remove pollutants from stormwater. Retention basins typically have a permanent pool of water that can serve as wetland habitat and improve water quality through natural processes.

#### **Placement:**

Retention basins should be located in areas where ground water recharge is necessary and where increased infiltration will not lead to further spreading of contaminated groundwater. Basins should only be designed in areas with highly permeable soils or where the aquifer is at or near the surface. Retention basins can be located to collect runoff from impermeable surfaces in the river park. The open water and wetland habi-

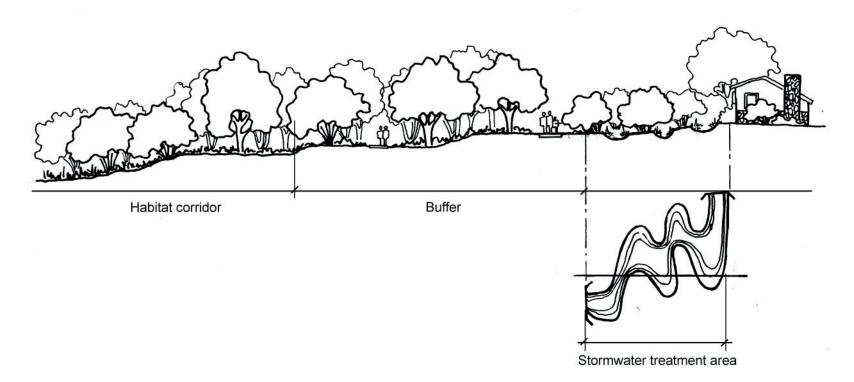
tat created by retention basins can be considered an amenity and add focus and interest to a site.

#### **Guidelines:**

- Maintain native wetland vegetation within basins to provide increased habitat
- Inspect basins after storm event to remove debris
- Keep edges well vegetated to decrease erosion
- Monitor for sediment accumulation

- Remove sediment accumulation when necessary, approximately every 5-10 years
- Include signage to educate the public about the purposes of basins

- Parking (P-4)
- Commercial edges (P-22)
- Interpretive signage (P-11c)
- Native landscaping (H-6)
- Habitat restoration (H-1)



W-7. Stormwater Treatment Areas

To filter and clean stormwater runoff currently flowing in storm drains to the river or its tributaries, before contaminated water enters the river or its tributaries.

#### **Placement:**

Stormwater treatment areas should be located in areas where storm sewers are located and where there is sufficient room to treat stormwater before it is discharged into the river. These treatment areas can be seen as amenities and placed in conjunction with picnic areas, view spots

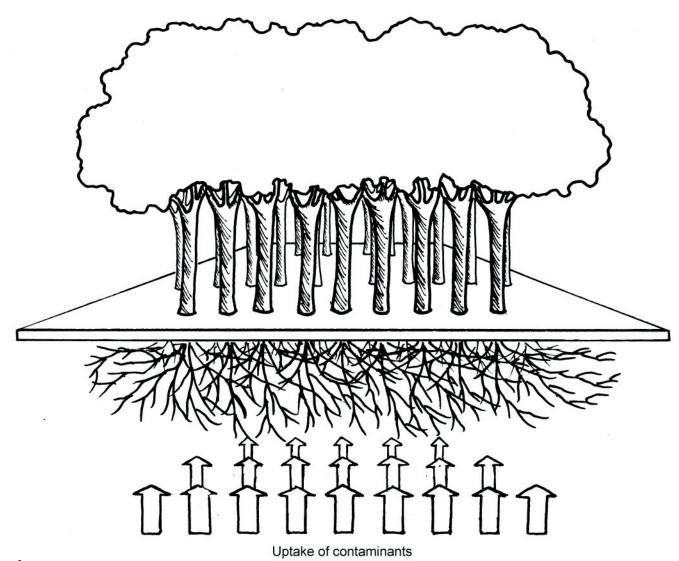
and trails (see Appendix H for further guidance regarding making ecological processes visible). Stormwater treatment should not occur in corridor, buffer or sensitive species areas where it would displace natural habitat. Stormwater treatment, if undertaken within the one hundred year flood plain, will require increased maintenance to remove contamination as it accumulates to prevent concentrated toxins from the filtration process from being washed into the river during flood events.

#### **Guidelines:**

- Bring stormwater and urban runoff to the surface from local stormwater pipes for the purpose of cleansing and filtration
- Design system capacity to clean and filter the first inch of stormwater, as this water contains the highest concentrations of pollutants
- Utilize a designed riparian system containing collectors for trash, detention areas for slowing and sediment precipitation, and vegetative swales for filtration

- Provide for overflow in large storm events to prevent scouring of filtration areas
- Utilize native vegetation within the system such as rushes, sedges, western sycamores and willows

- Interpretive signage (P-11c)
- View spots (P-8)
- Picnic areas (P-17)
- Spur trails (P-6b)



W-8. Phytoremediation

To remediate and restore riparian habitat sites from groundwater contaminants and toxic substances, such as MTBE, using inexpensive planting techniques as opposed to expensive, energy-intensive engineering solutions.

#### **Placement:**

Phytoremediation should be

considered in areas where toxic soils or contaminated shallow groundwater is present. Phytoremediation should not occur in corridor, buffer or sensitive species areas where it would displace natural habitat.

#### **Guidelines:**

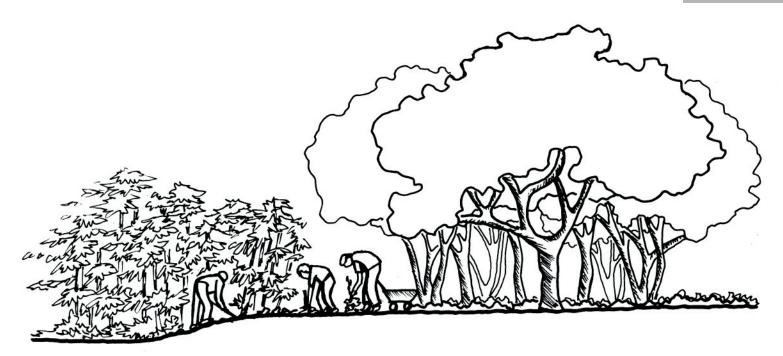
• Utilize plants to take-up, sequester and/or break down toxic contaminants

- Utilize native plants where applicable, or noninvasive exotic plants if necessary
- Do not utilize edible or fruiting plants or plants that are heavily consumed by native wildlife
- Design and monitor a system of test wells to gauge the effectiveness of treatment
- Develop an educational component involving

the local community or schools, focusing on monitoring for site improvements over time

#### **Associated Patterns:**

• Interpretive signage (P-11c)



## H-1. Habitat Restoration

## **Purpose:**

To increase the quality and extent of the natural habitat within the river park, eliminating invasive exotic species and reestablishing healthy populations of native species.

#### **Placement:**

Habitat restoration should occur throughout the river park wherever invasive exotics exist or where natural communities are degraded or absent.

#### **Guidelines:**

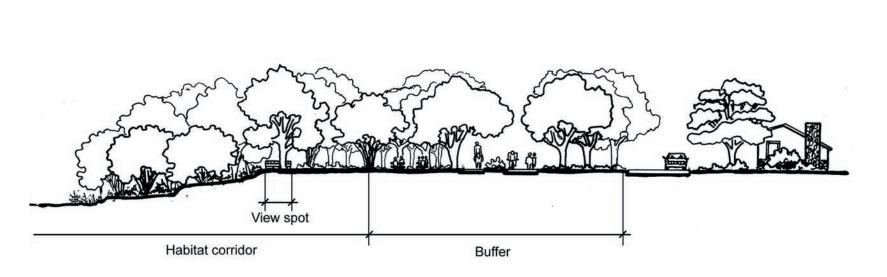
 Coordinate restoration efforts on a park-wide or watershed-wide basis, working with existing community groups currently involved in restoration on the river

- Prioritize exotic species removal efforts in the river park, first focusing on those species causing the greatest harm to native species and hydrological patterns or those spreading most rapidly
- Develop native revegetation strategies based on historic community distribution and the needs of sensitive species within the river park
- Revegetate the park with only local native species:
- o Plants for revegetation should be raised from seeds and cuttings from plants growing on or adjacent to the San Diego River
- o When this is not possible, plants should be raised from seeds and cuttings

- from the nearest local populations with similar conditions to the San Diego River
- o Commercially grown plants should be avoided as they can be genetically very different from local native populations
- Inoculate planting areas during restoration with native mycorrhizal fungi to encourage the better establishment of native species and to discourage colonization by exotic species
- Develop maintenance strategies for restored vegetation, including ways to compensate for the loss of periodic fires as a natural process of renewal and regeneration within the river park

- Develop an education program to inform local park neighbors about potential threats to habitat quality within the park, such as using invasive plants in yard landscaping and allowing cats and dogs to hunt within the park
- Conduct educational outreach to inform local nurseries about the impacts of selling invasive plants

- Bobcat corridor (H-3)
- Riparian habitat corridor (H-2)
- Sensitive species areas (H-5)
- Maintenance centers (P-15)
- Interpretive signage (P-11c)



#### H-2. Habitat Corridor

## Purpose:

To maintain habitat connectivity for wildlife and plant species throughout the entire river park in order to help maintain overall community health and vigor.

#### **Placement:**

Habitat corridors should be developed in the areas of the river park outside of bobcat corridor areas. The habitat within the riparian corridor should be maintained intact along the length of the river park and should extend outside of the park to make connections to adjacent critical habitat areas. The corridor should be as wide as possible, but with a minimum width determined through consul-

tation with a wildlife biologist. The corridor should be surrounded on each side by a 25- to 100-foot buffer area of habitat (see Appendix F for further guidance regarding corridor design).

## **Guidelines:**

- Allow for limited activities only within the corridor: walking, biking, fishing, bird-watching
- Allow for increased, but still limited, activities within the buffer areas: horse riding, picnicking
- Allow high impact activities outside of buffer areas only: sports, playground activities, parking
- Develop a management plan to maintain and/or restore

- riparian and other habitat within the corridor
- Study the impacts of road and freeway crossings within the corridor, and develop strategies for better connectivity, if necessary, such as speed bumps, stop signs or wildlife underpasses
- Provide for limited lighting in the buffer areas during dawn and dusk hours, but do not provide lighting within the corridor area
- Develop an education program to help park users and local residents understand the corridor and its purpose, thus fostering better stewardship

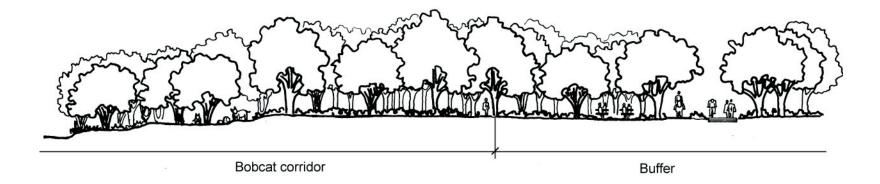
## **Associated Patterns:**

Riparian habitat corridor:

- Spur trails (P-6a)
- View spot (P-8)
- Benches (P-13)
- Water access (P-9)
- Wildlife underpasses (H-4)
- Habitat restoration (P-1)
- Regulatory signage (P-11d)
- Interpretive signage (P-11c)

#### Buffer area:

- San Diego River Park Trail (P-6a)
- Horse trails (P-6c)
- Picnic area (P-17)
- Lighting and emergency phone (P-12)
- Kiosk (P-10)
- Amphitheater (P-18)
- Habitat restoration (H-1)
- Native landscaping (H-6)



## H-3. Bobcat Corridor

## **Purpose:**

To maintain habitat connectivity for bobcats and other species between Cleveland National Forest and Mission Trails Regional Park in order to help maintain overall community health within Mission Trails Regional Park.

#### **Placement:**

The habitat within the riparian corridor should be maintained intact for bobcat movement along its length. Currently, bobcat movement does occur in this corridor, park design must ensure that this continues. The corridor should be as wide as possible, with a minimum width determined through consultation with a wildlife biologist. The

bobcat corridor should be surrounded on each side by a 25 to 100 foot buffer area of habitat. (See Appendix F for further guidance regarding corridor design).

#### **Guidelines:**

- Allow for limited daytime activities only within the corridor: walking, fishing, bird-watching
- Allow for increased, but still limited, activities within the buffer areas: biking, horse riding, picnicking
- Allow high impact activities outside of buffer areas only: sports, playground activities, parking
- Develop a management plan to maintain and/or restore habitat suitable for bobcat

- movement within the corridor
- Study the impacts of road and freeway crossings within the corridor, and develop strategies for better connectivity, if necessary, such as speed bumps, stop signs or wildlife underpasses
- Provide for limited lighting in the buffer areas during dawn and dusk hours, but do not provide lighting within the corridor area
- Develop an education program to help park users and local residents to understand the corridor and its purpose, thus fostering better stewardship

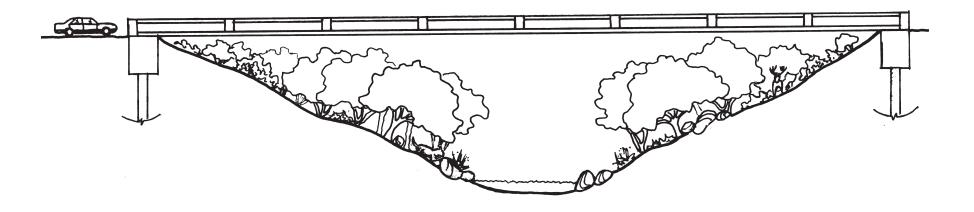
#### **Associated Patterns:**

#### Bobcat corridor:

- Spur trails (P-6b)
- View spots (P-8)
- Benches (P-13)
- Water access (P-9)
- Wildlife underpasses (H-4)
- Habitat restoration (H-1)

#### Buffer area:

- San Diego River Park Trail (P-6a)
- Horse trails (P-6c)
- Picnic areas (P-17)
- Lighting and emergency phones (P-12)
- Kiosks (P-10)
- Amphitheaters (P-18)
- Habitat restoration (H-1)
- Native landscaping (H-6)



# H-4. Wildlife Underpasses

## **Purpose:**

To increase habitat connectivity and facilitate better wildlife movement within the river park in areas where connectivity is otherwise lost.

## **Placement:**

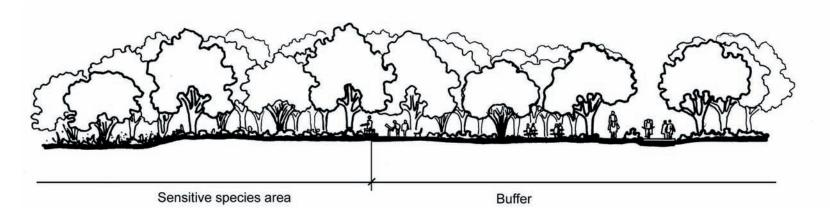
Wildlife underpasses should be located in areas, determined through research, where roads and freeways bisect the river park, hindering connectivity.

## **Guidelines:**

- Work with local universities or consultants to conduct monitoring and research on wildlife connectivity issues in the river park
- Design underpasses to suit the needs of specific species requiring better connectivity, as determined through research
- Design any new roads through the river park with

special consideration of the wildlife connectivity needs of park species

- Bobcat corridor (H-3)
- Riparian habitat corridor (H-2)
- Sensitive species areas (H-5)



H-5. Sensitive Species Areas

To protect sensitive species and their habitat within the river park.

#### **Placement:**

Sensitive species areas should be established in areas where endangered, threatened or sensitive species utilize the river or are likely to utilize the river. Biological research is necessary to determine precise locations. Sensitive habitat areas should be surrounded by 25-100 foot buffers where only limited, low-impact activities are allowed.

#### **Guidelines:**

Allow only low-impact

- activities appropriate to the sensitive species present in the area, such as walking and bird watching, with some areas set aside exclusively for habitat with no recreational uses
- Establish buffer areas around sensitive habitat where increased, but still limited, activities can take place such as biking, horse riding, fishing, picnicking
- Allow high impact activities outside of buffer areas only: sports, playground activities, parking
- Provide non-constructed access deterrents, such as signage, absence of trail access, landscaping with thorny plants

- Limit the use of fences whenever possible, but if necessary, construct them in ways sensitive to wildlife movement
- Work with local universities and high schools to conduct monitoring and research of sensitive species in the river park
- Develop adaptable strategies to suit the changing needs and locations of sensitive species
- Develop an educational program to help park users and local residents to understand the sensitive habitat areas and their purposes, thus fostering better stewardship

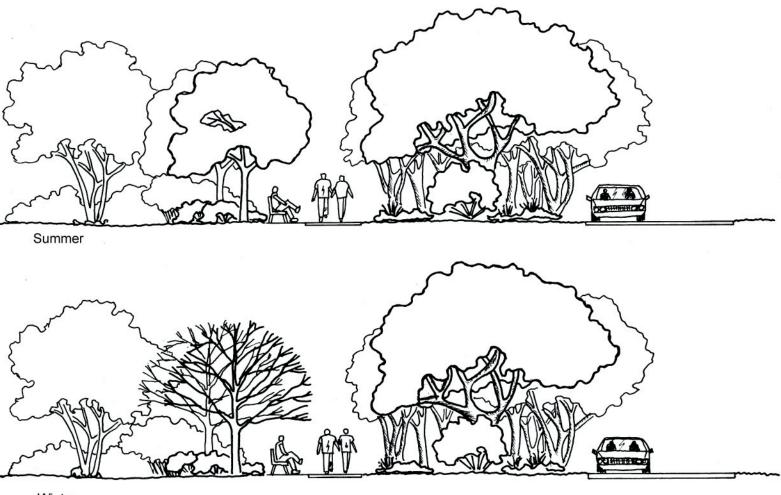
## **Associated Patterns:**

Sensitive Habitat Area:

- Spur Trails (P-6b)
- View Spots (P-8)
- Benches (P-13)
- Habitat Restoration (H-1)
- Signage (P-11)

#### Buffer Area:

- San Diego River Park Trail (P-6a)
- Horse trails (P-6c)
- Picnic areas (P-17)
- Water access (P-9)
- Lighting and emergency phones (P-12)
- Kiosks (P-10)
- Amphitheaters (P-18)
- Habitat Restoration (H-1)
- Native Landscaping (H-6)



Winter *H-6. Native Landscaping* 

To provide shade, beauty and habitat benefits for the river park, and to reinforce the sense of place along the river corridor.

#### **Placement:**

Native landscaping should be located in areas where shade, beauty, visual buffering, wind buffering or high quality habitat is desired. Plants should be chosen and located based on their individual specific cultural requirements.

#### **Guidelines:**

- Utilize only species native to the San Diego River and San Diego region for landscaping within the river park, with the exception of turf areas for play and ball fields Ensure that any nonnative plant species currently in the river park are not invasive in the local region
- If needed, install temporary drip or low flow irrigation to irrigate native landscap-

- ing until plants become established
- Maintain vegetation by thinning and pruning as needed to promote safety and visual access in the river park and along trails
- Weed out competitive nonnative plants as they appear

- Access points (P-1)
- Parking (P-4)
- Public transit access (P-3)
- Playgrounds (P-16)

- Amphitheaters (P-18)
- Recreational fields (P-20)
- Golf courses (P-21)Picnic areas (P-17)
- Maintenance centers (P-15)
- Benches (P-13)
- View spots (P-8)



P-1. Access Points

To provide convenient access to the trails and facilities of the river park.

#### **Placement:**

Access points should be located at all locations where the public enters the river park. Current access spots should be improved and new access areas should be developed. Access points should occur at a minimum of every five miles along the river

park, but may be more frequent in urban areas. Access areas should be located near parking, public transit access, bicycle and horse facilities. Features such as picnic areas, ball fields, amphitheaters and playgrounds should be located near access points.

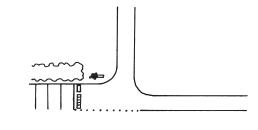
#### **Guidelines:**

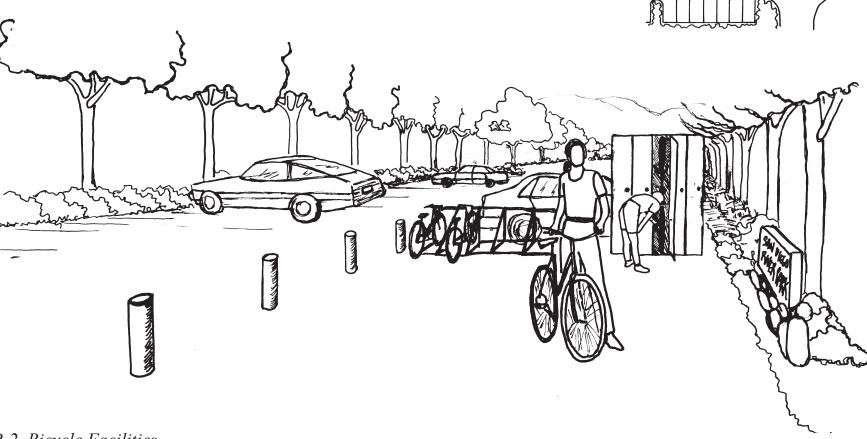
- Allow sufficient maneuvering room for pedestrians, bicyclists and equestrians
- Create a sense of place and

- feeling about the river park, as these areas give visitors their first impressions
- Provide security gate, fencing or barriers if necessary to prevent unauthorized park access, but design these to be unobtrusive and blend into the landscape

- Parking (P-4)
- Public transit access (P-3)
- Signage (P-11)
- Bicycle facilities (P-2)

- Horse facilities (P-5)
- Restrooms (P-14)
- Native landscaping (H-6)
- Lighting and emergency phones (P-12)
- Picnic areas (P-17)
- Recreational fields (P-20)
- Amphitheaters (P-18)
- Playgrounds (P-16)





# P-2. Bicycle Facilities

## **Purpose:**

To encourage bicycle use of the river park trails by providing a staging area for bicyclists, providing a safe place to store bicycles and by providing for bicyclists' needs.

#### **Placement:**

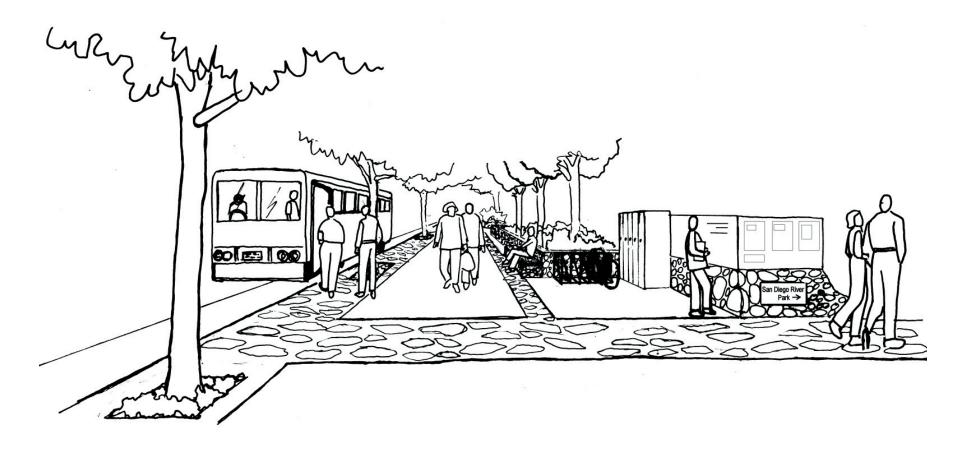
Bicycle facilities should be provided, at a minimum of one per five trail miles, at river park access points. Bicycle facilities should be located near public transit access, ball fields, picnic areas, amphitheaters, and playgrounds. These facilities should not be located within bobcat corridor areas, riparian corridor areas or sensitive habitat areas.

## **Guidelines:**

 Provide bike racks for short-term bicycle locking and bike lockers for long term bicycle locking, depending on location

- Provide air pumps for inflating bicycle tires
- Provide water fountains when possible
- Provide trail maps with mileage and difficulty information
- Develop an outreach program to inform bicyclists of trail sharing and habitat issues involving bicycles within the river park, thusfostering stewardship

- Access point (P-1)
- Road crossings (P-7)
- Public transit access (P-3)
- Recreational fields (P-20)
- Playgrounds (P-16)
- Amphitheaters (P-18)
- Native landscaping (H-6)
- Picnic areas (P-17)
- Signage (P-11)
- Lighting and emergency phones (P-12)



P-3. Public Transit Access

To provide access to the river park from existing and planned public transit services.

#### **Placement:**

Public transit access should be located where park users can conveniently access the river park by public transit.

## **Guidelines:**

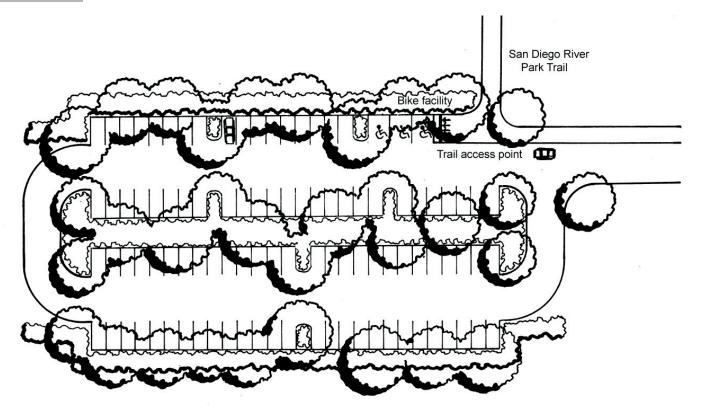
• Provide signage and maps at public transit stops with

river park access

- Utilize benches and design elements at these stops that reflect the character of the river park
- Plant native landscaping at these stops
- Showcase river-related art and projects

- Recreational fields (P-20)
- Golf courses (P-21)
- Amphitheaters (P-18)
- Playgrounds (P-16)

- Picnic areas (P-17)
- Water access (P-9)
- Access points (P-1)
- Bicycle facilities (P-2)
- Maintenance centers (P-15)
- Native landscaping (H-6)



# P-4. Parking

## **Purpose:**

To provide convenient access to the river park for users arriving by car while reinforcing the concept that autos are discouraged along the river park in favor of more sustainable modes of transportation such as walking, riding public transit, or riding bicycles and horses.

#### **Placement:**

Parking should be located at main activity areas including main access points, ball fields, golf courses, picnic areas, playgrounds, amphitheaters and water access, using existing automobile parking adjacent to or near river park access points.

Parking should never be located within corridor, buffer or sensitive habitat areas. Pre-developed or disturbed flat areas are preferred for new parking, rather than native habitat outside of protected areas.

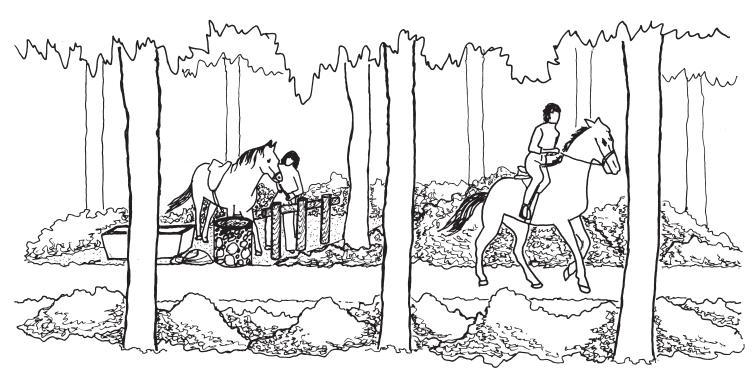
#### **Guidelines:**

- Provide convenient drop-off and pick-up points for ADA accessibility, when parking is remotely located
- Explore the possibility of joint use access agreements and special use permits with neighboring facilities to share maintenance and costs

- Provide the minimum amount of required parking spaces to encourage car pool and public transit options
- Utilize signage to encourage alternative forms of transportation
- Provide priority spaces for energy efficient vehicles
- Utilize natural, unpaved surfaces, such as soil and gravel, to slow traffic and limit impermeable surfaces in the river park
- Utilize vegetative buffers to clean and filter any runoff from parking areas
- Provide shade with native landscaping
- Provide lighting during

night time hours when park users may be returning to their vehicles

- Access points (P-1)
- Horse facilities (P-5)
- Recreational fields (P-20)
- Golf courses (P-21)
- Picnic areas (P-17)
- Playgrounds (P-16)
- Amphitheaters (P-18)
- Water access (P-9)
- Native landscaping (H-6)
- Vegetative swales (W-4)
- Infiltration zone (W-3)
- Lighting and emergency phones (P-12)
- Road crossings (P-7)



# P-5. Horse Facilities

## **Purpose:**

To provide a staging area for equestrians using the river park.

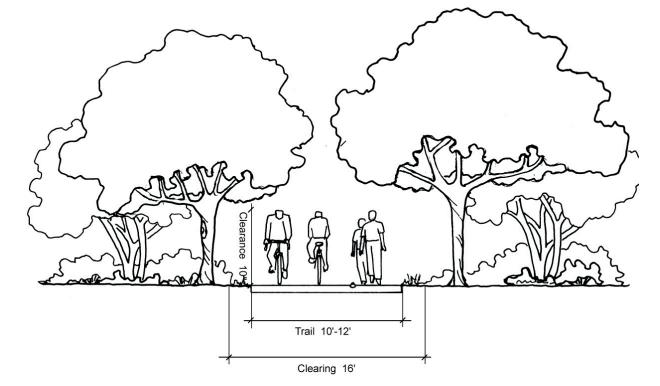
#### **Placement:**

Horse facilities should be provided at river park access points utilized by equestrians and concentrated in the portion of the river park east of Mission Trails Regional Park where most equestrian activity currently takes place. These facilities should not be located within bobcat corridor areas, riparian corridor areas or sensitive habitat areas.

## **Guidelines:**

- Provide hitching posts and troughs
- Develop a maintenance strategy to discourage brown-headed cowbirds from inhabiting the area which may include regular removal of horse wastes and/or cowbird trapping
- Develop an outreach program to inform equestrians of habitat issues involving horses within the river park, including brownheaded cowbirds, thus fostering bettering stewardship

- Access points (P-1)
- Parking (P-4)
- Native landscaping (H-6)
- Picnic areas (P-17)
- Benches (P-13)
- Signage (P-11)
- Lighting and emergency phones (P-12)
- Vegetative swale (W-4)



P-6a. Trail: San Diego River Park Trail

To provide a multiuse trail to serve as the backbone of the river park, with continuous connection from El Capitan Reservoir to the Pacific Ocean. It will provide community access and regional connectivity throughout the proposed park.

#### **Placement:**

The trail should be expanded upon existing trails along the river. As land becomes available or easements are acquired, the trail system will ultimately connect in a continuous trail corridor.

#### **Guidelines:**

- Design to act as a buffer between the habitat and the higher impact areas along the river park
- Analyze individual sites to ensure the trail will not

disturb sensitive habitat

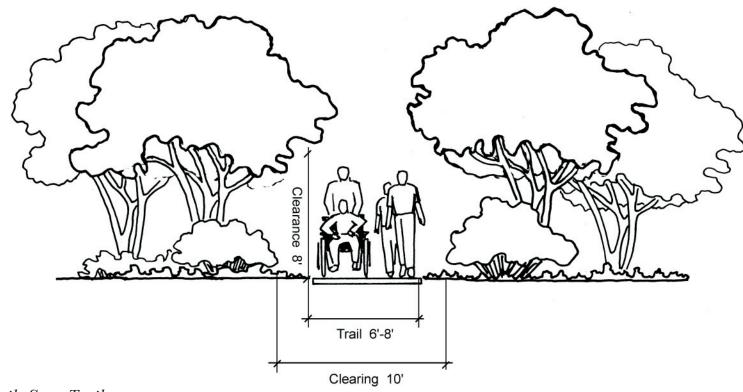
- Choose degraded areas for placement of trails rather than disturbing healthy areas
- Use concrete or asphalt in areas of intensive use and use water-permeable trail surfaces where possible in areas with low anticipated use
- Determine the user types and load demands in order to define the trail width and construction materials; more heavily segments should be wider and of durable materials; asphalt and concrete are an option for the most impacted trail segments
- Treat trail edges with vegetative swales to collect and filter wastes before they reach the river
- Provide for universal access and comply with all ADA

standards

- Prepare for impacts from the trail to be at least 100 feet on either side of trail
- Place barriers such as brush or boulders rather than fencing when possible to keep people on the trail
- Locate the trail so as to provide the best views whenever possible
- Avoid using sharp, angular curves and long, straight stretches of trail
- Avoid volunteer trails in riparian areas by running the trail on topographic benches and lead in at key areas rather than continuously along riparian area
- Minimize the number of stream crossings and avoid stream confluences act as nodes for wildlife
- Include an ongoing management plan that monitors trail impacts and user con-

flicts and allows for adjustments as necessary

- Spur trails (P-6b)
- Horse trails (P-6c)
- Road crossings (P-6)
- Directional signage (P-11b)
- Kiosks (P-10)
- Access points (P-1)
- Parking (P-4)
- Bicycle facilities (P-5)
- Vegetative swales (W-4)
- Lighting and emergency phones (P-12)
- Benches (P-13)
- View spots (P-8)
- Water access (P-9)
- Signage (P-11)
- Restrooms (P-14)
- Art (P-19)
- Native landscaping (H-6)
- Habitat restoration (H-1)



P-6b. Trail: Spur Trails

To provide users access to unique areas of interest, such as historic sites or wildlife viewing areas. Spur trails allow low-impact, limited access to sensitive habitat or historic areas rather than routing a primary trail through or along them.

#### **Placement:**

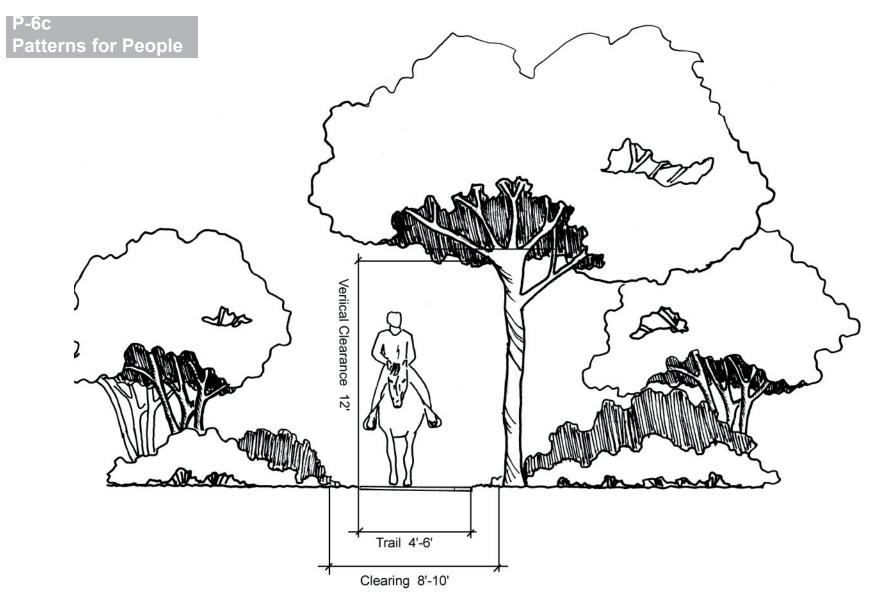
Spur trails should be located for access to sensitive habitat, historic areas or view spots as necessary

## **Guidelines:**

- Design with narrower trail widths than San Diego River Park Trail, to help users distinguish spurs from the main trail
- Provide boardwalks in wetlands as a sensible way to allow access while decreasing the damaging effects
- Limit seasonal use if impacts threaten endangered habitat or historic resources even with prevention measures

• Include an ongoing management plan that monitors trail impacts and allows for adjustments as necessary

- Signage (P-11)
- Bobcat corridor (H-3)
- Habitat corridor (H-2)
- Sensitive species areas (H-2)
- View spots (P-8)
- Water access (P-9)
- Benches (P-13)
- Picnic areas (P-17)



P-6c. Trail: Horse Trails

To provide a trail dedicated for the exclusive use by horseback riders. By providing designated routes, horseback access can be organized, reducing negative impacts. Providing a narrower, dedicated trail rather than a single multiuse trail will help discourage the settlement of brown-headed cowbirds, which parasitizes the endangered least Bell's vireo.

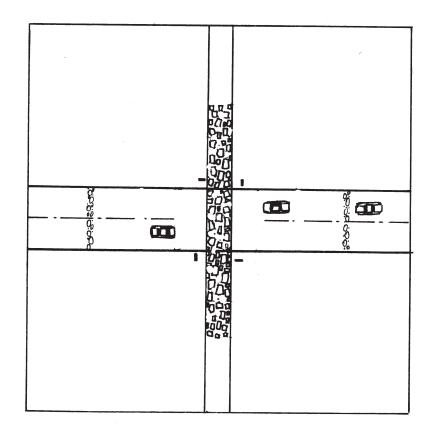
#### **Placement:**

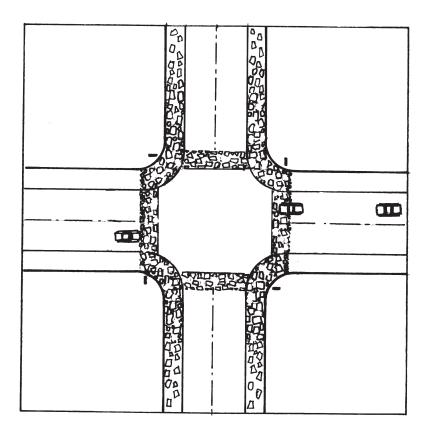
Horse trails should be located beyond bobcat and habitat corridors or within the buffer areas of these corridors. River crossings should be limited as much as possible, and should not occur at confluence areas. Horse trails should avoid sensitive habitat areas, especially those concerning least Bell's vireos, which are sensitive to the brown-headed cowbirds often accompanying horses.

#### **Guidelines:**

- Choose a path with a firm, natural base to prevent erosion
- Include an ongoing management plan that monitors trail impacts and allows for adjustments as necessary
- Treat trail edges with vegetative swales to collect and filter wastes before they reach the river

- Regulatory signage (P-11d)
- Directional signage (P-11b)
- Horse facilities (P-5)
- Access points (P-1)
- Parking (P-4)
- Kiosks (P-10)
- Vegetative swales (W-4)
- Native landscaping (H-6)
- Restrooms (P-14)
- Lighting and emergency phones (P-12)
- Road crossings (P-7)





# P-7. Road Crossings

## **Purpose:**

To increase the safety of park users when crossing roads within the river park.

## **Placement:**

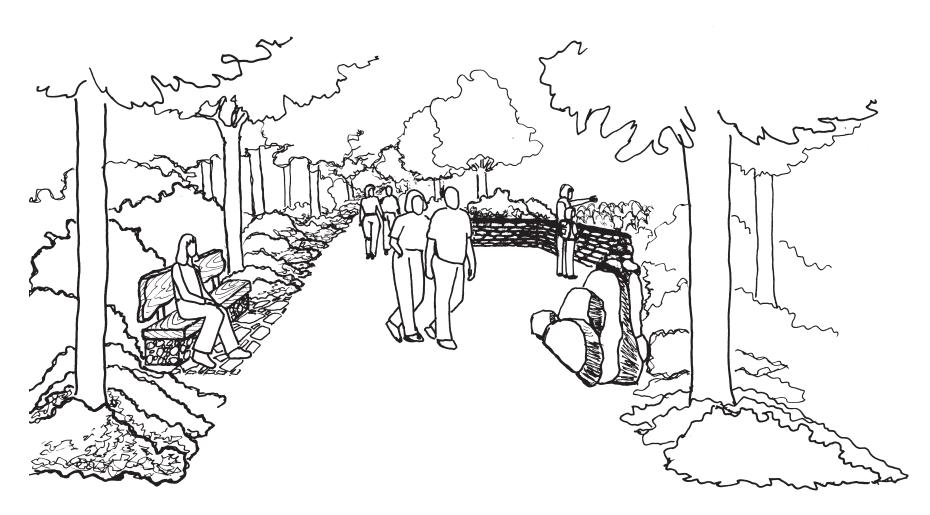
Road crossings will be marked at all locations where pedestrians, bicycles or horses cross roads within the river park.

## **Guidelines:**

- Stop signs or signals should be located for opposing traffic at each trail / road intersection
- Crosswalks at these crossings should be clearly defined and distinctive to the river park
- Signage at these crossings should alert vehicle drivers of river park crossings
- Provide rumble strips for cross vehicular traffic to

alert them to the presence of a trail crossing

- San Diego River Park Trail (P-6a)
- Lighting and emergency phones (P-12)
- Access point (P-1)
- Parking (P-4)
- Public transit access (P-3)
- Bicycle facilities (P-2)
- Horse facilities (P-5)
- Recreational fields (P-20)
- River signage (P-11a)



P-8. View Spots

To provide areas for rest and viewing of scenery and wildlife.

## **Placement:**

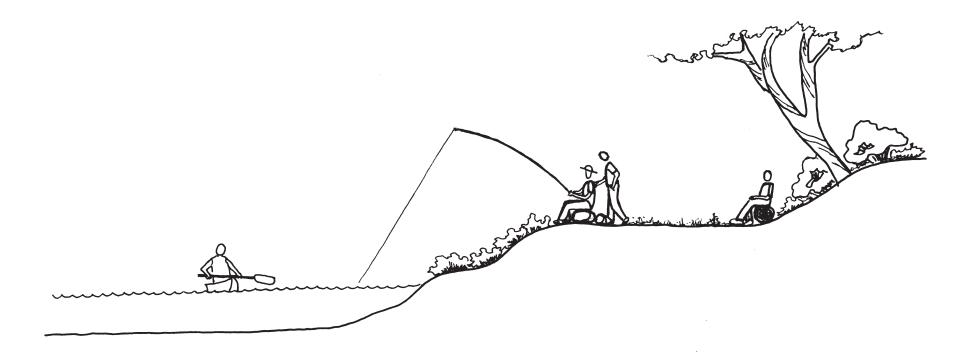
View spots should be located at a minimum of every mile along river park paths. View spots should be set off from main paths by fifteen feet, and may be accessed by secondary paths. View spots should be located to take advantage of areas of scenic beauty, abundant wildlife, historic interest or other unique characteristics.

## **Guidelines:**

- Provide benches situated for unobstructed views
- Provide shade with native landscaping

• Interpretive signage may be provided in some areas

- Benches (P-13)
- Native landscaping (H-6)
- Interpretive signage (P-11c)
- Spur trails (P-6b)



# P-9. Water Access

# **Purpose:**

To provide maintained areas for safe and easy public access to the river and mining ponds for viewing, fishing and boating.

## **Placement:**

Water access should be provided on spur trails in areas with shallow slopes, equal to or less than ten to one. Water

access should be located outside sensitive habitat areas and should be limited in size to reduce associated erosion problems. Currently used water access areas should be maintained when possible.

## **Guidelines:**

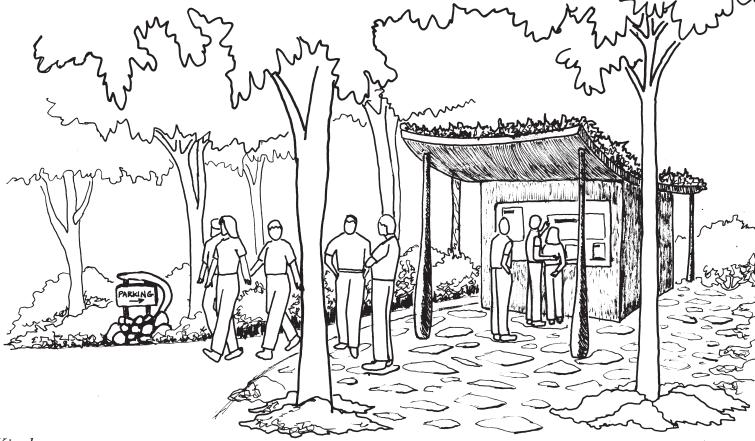
• Maintenance of water access areas may be necessary to prevent erosion

problems, including paved boating access where erosion is great

• Provide visual access to water access areas for safety reasons

- Signage (P-11)
- View spots (P-8)
- Benches (P-13)
- Access points (P-1)

- San Diego River Park Trail (p-6a)
- Spur trails (P-6b)



P-10. Kiosks

## **Purpose:**

To welcome users to the river park. Kiosks provide orientation and promote the value of the river park. They should give overall guidance to the opportunities along the river and group similar themes with brief descriptions. Content should include points of interest and interpretive tours within at least five miles, appropriate conduct, and relevant news.

#### **Placement:**

Kiosks should be placed at access points, points of interest, maintenance centers and main nodes along the main trail. A maximum of five miles should exist between the kiosks and they can be placed in conjunction with other directional and interpretive signage.

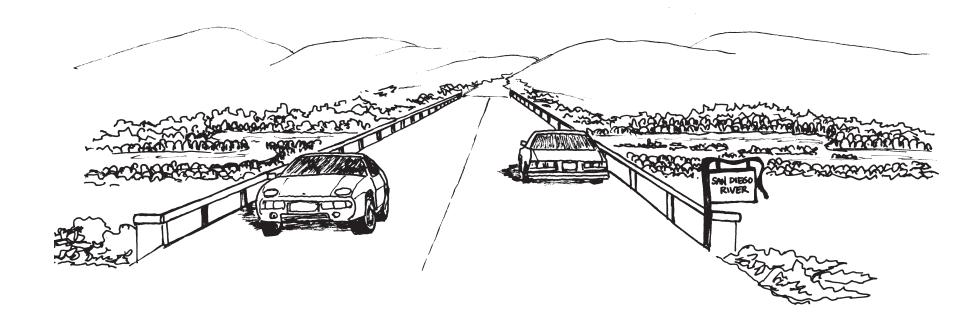
## **Guidelines:**

- Provide a covered area where notices, signage, and other information can be displayed and protected from the weather
- Consider larger kiosks to provide refuge areas for park users in inclement weather
- Consider attaching kiosks to other facilities such as maintenance centers

- or restrooms to conserve resources
- Design kiosks with continuity of size so that they express a harmonious river park system
- Keep the content simple and clear for the largest audience possible
- Keep maps diagrammatic and simplified rather than detailed and confusing
- Avoid extraneous content such as interpretive information unless other signage is limited
- Use positive language to promote appropriate conduct and the benefits of obeying the rules

• Incorporate international symbols to communicate to foreign visitors

- Access points (P-1)
- San Diego River Park Trail (P-6a)
- Picnic areas (P-17)
- Playgrounds (P-16)
- Recreational fields (P-20)
- Amphitheaters (P-18)
- Maintenance centers (P-15)
- Public transit access (P-3)
- Parking (P-4)
- Bicycle facilities (P-2)
- Horse facilities (P-5)
- Benches (P-13)



P-11a. Signage: River Signage

# **Purpose:**

To promote the identity of the river along all transit corridors adjacent and over the river.

## **Placement:**

River signage should be located along the entire length of the river at all river crossings and along segments where the river is visible

from adjacent roadways.

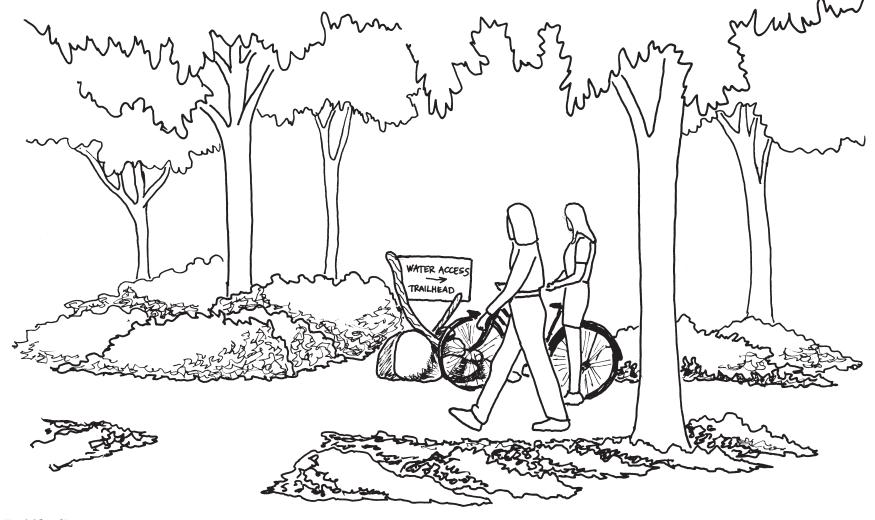
# **Guidelines:**

- Design signage to be consistent in size, location and information
- Use a distinctive logo that will be repeated on signs throughout the river park
- Consult with the U.S. Department of Transportation's Manual

on Uniform Traffic Control Devices for standard and universal signage systems

# **Associated Patterns:**

• Road crossings (P-7)



P-11b. Signage: Directional Signage

To give users of the river park information on length of trail, difficulty and approximate time to various destinations.

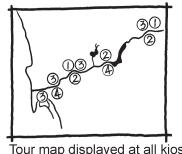
## **Placement:**

At access points, intersections with roads and other trails

## **Guidelines:**

- Design signage to be consistent in size, location and information
- Use graphic symbols and brief descriptions

- San Diego River Park Trail (P-6a)
- Horse trails (P-6c)
- Spur trails (P-6b)
- Access points (P-1)
- Road crossings (P-7)

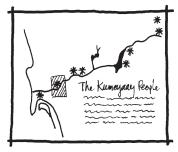


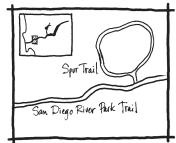
Interpretive tours:

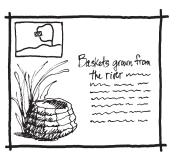
- 1 Geology
- 2 Habitat
- 3 Historic
- 4 Hydrology

Tour map displayed at all kiosks

#### Mission Valley historic interpretive tour







P-11c. Signage: Interpretive Signage

#### **Purpose:**

Provides educational activities to provoke thought and curiosity about unique natural and cultural features along the river park. Interpretive signage can be either selfguided or used to supplement a conducted tour. Interpretive signage should not be located within the one hundred year flood plain where it can be easily damaged.

#### **Placement:**

Interpretive tours are more effective than solo interpretive signage. They should be at unique areas of interest in a loop, figure eight or linear arrangement depending on site context. Spur trails work well for interpretive

tours because pedestrians are more likely to slow down and observe the signs (Ham, 1992).

#### **Guidelines:**

- Develop distinctive themes with five or fewer ideas / categories per theme; themes are successful at communicating larger patterns in the landscape because people tend remember themes but forget facts
- Provide a sign at the trailhead that introduces the theme of the tour and highlights the most interesting stops, and have the first stop visible from the starting point
- Design the tour to be no

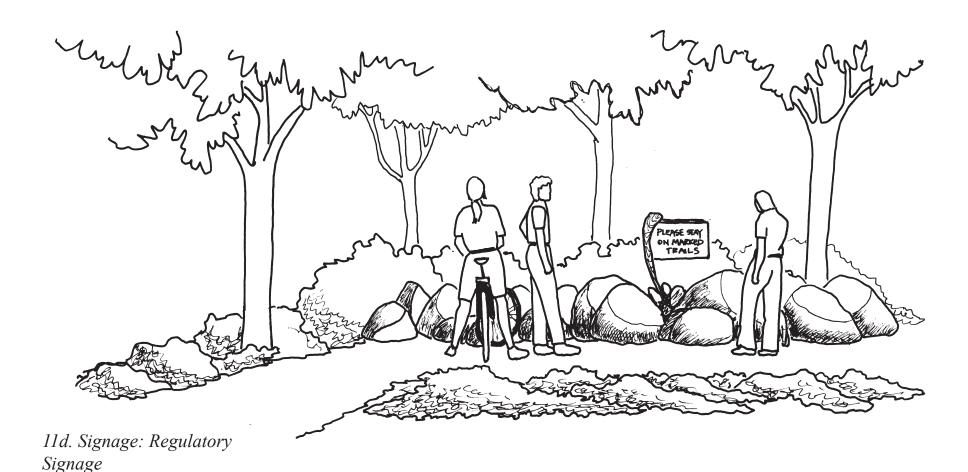
longer than .5 mile and 30-40 minutes in length

- Provide an average of 15 stops per half mile tour
- Attempt to have most stops during first half segment of the trail
- Add curves and visual barriers between signs for a sense of mystery
- Setback the signs from path of travel
- Design graphics so they are attractive and easy to comprehend
- Encourage users to focus attention on the interpreted feature, remembering to have an introduction, body and conclusion to the tour in order to stimulate interest and reinforce the overall theme

#### **Associated Patterns:**

- San Diego River Park Trail (P-6a)
- Spur trails (P-6b)
- Access points (P-1)
- View spots (P-8)
- Phytoremediation (W-8)
- Infiltration zones (W-3)
- Vegetative swales (W-4)
- Detention basins (W-5)
- Retention basins / wetlands (W-6)
- Stormwater treatment areas (W-7)
- Maintenance centers (P-15)
- Kiosks (P-10)
- Benches (P-13)
- Bobcat corridor (H-3)
- Habitat corridor (H-2)
- Sensitive species area (H-5)

# **Conceptual Plan**



To display laws and regulations pertaining to the river park.

#### **Placement:**

At access points and areas where messages need reinforcement.

#### **Guidelines:**

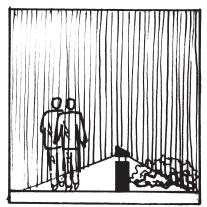
• Design signage to be consistent in size, location and information

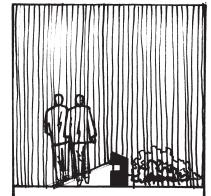
- Regulatory signage should not conflict with other components of the signage system
- Provide reasoning for the rules with firm, positive language, as well as the benefits to the user and / or the river park for obeying them
- Consult with the U.S. Department of Transportation's Manual on Uniform Traffic Control

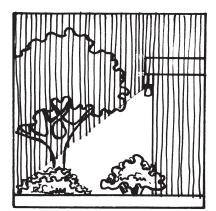
Devices for standard and universal signage systems

- San Diego River Park Trail (P-6a)
- Horse trails (P-6c)
- Spur trails (P-6b)
- Access points (P-1)
- Maintenance centers (P-15)
- Bobcat corridor (H-3)
- Habitat corridor (H-2)
- Sensitive species area (H-5)
- Recreational fields (P-20)

- Golf courses (P-21)
- Playgrounds (P-16)
- Horse facilities (P-5)
- Parking (P-4)
- Picnic areas (P-17)
- Water access (P-9)









P-12. Lighting and Emergency Phones

To increase safety and comfort within the river park.

#### **Placement:**

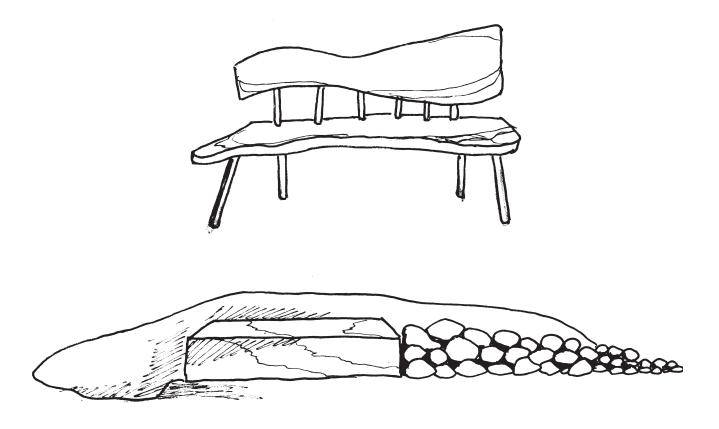
Lighting should be placed in the more urban portions of the river park, such as the Estuary, Mission Valley and Santee, and where safety issues are a concern. Parking areas should be lit at night and during early evening when river park users may be returning to their vehicles. Access points, public transit access, bicycle facilities and restrooms can also be lit. Ball fields and golf courses can be lit for longer playing times. Lighting should be limited and at low height when placed within habitat buffer areas. Lighting should not be used in corridor or sensitive species areas. Emergency phones should be placed at points farther than two miles from other facilities. Phones should be located at access

points for easy access and maintenance.

#### **Guidelines:**

- Utilize solar lighting to conserve energy and save on infrastructure costs
- Use lights at lower heights in habitat buffer areas
- Protect corridor or sensitive species areas from night-time lighting

- San Diego River Park Trail (P-6a)
- Parking (P-4)
- Access points (P-1)
- Public transit access (P-3)
- Bicycle facilities (P-2)
- Restrooms (P-14)
- Recreational fields (P-20)
- Golf courses (P-21)



# P-13. Benches

#### **Purpose:**

To provide comfortable and convenient seating complementing the character and spirit of the river park.

#### **Placement:**

Benches should be provided throughout the river park, at a minimum of one for every half mile of trail in urban areas. Benches should be included at access points, maintenance centers, parking areas, view spots, along trails, and in other areas. When along trails, benches should be placed at least three feet off the main trail.

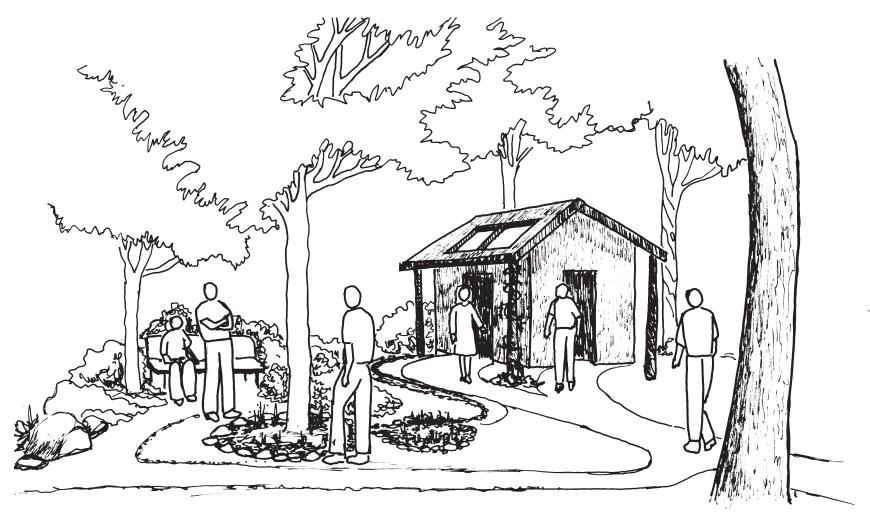
#### **Guidelines:**

- Accommodate seating for four to six people
- Provide benches in sunny and shady locations, though shady benches are usually

#### preferred

- Placement should maximize scenic viewing opportunities
- Provide benches in clusters to accommodate multiple sets of users
- Design should reflect the character and spirit of the river park
- Provide benches with arm rests to aid the elderly rise from seating

- San Diego River Park Trail (P-6a)
- Horse trails (P-6c)
- Spur trails (P-6b)
- Access points (P-1)
- Maintenance centers (P-15)
- Playgrounds (P-16)
- Parking (P-4)
- View spots (P-8)
- Art (P-19)
- Native Landscaping (H-6)



P-14. Restrooms

To provide river park users with sanitary facilities.

## **Placement:**

Restrooms should be located at gathering areas such as picnic areas, ball fields, playgrounds, and where alternative facilities are not easily accessible. Restrooms should be located outside of the one hundred year flood plain.

## **Guidelines:**

- Utilize onsite treatment of greywater, providing educational opportunities and irrigation for native landscaping
- Utilize composting or low flow toilets
- Provide skylights or translucent windows to reduce energy needs
- Develop a regular mainte-

nance program, which may include locking the facilities at night

• Restrooms should be ADA accessible

- Picnic areas (P-17)
- Recreational fields (P-20)
- Golf courses (P-21)
- Playgrounds (P-16)
- Kiosks (P-10)
- Native Landscaping (H-6)



P-15. Maintenance Centers

To provide areas for the storage of supplies and equipment used in the maintenance of the river park. To provide nursery locations for the propagation of local native plants for use in the river park. To demonstrate sustainable building practices.

#### **Placement:**

Several maintenance centers should be located within the river park to provide

for maintenance needs. Locations should be easily accessible, centrally located within the area of service, outside of sensitive habitat and buffer zones, and outside of the one hundred year flood plain. Ideally, the sites will be within disturbed areas with easy access to utilities and water and adjacent to restoration or educational areas.

## **Guidelines:**

- Provide a locking sustainable construction building, straw bale with a greenroof, for the storage of tools and equipment.
- Provide an adjacent propagation area with access to water and electricity.
- Provide benches and tables for outdoor gathering

- Parking (P-4)
- Public transit access (P-3)
- Bicycle facilities (P-2)
- Kiosks (P-10)
- Benches (P-13)
- Native Landscaping (H-6)
- Signage (P-11)



P-16. Playgrounds

To provide active play areas for children within the river park. To create play areas that are appropriate to the river park and reflect the character and nature of the San Diego River.

#### **Placement:**

Playgrounds should be located where there is community need for active play areas for children. Locations should be flat, easily acces-

sible, visually accessible to surrounding trails, roads or structures, and clustered with other activity areas such as ball fields, amphitheater, and picnic areas. Playgrounds should be safely separated from vehicular traffic, water access, and stray balls from ball fields.

#### **Guidelines:**

• Construct play areas of materials that reflect the character of the reach and

sense of place within the river park, such as wood, stone, sand and water

- Playgrounds should be universally accessible, following all guidelines for ADA accessibility, with efforts made to seamlessly incorporate universal activities
- Provide a variety of activities for a range of young ages within the playground
- Provide comfortable, shaded benches and view spots for parents

- Benches (P-13)
- View spots (P-8)
- Native landscaping (H-6)
- Restrooms (P-14)
- Parking (P-4)
- Public transit access (P-3)
- Bicycle facilities (P-2)
- Picnic areas (P-17)
- Recreational fields (P-20)
- Amphitheater (P-18)



P-17. Picnic Areas

To provide appropriate and comfortable spaces for picnicking and gathering within the river park.

#### **Placement:**

Picnic areas should be located near river park access points with associated access to public transit, parking, bicycle facilities or horse facilities where appropriate. Locations off main trails connected by a smaller access trail are ideal. Picnic areas should be clustered with other activity areas such as ball fields, playgrounds, amphitheaters, maintenance centers or kiosks.

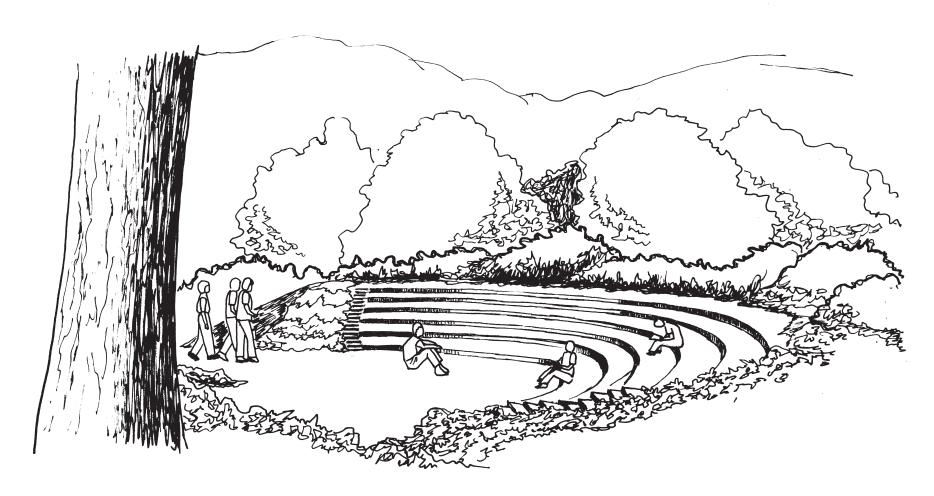
#### **Guidelines:**

- Provide universal access and follow all applicable ADA guidelines
- Provide pleasing views of the river or mountains where possible
- Provide ample shade for at

least a portion of the picnic area

- Provide vehicle access for maintenance
- Provide trash and recycling receptacles with lids or other mechanisms to prevent wildlife scavenging
- Provide signage to encourage good stewardship activities such as proper clean up and not feeding wildlife

- Native landscaping (H-6)
- Access points (P-1)
- Restrooms (P-14)
- Parking (P-4)
- Bicycle facilities (P-2)
- Horse facilities (P-5)
- Public transit access (P-3)
- Recreational fields (P-20)
- Playgrounds (P-16)
- Amphitheaters (P-18)
- Maintenance centers (P-15)
- Kiosks (P-10)
- Signage (P-11)
- Art (P-19)



P-18. Amphitheaters

To provide gathering spaces and opportunities for outdoor education, meetings, plays or non-amplified music within the river park.

#### **Placement:**

Additional opportunities for amphitheaters in the river park should be located near river park access points in areas with north or east facing aspects and suitable shallow slopes, and where large gatherings are expected such as near cultural sites or schools.

#### **Guidelines:**

- Provide terraced informal structure for intimate and flexible seating
- Construct seating facing north or east for audience comfort
- Provide shade for at least a portion of the seating area
- Design to reflect feeling of river park

- Design to take advantage of outdoor environment
- ADA accessibility should be provided

- Native landscaping (H-6)
- Access points (P-1)
- Parking (P-4)
- Public transit access (P-3)
- Bicycle facilities (P-2)
- Picnic areas (P-17)
- Art (P-19)



P-19. Art

Art in the river park can reinforce the cultural, historic and native qualities of the San Diego River. It can provide additional interest to the park and encourage people to visit regularly to see work and performances by local artists.

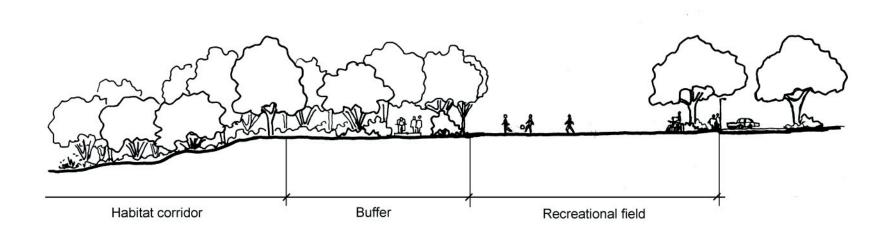
### **Placement:**

Art can be located at almost any location in the river park, but areas with high numbers of visitors are ideal. Some possible locations include public transit access, access points, amphitheaters and playgrounds.

#### **Guidelines:**

- Art in the river park should reflect the quality, character or nature of the river, region or people in some way
- Local artists in the community should be featured
- Encourage the display of art by children and "non-artists"

- Benches (P-13)
- Public transit access (P-3)
- Access points (P-1)
- Amphitheaters (P-18)
- Playgrounds (P-16)
- Picnic areas (P-17)



P-20. Recreational Fields

To provide for the active recreational needs of the community.

## **Placement:**

Ball fields should be located outside of corridor, buffer and sensitive habitat areas. Pre-developed or disturbed flat areas are preferable to native habitat areas outside protected areas. Ball fields

should be located near access points, parking, public transit access and bicycle facilities. Ball fields should be located in areas where local residents desire them.

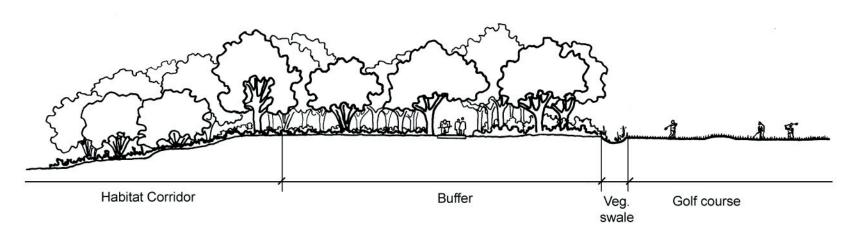
#### **Guidelines:**

- Manage irrigation to prevent excess runoff
- Use organic fertilizers and limit the use of pesticides
- Provide lighting for night

time games where desired

- Parking (P-4)
- Lighting and emergency phones (P-12)
- Access points (P-1)
- Kiosks (P-10)
- Public transit access (P-3)
- Bicycle facilities (P-2)
- Picnic areas (P-17)
- Playgrounds (P-16)
- Amphitheaters (P-18)

- Native landscaping (H-6)
- Restrooms (P-14)



# P-21. Golf Courses

## **Purpose:**

To provide golfing facilities.

#### **Placement:**

Golf courses are currently located in many areas of the river park. Due to high impacts on water and habitat, future golf courses are not recommended within the river park. Existing golf courses should be fitted with access points, parking, public transit access and bicycle facilities.

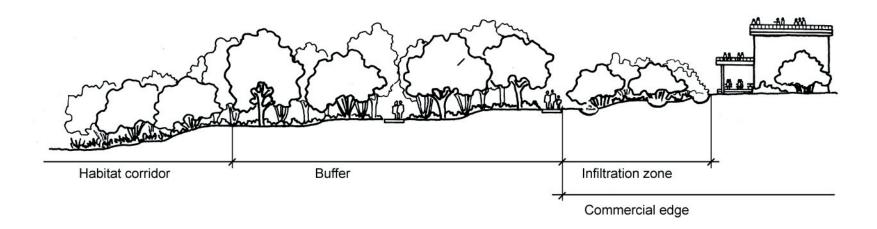
#### **Guidelines:**

- Manage irrigation to prevent excess runoff
- Manage fertilizers, and pesticides if necessary, to prevent contamination of the river or nearby habitat
- Maintain corridor, buffer and sensitive species areas within golf courses
- Utilize native landscaping
- Provide trail access through golf course areas with clear signage alerting park users

- to associated dangers
- Provide alternative trail routes outside of golf course areas
- Create wildlife habitat within golf courses where possible

- Parking (P-4)
- Lighting and emergency phones (P-12)
- Access points (P-1)
- Public transit access (P-3)

- Trails (P-6)
- Native landscaping (H-6)
- Habitat restoration (H-1)



# P-22. Commercial Edges

#### **Purpose:**

To generate river focused activity along the edges of the river park.

#### **Placement:**

Commercial edges should be located only in the most urban portions of the river park. They should lie well outside corridor, buffer and sensitive species areas. Commercial edges should be located near parking, public transit access, bike facilities, and high activity areas such as ball fields, golf courses and playgrounds, but outside of the one hundred year flood plain.

#### **Guidelines:**

- Require businesses to have entrances facing and recognizing the river
- Recruit businesses that are river-related or cater to park users such as cafes, restaurants or small shops
- Encourage river-friendly building practices such as green roofs, increased permeable surfaces, inclusion of detention or retention basins and vegetative swales to reduce river impacts

- Road crossings (P-7)
- Parking (P-4)
- Public transit access (P-3)
- Bicycle facilities (P-2)

- Vegetative swales (W-4)
- Detention basins (W-5)
- Retention basins / wetland (W-6)
- Infiltration zones (W-3)
- Native landscaping (H-6)
- Recreational fields (P-20)
- Golf courses (P-21)
- Playgrounds (P-16)