

**APPENDIX D**

**DESIGN AND DEVELOPMENT STANDARDS**

**Introduction**

**Design And Development Standards For Future Development Within The San Dieguito River Park Focused Planning Area**

To preserve the scenic quality of the San Dieguito River Park's Focused Planning Area (FPA), protect its natural and cultural resources, and ensure that park development complements the open space/park proposals of the San Dieguito River Park Concept Plan, the San Dieguito River Park JPA Board adopted, as part of the Concept Plan, design and development standards for all park-initiated projects on February 18, 1994.

Through the adoption of these standards, the JPA has demonstrated its commitment that all future park proposals such as trails and other park amenities will be planned, designed and constructed in accordance with these standards. Further, the JPA recommends that design and development standards, similar to those outlined in Part II below and those already adopted by the City of Escondido, be adopted by each of its member agencies in order to insure that future development within the FPA is consistent with the goals and objectives of the San Dieguito River Park.

The Design and Development Standards are divided into two sections. The first section establishes design and development standards for JPA initiated proposals, while the second section includes recommended design and development standards compiled from previous work done by the City and County of San Diego and the City of Escondido, for other public and private development or use proposals within the FPA. In addition, it is the intent of the JPA to review all private development proposals within the FPA for compatibility with the overall goals and objectives for the Park, as well as for consistency with the intent of the standards provided below and make recommendations to the agency with jurisdiction over the project.

**PART I**

**Design And Development Standards For Park Proposals**

**Program-Level Mitigation Policies**

All park proposals shall adhere to the following mitigation policies outlined in the Concept Plan:

- Significant impacts to sensitive biological resources shall be avoided to the maximum extent possible. Where avoidance is infeasible, mitigation adequate to reduce impacts to below a level of significance shall be incorporated into the scope of the project.

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- Implementation of the Concept Plan and any required mitigation measures shall conform to State and Federal statutes and regulations that have been adopted for specific areas or resources within the FPA, and all projects shall conform to the policy of no net loss of wetlands.
- Direct impacts to cultural resources shall be avoided to the maximum extent possible. Where avoidance is impossible due to physical constraints, the preferred form of mitigation shall be capping to protect subsurface materials.
- As part of the master planning process, management plans shall be developed that will ensure the long term protection of sensitive natural resources; address issues of fire protection and law enforcement, fire management, enforcement of park rules and regulations, access control, control of non-native and weedy species in native habitats, cowbird/exotic animal control, public education, and biological preserve design planning.

### Project Specific Mitigation Measures

The following mitigation measures shall, as appropriate, be incorporated into the design, construction, and/or implementation of all park proposals:

#### *I. Resource Evaluation:*

Biological Resources. A biological field reconnaissance shall have been conducted of a potential project site or trail corridor to identify the existing biological resources on the site. The findings of the fieldwork shall be provided in a written report and a vegetation map shall be prepared indicating the location of all vegetation communities, habitats, mature trees and sensitive plant and animal species.

Cultural Resources. For each master plan and/or specific park proposal one or more of the following work tasks will be required: 1) update of the existing literature review, including an update of the record search, attempt to obtain more detailed information about existing historic sites in the planning area, identify the designated Native American representative(s) for the specific master planning area, and seek to obtain oral interviews with tribal elders in order to develop a better understanding of past and present traditions and concerns within the planning area; 2) conduct a field inventory to determine the condition of known resources and to identify any unrecorded resources; 3) conduct subsurface testing of any sites that could be directly impacted by a specific park proposal to determine site significance under CEQA; and 4) develop a mitigation program that will adequately mitigate impacts to significant cultural resources.

For the master plan processing, only Task I shall be completed. For specific park projects, Task 2 shall be implemented to identify the presence or absence of cultural resources, with the goal being to avoid impacts to cultural resources through redesign, site avoidance, and/or fencing. However, in certain areas, avoidance may not be possible and Tasks 3 and 4 will be required.

Task 2 requires that for each site specific park proposal (i.e., trail segment, staging area, or interpretive facility) involving new construction, an intensive field survey will be conducted of the project site. For new trail segments, a 100-foot wide corridor shall be surveyed. Surveys

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shall be conducted on foot with an interval of approximately 10 meters between survey transects. Ground visibility will be reported and bedrock outcrops intensively surveyed to identify milling features. All previously recorded sites shall be updated and newly recorded sites recorded on State of California Site Record Forms and submitted to the South Coast Information Center, SDSU, and the San Diego Museum of Man.

Task 3, subsurface testing to determine site importance under CEQA, shall only be conducted for those sites that would be directly impacted by a park proposal. Testing, where required, shall include surface artifact collection, subsurface excavation and recording of milling features, as necessary. For trails, specific site recording/mapping will be primarily confined to the 100-foot wide trail corridor. For other park amenities, such as staging areas and interpretative facilities, entire sites may need to be recorded and tested to determine site importance and impacts. Surface artifact collection will employ either a 100 percent collection or a sample collection depending on data needs. A site map shall be prepared for each site tested showing location of surface artifacts, 1 by 1 meter units, and site boundary. A minimum of two units shall be excavated at each site in 10 cm levels following the natural contour of the surface, and all sediments shall be passed through one-eighth inch mesh screen. Units will not be excavated at sites not demonstrating a subsurface deposit. This can be determined through the excavation of shovel test pits (STPs) or by using the "California Archaeological Resource Identification and Data Acquisition Program: Sparse Lithic Scatters" (1988). Artifacts and ecofacts collected shall be placed in labeled bags and provided temporary curation until the JPA provides for final curation.

Other Natural Resources. An overall examination of site conditions shall be conducted prior to selection of a project site or trail alignment. Soil conditions, potential for erosion, rock features, topographic characteristics, visibility from surrounding areas, and the presence of surface water flows shall be considered.

### *2. Siting Criteria:*

Based on the information provided by the field reconnaissance, a project site location or trail alignment shall be selected that attempts to avoid impacts to sensitive resources. If, for topographic or other reasons, avoidance of a sensitive resource is not possible, then a design or alignment that minimizes direct and/or indirect impacts to sensitive resources shall be selected.

Site or trail alignment selection shall also take into consideration other uses, such as residential development, agricultural activities, and roadways, that may be present in the general vicinity of a project site or are planned for the area in an adopted land use plan. Adequate separation, to be determined on a case by case basis, shall be provided between such uses in order to avoid compatibility issues. Separation can be achieved in the form of setbacks, fencing or through effective use of the existing site conditions such as elevational differences or vegetative screening.

In all cases the following site criteria shall be implemented to the extent feasible:

- Wherever possible, locate park amenities in disturbed areas to avoid impacts to native habitats and sensitive resources.

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- Avoid disturbance to wetlands, the only exception being where bridges or undercrossings are required for trail access or other unanticipated circumstances warrant.
- Locate park facilities so as not to eliminate or disrupt wildlife movement within established wildlife corridors.
- In those areas where there is existing development, locate park facilities near other existing development edges rather than as an isolated entity in the middle of an open space area.
- Wherever possible, use the existing topography as a buffer between a facility and sensitive resources. For example, a trail may be in close proximity to a sensitive plant population or a cultural resource but a steep slope between the park facility and resource would act as an effective barrier to most human intrusion.
- Align park trails within existing dirt roads and trails to the extent feasible, however, only those existing trails and/or roads that are determined to be appropriate for park trail use should be selected for park trail designation. Specific trail alignments shall be developed in cooperation with landowners and leaseholders in order to minimize impacts to existing uses such as farming, cattle ranching, and private residences.
- Trails should be clearly designated and aligned so as to direct trail users away from sensitive species and cultural sites.
- Trails should be aligned to avoid potential rock fall hazards.
- Some trails within the Cleveland National Forest are designated for mixed use motorized and non-motorized activities. Where multiple trails exist in these areas, consideration should be given to designating one for motorized vehicles and one for non-motorized use.

### *Buffer Criteria*

Biological Buffers. The purpose of biological buffers is to protect or reduce impacts to sensitive biological resources from external forces. The appropriate buffer widths, which will be determined on a case by case basis, are to be based upon the sensitivity of the biological resources to be protected. The following buffer recommendations for park proposals are broken down for high, moderate and low sensitivity areas:

High sensitivity areas (areas supporting rare and endangered species, several regionally significant sensitive biological resources, or sensitive species susceptible to trampling) shall be retained as natural areas within the FPA, allowing limited or no access. A minimum 200-foot buffer from the resource being protected is recommended in these areas. A trail may be placed within this buffer depending upon the site specific conditions and a case by case evaluation.

The recommended buffer for moderate sensitivity areas (areas that have sensitive resources such as plants that could be protected through fencing or appropriate buffering)

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is 50-100 feet. A trail would generally be an acceptable use in this buffer, acceptability would be determined on a case by case basis.

Low sensitivity areas (areas that contain sensitive resources, but are so disturbed that the long term viability of these resources is questionable or though sensitive, these resources do not represent regionally significant resources) a buffer of at least 25 feet would be adequate for these areas.

Trails are an acceptable use in such buffers.

The appropriate width of a buffer adjacent to riparian habitat varies depending upon site specific conditions. A minimum buffer of 25 feet is recommended, but buffers as wide as 200 feet may be required in some instances to maintain biological viability of the habitat. An intermittent drainage swale that contains riparian elements but is not a part of a wildlife corridor and lacks sensitive species and regional significance would only require a buffer of 25 feet. A riparian system which is a known least Bell's vireo breeding locality would require a 200-foot buffer. Trails would be permitted in these buffer areas, provided that the trails are placed as far from the habitat edge as possible. Where a trail alignment must cross a streambed, the trail is permitted to traverse this buffer. Stream crossings shall however occur in the less sensitive portions of the habitat.

The minimum buffer for an oak woodland or individual oak trees is 25 feet when the oak woodland or oak tree(s) are of limited biological value. In most instances a 50 foot buffer is recommended. In specific instances, such as an oak woodland that is associated with a major drainage, a minimum buffer width of 100 feet is recommended. In all instances, the buffer is measured from the canopy edge of either the individual oak or woodland, and the actual size of the buffer shall be determined on a case by case basis. Woodlands containing Engelmann oaks are subject to the largest of the range of standards. Trails that already exist will be allowed within the buffer. In some instances, as evaluated on a case by case basis, it may also be necessary to place a new trail within the buffer or under an oak canopy.

#### *4. Controlled Access*

- Off-trail activities shall be discouraged in sensitive areas through trail design, fencing, and/or signage.
- Provide barriers or fencing at trail heads, staging areas, and open space access points in order to avoid impacts from unauthorized off-road vehicle activity.
- In highly sensitive areas, such as the San Dieguito Lagoon, Volcan Mountain and sacred cultural sites, a plan to limit access in order to avoid direct and indirect impacts to rare and/or fragile resources shall be developed in association with future management plans.
- The need for controlled access on trails east of Lake Sutherland will be considered during master park planning or if funding is identified for a specific trail project in Landscape Units M or N. The appropriateness of controlled access will be evaluated based on existing ownership patterns and the level of development and types of uses occurring within the area.

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- In sensitive biological areas it may be necessary to limit some trails to pedestrian use only; to decrease the trail width in order to minimize direct impacts; prohibit equestrian and/or mountain bike activity; preclude night lighting; preclude smoking or campfires; and exclude access to certain sensitive areas during certain times of the year for specific resources (i.e. breeding seasons for sensitive fauna).

### *5. Traffic/Parking Analysis*

- Traffic studies shall be conducted in association with the review of future master plans and/or for major park proposals, such as the development of an interpretive center. These studies shall address as appropriate, existing traffic, project traffic, and existing plus project traffic and traffic splits. Potential impacts to all appropriate roadways shall be considered and shall be reviewed in terms of impact to level of service. Where significant direct traffic impacts could occur, measures adequate to avoid such impacts shall be incorporated into the scope of the project (including but not limited to: reduction in the scope of the project in order to reduce overall trip generation, limiting hours of use to avoid peak traffic periods, implementation of a reservation system, and/or providing funding in part or whole for required traffic improvements).
- A parking analysis shall be conducted for major park project proposals. Based on the results of the parking analysis, adequate on-site parking shall be provided to accommodate anticipated use of the facility.

### *6. Biological Mitigation Ratio Requirements*

Although avoidance is the preferred form of mitigation, there may be instances in which impacts to biological resources would be unavoidable. In those cases, the impact shall be minimized to the extent possible and adequate compensation for the remaining impacts provided. The mitigation ratio requirements presented in the "Biological Overview Report," prepared by Sweetwater Environmental Biologists, Inc., for the Concept Plan EIR are to be used as guidelines for developing adequate mitigation proposals. The actual ratio required for a specific project will be determined in consultation with the appropriate local, state and federal agencies and will be based upon a site specific assessment of the impacts and the proposed mitigation site. In some instances, non-sensitive habitats that are to be impacted require mitigation because these habitats are used by sensitive species. Mitigation for impacts to wetlands shall be adequate to meet the "no net loss" standards of the U.S. Fish and Wildlife Service.

### *7. Cultural Resource Mitigation and Monitoring Requirements*

Mitigation. A primary objective of the Concept Plan is to avoid impacts to cultural resources. Therefore, all possible forms of site avoidance, including redesign, realignment, and/or fencing, shall be explored prior to developing a mitigation program. In those cases where direct impacts to a site can not be avoided, mitigation in the form of capping and/or data recovery for that portion of the resource to be impacted shall be required. Mitigation through capping is the preferred measure, as this method can preserve the cultural resource while allowing the construction of limited park amenities, such as trails.

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In those instances in which a trail segment can not be realigned to avoid a cultural resource due to topographic or other physical constraints, the resource shall be capped. The following capping measures have been developed for this type of situation:

Filter fabric (Supac 5NP or a comparable product) shall be placed over that portion of the site to be impacted, followed by the placement of two inches of sterile soil, one inch of 1/2 to 3/4 inch gravel, and a minimum of an additional four inches of sterile soil.

There may also be an occasion in which subsurface disturbance of a site can not be avoided and mitigation through data recovery is necessary. Mitigation using data recovery shall include the development of a data recovery program. The program shall be circulated to the appropriate parties and agencies for review and comment prior to implementation. A Native American monitor shall be present during all field work associated with the recovery program. Should any Native American remains and/or funerary objects be discovered during a recovery program or as a result of any other park activities, the appropriate agencies, including the Native American Heritage Commission, and tribal representatives shall be contacted to agree on appropriate handling and reburial procedures. A draft report documenting data recovery findings shall be provided to the Native American representative(s) for review and comment.

Mitigation measures that will be implemented to avoid indirect impacts to significant cultural sites and historic resources could include one or more of the following: rerouting of a trail to reduce visual and physical access to the site; installation of split-rail fencing to direct visitors away from the resource; use of signage identifying the area as a protected area (signs shall not however call attention to the site, but shall instead indicate that the area is not part of the trail and needs to be protected for reasons such as revegetation); implementation of proper drainage techniques that will direct runoff away from subsurface deposits; and development of interpretive programs to educate park users about the importance of preserving and protecting cultural resources.

Monitoring. To further protect cultural resources and to ensure that unanticipated finds are handled in a professional manner, monitoring of park activities involving subsurface disturbance shall be conducted in those areas with known cultural sites. Native Americans shall be contacted for their input throughout the planning process. For those sites of religious or ceremonial significance, park planning shall be conducted in consultation with the appropriate tribal representative(s) and a Native American monitor shall be present during implementation of the approved park plans for these significant sites.

Monitoring of trail construction and/or other park improvements in areas where significant sites have been identified is required to ensure that: 1) the proposed trail alignment or site disturbance avoids cultural resources as designed; 2) construction provides fill and fencing for midden areas; and 3) unanticipated finds are handled properly. If during construction, a subsurface deposit is encountered, then mitigation of impacts will need to be addressed. Mitigation can be achieved through the completion of a sample excavation of the newly discovered site. As per state and federal regulations, the level of excavation shall be directly tied to the type of site or cultural material present and research question(s) posed.

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Capping proposals also include requirements for monitoring and additional mitigation should monitoring indicate that the capping is inadequate to protect the underlying resource. Monitoring of these areas on a long-term basis shall include site visits every six months for five years to ensure that mitigation measures are adequate. If through long-term monitoring, cultural resource sites are found to be damaged through either primary or secondary impacts, then additional mitigation measures shall be implemented.

A capping program is currently being implemented on a trail segment in the Highland Valley Road area. If based on the findings of the long-term monitoring program, it is determined that the capping program is ineffective, then the Cultural Management Policies outlined in the Cultural Resources Literature Review, as well as the mitigation requirements included in this Appendix shall be revised to incorporate new capping requirements.

Native American Consultation. It shall be the responsibility of the JPA to invite each tribe that has traditional and/or present lands within the FPA to designate a representative to confer with the JPA on cultural resource matters. Once representatives have been identified, the JPA shall notify the appropriate designated Native American representative(s) when park proposals such as master plans or site-specific projects are being considered. This process will establish a formal notification process, as well as provide a means to facilitate Native American input. In addition, Native Americans shall be solicited for input and review regarding interpretive text and materials to be utilized in the San Dieguito River Park's interpretive program. In accordance with California Public Resources Code Chapter 1.75, park plans shall incorporate guarantees of non-interference with the free expression or exercise of Native American religion, including access to regions of the Park for ceremonial and religious purposes on JPA controlled lands.

Report Preparation. Technical reports shall be prepared, following the guidelines defined in *Archaeological Resource Management Reports (ARMR): Recommended Contents and Format* prepared by the State Office of Historic Preservation. Appendices shall contain site records, field and laboratory data, special analysis results, and related material. Sensitive appendices, such as site records, shall be designated as Confidential (not for public review).

Qualifications. The lead individual(s) in charge of fieldwork shall be SOPA qualified. Any investigation of historic resources must be conducted by a qualified historian or by a qualified historical archaeologist who is familiar with rural resources. Similarly, evaluation of historic buildings shall be accomplished in conjunction with an architectural historian or a historian with strong background in architectural history and terminology.

### 8. *Flood Control:*

In association with future wetland restoration and/or enhancement proposals, including restoration of the San Dieguito Lagoon Coastal Wetlands as well as upstream riparian enhancement projects, a thorough analysis of potential impacts to affected properties as a result of alteration of existing flood flows shall be prepared in association with required environmental review. Adequate mitigation measures shall be incorporated into the scope of such projects to ensure that adverse impacts resulting from the proposed alteration in flood flow are reduced to below a level of significance.

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### 9. *Design and Construction Criteria*

The form, mass and profile of all structures and architectural features shall be designed to blend with the natural terrain.

- Materials, finishes, and colors of all buildings, accessory structures, walls and fences should be compatible with the intent of minimizing the visual impact on the FPA. Colors should be limited to subtle earthtone hues, with style and texture that reflects the traditional/rural character of the FPA.
- Grading associated with the construction of park amenities should be limited to the extent possible and where grading is proposed it should be designed so as to retain the natural shape of the landform and reflect the topographic constraints of the terrain. In all cases mass grading shall be avoided.
- Building pads for park amenities should be designed to conform to and/or respect the site topography. In addition, building pads should not be created in highly visible areas.
- Staging areas and other parking lots should be sited and/or landscaped to minimize visibility from major roadways and sensitive viewsheds.
- Native species should be the predominant plant material used in park landscape proposals. The use of non-native species, which would most likely be utilized for screening, should be limited to areas located adjacent to developed lands. Under no circumstances should invasive species be utilized.
- No park structures shall be constructed over active faults and construction of structures shall adhere to the standards in the Uniform Building Code.
- Native species should be the predominant plant material used in park landscape proposals. The use of non-native species, which would most likely be utilized for screening, should be limited to areas located adjacent to developed lands. Under no circumstances should invasive species be utilized.
- Lighting is not envisioned for trails in the Park. Night lighting should be limited to that required for security/safety purposes., for example, at Interpretive Center parking lots, or on the crossing under the freeway at Lake Hodges.
- Temporary desilting basins shall be provided during construction for projects such as parking lots and interpretive centers in order to trap site-generated sediment on-site. Following the installation of permanent erosion control measures, the desilting basin can be removed.
- Grading activities necessary to implement park proposals should not occur during the rainy season (November 15 to April 15).
- To avoid long-term erosion problems, all graded areas shall be revegetated and properly maintained for the life of the project.

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- For paved parking lots located in proximity to an existing natural drainage or reservoir, the use of grass filter strips, infiltration trenches, or similar established practices shall be provided to reduce runoff volumes and peak discharge rates from the site, as well as to filter contaminants out of the runoff before it reaches the natural drainage system.
- Trails should be designed in a manner that will not result in increased runoff velocities.
- To the extent possible, a bridge shall be provided where a trail crosses a stream.
- Trails should be aligned to avoid potential rockfall and landslide hazards.
- Asphalt surfaced trails should not be used adjacent to potable water sources, such as Lake Hodges and Lake Sutherland, nor within 50 feet of drainages, streams or other surface water bodies.
- Wherever possible, trails shall follow the contours of the slope, with the cross-slope toward the downhill side of the trail.
- The grade of the trail should be less than 15 percent even on steep terrain.
- To reduce erosion impacts, the feasibility of using sidehill trail construction should be considered in areas where a trail must pass over steep slopes.
- The number and frequency of switchbacks should be minimized due to the erosional problems associated with this type of trail design.
- Trail design should incorporate the drainage techniques approved by the U.S. Forest Service, presented in Standard Specifications for Construction of Trails.

### *10. Signage*

Major trail entry points shall have signs providing information regarding trail rules and regulations. Consideration should be given on a case by case basis to including the following regulations: Hours of use; keeping dogs on leashes at all times (in some cases dogs may be prohibited from a trail); no alcoholic beverages on the trail; no loud music on trails or in staging areas; trail users must stay on the trails; fires are prohibited; firearms are prohibited (except where permitted in the National Forest); no smoking; and fire hazard potential. As appropriate, signs should state that no motorized or off-road vehicles are permitted. Signs indicating the presence of motorized vehicles should be provided along mixed use trails designated as park trails within the Cleveland National Forest. Signs should indicate that trails are subject to closure due to fire hazard, flooding, and/or agricultural activity, and that users are expected to respect and comply with all closure signs. Rules of etiquette for priority right of way when different types of park users share the trail should be provided as appropriate.

### Management and Maintenance Recommendations

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In order to more fully evaluate the biological and cultural resources of the San Dieguito River Park FPA, as well as to begin to establish management recommendations for the long-term protection of these resources, the JPA authorized the preparation of a "Biological Overview Report," prepared by Sweetwater Environmental Biologists, Inc., and a "Cultural Resources Literature Review," prepared by Gallegos & Associates. These documents, which were provided as appendices to the Concept Plan EIR, include numerous recommendations for the protection and management of biological and cultural resources. As future master plans are prepared, these two documents should be utilized as the basis for developing area- or resource-specific management plans.

The following measures, which represent only some of the recommendations included in these documents should be addressed in future park planning proposals:

- Equestrian facilities located on lands controlled by the JPA shall be kept clean and free of fodder and manure. This will reduce the forage available for cowbirds, as well as reduce
- potential impacts to downstream water quality. Manure should be removed on a regular basis.
- Stables and grassy areas associated with equestrian facilities are prime cowbird habitats, therefore, consideration should be given to implementing cowbird removal programs at all equestrian facilities, including stables and equestrian staging areas.
- A program to close and revegetate existing voluntary trails that will not be part of the Park's trail system should be explored. This will require the identification of funding sources and creation of a volunteer labor force.
- A policy should be adopted that prohibits the use of bird feeding stations at park facilities located near least Bell's vireo nesting locations.
- To avoid providing food sources for scavengers such as crows, ravens, skunks, and raccoons, the use of open trash containers shall be prohibited throughout the Park.
- All trailheads, staging areas, and other park facilities shall include signage indicating that dogs must be on a leash at all times, and where sensitive resources could be impacted, such as in proximity to wetlands, consideration should be given to prohibiting dogs from the area.
- Certain areas within the FPA that have exceptionally high potential or need for revegetation and/or resource restoration and enhancement should be recognized as "mitigation banks or pools". These areas, which must be in the ownership of the JPA or other appropriate public agency, should be the focus of all revegetation and/or resource restoration and enhancement efforts associated with impacts to sensitive habitats as a result of Park implementation.