

Mitigation Concept

Onsite and offsite mitigation concept approaches are summarized below.

Onsite Mitigation

Mitigation for impacts to upland habitats will occur onsite within appropriate portions of landfill open space areas (Exhibit 2). Onsite mitigation will include southern needlegrass grassland, and mesic /xeric coastal sage scrub restoration and creation, and special status plant species relocation. Native grassland, and mesic/ xeric coastal sage scrub creation will occur on north, west, and east facing slopes that currently support annual grassland and invasive plant species (primarily mustard (*Brassica nigra*) and artichoke thistle (*Cynara cardunculus*)). Existing thread-leaved brodiaea (TLB) plants will be relocated to appropriate receptor sites located along the western boundary of the landfill property. The receptor sites consist of a clay substrate, are located on a 3:1 southeast-facing slope, and currently support annual grassland; these are conditions that are similar to those that exist at the existing brodiaea population site.

The conceptual design of the onsite pre-mitigation plan was based on the following goals:

- **Maximize On-site Restoration and Opportunities:** Mitigation for coastal sage scrub, southern needlegrass grassland, and special status plant species impacted by the ultimate build-out of Prima Deshecha Landfill can be accommodated within onsite open space areas outside of current and future landfilling operations and any potential future alignment of La Pata Avenue.
- **Locate Pre-Mitigation Sites in Disturbed Areas:** The proposed pre-mitigation sites occur within areas of the landfill that have been disturbed by previous grazing activities and landslide remediation activities. These areas support annual grassland and non-native invasive species.
- **Maximize Accessibility and Contiguity:** Pre-mitigation sites are located in areas that are accessible by existing maintenance roads to maximize efficient installation, maintenance, and monitoring performance. The proposed pre-mitigation sites are located immediately adjacent to the existing Landslide Remediation bio-mitigation sites as well as existing native coastal sage and riparian habitat resources to maximize site-wide habitat contiguity. Additionally, the proposed pre-mitigation areas will provide enhanced regional habitat connectivity to the Talega Development riparian and upland habitat mitigation sites and other permanent open space areas to the south and east of the PDL.
- **Enhance Sensitive Species Habitat:** The pre-mitigation plan will enhance the long-term habitat values for the California gnatcatcher and least Bell's vireo as well as other sensitive and non-sensitive plant and wildlife species through restoration and creation activities within and adjacent to habitats that support these species.
- **Incorporate Viewshed Protection Elements:** The pre-mitigation plan will incorporate viewshed protection requirements from City/County Memorandum of Understanding (MOU) and agreements with adjacent landowners by siting native

shrubs and trees in a manner that does not alter the natural appearance of existing ridge lines.

Offsite Mitigation

Mitigation for impacts to all riparian resources (USACE and CDFG jurisdictional areas) will occur offsite within the County-owned Ronald M. Caspers Regional Park (Exhibit 3). Mitigation will consist of the systematic eradication of non-native, invasive species including giant reed (*Arundo donax*), salt cedar (*Tamarix ramossisima*), and other non-native species that occur within a section of the San Juan Creek corridor that extends between the northeastern and southwestern borders of Caspers Regional Park. Offsite pre-mitigation for impacts to riparian resources will consist of a total of 9.81 acres of invasive species eradication.

The conceptual design of the offsite pre-mitigation plan was based on the following goal:

- **Improve Habitat Functions and Values:** The riparian habitat within the San Juan Creek corridor is currently threatened by increasing establishment of giant reed. The offsite eradication program will remove and eradicate 9.81 acres of giant reed, as well as other invasive species, over a ten year period, thereby enhancing the quality of the existing riparian habitat and increasing it's value to sensitive riparian bird species such as least Bell's vireo and southwestern arroyo toad.

Responsibilities

The long term success of the pre-mitigation program is dependent upon the cooperative efforts of the OCIWMD, the County Monitor, a qualified onsite and offsite Landscape Contractor, and a qualified Biological Monitor.

- The Biological Monitor will have a minimum of five years of experience with habitat restoration planning and monitoring in Southern California, and will be responsible for monitoring onsite pre-mitigation implementation. This will include: monitoring initial installation activities, long term maintenance activities, and performance; identifying appropriate remedial measures in coordination with the Landscape Contractor, the County Monitor, and OCIWMD landfill staff; and facilitating compliance with the resource agency permit requirements. The Biological Monitor will also be responsible for coordinating with the Landscape Contractor, the County Monitor, OCIWMD, and the Resource Agencies regarding site status.
- The County Monitor will have oversight responsibilities for ensuring compliance with all project requirements, as well as compliance with resource agency permits for both onsite and offsite pre-mitigation areas. The County Monitor, in coordination with the Biological Monitor, OCIWMD landfill staff, and the Landscape Contractor, will modify mitigation planning and implementation procedures using an "Adaptive Management" strategy.
- The Restoration Landscape Contractor (RLC) will have a minimum of five years of experience with habitat restoration installation and maintenance procedures

and will have successfully completed installation/maintenance at a minimum of two native habitat creation/restoration sites that are at least 10 acres in size. The RLC will be responsible for performing all onsite pre-mitigation installation and site maintenance procedures. The RLC will also be responsible for coordinating with the Biological Monitor, the County Monitor, and OCIWMD landfill staff regarding site status.

- The Eradication Landscape Contractor (ELC) will have a minimum of five years of experience with non-native invasive species eradication procedures in sensitive native habitat areas and will have successfully completed initial and follow-up eradication procedures at a minimum of two eradication sites that are at least 10 acres in size. The ELC will be responsible for performing all offsite initial eradication and long term maintenance tasks. The ELC will also be responsible for coordinating with the County Monitor regarding site status.

IMPLEMENTATION

Pre-mitigation program implementation will consist of initial installation/eradication activities, long-term site maintenance, and long-term site monitoring. Pre-mitigation program implementation will emphasize an 'adaptive management' approach. Adaptive management consists of ongoing site evaluation procedures and identification of appropriate remedial maintenance action items based on current site conditions; this includes adjustments to initial management guidelines and specifications (within limits of permit requirements) based on dynamics of developing site conditions as well as new technical information to more effectively achieve successful habitat establishment and overall resource management goals.

Onsite pre-mitigation program implementation will be initiated in three separate phases. It is anticipated that implementation will be completed by 2011 (Table 2). It should be noted that Phase 1 (17.2 acres) was installed in 2004 and is currently being maintained and monitored as part of the five year program. Phases 2 and 3 will be initiated in Fall 2005 and 2006, respectively. It is anticipated that offsite mitigation/eradication procedures will be initiated late 2006/early 2007. Implementation phasing may change subject to the date of the NCCP/MSAA/HCP approval.