APPENDIX G

MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

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G.1 MITIGATION MONITORING REQUIREMENTS

Public Resources Code (PRC) Section 21081.6 (enacted by the passage of Assembly Bill [AB] 3180) mandates that the following requirements shall apply to all reporting or mitigation monitoring programs:

- The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation. For those changes that have been required or incorporated into the project at the request of a responsible agency or a public agency having jurisdiction by law over natural resources affected by the project, that agency shall, if so requested by the lead agency or a responsible agency, prepare and submit a proposed reporting or monitoring program.

- The lead agency shall specify the location and custodian of the documents or other materials that constitute the record of proceedings upon which its decision is based.

- A public agency shall provide measures to mitigate or avoid significant effects on the environment that are fully enforceable through permit conditions, agreements, or other measures. Conditions of project approval may be set forth in referenced documents that address required mitigation measures or, in the case of the adoption of a plan, policy, regulation, or other project, by incorporating the mitigation measures into the plan, policy, regulation, or project design.

- Prior to the close of the public review period for a Draft Environmental Impact Report (EIR), a responsible agency, or a public agency having jurisdiction over natural resources affected by the project, shall either (1) submit to the lead agency complete and detailed performance objectives for mitigation measures that would address the significant effects on the environment identified by the responsible agency or agency having jurisdiction over natural resources affected by the project, or (2) refer the lead agency to appropriate, readily available guidelines or reference documents. Any mitigation measures submitted to a lead agency by a responsible agency or an agency having jurisdiction over natural resources affected by the project shall be limited to measures that mitigate impacts to resources that are subject to the statutory authority of, and definitions applicable to, that agency. Compliance or noncompliance with that requirement by a responsible agency or agency having jurisdiction over natural resources affected by a project shall not limit the authority of the responsible agency or agency having jurisdiction over natural resources affected by a project, or the authority of the lead agency, to approve, condition, or deny projects as provided by this division or any other provision of law.

G.2 MITIGATION MONITORING PROCEDURES

The Mitigation Monitoring and Reporting Program has been prepared in compliance with PRC Section 21081.6. It describes the requirements and procedures to be followed by the County of Orange (County) to ensure that all mitigation measures adopted as part of the proposed amendment to the Prima Deshecha Landfill (Landfill) General Development Plan (GDP) to include the Increase in Maximum Daily Operations at Prima Deshecha Landfill (Proposed Project) will be carried out as described in this Subsequent EIR.

Table G.A lists each of the mitigation measures specified in this Subsequent EIR and identifies the party or parties responsible for implementation and monitoring of each measure. The numbering of the mitigation measures corresponds with the numbering in the 2001 GDP EIR, First Supplemental EIR to the 2001 GDP EIR, and this Subsequent EIR. Additionally, the Integrated Waste Management Department (IWMD) is now OCWR.

Table G.A: Mitigation and Monitoring Reporting Program

MM No.	Mitigation Measures	Method of Verification	Timing for Mitigation Measures	Responsible Party
TOPOGRAPHY				
2001 GDP EIR Mitigation Monitoring and Reporting Program – Landfill Component				
4.1-1	Prior to approval of the final cover design in the Preliminary Closure Plan by the San Diego Regional Water Quality Control Board, the Local Enforcement Agency and the California Integrated Waste Management Board, the IWMD Director shall ensure that the grading plans for final slopes for the landfill areas in Zones 1 and 4 continue to incorporate design, grading and engineering features that avoid a manufactured appearance and result in curvilinear landfill surfaces that most closely approximate the existing natural features in the area.	Plan Check	Prior to the approval of the Final Cover Design	Director, IWMD
2001 GDP EIR Mitigation Monitoring and Reporting Program – Circulation Component				
4.1-2	The Director PF&RD shall ensure through the construction bid documents that temporary excavations and stockpiles associated with the construction of the circulation and roadway improvements are strategically located to be visible from off-site viewsheds for the shortest time possible.	Plan Check	Prior to approval of construction documents	Director, PF&RD
GEOLOGY, SEISMICITY, SOILS AND GROUNDWATER				
2001 GDP EIR Mitigation Monitoring and Reporting Program – Landfill Component				
4.2-1a	Prior to designing each phased landfill plan and specifications, the IWMD shall conduct a geotechnical investigation to determine the extent of landslide material and the soil foundation characteristics of the proposed phase. A geotechnical report of the phased site area shall be prepared which includes a landslide excavation and removal plan prepared to the satisfaction of the Director, IWMD.	Plan Check	Prior to the design of each Landfill Phase	Director, IWMD
4.2-1b	For each phased grading plan, the excavation and grading plan shall ensure the stability of all cut, fill and lined slopes. Slopes shall be designed to withstand the most probable earthquake based on a return period of 100 years or as required by current regulations. Liner design plans shall be submitted to the San Diego Regional Water Quality Control Board for approval. The plans shall also be incorporated in an JTD and submitted to the LEA for approval and to the CIWMB for concurrence.	Plan Check	Prior to the approval of the Amended ROSI	Director, IWMD
4.2-2a	The IWMD shall demonstrate that landfill design plans comply with the state and federal seismic requirements in CCR Title 27, and 40 Code of Federal Regulations (CFR) §258.14 (Seismic Impact Zones) and §258.15 (Unstable Areas). These demonstrations shall be incorporated in the IWMD Operating Record prior to construction of said plans.	Plan Check	Prior to the approval of the Landfill Design	Director, IWMD
4.2-2b	Prior to commencement of daily excavations for borrow material grading plans shall be prepared, analyzed for slope stability and submitted for approval by the Director, IWMD, or his designee.	Plan Check	Prior to the commencement of daily excavations for borrow material	Director, IWMD or designee
4.2-2c	As part of a JTD, the IWMD shall present the assumptions, methods and calculations used to demonstrate seismic safety. This measure is required only if final slopes are planned to be steeper than a ratio of 3:1 (horizontal to vertical), if the site is located in an area subject to liquefaction or in unstable areas with poor foundation conditions as described in the Seismic Safety Element of the Orange County General Plan (27 CCR 17777).	Plan Check	Prior to the approval of the Amended ROSI	Director, IWMD
4.2-3	As part of a JTD, the IWMD shall present the assumptions, methods and calculations used to demonstrate that differential settlement of the site will not result in future environmental impacts (27 CCR 21090).	Plan Check	Prior to the approval of the Amended ROSI	Director, IWMD
4.2-4	When the JTD is prepared, the IWMD shall identify the assumptions, methods and calculations performed to demonstrate that the excavation plans provide for sufficient quantities and sources of suitable soils or alternative cover systems for daily and intermediate cover, final cover and liner materials. This section of the JTD should also reference and summarize any borrow studies conducted to demonstrate the availability of sufficient quantities of materials. If materials are obtained on-site, the description shall include which sections of the site will be excavated for each sequence of landfilling and where these materials will be stockpiled for use. Stockpile locations should not interfere with unloading, spreading, compacting, access, safety, drainage or other operations on the site. Stockpiles should be clearly shown on the fill sequencing and excavation plans prepared for construction. (27 CCR 21600).	Plan Check	Prior to the approval of the Amended ROSI	Director, IWMD
4.2-5a	The IWMD shall continue to operate its existing leachate control system within the active landfill area. In addition, the IWMD shall be required to construct a corresponding leachate control and recovery system in those areas where new liners are placed and in areas added to the active landfill area.	Plan Check	Ongoing and prior to construction of new liners	Director, IWMD
4.2-5b	The site shall continue to operate under the groundwater monitoring requirements contained in Waste Discharge Requirements, Order No. 89-102, Technical Change Order (TCO) No. 1, Amended Waste Discharge Requirements contained in Order No. 93-86, and any future orders issued by the San Diego Regional Water Quality Control Board. TCO No. 1 contains the detailed Groundwater and Vadose Zone Monitoring Program for the Prima Deshecha Landfill.	Field Monitoring	Ongoing	Director, IWMD
4.2-5c	As part of a revised JTD, the IWMD shall present the assumptions, methods and calculations used to predict leachate generation and sizing of the components of the leachate collection system.	Plan Check	Prior to the approval of the Amended ROSI	Director, IWMD
2001 GDP EIR Mitigation Monitoring and Reporting Program – Circulation Component				
4.2-6a	Prior to the final design of any circulation uses on the site, the Director PF&RD shall conduct a comprehensive geotechnical study. The study should include detailed geologic mapping, exploratory drilling, logging and sampling, laboratory testing of soil and rock samples, engineering and slope stability analyses, and cut slope and landslide removal recommendations. The final recommendations of the geotechnical study shall be incorporated in the final design of the GDP circulation elements as appropriate.	Plan Check	Prior to final design of any circulation uses on-site	Director, PF&RD
4.2-6b	Where embankment fills associated with the extension of La Pata Avenue overlie landslide deposits, the Director PF&RD will ensure that the final design incorporates removal of all highly disturbed landslide debris prior to placement of fill. The final design of the La Pata Avenue extension regarding the removal of landslide debris will be consistent with the findings of the geotechnical study, described in MM 4.2-6a, above, to reduce adverse settlement and/or potential instability of the roadfill.	Plan Check	Prior to final design of La Pata Avenue on-site	Director, PF&RD

Table G.A: Mitigation and Monitoring Reporting Program

MM No.	Mitigation Measures	Method of Verification	Timing for Mitigation Measures	Responsible Party
4.2-6c	Where unstable cut slopes are found along the La Pata Avenue extension, they will require some form of stabilization. Typical measures for stabilizing permanent unstable cut slopes in the various bedrock units and landslide debris include construction of low-angle (3:1 horizontal to vertical or less) cut slopes, buttress and/or stabilization fills, and structurally reinforced fills. Stabilization measures for temporary cut slopes associated with ingress and egress from the landfill may only require constructing the cut slopes at low angles. The Director PF&RD will ensure that the appropriate measure for stabilizing the permanent cut slopes along the La Pata Avenue extension will be determined during final design of the extension, based on the findings of the geotechnical study described in MM 4.2- 6a, above.	Plan Check	Prior to final design of La Pata Avenue on-site	Director, PF&RD
4.2-7	The Director PF&RD shall incorporate the appropriate seismic design features in the final design of the La Pata Avenue extension, consistent with the geotechnical study described in MM 4.2-6a and with the current County of Orange seismic design practices and standard design practices for arterial roads.	Plan Check	Prior to final design of La Pata Avenue on-site	Director, PF&RD
2001 GDP EIR Mitigation Monitoring and Reporting Program – Recreation Component				
4.2-8	Prior to final design for the construction of any recreation uses on the site, the PF&RD/HBP shall conduct a comprehensive geotechnical study. The study should include detailed geologic mapping, exploratory drilling, logging and sampling, laboratory testing of soil and rock samples, engineering and slope stability analyses, and cut slope and landslide removal recommendations. The final recommendations of the geotechnical study shall be incorporated in the final design of the GDP recreation elements as appropriate.	Plan Check	Prior to the approval of final design of recreation improvements	Director, PF&RD/HBP
4.2-9	The PF&RD/HBP will incorporate the appropriate seismic design features in the final design of the recreation improvements, consistent with the geotechnical study described in mitigation measure 4.2-8, above, and with the current County of Orange standard seismic design practices.	Plan Check	Prior to approval of final design of recreation improvements	Director, PF&RD/HBP
GEOPHYSICAL				
First Supplemental EIR to the 2001 GDP EIR				
4.2-1a	Prior to designing each phased landfill plan and specifications, the IWMD shall conduct a geotechnical investigation to determine the extent of landslide material and the soil foundation characteristics of the proposed phase. A geotechnical report of the phased site area shall be prepared which includes a landslide excavation and removal plan prepared to the satisfaction of the Director, IWMD.	Plan Check	Prior to the design of each Landfill Phase	Director, IWMD or Designee
4.2-1b	For each phased grading plan, the excavation and grading plan shall ensure the stability of all cut, fill, and lined slopes. Slopes shall be designed to withstand the most probable earthquake based on a return period of 100 years or as required by current regulations. Liner design plans shall be submitted to the San Diego Regional Water Quality Control Board (RWQCB) for approval. The plans shall also be incorporated in an Joint Technical Document (JTD) and submitted to the LEA for approval and to the CIWMB for concurrence	Plan Check	Prior to the approval of the Amended RDSI	Director, IWMD or Designee
4.2-2a	The IWMD shall demonstrate that landfill design plans comply with the state and federal seismic requirements in CCR Title 27, and 40 Code of Federal Regulations (CFR) §258.14 (Seismic Impact Zones) and §258.15 (Unstable Areas). These demonstrations shall be incorporated in the IWMD Operating Record prior to construction of said plans.	Plan Check	Prior to the approval of the Landfill Design	Director, IWMD or Designee
4.2-2b	Prior to commencement of daily excavations for borrow material, grading plans shall be prepared, analyzed for slope stability, and submitted for approval by the Director, IWMD, or his designee.	Plan Check	Prior to the commencement of daily excavations for borrow material	Director, IWMD or Designee
4.2-2c	As part of a JTD, the IWMD shall present the assumptions, methods, and calculations used to demonstrate seismic safety. This measure is required only if final slopes are planned to be steeper than a ratio of 3:1 (horizontal to vertical), or if the site is located in an area subject to liquefaction or in unstable areas with poor foundation conditions as described in the Seismic Safety Element of the Orange County General Plan (27 CCR 17777).	Plan Check	Prior to the approval of the Amended RDSI	Director, IWMD or Designee
4.2-3	As part of a JTD, the IWMD shall present the assumptions, methods, and calculations used to demonstrate that differential settlement of the site will not result in future environmental impacts (27 CCR 21090).	Plan Check	Prior to the approval of the Amended RDSI	Director, IWMD or Designee
4.2-4	When the JTD is prepared, the IWMD shall identify the assumptions, methods, and calculations performed to demonstrate that the excavation plans provide for sufficient quantities and sources of suitable soils or alternative cover systems for daily and intermediate cover, final cover, and liner materials. This section of the JTD should also reference and summarize any borrow studies conducted to demonstrate the availability of sufficient quantities of materials. If materials are obtained on site, the description shall include which sections of the site will be excavated for each sequence of landfilling and where these materials will be stockpiled for use. Stockpile locations should not interfere with unloading, spreading, compacting, access, safety, drainage, or other operations on the site. Stockpiles should be clearly shown on the fill sequencing and excavation plans prepared for construction. (27 CCR 21600).	Plan Check	Prior to the approval of the Amended RDSI	Director, IWMD or Designee
SURFACE HYDROLOGY				
2001 GDP EIR Mitigation Monitoring and Reporting Program – Landfill Component				
4.3-1a	As part of a Joint Technical Document (JTD) to be prepared by IWMD, the IWMD shall present the assumptions, methods and calculations used to calculate the potential flow quantities for run-on, runoff, and sediment content of storm water flow used in sizing drainage and sediment control facilities.	Plan Check	Prior to the approval of the JTD	Director, IWMD
4.3-1b	As part of a JTD to be prepared by IWMD, the IWMD shall include surface drainage plans for each of the fill sequencing and excavation plans, showing both temporary and permanent systems, including all berms, down drain systems, storm drain systems, direction of flow in perimeter drainage channels, and the location of off-site discharge point for runoff water.	Plan Check	Prior to the approval of the JTD	Director, IWMD
4.3-1c	Detention, diversion, and drainage facilities shall be designed and constructed to accommodate the anticipated volume of precipitation and peak flows from surface runoff under the precipitation conditions specified in §20365 of Title 27 of the California Code of Regulations for each class of waste management unit (WMU). In addition, drainage facilities for WMUs shall be designed to prevent washout of the WMUs during a 1DO-year storm event.	Plan Check	Prior to the approval of the Amended RDSI	Director, IWMD

Table G.A: Mitigation and Monitoring Reporting Program

MM No.	Mitigation Measures	Method of Verification	Timing for Mitigation Measures	Responsible Party
2001 GDP EIR Mitigation Monitoring and Reporting Program–Circulation Component				
4.3-2	The Orange County PF&RD shall ensure that the temporary and permanent grading associated with La Pata Avenue comply with street drainage design criteria in the County's Local Drainage Manual.	Plan Check	Prior to final design of La Pata Avenue on-site	Director, PF&RD
2001 GDP EIR Mitigation Monitoring and Reporting Program – Recreation Component				
4.3-3	The PF&RD/HBP shall ensure that the temporary and permanent grading around all structures and roadways under the interim and ultimate GDP recreation uses are designed to comply with applicable design criteria in the County's Local Drainage Manual.	Plan Check	Prior to approval of grading plans	Director, PF&RD/HBP
WATER QUALITY				
2001 GDP EIR Mitigation Monitoring and Reporting Program – Landfill Component				
4.4-1a	The IWMD shall comply with its National Pollutant Discharge Elimination System (NPDES) Storm Water Pollution Prevention Plan (SWPPP) and its NPDES Monitoring and Reporting Plan for the landfilling under the GDP. This plan will ensure that the measures taken to safeguard surface water quality are effective and are being correctly employed.	Plan Check	Prior to construction of landfilling improvements in Zones 1 and 4	Director, IWMD
4.4-1b	The IWMD shall continue to implement the existing Surface Water Runoff Monitoring Program as described in the currently effective Waste Discharge Requirements.	Field Monitoring	Ongoing	Director, IWMD
4.4-2	As part of the NPDES program and prior to approval of construction contracts, the Director, IWMD, or a designee, shall ensure that silt loading to surface waters from the construction activities will be periodically tested and controlled, where necessary, by appropriate erosion control measures, siltation basins or other settling structures.	Field Monitoring	Prior to approval of construction contracts	Director, IWMD or designee
2001 GDP EIR Mitigation Monitoring and Reporting Program–Circulation Component				
4.4-3a	The Director PF&RD shall ensure that the final design of the GDP circulation and roadway improvements include features such as installation of grates in open drains and culverts to catch litter and elimination of bridge drains which drain directly into stream courses to minimize the potential water quality impacts of runoff from on-site roadways.	Plan Check	Prior to final design of any circulation uses on-site	Director, PF&RD
4.4-3b	Prior to the initiation of construction activities, the Director PF&RD shall apply for updated NPDES permit conditions for each phase of circulation use construction.	Plan Check	Prior to the initiation of construction activities	Director, PF&RD
4.4-3c	Prior to construction of La Pata Road, the Director of PF&RD will consider various engineering controls such as biofilters, vegetated swales, catch basins, filters or other similar controls in order to mitigate impacts on the quality of surface water runoff from roadway surfaces identified in a future environmental assessment for the road.	Plan Check	Prior to final design of La Pata Avenue on-site	Director, PF&RD
4.4-4a	The Director PF&RD shall ensure, as part of the construction documents for circulation and roadway improvements under the GDP, that the construction contractors implement erosion control measures conforming to County Standards for all graded or cleared areas on the site.	Plan Check	Prior to final design of any circulation uses on-site	Director, PF&RD
4.4-4b	PF&RD/Road Programs shall ensure, as part of the construction documents for the circulation uses (i.e., La Pata Avenue extension) and normal facility operating practices, that silt loading to surface waters from the construction activities will be periodically tested and controlled, where necessary, by appropriate erosion control measures, siltation basins or other settling structures.	Plan Check	Prior to final design of any circulation uses on-site	Director, PF&RD
2001 GDP EIR Mitigation Monitoring and Reporting Program – Recreation Component				
4.4-5	The PF&RD/HBP shall operate the recreation and related improvements consistent with a comprehensive Pollution Management Plan which incorporates best management practices to reduce potential impacts to water quality. These are expected to include parking lot and street sweeping; recreation facility user education to promote responsible behavior regarding litter, hazardous materials and other materials which could cause water quality impacts; landscape management to reduce irrigation water runoff and promote elimination or conservative use of fertilizers, pesticides and other chemicals; water conservation measures to reduce discharge to sanitary and storm sewer systems; an accident, collision and spill contingency plan which mandates employee response, stockpiling of cleanup equipment and materials, notification of responsible agencies and management/disposal of contaminated materials; litter control; employee training which addresses chemical use and storage, responsible cleaning, responsible maintenance and repair of vehicles and other equipment, waste disposal and emergency response; authority of facility operator to remove vehicles observed to be leaking fluid; and other pollution prevention practices.	Plan Check	Prior to introduction of on-site recreation uses	Director, PF&RD/HBP
4.4-6a	The PF&RD/HBP shall ensure, as part of the construction documents for the recreation uses under the GDP, that the construction contractors implement erosion control measures conforming to County Standards for all graded or cleared areas on the site.	Plan Check	Prior to approval of construction documents	Director, PF&RD/HBP
4.4-6b	The construction impacts to surface water quality due to increased silt load are regulated under Federal NPDES stormwater permitting requirements. The PF&RD/HBP will apply for updated permit conditions for each phase of recreation use construction prior to the initiation of those phased construction activities.	Plan Check	Prior to approval of construction documents	Director, PF&RD/HBP
4.4-6c	Prior to approval of construction contracts, the PF&RD/HBP shall ensure that silt loading to surface waters from the construction activities will be periodically tested and controlled, where necessary, by appropriate erosion control measures, siltation basins or other settling structures.	Plan Check	Prior to approval of construction documents	Director, PF&RD/HBP
HYDROLOGY AND WATER QUALITY				
First Supplemental EIR to the 2001 GDP EIR				
4.2-5a	The IWMD shall continue to operate its existing leachate control system within the active landfill area. In addition, the IWMD shall be required to construct a corresponding leachate control and recovery system in those areas where new liners are constructed and in areas added to the active landfill area.	Plan Check	Ongoing and prior to construction of new liners	Director, IWMD or Designee
4.2-5b	The site shall continue to operate under the groundwater monitoring requirements contained in Waste Discharge Requirements, Order No. 89-102, Technical Change Order (TCO) No. 1, Amended Waste Discharge Requirements contained in Order No. 93-86, and any future orders issued by the San Diego RWQCB. TCO No. 1 contains the detailed Groundwater and Vadose Zone Monitoring Program for the Prima Deshecha Landfill.	Field Monitoring	Ongoing	Director, IWMD or Designee

Table G.A: Mitigation and Monitoring Reporting Program

MM No.	Mitigation Measures	Method of Verification	Timing for Mitigation Measures	Responsible Party
4.2-5c	As part of a revised JTD, the IWMD shall present the assumptions, methods, and calculations used to predict leachate generation and sizing of the components of the leachate collection system.	Prior to the approval of the Amended RDSI	Prior to the approval of the Amended RDSI	Director, IWMD or Designee
4.3-1a	As part of a JTD to be prepared by IWMD, the IWMD shall present the assumptions, methods, and calculations used to calculate the potential flow quantities for run-on, run-off, and sediment content of storm water flow used in sizing drainage and sediment control facilities.	Plan Check	Prior to the approval of the JTD	Director, IWMD or Designee
4.3-1b	As part of a JTD to be prepared by IWMD, the IWMD shall include surface drainage plans for final fill and bottom excavation plans, including any berms, down drain systems, storm drain systems, direction of flow in perimeter drainage channels, and the location of off-site discharge point for runoff water.	Plan Check	Prior to the approval of the JTD	Director, IWMD or Designee
4.3-1c	Detention, diversion, and drainage facilities shall be designed and constructed to accommodate the anticipated volume of precipitation and peak flows from surface runoff under the precipitation conditions specified in §20365 of Title 27 of the California Code of Regulations for each class of waste management unit (WMU). In addition, drainage facilities for WMUs shall be designed to prevent washout of the WMUs during a 100-year storm event.	Plan Check	Prior to the approval of the Amended RDSI	Director, IWMD or Designee
4.4-1a	The IWMD shall comply with its National Pollutant Discharge Elimination System (NPDES) Storm Water Pollution Prevention Plan (SWPPP) and its NPDES Monitoring and Reporting Plan for the landfilling under the GDP. This plan will ensure that the measures taken to safeguard surface water quality are effective and are being correctly employed.	Plan Check	Prior to construction of landfilling improvements in Zones 1 and 4	Director, IWMD or Designee
4.4-1b	The IWMD shall continue to implement the existing Surface Water Runoff Monitoring Program as described in the currently effective Waste Discharge Requirements.	Field Monitoring	Ongoing	Director, IWMD or Designee
4.4-2	As part of the NPDES program and prior to approval of construction contracts, the Director, IWMD, or a designee, shall ensure that silt loading to surface waters from the construction activities will be periodically tested and controlled, where necessary, by appropriate erosion control measures, siltation basins, or other settling structures.	Field Monitoring	Prior to the approval of construction contracts	Director, IWMD or Designee
5.3-1	The Proposed Project will comply with Section 7 of the Drainage Area Management Plan (DAMP) for Orange County through the development of a Water Quality Management Plan.	Verify inclusion in Plans and Specifications	Prior to approval of Plans and Specifications	Director, IWMD or Designee
BIOLOGICAL RESOURCES				
2001 GDP EIR Mitigation Monitoring and Reporting Program – Landfill Component				
4.5-1	The restoration of needlegrass grasslands will be incorporated into the Conceptual Coastal Sage Scrub Mitigation Plan (described in MM 4.5-2a through 2c), the Integrated Waste Management Department (IWMD) will replace impacted needlegrass grassland at a 1:1 ratio.	Plan Check	Prior to construction of landfilling improvements in Zones 1 and 4	Director, IWMD
4.5-2a	Prior to the removal of coastal sage scrub habitat resources including clearing, grubbing, mowing, discing, trenching, grading, fuel modification, or other construction related activities, the Director IWMD or his designee shall prepare and submit, in consultation with the PDSD Director of Planning or his designee, an Interim Habitat Loss Management Plan (IHLMP) to the USFWS for review and approval in compliance with the Natural Communities Conservation Plan (NCCP) and the Interim Coastal Sage Scrub (CSS) Habitat Loss Process. The County remains committed to the Natural Communities Conservation Plan (NCCP) process and intends to operate by the same procedure outlined in the Federal Endangered Species Act Section 4(d) Special Rule for Incidental Take of the coastal California gnatcatcher or other agreement as determined to be appropriate by the resource agencies.	Coastal Sage Scrub IHLMP or other resource agency approved plan	Prior to removal of coastal sage scrub habitat resources	Director, IWMD or designee/
4.5-2b	The GDP shall be amended to include all applicable provisions of the approved Southern Subregion NCCP on its adoption by the County of Orange Board of Supervisors. The NCCP implementation programs may include, but are not limited to, requirements for the removal and mitigation replacement of lost coastal sage scrub habitat, operations restrictions, instructional signs, fencing, etc.	Plan Check	Subsequent to approval of the Southern Subregional NCCP	Director, IWMD
4.5-2c	In accordance with an approved Conceptual Coastal Sage Scrub Mitigation Plan, the IWMD shall replace impacted coastal sage scrub at a 1:1 ratio replacement or as otherwise required. The IWMD shall prepare a Conceptual Coastal Sage Scrub Mitigation Plan in cooperation with the affected resource agencies (CDFG, USFWS). Guidelines for the Mitigation Plan shall be as follows: ● The mitigation areas/sites shall have been evaluated and selected on the basis of their suitability for use as coastal sage scrub revegetation areas. The parameters evaluated shall include but not be limited to soil condition, slope aspect, proximity to adjacent coastal sage scrub, level of difficulty of site preparation, and ownership status. ● The mitigation plan shall provide procedures to prepare the soils in the mitigation area, provide detailed seeding/planting mixtures; provide seeding/planting methods; and provide any other procedures, such as supplemental irrigation, mycorrhizal inoculation, etc., that will be used for successful vegetation. ● Maintenance and monitoring goals shall be established. The components and implementation of the maintenance and monitoring procedures shall be consistent with the components and implementation of mitigation measure 4.5-7a. In accordance with the approved Conceptual Coastal Sage Scrub Mitigation Plan, the IWMD shall develop a maintenance and monitoring program to ensure success of the revegetation effort. Maintenance shall include regulation inspection of the site for excessive weed growth, erosion problems, failure of irrigation system, and/or unhealthy or dying plants. Invasion of the site by weeds in the area, especially pampas grass, artichoke thistle, castor bean, fountain grass, mustard, clover, cocklebur, and tree tobacco could be a potential maintenance problem. Maintenance crews shall be able to recognize the difference between native plant and weed seedlings. A qualified biologist will be required to instruct the maintenance crew in the identification of native plant seedlings. The maintenance program shall include procedures for regular maintenance and repair of the irrigation system.	Plan Check	Prior to mitigation site preparation	Director, IWMD

Table G.A: Mitigation and Monitoring Reporting Program

MM No.	Mitigation Measures	Method of Verification	Timing for Mitigation Measures	Responsible Party
	A system shall be developed for reporting by the maintenance crew of any unhealthy or dying plants or failure in any of the seeded areas. This would assist the monitoring crew in the development of immediate remedial measures, such as replacing plant material, to correct the problem. To document the success of revegetation programs, the IWMD shall ensure that the progress of the revegetated area is monitored by a qualified biologist. The maintenance and monitoring plan will address unique aspects of mitigation areas. An agreement shall be developed between the County and the USFWS and CDFG on criteria that will be used to determine successful plant establishment on a mitigation site. Success criteria will include plant cover, species diversity, habitat structure, and density, and will be based on measurements made in reference to habitats near the mitigation site.			
4.5-3a	Prior to grading for the landfilling activities affecting riparian resources, the IWMD, as appropriate, shall ensure that all sycamore and willow trees of four or more inches in diameter at breast height (DBH), defined as 4.5 feet from mean ground level, within the grading or construction limits of the landfilling activities, whichever is greater, and within 100 feet of grading and construction operations, shall be tagged and numbered with permanent tags under the supervision of a qualified biologist. The tag numbers of the trees to be protected and those to be removed shall be noted. Those trees adjacent to the construction areas that can be avoided will be tagged for protection and fenced off with red-orange mesh fencing during grading and construction activities. Trees that cannot be avoided during construction will be tagged for removal. Records of these numbers shall be kept by the Director, IWMD or his designee for use in mitigation, replacement, and monitoring of tree resources before, during, and after grading and construction activities. In addition, prior to grading and site preparation, the Director IWMD shall ensure that all trees subject to removal are marked with a red "X" on the trunk. Trees to be preserved shall be marked with yellow flagging visible from all directions and fenced off with red-orange flexible mesh fencing during grading and construction activities.	Plan Check	Prior to grading for landfilling activities affecting riparian resources	Director, IWMD or designee
4.5-3b	During the process of obtaining the required 404 Permit Application and 1601 Streambed Alteration Agreement (1601/404) for encroachment into streambed areas and prior to site preparation, the Director IWMD shall prepare a Conceptual Riparian Mitigation Plan in cooperation with the affected resource agencies (CDFG, USFWS, and ACOE). Guidelines for the Mitigation Plan shall be as follows: ● The mitigation sites will be evaluated and selected on the basis of their suitability for use as riparian revegetation areas. The parameters evaluated shall include but not be limited to soil condition, hydrology, access, contiguousness with existing habitat, geology and drainage considerations, level of difficulty of site preparation, and ownership status. ● The mitigation plan shall include the procedures for soil preparation, provide seeding/planting mixtures; include the seeding/planting methods; and include any other procedures, such as supplemental irrigation, mycorrhizal inoculation, etc., that will be used. ● Maintenance and monitoring goals shall be established. The components and implementation of the maintenance and monitoring assignments are described in MM 4.5-3d.	Plan Check	Prior to mitigation site preparation	Director, IWMD
4.5-3c	In accordance with an approved Conceptual Riparian Mitigation Plan, the Director IWMD shall replace impacted riparian areas at a minimum 2:1 ratio of in-kind or higher quality habitat. The required replacement acreage will be approved by the resource agencies having jurisdiction over the impacted resources (i.e., CDFG, USFWS, and ACOE) for all the GDP uses, based on a jurisdictional delineation and vegetation mapping and the current (2001) GDP grading plan.	Field Inspection	Following implementation of Riparian Mitigation Plan	Director, IWMD
4.5-3d	During the process of obtaining the required 404 Permit and 1601 Streambed Alteration Agreement, and, in accordance with the approved Conceptual Riparian Mitigation Plan, the Director IWMD shall develop a maintenance and monitoring program to ensure success of any revegetation effort. Maintenance shall include regular inspection of the site for excessive weed growth, erosion problems, failure of irrigation system, and/or unhealthy or dying plants. Invasion of the site by weeds in the area, especially castor bean, fountain grass, mustard, clover, cocklebur, and tree tobacco, could be a potential maintenance problem. Maintenance crews shall be able to recognize the difference between native plant and weed seedlings. A qualified biologist will be required to instruct the maintenance crew in the identification of native plant seedlings. The maintenance program shall include procedures for regular maintenance and repair of the irrigation system. A system shall be developed for reporting by the maintenance crew of any unhealthy or dying plantings or failure in any of the seeded areas. This would assist the monitoring crew in the development of immediate remedial measures, such as increasing the irrigation rate or replacing plant material, to correct the problem. To document the success of revegetation programs, the Director IWMD shall ensure that the progress of the revegetated area is monitored by a qualified biologist. An agreement shall be developed between the County and the ACOE, USFWS, or CDFG on criteria that will be used to determine successful plant establishment on a mitigation site. These criteria will include plant cover, species diversity, habitat structure, and density, and will be based on measurements made in reference to habitats near the mitigation site. The qualified biologist shall monitor the site for five years or until the site complies with required performance standards. If the biologist determines that the mitigation site meets the conditions of the performance standards, documentation shall be submitted to the responsible agency for approval.	Maintenance and Monitoring Plan Check	Ongoing	Director, IWMD
4.5-3e	Prior to grading and site preparation adjacent to riparian areas outside the limits of construction, the Director IWMD shall incorporate instructions in the construction documents ensuring that, in conjunction with construction activities: ● Graded material spoils shall not be placed on or stored near any riparian areas outside the limits of construction ● The removal of streamside or bank vegetation shall be avoided wherever feasible. ● The amount of habitat removed shall be limited to the minimum amount required for construction.	Plan Check	Prior to site preparation and/or grading	Director, IWMD

Table G.A: Mitigation and Monitoring Reporting Program

MM No.	Mitigation Measures	Method of Verification	Timing for Mitigation Measures	Responsible Party
	• Riparian areas in the vicinity of grading or heavy recreation use, such as in Zone 1, shall be designated as Environmentally Sensitive Areas onsite preparation, grading, and construction plans and fenced off as appropriate for protection before any of these activities begin. • Excess fill shall not be dumped in streams outside the limits of construction. • Vehicles and equipment shall not be parked in washes or other drainages outside the limits of construction.			
4.5-4a	Prior to site preparation and during final design for each phase of landfill development (i.e., Phases A - D in Zone 1 and Phases A-I in Zone 4), the Director, IWMD shall ensure that focused surveys are conducted by qualified biologists for the thread-leaved brodiaea, Coulter's saltbush, many-stemmed dudleya, southern tarplant, vernal barley, paniculate tarplant, and any other plant species that may warrant focused surveys in the future as determined by a qualified botanist. In addition, the Director IWMD shall ensure that focused surveys are conducted by qualified biologists for the western spadefoot toad, southwestern willow flycatcher, and other wildlife species that may warrant focused surveys in the future as determined by a qualified biologist. The results of surveys shall be incorporated into environmental documentation for future proposed projects within the Prima Deshecha site. Identified special status species and habitats located within 300 feet of the affected area(s) shall be mapped on grading plans for each phase of development. In addition, the Director IWMD shall implement procedures approved by the appropriate resource agencies to mitigate the potential impacts to those species. In the event that landfill activities within a phase must occur prior to the completion of spring surveys, habitat for the special status plant species shall be salvaged, stored and used in an appropriate manner as determined by a qualified biologist. The appropriate agencies will be notified prior to disturbance. All future proposed projects within the Prima Deshecha Landfill shall provide vegetation mapping on topographic maps at a scale of 1 inch equals 200 feet.	Field Surveys	Prior to site preparation and during final design for each phase of landfill development	Director, IWMD
4.5-4b	The Director IWMD shall ensure that, for the periods covering All site preparation, disturbance, or grading of native areas, the Director IWMD shall monitor wildlife habitat preservation. The purpose of this monitoring is to ensure that the Environmental Sensitive Areas and Environmentally Restrictive Areas (i.e., areas outside the grading limits) will not be adversely impacted during site preparation, grading, and construction of the landfilling activities. For the landfilling activities, this inspection program shall be coordinated with the Site Manager at the weekly meetings held at the Landfill to review the planned grading program for the landfilling activities. These meetings shall commence at the start of each new phase, when native ground is scheduled for disturbance (e.g., grading or stockpiling, etc.). The Director, IWMD or his designee will attend these meetings and provide a status and progress report to the Operations Manager. These meetings will be held throughout the site preparation, grading and construction periods for all the landfilling activities and the monitoring reports shall continue to be prepared and submitted by the Director, IWMD or his designee until the disturbance is completed. The monitor shall be onsite before, during, and after the completion of site preparation, grading and construction for all of the landfilling activities.	Field Monitoring	Ongoing	Director, IWMD
4.5-5a	During site preparation and grading for the landfill, the IWMD shall phase these operations outside significant areas during the nesting and breeding season for the coastal California gnatcatcher. This measure shall be overseen and conducted by a qualified biologist. During site preparation and grading for the landfill, the IWMD shall phase these operations outside significant habitat areas during the nesting and breeding season for the least Bell's vireo. This measure shall be overseen and conducted by a qualified biologist. Prior to activities that may impact potential vireo habitat, updated vireo surveys will be conducted by a qualified biologist	Plan Check	Prior to site preparation or direct/indirect disturbance to native or restored areas	Director, IWMD
4.5-5b	The Director IWMD shall ensure that grading and construction operations for the landfilling are redirected temporarily around nesting sites for a distance of 500 feet for candidate and listed species of birds and a distance of 1,000 feet for raptors, during nesting and breeding seasons between February 15 and July 15, or a distance and time agreed upon by the USFWS. In the event that a coyote, bobcat or mountain lion den is located, then grading and construction operations shall be redirected temporarily around the den for a distance of 1,000 feet. The nesting sites and dens should be resurveyed toward the end of the breeding seasons and these species to verify completion of the breeding cycle. Nests and dens of non-listed species that will be removed due to grading and/or construction operations shall be removed only during the non-breeding season.	Plan Check and Field Monitoring	Prior to site preparation and construction operations	Director, IWMD
4.5-6	The Director IWMD shall ensure that during final design, the landfill operation continues to incorporate regulatory agency guidelines to reduce indirect impacts associated with noise, dust, night lighting, and blowing debris. Noise shall be controlled through the proper maintenance of the construction equipment, including trucks, bulldozers, and other mobile and fixed construction equipment. Dust shall be controlled at its source with standard wetting techniques consistent with applicable SCAQMD requirements. Low lighting alternatives and shielded lighting shall be employed to reduce indirect impacts on surrounding habitats.	Plan Check	Prior to approval of the Final Design of a landfill phase or ancillary infrastructure facility	Director, IWMD
2001 GDP EIR Mitigation Monitoring and Reporting Program–Circulation Component				
4.5-7a	Prior to the removal of coastal sage scrub habitat resources including clearing, grubbing, mowing, discing, trenching, grading, fuel modification, or other construction related activities, the Director Public Facilities and Resources Department (PF&RD) Transportation or his designee shall prepare and submit, in consultation with the PDSD Director of Planning or his designee, an IHLMP to the USFWS for review and approval in compliance with the Natural Communities Conservation Plan (NCCP) and the Interim Coastal Sage Scrub (CSS) Habitat Loss Process. The County remains committed to the Natural Communities Conservation Plan (NCCP) process and intends to operate by the same procedure outlined in the Federal Endangered Species Act Section 4(d) Special Rule for Incidental Take of the coastal California gnatcatcher or other agreement as determined to be appropriate by the resource agencies.	Coastal Sage Scrub IHLMP or other resource agency approval plan	Prior to the removal of coastal sage scrub habitat resources	Director, PF&RD/ Director of Planning, PDSD
4.5-7b	The GDP shall be amended to include all applicable provisions of the approved Southern Subregion NCCP on its adoption by the County of Orange Board of Supervisors. The NCCP implementation programs may include, but are not limited to, requirements for the removal and mitigation replacement of lost coastal sage scrub habitat, operations restrictions, instructional signs, fencing, etc.	Plan Check	Subsequent to approval of the Southern Subregional NCCP	Director, PF&RD

Table G.A: Mitigation and Monitoring Reporting Program

MM No.	Mitigation Measures	Method of Verification	Timing for Mitigation Measures	Responsible Party
4.5-7c	The IWMD shall replace impacted coastal sage scrub at a 1:1 ratio replacement or as otherwise required. The IWMD shall prepare a Conceptual Coastal Sage Scrub Mitigation Plan in cooperation with the affected resource agencies (CDFG, USFWS). Guidelines for the Mitigation Plan shall be as follows: ● The mitigation areas/sites shall have been evaluated and selected on the basis of their suitability for use as coastal sage scrub revegetation areas. The parameters evaluated shall include but not be limited to soil condition, slope aspect, proximity to adjacent coastal sage scrub, level of difficulty of site preparation, and ownership status. ● The mitigation plan shall provide procedures to prepare the soils in the mitigation area, provide detailed seeding/planting mixtures; provide seeding/planting methods; and provide any other procedures, such as supplemental irrigation, mycorrhizal inoculation, etc., that will be used for successful vegetation. ● Maintenance and monitoring goals shall be established. The components and implementation of the maintenance and monitoring procedures shall be consistent with the components and implementation of mitigation measure 4.5-?a. In accordance with an approved Conceptual Coastal Sage Scrub Mitigation Plan, In accordance with the approved Conceptual Coastal Sage Scrub Mitigation Plan, the IWMD shall develop a maintenance and monitoring program to ensure success of the revegetation effort. Maintenance shall include regulation inspection of the site for excessive weed growth, erosion problems, failure of irrigation system, and/or unhealthy or dying plants. Invasion of the site by weeds in the area, especially pampas grass, artichoke thistle, castor bean, fountain grass, mustard, clover, cocklebur, and tree tobacco could be a potential maintenance problem. Maintenance crews shall be able to recognize the difference between native plant and weed seedlings. A qualified biologist will be required to instruct the maintenance crew in the identification of native plant seedlings. The maintenance program shall include procedures for regular maintenance and repair of the irrigation system. A system shall be developed for reporting by the maintenance crew of any unhealthy or dying plants or failure in any of the seeded areas. This would assist the monitoring crew in the development of immediate remedial measures, such as replacing plant material, to correct the problem. To document the success of revegetation programs, the IWMD shall ensure that the progress of the revegetated area is monitored by a qualified biologist. The maintenance and monitoring plan will address unique aspects of mitigation areas. An agreement shall be developed between the County and the USFWS and CDFG on criteria that will be used to determine successful plant establishment on a mitigation site. Success criteria will include plant cover, species diversity, habitat structure, and density, and will be based on measurements made in reference to habitats near the mitigation site.	Plan Check	Prior to mitigation site preparation	Director, PF&RD
4.5-8a	Prior to grading for the circulation facilities, the Public Facilities and Resources Department (PF&RD), as appropriate, shall ensure that all sycamore and willow trees of four or more inches in diameter at breast height (DBH), defined as 4.5 feet from mean ground level, within the grading or construction limits of the landfilling activities, whichever is greater, and within 100 feet of grading and construction operations, shall be tagged and numbered with permanent tags under the supervision of a qualified biologist. The tag numbers of the trees to be protected and those to be removed shall be noted. Those trees adjacent to the construction areas that can be avoided will be tagged for protection and fenced off with red-orange mesh fencing during grading and construction activities. Trees that cannot be avoided during construction will be tagged for removal. Records of these numbers shall be kept by the Director, TPD and Director, PF&RD or their designees for use in mitigation, replacement, and monitoring of tree resources before, during, and after grading and construction activities. In addition, prior to grading and site preparation, the Director PF&RD shall ensure that all trees subject to removal are marked with a red "X" on the trunk. Trees to be preserved shall be marked with yellow flagging visible from all directions and fenced off with red-orange flexible mesh fencing during grading and construction activities.	Plan Check	Prior to grading for any circulation facilities affecting riparian resources	Director, PF&RD
4.5-8b	During the process of obtaining the required 404 Permit Application and 1601 Streambed Alteration Agreement (1601/404) for encroachment into streambed areas and prior to site preparation, the Director PF&RD shall prepare a Conceptual Riparian Mitigation Plan in cooperation with the affected resource agencies (CDFG, USFWS, and ACOE). Guidelines for the Mitigation Plan shall be as follows: ● The mitigation sites will be evaluated and selected on the basis of their suitability for use as riparian revegetation areas. The parameters evaluated shall include but not be limited to soil condition, hydrology, access, contiguousness with existing habitat, geology and drainage considerations, level of difficulty of site preparation, and ownership status. ● The mitigation plan shall include the procedures for soil preparation, provide seeding/planting mixtures; include the seeding/planting methods; and include any other procedures, such as supplemental irrigation, mycorrhizal inoculation, etc., that will be used. ● Maintenance and monitoring goals shall be established. The components and implementation of the maintenance and monitoring assignments are described in MM 4.5-3d.	Plan Check	Prior to mitigation site preparation	Director, PF&RD
4.5-8c	In accordance with an approved Conceptual Riparian Mitigation Plan, the Director PF&RD shall replace impacted riparian areas at a minimum 2:1 ratio of in-kind or higher quality habitat. The required replacement acreage will be approved by the resource agencies having jurisdiction over the impacted resources (i.e., CDFG, USFWS, and ACOE) for all the GDP uses, based on a jurisdictional delineation and vegetation mapping and the current (2001) GDP grading plan.	Field Inspection	Prior to site preparation	Director, PF&RD

Table G.A: Mitigation and Monitoring Reporting Program

MM No.	Mitigation Measures	Method of Verification	Timing for Mitigation Measures	Responsible Party
4.5-8d	During the process of obtaining the required 404 Permit and 1601 Streambed Alteration Agreement, and, in accordance with the approved Conceptual Riparian Mitigation Plan, the Director PF&RD shall develop a maintenance and monitoring program to ensure success of any revegetation effort. Maintenance shall include regular inspection of the site for excessive weed growth, erosion problems, failure of irrigation system, and/or unhealthy or dying plants. Invasion of the site by weeds in the area, especially castor bean, fountain grass, mustard, clover, cocklebur, and tree tobacco, could be a potential maintenance problem. Maintenance crews shall be able to recognize the difference between native plant and weed seedlings. A qualified biologist will be required to instruct the maintenance crew in the identification of native plant seedlings. The maintenance program shall include procedures for regular maintenance and repair of the irrigation system. A system shall be developed for reporting by the maintenance crew of any unhealthy or dying plantings or failure in any of the seeded areas. This would assist the monitoring crew in the development of immediate remedial measures, such as increasing the irrigation rate or replacing plant material, to correct the problem. To document the success of revegetation programs, the Director PF&RD shall ensure that the progress of the revegetated area is monitored by a qualified biologist. An agreement shall be developed between the County and the ACOE, USFWS, or CDFG on criteria that will be used to determine successful plant establishment on a mitigation site. These criteria will include plant cover, species diversity, habitat structure, and density, and will be based on measurements made in reference to habitats near the mitigation site. The qualified biologist shall monitor the site for five years or until the site complies with required performance standards. If the biologist determines that the mitigation site meets the conditions of the performance standards, documentation shall be submitted to the responsible agency for approval.	Maintenance and Monitoring Plan Check	Ongoing	Director, PF&RD
4.5-8e	Prior to grading and site preparation adjacent to riparian areas outside the limits of construction, the Director PF&RD shall incorporate instructions in the construction documents ensuring that, in conjunction with construction activities: ● Graded material spoils shall not be placed on or stored near any riparian areas outside the limits of construction ● The removal of streamside or bank vegetation shall be avoided wherever feasible. ● The amount of habitat removed shall be limited to the minimum amount required for construction. ● Riparian areas in the vicinity of grading or heavy recreation use, such as in Zone 1, shall be designated as Environmentally Sensitive Areas onsite preparation, grading, and construction plans and fenced off as appropriate for protection before any of these activities begin. ● Excess fill shall not be dumped in streams outside the limits of construction. ● Vehicles and equipment shall not be parked in washes or other drainages outside the limits of construction.	Plan Check	Prior to site preparation and/or grading	Director, PF&RD
4.5-9a	Prior to site preparation and during final design for each circulation improvement, the Director, Public Facilities and Resources Department (PF&RD) shall ensure that focused surveys are conducted by qualified biologists for the thread-leaved brodiaea, Coulter's saltbush, many-stemmed dudleya, southern tarplant, vernal barley, paniculate tarplant and any other plant species that may warrant focused surveys in the future as determined by a qualified botanist. In addition, the Director, PF&RD shall ensure that focused surveys are conducted by qualified biologists for the western spadefoot toad, southwestern willow flycatcher, and other wildlife species that may warrant focused surveys in the future as determined by a qualified biologist. The results of surveys shall be incorporated into environmental documentation for future proposed projects within the Prima Deshecha Landfill. Identified special status species and habitats located within 300 feet of the affected area (sw) shall be mapped on grading plans for each circulation improvement. In addition, the Director, PF&RD shall implement procedures approved by the appropriate resource agencies to mitigate the potential impacts to those species. In the event that landfill activities within a phase must occur prior to the completion of spring surveys, habitat for the special status plant species shall be salvaged, stored and used in an appropriate manner as determined by a qualified biologist. The appropriate agencies will be notified prior to disturbance. All future proposed projects within the Prima Deshecha Landfill shall provide vegetation mapping on topographic base maps at a scale of 1-inch equals 200-feet.	Field Surveys	Prior to site preparation or disturbance to native areas	Director, PF&RD
4.5-9b	The Director PF&RD shall ensure that, for the periods covering All site preparation, disturbance, or grading of native areas, A Resource Management Coordinator shall monitor wildlife habitat preservation. The purpose of this monitoring is to ensure that the Environmental Sensitive Areas and Environmentally Restrictive Areas (i.e., areas outside the grading limits) will not be adversely impacted during site preparation, grading, and construction of the circulation and roadway improvements. For the circulation improvements, the PF&RD Project Manager shall schedule regular progress and status meetings with the Resource Management Coordinator. These meetings shall commence at the beginning of grading for each roadway improvement, when native ground is scheduled for disturbance (e.g., grading and/or stockpiling activities, etc.). The PF&RD Project Manager will attend these meetings and provide a status and progress report to the Director, PF&RD. These meetings will be held throughout the site preparation, grading and construction periods, for all the circulation and roadway improvements. The monitoring reports shall continue to be prepared and submitted by the Director, PF&RD or his designee until the disturbance is completed. The monitor shall be onsite before, during, and after the completion of site preparation, grading and construction for all of the circulation improvements.	Field Monitoring	Ongoing	Director, PF&RD
4.5-9c	Prior to any site preparation, grading, or construction activities in native areas, the Director PF&RD will ensure that focused surveys are conducted by qualified biologists for those species that potentially occur onsite, but which were not identified during the 1998 surveys, as described earlier in this EIR.	Field Surveys	Prior to any site preparation, grading, or construction activities in native areas	Director, PF&RD

Table G.A: Mitigation and Monitoring Reporting Program

MM No.	Mitigation Measures	Method of Verification	Timing for Mitigation Measures	Responsible Party
4.5-9d	In conjunction with final design and prior to any site preparation or grading in native areas, the Director PF&RD will ensure that all special status species and special habitats within 300 feet of the grading limits shall be mapped on the grading plans by a qualified biologist.	Plan Check/ Field Inspection	In conjunction with final design and prior to any site preparation or grading in native areas	Director, PF&RD
4.5-9e	Prior to any site preparation, grading, and construction activities, the Director PF&RD shall implement procedures for protecting special status and candidate species and special habitats identified and mapped on grading plans during site preparation, grading, construction, and maintenance activities for all of the circulation and roadway improvements affecting native areas.	Plan Check/ Field Inspection	Prior to any site preparation, grading, and construction activities in native areas	Director, PF&RD
4.5-10a	During site preparation and grading for the circulation uses, the Director Public Facilities and Resources Department (PF&RD) shall phase these operations outside significant habitat areas during the nesting and breeding season for the coastal California gnatcatcher. This measure will be overseen by a qualified biologist. During the site preparation and grading for circulation uses, the Director, Public Facilities and Resources Department (PF&RD) shall phase these operations outside significant habitat areas during the nesting and breeding season for the least Bell's vireo. This measure will be overseen and conducted by a qualified biologist. Prior to activities that may impact potential	Plan Check	During site preparation or direct/indirect disturbance to native or restored areas	Director, PF&RD
4.5-10b	The Director Public Facilities and Resources Department (PF&RD) shall ensure that grading and construction operations for the circulation uses are redirected temporarily around nesting sites for a distance of 500 feet for candidate and listed species of birds and a distance of 1,000 feet for raptors, during nesting and breeding seasons between February 15 and July 15, or a distance and time agreed upon by the USFWS. In the event that a coyote, bobcat or mountain lion den is located, then grading and construction operations shall be redirected temporarily around the den for a distance of 1,000 feet. The nesting sites and dens should be resurveyed toward the end of the breeding seasons and these species to verify completion of the breeding cycle. Nests and dens of non-listed species that will be removed due to grading and/or construction operations shall be removed only during the non-breeding season.	Field Monitoring	Prior to site preparation and construction operations	Director, PF&RD
4.5-11	The Director Public Facilities and Resources Department (PF&RD) shall ensure that during final design, the circulation component improvements continue to incorporate regulatory agency guidelines to reduce indirect impacts associated with noise, dust, night lighting, and blowing debris. Noise shall be controlled through the proper maintenance of the construction equipment, including trucks, bulldozers, and other mobile and fixed construction equipment. Dust shall be controlled at its source with standard wetting techniques consistent with applicable SCAQMD requirements. Low lighting alternatives and shielded lighting shall be employed to reduce indirect impacts on surrounding habitats.	Plan Check	Prior to approval of Final Circulation Facilities Design	Director, PF&RD
2001 GDP EIR Mitigation Monitoring and Reporting Program – Recreation Component				
4.5-12a	Prior to the removal of coastal sage scrub habitat resources including clearing, grubbing, mowing, discing, trenching, grading, duel modification, or other construction related activities, the Director Public Facilities and Resources Department (PF&RD) or his designee shall prepare and submit, in consultation with the PDSD Director of Planning or his designee, an IHLMP to the USFWS for review and approval in compliance with the Natural Communities Conservation Plan (NCCP) and the Interim Coastal Sage Scrub (CSS) Habitat Loss Process. The County remains committed to the Natural Communities Conservation Plan (NCCP) process and intends to operate by the same procedure outlined in the Federal Endangered Species Act Section 4(d) Special Rule for incidental Take of the coastal California gnatcatcher or other agreement as determined to be appropriate by the resource agencies.	Coastal Sage Scrub IHLMP or other resource agency-approved plan	Prior to removal of coastal sage scrub habitat resources	Director, PF&RD/HBP Director of Planning, PDSD
4.5-12b	The GDP shall be amended to include all applicable provisions of the approved Southern Subregion NCCP on its adoption by the County of Orange Board of Supervisors. The NCCP implementation programs may include, but are not limited to, requirements for the removal and mitigation replacement of lost coastal sage scrub habitat, operations restrictions, instructional signs, fencing, etc.	Plan Check	Subsequent to approval of the Southern Subregional NCCP	Director, PF&RD
4.5-12c	In accordance with an approved Conceptual Coastal Sage Scrub Mitigation Plan, the IWMD shall replace impacted coastal sage scrub at a 1:1 ratio replacement or as otherwise required. The IWMD shall prepare a Conceptual Coastal Sage Scrub Mitigation Plan in cooperation with the affected resource agencies (CDFG, USFWS). Guidelines for the Mitigation Plan shall be as follows: ● The mitigation areas/sites shall have been evaluated and selected on the basis of their suitability for use as coastal sage scrub revegetation areas. The parameters evaluated shall include but not be limited to soil condition, slope aspect, proximity to adjacent coastal sage scrub, level of difficulty of site preparation, and ownership status. ● The mitigation plan shall provide procedures to prepare the soils in the mitigation area, provide detailed seeding/planting mixtures; provide seeding/planting methods; and provide any other procedures, such as supplemental irrigation, mycorrhizal inoculation, etc., that will be used for successful vegetation. ● Maintenance and monitoring goals shall be established. The components and implementation of the maintenance and monitoring procedures shall be consistent with the components and implementation of mitigation measure 4.5-7a. In accordance with the approved Conceptual Coastal Sage Scrub Mitigation Plan, the IWMD shall develop a maintenance and monitoring program to ensure success of the revegetation effort. Maintenance shall include regulation inspection of the site for excessive weed growth, erosion problems, failure of irrigation system, and/or unhealthy or dying plants. Invasion of the site by weeds in the area, especially pampas grass, artichoke thistle, castor bean, fountain grass, mustard, clover, cocklebur, and tree tobacco could be a potential maintenance problem. Maintenance crews shall be able to recognize the difference between native plant and weed seedlings. A qualified biologist will be required	Plan Check	Prior to mitigation site preparation	Director, PF&RD

Table G.A: Mitigation and Monitoring Reporting Program

MM No.	Mitigation Measures	Method of Verification	Timing for Mitigation Measures	Responsible Party
	to instruct the maintenance crew in the identification of native plant seedlings. The maintenance program shall include procedures for regular maintenance and repair of the irrigation system. A system shall be developed for reporting by the maintenance crew of any unhealthy or dying plants or failure in any of the seeded areas. This would assist the monitoring crew in the development of immediate remedial measures, such as replacing plant material, to correct the problem. To document the success of revegetation programs, the IWMD shall ensure that the progress of the revegetated area is monitored by a qualified biologist. The maintenance and monitoring plan will address unique aspects of mitigation areas. An agreement shall be developed between the County and the USFWS and CDFG on criteria that will be used to determine successful plant establishment on a mitigation site. Success criteria will include plant cover, species diversity, habitat structure, and density, and will be based on measurements made in reference to habitats near the mitigation site.			
4.5-13a	Prior to site preparation and during final design for each recreational improvement, the Director Public Facilities and Resources Department (PF&RD) shall ensure that focused surveys are conducted by qualified biologists for the thread-leaved brodiaea, Coulter's saltbush, many-stemmed dudleya, southern tarplant, vernal barley, parniculate tarplant, and any other plant species that may warrant focused surveys in the future as determined by a qualified biologist. In addition, the Direct, PF&RD shall ensure that focused surveys are conducted by qualified biologists for the western spadefoot toad, southwestern willow flycatcher, and other wildlife species that may warrant focused surveys in the future as determined by a qualified biologist. The results of the surveys shall be incorporated into environmental documentation for future proposed projects within the Prima Deshecha Landfill. Identified special status species and habitats located within 300 feet of the affected area(s) shall be mapped on grading plans for each recreation improvement. In addition, the Director PF&RD shall implement procedures approved by the appropriate resource agencies to mitigate the potential impacts to those species. In the event that a phase would occur prior to spring surveys being conducted, habitat for the special status plant species shall be salvaged as appropriate. This material shall be used in an appropriate manner as determined by a qualified biologist. The appropriate agencies will be notified prior to disturbance. All future proposed projects within the Prima Deshecha Landfill shall provide vegetation mapping on topographic base maps at a scale of 1-inch equals 200-feet.	Field Surveys	Prior to site preparation or disturbance to native areas	Director, PF&RD/HBP
4.5-13b	The Director PF&RD shall ensure that, for the periods covering all site preparation, disturbance, or grading of native areas, A Resource Management Coordinator shall monitor wildlife habitat preservation. The purpose of this monitoring is to ensure that the Environmental Sensitive Areas and Environmentally Restrictive Areas (i.e., areas outside the grading limits) will not be adversely impacted during site preparation, grading, and construction of the recreation improvements. For the recreation improvements, the PF&RD Project Manager shall schedule regular progress and status meetings with the Resource Management Coordinator. These meetings shall commence at the beginning of grading for each recreation improvement, when native ground is scheduled for disturbance (e.g., grading and/or stockpiling activities, etc.). The PF&RD Project Manager will attend these meetings and provide a status and progress report to the Director, PF&RD. These meetings will be held throughout the site preparation, grading and construction periods, for all the recreation improvements. The monitoring reports shall continue to be prepared and submitted by the Director, PF&RD or his designee until the disturbance is completed. The monitor shall be onsite before, during, and after the completion of site preparation, grading and construction for all of the recreation improvements.	Field Monitoring	Ongoing	Director, PF&RD/HBP
4.5-14	During site preparation and grading for the recreation uses, the Director Public Facilities and Resources Department (PF&RD) shall phase these operations outside significant habitat areas during the nesting and breeding season for the coastal California gnatcatcher. This measure will be overseen by a qualified biologist. During the site preparation and grading for recreation uses, the Director, Public Facilities and Resources Department (PF&RD) shall phase these operations outside significant habitat areas during the nesting and breeding season for the least Bell's vireo. This measure will be overseen and conducted by a qualified biologist. Prior to activities that may impact potential.	Plan Check	Prior to site preparation or direct/indirect disturbance to native or restored areas	Director, PF&RD/HBP
4.5-15	The Director Public Facilities and Resources Department (PF&RD) shall ensure that grading and construction operations for the recreation uses are redirected temporarily around nesting sites for a distance of 500 feet for candidate and listed species of birds and a distance of 1,000 feet for rapiers, during nesting and breeding seasons between February 15 and July 15, or a distance and time agreed upon by the USFWS. In the event that a coyote, bobcat or mountain lion den is located, then grading and construction operations shall be redirected temporarily around the den for a distance of 1,000 feet. The nesting sites and dens should be resurveyed toward the end of the breeding seasons and these species to verify completion of the breeding cycle. Nests and dens of non-listed species that will be removed due to grading and/or construction operations shall be removed only during the non-breeding season.	Field Monitoring	Prior to site preparation and construction operations	Director, PF&RD/HBP
4.5-16	The Director Public Facilities and Resources Department (PF&RD) shall ensure that during final design, the recreation uses continue to incorporate regulatory agency guidelines to reduce indirect impacts associated with noise, dust, night lighting, and blowing debris. Noise shall be controlled through the proper maintenance of the construction equipment, including trucks, bulldozers, and other mobile and fixed construction equipment. Dust shall be controlled at its source with standard wetting techniques consistent with applicable SCAQMD requirements. Low lighting alternatives and shielded lighting shall be employed to reduce indirect impacts on surrounding habitats.	Plan Check	Prior to approval of final design for recreation uses	Director, PF&RD/HBP

Table G.A: Mitigation and Monitoring Reporting Program

MM No.	Mitigation Measures	Method of Verification	Timing for Mitigation Measures	Responsible Party
First Supplemental EIR to the 2001 GDP EIR				
4.5-1	The restoration of needlegrass grasslands will be incorporated into the Conceptual Coastal Sage Scrub Mitigation Plan (described below in MM 4.5-2a through 2c), the IWMD will replace impacted needlegrass grassland at a 1:1 ratio.	Plan Check	Prior to construction of landfilling improvements in Zones 1 and 4	Director, IWMD or Designee
4.5-2a	Prior to the removal of coastal sage scrub habitat resources including clearing, grubbing, mowing, disking, trenching, grading, fuel modification, or other construction-related activities, the Director, IWMD or his designee shall prepare and submit, in consultation with the Planning and Development Services Department (PDSD) Director of Planning or his designee, an Interim Habitat Loss Mitigation Plan (IHLMP) to the USFWS for review and approval in compliance with the Natural Communities Conservation Plan (NCCP) and Interim Coastal Sage Scrub (CSS) Habitat Loss Process. The County remains committed to the NCCP process and intends to operate by the same procedure outlined in the Federal Endangered Species Act Section 4(d) Special Rule for Incidental Take of the coastal California gnatcatcher or other agreement as determined to be appropriate by the resource agencies.	Coastal Sage Scrub IHLMP or other resource agency approved plan	Prior to the removal of coastal sage scrub habitat resource	Director, IWMD or Designee/Director of Planning, PDSD
4.5-2b	The GDP shall be amended to include all applicable provisions of the approved Southern Subregion NCCP on its adoption by the County of Orange Board of Supervisors. The NCCP implementation programs may include, but are not limited to, requirements for the removal and mitigation replacement of lost coastal sage scrub habitat, operations restrictions, instructional signs, fencing, etc.	Plan Check	Subsequent to approval of the Southern Subregional NCCP	Director, IWMD or Designee
4.5-2c	In accordance with an approved Conceptual Coastal Sage Scrub Mitigation Plan, the IWMD shall replace impacted coastal sage scrub at a minimum 1:1 (or as otherwise stated by USFWS) replacement ratio of in-kind habitat for on-site and off-site habitat preservation, replacement, or enhancement. The IWMD shall prepare a Conceptual Coastal Sage Scrub Mitigation Plan in cooperation with the affected resource agencies (CDFG, USFWS). Guidelines for the Mitigation Plan shall be as follows: ● The mitigation areas/sites shall have been evaluated and selected on the basis of their suitability for use as coastal sage scrub revegetation areas. The parameters evaluated shall include but not be limited to soil condition, slope aspect, proximity to adjacent coastal sage scrub, level of difficulty of site preparation, and ownership status. ● The mitigation plan shall provide procedures to prepare the soils in the mitigation area, provide detailed seeding/planting mixtures; provide seeding/planting methods; and provide any other procedures (such as supplemental irrigation, mycorrhizal inoculation, etc.) that will be used for successful revegetation. ● Maintenance and monitoring goals shall be established. The components and implementation of the maintenance and monitoring procedures shall be consistent with the components and implementation of Mitigation Measure 4.5-7a. In accordance with the approved Conceptual Coastal Sage Scrub Mitigation Plan, the IWMD shall develop a maintenance and monitoring program to ensure success of the revegetation effort. Maintenance shall include regular inspection of the site for excessive weed growth, erosion problems, failure of irrigation system, and/or unhealthy or dying plants. Invasion of the site by weeds in the area, especially pampas grass, artichoke thistle, castor bean, fountain grass, mustard, clover, cocklebur, and tree tobacco could be a potential maintenance problem. Maintenance crews shall be able to recognize the difference between native plant and weed seedlings. A qualified biologist will be required to instruct the maintenance crew in the identification of native plant seedlings. The maintenance program shall include procedures for regular maintenance and repair of the irrigation system. ● A system shall be developed for reporting by the maintenance crew of any unhealthy or dying plantings or failure in any of the seeded areas. This would assist the monitoring crew in the development of immediate remedial measures, such replacing plant material, to correct the problem. To document the success of revegetation programs, the IWMD shall ensure that the progress of the revegetated area is monitored by a qualified biologist. The maintenance and monitoring plan will address unique aspects of mitigation areas. An agreement shall be developed between the County and the USFWS and CDFG on criteria that will be used to determine successful plant establishment on a mitigation site. Success criteria will include plant cover, species diversity, habitat structure, and density and will be based on measurements made in reference habitats near the mitigation site.	Plan Check	Prior to mitigation site preparation	Director, IWMD or Designee
4.5-3a	Prior to grading for the landfilling activities affecting riparian resources, the IWMD, as appropriate, shall ensure that all sycamore and willow trees of four or more inches in diameter at breast height (DBH), defined as 4.5 feet from mean ground level, within the grading or construction limits of the landfilling activities (whichever is greater) and within 100 feet of grading and construction operations, shall be tagged and numbered with permanent tags under the supervision of a qualified biologist. The tag numbers of the trees to be protected and those to be removed shall be noted. Those trees adjacent to the construction areas that can be avoided will be tagged for protection. Trees that cannot be avoided during construction shall be tagged for removal and fenced off with red-orange flexible mesh fencing during grading and construction activities. Records of these numbers shall be kept by the Director, IWMD or his designee for use in mitigation, replacement, and monitoring of tree resources before, during, and after grading and construction activities. In addition, prior to grading and site preparation, the IWMD shall ensure that all trees subject to removal are marked with a red “X” on the trunk. Trees to be preserved shall be marked with yellow flagging visible from all directions and fenced-off with red-orange flexible mesh fencing during grading and construction activities.	Plan Check	Prior to grading for landfilling activities affecting riparian resources	Director, IWMD or Designee

Table G.A: Mitigation and Monitoring Reporting Program

MM No.	Mitigation Measures	Method of Verification	Timing for Mitigation Measures	Responsible Party
4.5-3b	During the process of obtaining the required 404 Permit Application and 1601 Streambed Alteration Agreement (1601/404) for encroachment into streambed areas and prior to site preparation, the IWMD shall prepare a Conceptual Riparian Mitigation Plan in cooperation with the affected resource agencies (CDFG, USFWS, USACE). Guidelines for the Mitigation Plan shall be as follows: ● The mitigation sites will be evaluated and selected on the basis of their suitability for use as riparian revegetation. The parameters evaluated shall include but not be limited to soil condition, hydrology, geology, and drainage considerations, level of difficulty of site preparation, access, contiguousness with existing habitat, and ownership status. ● The mitigation plan shall include the procedures for soil preparation, provide seeding/planting mixtures; include seeding/planting methods; and include any other procedures (such as supplemental irrigation, mycorrhizal inoculation, etc.) that will be used. ● Maintenance and monitoring goals shall be established. The components and implementation of the maintenance and monitoring assignments shall be consistent with the components and implementation of Mitigation Measure 4.5-3d.	Plan Check Verify inclusion in Plans and Specifications	Prior to mitigation site preparation Prior to approval of Plans and Specifications	Director, IWMD or Designee Director, IWMD or Designee
4.5-3c	In accordance with an approved Conceptual Riparian Mitigation Plan, the IWMD shall replace impacted riparian areas at a minimum 2:1 or higher ratio of in-kind or higher quality habitat. The required replacement acreage will be approved by the resource agencies having jurisdiction over the impacted resources (i.e., CDFG, USACE, USFWS), for all the GDP uses, based on jurisdictional delineations and vegetation mapping and the current 2001 GDP grading plan.	Field Inspection	Following implementation of Riparian Mitigation Plan	Director, IWMD
4.5-3d	During the process of obtaining the 404 Permit and 1601 Streambed Alteration Agreement, in accordance with the approved Conceptual Riparian Mitigation Plan, the IWMD shall develop a maintenance and monitoring program to ensure success of any revegetation effort. Maintenance shall include regular inspection of the site for excessive weed growth, erosion problems, failure of irrigation system, and/or unhealthy or dying plants. Invasion of the site by weeds in the area, especially pampas grass, artichoke thistle, mustard, clover, castor bean, fountain grass, cocklebur, and tree tobacco could be a potential maintenance problem. Maintenance crews shall be able to recognize the difference between native plant and weed seedlings. A qualified biologist will be required to instruct the maintenance crew in the identification of native plant seedlings. The maintenance program shall include procedures for regular maintenance and repair of the irrigation system. A system shall be developed for reporting by the maintenance crew of any unhealthy or dying plantings or failure in any of the seeded areas. This would assist the monitoring crew in the development of immediate remedial measures, such as increasing the irrigation rate or replacing plant material, to correct the problem. To document the success of revegetation programs, the IWMD shall ensure that the progress of the revegetated area is monitored by a qualified biologist. An agreement shall be developed between the County and the USACE, USFWS, or CDFG on criteria that will be used to determine successful plant establishment on a mitigation site. These criteria will include plant cover and density and will be based on measurements made in reference habitats near the mitigation site. The qualified biologist shall monitor the site for five years or until the site complies with required performance standards. If the biologist determines that the mitigation site meets the conditions of the performance criteria prior to the five-year period, documentation shall be submitted to the responsible agency for approval.	Maintenance and Monitoring Plan Check	Ongoing	Director, IWMD
4.5-3e	Prior to grading and site preparation adjacent to riparian areas outside the limits of construction, the IWMD shall incorporate instructions in the construction documents ensuring that, in conjunction with construction activities: ● Graded material spoils shall not be placed or stored near riparian areas outside the limits of construction. ● The removal of streamside or bank vegetation shall be avoided wherever feasible. ● The amount of habitat removed shall be limited to the minimum amount required for construction. ● Riparian areas in the vicinity of grading or heavy recreation use, such as in Zone 1, shall be designated as Environmentally Sensitive Areas onsite preparation, grading, and construction plans, and fenced off as appropriate for protection before any of these activities begin. ● Excess fill shall not be dumped in streams outside the limits of construction. ● Vehicles and equipment shall not be parked in washes or other drainages outside the limits of construction.	Plan Check	Ongoing	Director, IWMD or Designee
4.5-4a	Prior to site preparation and during final design for each phase of landfill development (i.e., Phases A–D in Zone 1 and Phases A–I in Zone 4), the Director, IWMD shall ensure that focused surveys are conducted by qualified biologists for the thread-leaved brodiaea, Coulter's saltbush, many-stemmed dudleya, southern tarplant, vernal barley, paniculate tarplant, and any other plant species that may warrant focused surveys in the future as determined by a qualified botanist. In addition, the Director, IWMD shall ensure that focused surveys are conducted by qualified biologists for the western spadefoot toad, southwestern willow flycatcher, and other wildlife species that may warrant focused surveys in the future as determined by a qualified biologist. The results of the surveys shall be incorporated into environmental documentation for future proposed projects within the Prima Deshecha site. Identified special status species and habitats located within 300 feet of the affected area(s) shall be mapped on grading plans for each phase of development. In addition, the Director, IWMD shall implement procedures approved by the appropriate resource agencies to mitigate the potential impacts to those species. In the event that landfill activities within a phase must occur prior to the completion of spring surveys, habitat for the special status plant species shall be salvaged, stored, and used in an appropriate manner as determined by a qualified	Field Surveys	Prior to site preparation and during final design for each phase of landfill development	Director, IWMD

Table G.A: Mitigation and Monitoring Reporting Program

MM No.	Mitigation Measures	Method of Verification	Timing for Mitigation Measures	Responsible Party
	biologist. The appropriate agencies will be notified prior to disturbance. All future proposed projects within the Prima Deshecha Landfill shall provide vegetation mapping on topographic maps at a scale of 1 inch equals 200 feet.			
4.5-4b	The IWMD shall ensure that, for the periods covering all site preparation, disturbance or grading of native areas, the Director, IWMD or his designee shall monitor wildlife habitat preservation. The purpose of this monitoring is to ensure that the Environmentally Sensitive Areas and Environmentally Restrictive Areas (i.e., areas outside the grading limits) will not be adversely impacted during site preparation, grading, and construction of the landfilling activities. For the landfilling activities, this inspection program shall be coordinated with the Site Manager at the weekly meetings held at the Landfill to review the planned grading program for the landfilling activities. These meetings shall commence at the start of each new phase, when native ground is schedule for disturbance (e.g., grading or stockpiling). The Director, IWMD or his designee will attend these meetings and provide a status and progress report to the Operations Manager. These meetings will be held throughout the site preparation, grading, and construction periods for all the landfilling activities, and the monitoring reports shall continue to be prepared and submitted by the Director, IWMD or his designee until the disturbance is completed. The monitor shall be on site before, during, and after the completion of site preparation, grading, and construction for all the landfilling activities.	Field Inspection	Ongoing	Director, IWMD or Designee
4.5-5a	During site preparation and grading for the landfill, the IWMD shall phase these operations outside significant habitat areas during the nesting and breeding season for the coastal California gnatcatcher. This measure shall be overseen and conducted by a qualified biologist. During site preparation and grading for the landfill, the IWMD shall phase these operations outside significant habitat areas during the nesting and breeding season for the least Bell's vireo. This measure shall be overseen and conducted by a qualified biologist. Prior to activities that may impact potential vireo habitat, updated vireo surveys will be conducted by a qualified biologist.	Plan Check	Prior to site preparation or direct/indirect disturbance to native or restored areas	Director, IWMD
4.5-5b	The IWMD shall ensure that grading and construction operations for the landfilling are redirected temporarily around nesting sites for a distance of 500 feet for candidate and listed species of birds and a distance of 1,000 feet for raptors during nesting and breeding seasons between February 15 and July 15, or a distance and time period agreed upon by the USFWS. In the event that a coyote, bobcat, or mountain lion den is located, then grading and construction operations shall be redirected temporarily around the den for a distance of 1,000 feet. The nesting sites and dens should be resurveyed toward the end of the breeding seasons of these species to verify completion of the breeding cycle. Nests and dens that will be removed due to the grading and/or construction operations shall be removed only during the non-breeding season.	Plan Check and Field Monitoring	Prior to site preparation and construction operations	Director, IWMD
4.5-6	The IWMD shall ensure that during final design, the landfill operation continues to incorporate regulatory agency guidelines to reduce indirect impacts associated with noise, dust, night lighting, and blowing debris. Noise shall be controlled through the proper maintenance of the construction equipment, including trucks, bulldozers, and other mobile and fixed construction equipment. Dust shall be controlled at its source with standard wetting techniques consistent with applicable Southern California Air Quality Management District (SCAQMD) requirements. Low lighting alternatives and shielded lighting shall be employed to reduce indirect impacts on surrounding habitats.	Plan Check	Prior to approval of the Final Design of a landfill phase or ancillary infrastructure facility	Director, IWMD or Designee
5.5-1	**Additional Provisions for Thread-Leaved Brodiaea.** Prior to the Initiation of construction within Phase C3, OCIWMD will obtain authorization to take the thread-leaved brodiaea may be obtained from CDFG through the provisions of Section 2081(b) of the California Fish and Game Code if no federal nexus is present such as a USACE Section 404. If a USACE Section 404 Permit is being pursued, IWMD would request consultation with the USFWS under Section 7 of the FESA. Consultation is required between the USFWS and a federal agency (such as the USACE) whenever a federal action is likely to adversely affect species listed as Threatened or Endangered, such as thread-leaved brodiaea. The anticipated federal action is the issuance/amendment of a 404 permit that will affect the thread-leaved brodiaea. At the conclusion of the consultation, the USFWS will prepare a Biological Opinion based upon its review of the information provided herein. The final Biological Opinion may include an incidental take statement. As part of the consultation process under Section 7 of the FESA, the CDFG will be consulted pursuant to Section 2080.1 of the California Fish and Game Code. Because the Project will affect a state-listed species, the thread-leaved brodiaea, CDFG concurrence with the Project conservation measures is required. The mitigation for the thread-leaved brodiaea will include the following requirements: ● A pre-construction survey during the peak flowering period, approximately March through June, will be conducted by a qualified biologist. The limits of each brodiaea location within the impact area will be clearly delineated with lath and brightly colored flagging. ● The loss of thread-leaved brodiaea will be mitigated by seed and bulb collection, and revegetation into suitable mitigation site(s). A qualified biologist shall prepare a mitigation plan for review/approval by the United States Fish and Wildlife Service and oversee its implementation. The detailed mitigation plan shall include the following requirements: ○ The known populations of thread- leaved brodiaea on the project site shall be determined and mapped as the "collection area." The collection area shall include only areas within the impact footprint. ○ The existing locations of thread- leaved brodiaea shall be monitored every two weeks by a qualified biologist to determine when the seeds are ready for collection. A qualified seed collector shall collect all of the seeds from the plants within the collection area when the seeds are ripe. The seeds will be cleaned and stored by a qualified nursery or institution with appropriate storage facilities.	Verify inclusion in Plans and Specifications	Prior to the initiation of construction	Director, IWMD or Designee

Table G.A: Mitigation and Monitoring Reporting Program

MM No.	Mitigation Measures	Method of Verification	Timing for Mitigation Measures	Responsible Party
	○ Following the seed collection, the bulbs shall be removed by an approved method (e.g., bulb collection or block transplantation). The bulbs shall either be transplanted directly or stored by a qualified nursery or institution with appropriate storage facilities. If the bulbs are collected and the block transplantation method is not used, then the top 12 inches of topsoil from the thread-leaved brodiaea locations shall be scraped, stockpiled, and used at the selected mitigation site. ○ The mitigation site(s) shall be located in open space. The site(s) shall not attempt to enhance existing populations and shall be located so as not to be impacted by any pesticides or herbicides used on adjacent properties. ○ The thread-leaved brodiaea mitigation site(s) will be prepared for seeding as described in a conceptual restoration plan. ○ The topsoil shall be re-spread in the selected location as approved by the project biologist. Approximately 60 percent of the seeds and bulbs collected shall be spread/placed in the fall following soil preparation. Forty percent of the seed and bulbs shall be kept in storage for subsequent seeding, if necessary. ○ A detailed maintenance and monitoring plan shall be developed by a qualified biologist. The plan shall include detailed descriptions of maintenance appropriate for the site, monitoring requirements, and annual report requirements and shall have the full authority to suspend any operation in the study area which is, in the qualified biologist's opinion, not consistent with the restoration plan. Any disputes regarding the consistency of an action with the restoration plan will be resolved by the appropriate Project Applicant and the biologist. ○ The performance criteria shall be developed in the maintenance and monitoring plan and approved by a qualified biologist. The performance criteria shall also include percent cover, density, and seed production requirements. These criteria shall be developed by a qualified biologist following habitat analysis of an existing high-quality thread-leaved brodiaea population. This information will be recorded by a qualified biologist. ○ If the germination goal is not achieved following the first season, remediation measures shall be implemented prior to seeding with the remaining 40 percent of seed and bulbs. Remedial measures shall include at a minimum: soils testing, control of invasive species, soil amendments, and physical disturbance (to provide scarification of the seed) of the planted areas by raking or similar actions. Additional mitigation measures may be suggested as determined appropriate by the project biologist. ○ Potential seed sources from additional donor sites shall also be identified in case it becomes necessary to collect additional seed for use on the site following performance of remedial measures. IWMD is currently pursuing authorization to collect seed and propagate the brodiaea as well as transplantation of the plants and soils containing plants from CDFG under Section 2081(b).			
5.5-2	**Fairy Shrimp Surveys.** Prior to the initiation of construction activities that involve the removal of any pond within Zone 4, the IWMD shall have focused surveys conducted for the San Diego fairy shrimp and Riverside fairy shrimp by a biologist possessing the necessary resource agency permits. The surveys will be performed during the winter season prior to any construction activities on the site that may impact appropriate habitat for the fairy shrimp (i.e., ponds). The surveys will follow the protocol developed by the USFWS for these species. If it is determined that either or both fairy shrimp species are not present, then no further mitigation is necessary. However, if one or both fairy shrimp species are present, then consultation with the USFWS will be necessary in order to obtain a take authorization prior to any construction activities that may impact the species. The permitting process would require the preparation of a Biological Assessment which would include a mitigation plan to avoid or minimize impacts on this species.	Verify inclusion in Plans and Specifications	Prior to initiation of construction that involve the removal of any pond within Zone 4	Director, IWMD or Designee
5.5-3	**Western Spadefoot Toad Surveys.** Prior to the initiation of construction activities that involve the removal of habitat that is known and/or has the potential to support the western spadefoot toad, the IWMD shall have a focused survey conducted, where appropriate, on the project site prior to any potential impacts and during the breeding season for this species (February through May). The survey results will be submitted within 30 days after completion of the last survey to the CDFG for concurrence. Based on the May 3, 2005 survey results, a relocation program will be developed for western spadefoot on the project site. The relocation program will include a detailed methodology for locating, capturing, and relocating individuals prior to construction. The program will identify a suitable location for relocation of the western spadefoot prior to capture. The relocation program will require a biologist with the necessary permits for handling the western spadefoot. Prior to implementation of the relocation program, the program and the biologist(s) implementing the program will be subject to approval of the CDFG.	Verify inclusion in Plans and Specifications	Prior to initiation of construction activities that involve the removal of habitat that is known and/or has the potential to support the western spadefoot toad	Director, IWMD or Designee
5.5-4	**Existing Mitigation and Future Pre-Mitigation.** Any disturbance to existing or future mitigation areas, including those created by the Pre- Mitigation Plan or the Regional Environmental Enhancement Plan contained herein, shall be restored by the IWMD at the completion of the landfilling activity during the next growing season using a hydroseed mix consistent with the appropriate approved mitigation plan. All restored areas will be maintained to remove non-native invasive plant species for a maximum of three years. Implementation of this mitigation measure shall constitute full compliance with the provisions of SEIR 597 and the approved CSS/NG Mitigation Plan. No further mitigation will be assessed against IWMD by the resource agencies.	Verify inclusion in Plans and Specifications	Any disturbance to existing or future mitigation areas	Director, IWMD or Designee

Table G.A: Mitigation and Monitoring Reporting Program

MM No.	Mitigation Measures	Method of Verification	Timing for Mitigation Measures	Responsible Party
CULTURAL/SCIENTIFIC RESOURCES				
2001 GDP EIR Mitigation Monitoring and Reporting Program – Landfill Component				
4.6-1	Prior to the initiation of any site modifications, the IWMD shall contract with a County-certified archeologist who will prepare a Testing, Monitoring and Salvage Program for Archeological Resources for the GDP landfilling activities. The Plan shall identify the specific pre-disturbance subsurface testing program and the specific monitoring procedures, scheduling, staffing and other elements to ensure adequate testing, identification and salvage of archeological resources prior to and during grading, site preparation, earth moving and excavation activities associated with the GDP landfilling activities. The Plan shall also identify procedures for in-place preservation of resources including the identification of typical resources that would be preserved in-place. The Plan shall also establish the authority for halting or temporarily relocating construction during preservation activities and other procedures as necessary.	Plan Check	Prior to approval of the Final Design of a landfill phase or ancillary infrastructure facility	Director, IWMD
4.6-2	Prior to the initiation of any site modifications, the IWMD shall contract with a County-certified paleontologist who will prepare a Monitoring and Salvage Plan for Paleontological Resources for the GDP landfilling activities. The Plan will identify the specific monitoring procedures, scheduling, staffing and other elements to ensure adequate identification and salvage of fossil materials during grading, site preparation, earth moving and excavation activities associated with the GDP landfilling activities. The Plan shall also identify procedures for in-place preservation of resources including the identification of typical resources that would be preserved in-place. The Plan shall also establish the authority for halting or temporarily relocating construction during the preservation activities and other procedures as necessary.	Plan Check	Prior to approval of the Final Design of a landfill phase or ancillary infrastructure facility	Director, IWMD
2001 GDP EIR Mitigation Monitoring and Reporting Program – Circulation Component				
4.6-3	Prior to the initiation of any site modifications, the PF&RD/Road Programs shall contract with a County-certified archeologist who will prepare a Testing, Monitoring and Salvage Program for Archeological Resources for the GDP circulation and roadway improvements. The Plan shall identify the specific pre- disturbance subsurface testing program and the specific monitoring procedures, scheduling, staffing and other elements to ensure adequate testing, identification and salvage of archeological resources prior to and during grading, site preparation, earth moving and excavation activities associated with the GDP circulation and roadway improvements. The Plan shall also identify procedures for in-place preservation of resources including the identification of typical resources that would be preserved in-place. The Plan shall also establish the authority for halting or temporarily relocating construction during preservation activities and other procedures as necessary.	Plan Check	Prior to approval of final Circulation Facilities Design	Director, PF&RD/Road Programs
4.6-4	Prior to the initiation of any site modifications, the PF&RD/Road Programs shall contract with a County-certified paleontologist who will prepare a Monitoring and Salvage Plan for Paleontological Resources for the GDP circulation and roadway improvements. The Plan shall identify the specific monitoring procedures, scheduling, staffing and other elements to ensure that on-site monitoring allows for adequate identification and salvage of fossil materials during grading, site preparation, earth moving and excavation activities associated with the GDP circulation and roadway improvements. The Plan shall also identify procedures for in-place preservation of resources including the identification of typical resources that would be preserved in-place. The Plan shall also establish the authority for halting or temporarily relocating construction during the preservation activities and other procedures as necessary.	Plan Check	Prior to approval of final design for recreation uses	Director, PF&RD/Road Programs
2001 GDP EIR Mitigation Monitoring and Reporting Program – Recreation Component				
4.6-5	Prior to the initiation of any site modifications, the PF&RD/HBP shall contract with a County-certified archeologist who will prepare a Testing, Monitoring and Salvage Program for Archeological Resources for the interim and ultimate GDP recreation activities. The Plan shall identify the specific pre-disturbance subsurface testing program and the specific monitoring procedures, scheduling, staffing and other elements lo ensure adequate testing, identification and salvage of archeological resources prior to and during grading, site preparation, earth moving and excavation activities associated with the interim and ultimate GDP recreation uses. The Plan shall also identify procedures for in-place preservation of resources including the identification of typical resources that would be preserved in-place. The Plan shall also establish the authority for halting or temporarily relocating construction during preservation activities and other procedures as necessary.	Plan Check	Prior to approval of final design for recreation uses	Director, PF&RD/HBP
4.6-6	Prior to the initiation of any site modifications, the PF&RD/HBP will contract with a-County-certified paleontologist who will prepare a Monitoring and Salvage Plan for Paleontological Resources for the interim and ultimate GDP recreation uses. The Plan shall identify the specific monitoring procedures, scheduling, staffing and other elements to ensure adequate identification and salvage of fossil materials during grading, site preparation, earth moving and excavation activities associated with the interim and ultimate GDP recreation uses. The Plan shall also identify procedures for in-place preservation of resources including the identification of typical resources that would be preserved in-place. The Plan shall also establish the authority for halting or temporarily relocating construction during the preservation activities and other procedures as necessary.	Plan Check	Prior to approval of final design for recreation uses	Director, PF&RD/HBP
LAND USE/RELEVANT PLANNING				
2001 GDP EIR Mitigation Monitoring and Reporting Program – Landfill Component				
4.7-1	During final design and implementation of the GDP landfilling activities, the IWMD shall ensure, to the extent feasible and that funding is available, that the landfill disposal areas and associated permanent and temporary landfilling facilities are sited so as to minimize visibility from beyond the site, particularly with regard to ridgelines protected by ordinances in the cities of San Clemente and San Juan Capistrano. For landfill areas and/or facilities not able to be sited below intervening protected ridgelines, options for reducing or minimizing views of operations and facilities from off-site sensitive viewsheds may include retention of natural topography, landscaping, berms and other methods as feasible and as funding is available.	Plan Check	Prior to approval of the Final Design of a landfill phase or ancillary infrastructure facility	Director, IWMD
4.7-2	Above-ground landfill facilities within the 200-foot "major ridgeline" protection zone established by the City shall be prohibited with the exception of required above- ground monitoring and maintenance facilities (e.g., risers, check valves, etc.) less than five (5) feet in height. Non-landfill facilities or structures shall be prohibited within the 200-foot "major ridgeline" protection zone.	Plan Check	Prior to approval of the construction plans	Director, IWMD

Table G.A: Mitigation and Monitoring Reporting Program

MM No.	Mitigation Measures	Method of Verification	Timing for Mitigation Measures	Responsible Party
4.7-3	Prior to the completion and approval of construction plans, the IWMD shall ensure that the design of the flare stations needed under the GDP landfilling activities incorporates the following types of features to reduce the visual effect of these facilities: ● Landscaping around the flare stations will be developed to allow for a natural appearance of the area. Cut and fill areas resulting from the construction of the flare stations will be gently contoured consistent with the area topography and will be landscaped. ● The flare stacks and other flare station facilities will be painted light brown colors, similar to the existing flare station facilities.	Plan Check	Prior to approval of the construction plans	Director, IWMD
2001 GDP EIR Mitigation Monitoring and Reporting Program – Circulation Component				
4.7-4	The PF&RD/Traffic Engineering/Road Programs and PF&RD/HBP shall coordinate on the final design of the La Pata Avenue extension and the design of any trails that will cross La Pata Avenue on-site. The crossings will be designed with signing and pavement markings consistent with County standards for both vehicular and trail users regarding safe procedures for trail users in approaching and using the trail crossing and to alert drivers on La Pata Avenue of the need to stop for trail users crossing the roadway.	Plan Check	Prior to approval of the final design of La Pata Avenue	Director, PF&RD/HBP Manager, PF&RD/Traffic Engineering/Road Programs
4.7-5	When the grade separated culvert under La Pata Avenue is constructed for a trail crossing, the PF&RD/Traffic Engineering/Road Programs will remove the on street signing and pavement marking at this location. The PF&RD/HBP will be responsible for redesigning the trail as it crosses La Pata Avenue, to direct trail users to the grade separated culvert. The design of the culvert and the trail crossing should clearly restrict any future use of the at-grade crossing on La Pata Avenue. Additionally, the grade-separated culvert shall be constructed consistent with the County of Orange Regional Riding and Hiking Design Manual trail design standards. If there are other remaining at-grade trail crossings, the PF&RD/Traffic Engineering/Road Programs and PF&RD/HBP will continue to maintain the required signing and pavement markings for these crossings on La Pata Avenue.	Field Inspection	Subsequent to construction of the grade-separated culvert under La Pata Avenue	Director, PF&RD/HBP
2001 GDP EIR Mitigation Monitoring and Reporting Program – Recreation Component				
4.7-6	The PF&RD/Traffic Engineering/Road Programs and the PF&RD/HBP shall coordinate on the final design of the La Pata Avenue extension and the design of any trails that will cross La Pata Avenue on-site. The crossings will be designed with signing and pavement markings consistent with County standards for both vehicular and trail users regarding safe procedures for trail users in approaching and using the trail crossing and to alert drivers on La Pata Avenue of the need to stop for trail users crossing the roadway.	Plan Check	Prior to approval of the final design for La Pata Avenue	Director, PF&RD/HBP Director, PF&RD/Traffic Engineering/Road Programs
4.7-7	When the grade separated culvert under La Pata Avenue is constructed for a trail crossing, the PF&RD/Traffic Engineering/Road Programs will remove the on- street signing and pavement marking at this location. The PF&RD/HBP will be responsible for redesigning the trail as it crosses La Pata Avenue, to direct trail users to the grade separated culvert. The design of the culvert and the trail crossing should clearly restrict any future use of the at-grade crossing on La Pata Avenue. Additionally, the grade-separated culvert shall be constructed consistent with the County of Orange Regional Riding and Hiking Design Manual trail design standards. If there are other remaining at-grade trail crossings, the PF&RD/Traffic Engineering/Road Programs and PF&RD/HBP will continue to maintain the required signing and pavement markings for these crossings on La Pata Avenue.	Field Inspection	Subsequent to construction of the grade-separated culvert under La Pata Avenue	Director, PF&RD/HBP Director, PF&RD/Traffic Engineering/Road Programs
4.7-8	During final design for the recreation facilities, the PF&RD/HBP shall ensure that no permanent facilities (i.e., structural features) other than at-grade trails are located on key ridgelines in the cities of San Clemente and San Juan Capistrano. All permanent recreation facilities shall be located below these key ridgelines such that they are not visible from viewpoints within these cities.	Plan Check	Prior to approval of final design for recreation uses	Director, PF&RD/HBP
AIR QUALITY				
2001 GDP EIR Mitigation Monitoring and Reporting Program – Landfill Component				
4.9-1	Landfill fee station personnel and/or landfill refuse inspectors shall reject extremely odorous loads for disposal in the landfill.	Field Inspection	Daily	Landfill Site Supervisor
4.9-2	The active face of the landfill shall be covered daily. If the active face is in close proximity and upwind of on-site recreation uses, masking or neutralization agents may be added to exposed refuse to reduce the odor nuisance effects on the adjacent recreation uses.	Field Inspection	Daily	Landfill Site Supervisor
4.9-3	The IWMD shall design, construct and operate new landfill areas in Zones 1 and 4 with LFG systems to maximize the collection of LFG. The LFG systems will include continuous monitoring of the LFG collection system to maximize efficient collection of LFG generated in these areas.	Plan Check	Prior to approval of the LFG system	Director, IWMD
4.9-4	During landfill operations, the IWMD shall continue regular visual inspections of the landfill cover and monitoring of LFG emissions throughout the entire refuse fill areas. The purpose of these inspections is to locate cracks or other defects or flaws in the landfill cover which may allow LFG to escape. When such areas are identified, the IWMD will implement the appropriate corrective action as soon as feasible. These corrective actions may include application and compaction of additional cover material, adjustment of the existing LFG control system and/or installation of new LFG control facilities.	Field Inspection	Quarterly	Landfill Site Supervisor
4.9-5	During landfill operations, the IWMD shall conduct periodic odor surveys on the landfill site and at various points in the area surrounding the site. The IWMD shall conduct odor surveys if any odors from the landfill are detected off-site and reported by nearby residents. When the source of these odors is identified, the IWMD will implement the appropriate corrective action as soon as feasible. These corrective actions may include application and compaction of additional cover material, use of masking or neutralizing agents, adjustment of the existing LFG control system and/or installation of new LFG control facilities.	Field Inspection	Daily	Landfill Site Supervisor
4.9-6	During landfill operations, the IWMD shall ensure that landfill operations areas that are to be left exposed temporarily, including top deck and excavation slopes, are sprayed periodically with water, as needed.	Field Inspection	Ongoing	Landfill Site Supervisor
4.9-7	On landfilled areas that are no longer in use, the IWMD will, as appropriate, incorporate dust control systems or vegetative covers, consistent with the Final Closure Plans and with IWMD's approved Rule 403 Compliance Plan for landfilling Zones 1 and 4.	Field Inspection	Ongoing	Landfill Site Supervisor

Table G.A: Mitigation and Monitoring Reporting Program

MM No.	Mitigation Measures	Method of Verification	Timing for Mitigation Measures	Responsible Party
4.9-8	During landfill operations, the landfill fee station personnel and/or landfill refuse inspectors shall refrain from accepting dusty loads of refuse for disposal in either landfilling Zone 1 or 4. Alternatively, at the discretion of landfill personnel, dusty loads of refuse may be accepted for disposal, if they are sprayed with water prior to leaving the fee station and accessing the active face of the landfill.	Field Inspection	Daily	Landfill Fee Station Personnel
4.9-9a	During landfill operations, the IWMD shall maintain water trucks on-site to spray water on on-site unpaved roads as needed to minimize the generation of dust as vehicles travel on these roads, as per IWMD's approved Rule 403 Compliance Plan.	Field Inspection	Daily	Landfill Site Supervisor
4.9-9b	During landfill operations, the IWMD shall, to the extent feasible while still maintaining appropriate landfill operations, restrict vehicular travel on unpaved roads on the site. In the event that unpaved roads must be used, the IWMD shall spray water on these roads as needed.	Field Inspection	Daily	Field Inspection
4.9-9c	As unpaved on-site roads are removed from active service, the IWMD will spray these areas with a hydromulch solution or synthetic binder.	Field Inspection	Ongoing	Landfill Site Supervisor
4.9-10	During landfill operations, the IWMD will use the on-site water trucks to spray water on graded areas or areas where the vegetation has been removed or severely disturbed as a result of landfilling activities, as per IWMD's approved Rule 403 Compliance Plan.	Field Inspection	Ongoing	Landfill Site Supervisor
2001 GDP EIR Mitigation Monitoring and Reporting Program – Circulation Component				
4.9-11	Prior to approval of construction plans, the IWMD will ensure that the construction contractor complies with the requirements of IWMD's Compliance Plan with SCAQMD Rule 403. These requirements address the use of one or more dust control measures and removal of tracked-out dirt from traveled roadways for construction both outside and within the landfill boundary.	Plan Check	Prior to approval of construction plans	Director, IWMD
2001 GDP EIR Mitigation Monitoring and Reporting Program – Recreation Component				
4.9-12	The County of Orange PF&RD/HBP will ensure, as part of the construction documents, that the construction contractor complies with the requirements of SCAQMD Rule 403. These requirements address the use of one or more dust control measures and removal of tracked-out dirt from traveled roadways for construction both outside and within the landfill boundary. The contractors will specifically be required to cease the new grading of right-of-way when hourly average wind speeds exceed 25 miles per hour since high winds decrease the effectiveness of any dust control measures in effect.	Plan Check	Prior to approval of construction plans	Director, PF&RD/HBP
4.9-13	The PF&RD/HBP shall ensure that all purchase of new maintenance and utility equipment and golf carts are electric or are fueled by clean gaseous fuels. In the event that PF&RD/HBP contracts with concessionaires to provide either or both maintenance and golf cart services, PF&RD/HBP will include language in the contract requiring the concessionaire to use electric or clean fuel vehicles for these uses.	Plan Check	Prior to purchase of maintenance and utility equipment	Director, PF&RD/HBP
First Supplemental EIR to the 2001 GDP EIR				
4.9-1	Landfill fee station personnel and/or landfill refuse inspectors shall reject extremely odorous loads for disposal in the landfill.	Field Inspection	Daily	Landfill Fee station personnel and/or landfill refuse inspectors
4.9-2	The active face of the landfill shall be covered daily. If the active face is in close proximity and upwind of on-site recreation uses, masking or neutralization agents may be added to exposed refuse to reduce the odor nuisance effects on the adjacent recreation uses.	Field Inspection	Daily	IWMD-Assigned Monitor
4.9-3	The IWMD shall design, construct, and operate new landfill areas in Zones 1 and 4 with LFG systems to maximize the collection of LFG. The LFG systems will include continuous monitoring of the LFG collection system to maximize efficient collection of LFG generated in these areas	Plan Check	Prior to the approval of the LFG system	Director, IWMD or Designee
4.9-4	During landfill operations, the IWMD shall continue regular visual inspections of the landfill cover and monitoring of LFG emissions throughout the entire refuse fill areas. The purpose of these inspections is to locate cracks or other defects or flaws in the landfill cover, which may allow LFG to escape. When such areas are identified, the IWMD will implement the appropriate corrective action as soon as feasible. These corrective actions may include application and compaction of additional cover material, adjustment of the existing LFG control system, and/or installation of new LFG control facilities.	Field Inspection	Quarterly	Landfill Site Supervisor
4.9-5	During landfill operations, the IWMD shall conduct periodic odor surveys on the landfill site and at various points in the area surrounding the site. The IWMD shall conduct odor surveys if any odors from the landfill are detected off site and reported by nearby residents. When the source of these odors is identified, the IWMD will implement the appropriate corrective action as soon as feasible. These corrective actions may include application and compaction of additional cover material, use of masking or neutralizing agents, adjustment of the existing LFG control system, and/or installation of new LFG control facilities.	Field Inspection	Daily	IWMD-Assigned Monitor
4.9-6	During landfill operations, the IWMD shall ensure that landfill operations areas that are to be left exposed temporarily, including top deck and excavation slopes, are sprayed periodically with water, as needed.	Field Inspection	Ongoing	IWMD-Assigned Monitor
4.9-7	On landfilled areas that are no longer in use, the IWMD will, as appropriate, incorporate dust control systems or vegetative covers, consistent with the Final Closure Plans and with IWMD's approved Rule 403 Compliance Plan for landfilling Zones 1 and 4.	Field Inspection	Ongoing	Landfill Site Supervisor
4.9-8	During landfill operations, the landfill fee station personnel and/or landfill refuse inspectors shall refrain from accepting dusty loads of refuse for disposal in either landfilling Zone 1 or 4. Alternatively, at the discretion of landfill personnel, dusty loads of refuse may be accepted for disposal if they are sprayed with water prior to leaving the fee station and accessing the active face of the landfill.	Field Inspection	Ongoing	Landfill Fee Station Personnel
4.9-9a	During landfill operations, the IWMD shall maintain water trucks on site to spray water on unpaved roads, as needed, to minimize the generation of dust as vehicles travel on these roads (per IWMD's approved Rule 403 Compliance Plan).	Field Inspection	Daily	Landfill Site Supervisor
4.9-9b	During landfill operations, the IWMD shall, to the extent feasible while still maintaining appropriate landfill operations, restrict vehicular travel on unpaved roads on the site. In the event that unpaved roads must be used, the IWMD shall spray water on these roads, as needed.	Field Inspection	Daily	Landfill Site Supervisor

Table G.A: Mitigation and Monitoring Reporting Program

MM No.	Mitigation Measures	Method of Verification	Timing for Mitigation Measures	Responsible Party
4.9-9c	As unpaved on-site roads are removed from active service, the IWMD will spray these areas with a hydromulch solution or synthetic binder.	Field Inspection	Ongoing	Landfill Site Supervisor
4.9-10	During landfill operations, the IWMD will use the on-site water trucks to spray water on graded areas or areas where the vegetation has been removed or severely disturbed as a result of landfilling activities (per IWMD's approved Rule 403 Compliance Plan).	Field Inspection	Ongoing	Landfill Site Supervisor
5.4-1	IWMD and its contractors shall be required to comply with regional rules to reduce air pollutant emissions. SCAQMD Rule 401 sets limits on the opacity of visible plumes of dust resulting from activities at the landfill. SCAQMD Rule 402 requires that air pollutant emissions generated at the landfill not be a nuisance off site. SCAQMD Rule 403 requires that fugitive dust be controlled with the best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. Two options are presented in Rule 403: monitoring of particulate concentrations or active control. Monitoring involves a sampling network around the project with no additional control measures unless specified concentrations are exceeded. The active control option does not require any monitoring, but requires that a list of measures be implemented on a daily basis. SCAQMD Rule 403 requires that "best available control measures" be utilized whenever a dust- generating activity occurs in the Air Basin. These measures are listed in Table 1 of Rule 403 and called out in Table 5.4-6 (see Attachment A) It is important to note that all applicable measures from Table 5.4-6 should be implemented to achieve the required PM10 emissions reductions. Rule 403 requires that "Large Projects" implement additional measures. A Large Project is defined as "any active operations on property which contains 50 or more acres of disturbed surface area; or any earth-moving operation with a daily earth-moving or throughput volume of 3,850 cubic meters (5,000 cubic yards) or more than three times during the most recent 365 day period. The Prima Deshecha Landfill would be considered a Large Project under Rule 403. Therefore, the landfill is required to implement the applicable actions specified in Table 2 of the Rule. Table 2 from Rule 403 is presented as Table 5.4-7 (see Attachment A). As a Large Operation, the landfill will also be required to: ● Submit a fully executed Large Operation Notification (SCAQMD Form 403N) to the SCAQMD Executive Officer within 7 days of qualifying as a large operation; ● Include, as part of the notification, the name(s), address(es), and phone number(s) of the person(s) responsible for the submittal, and a description of the operation(s), including a map depicting the location of the site; ● Maintain daily records to document the specific dust-control actions taken, maintain such records for a period of not less than three years; and make such records available to the Executive Officer upon request; ● Install and maintain project signage with project contact signage that meets the minimum standards of the Rule 403 Implementation Handbook, prior to initiating any earthmoving activities; ● Identify a dust control supervisor that is employed by or contracted with the property owner or developer, is on the site or available on-site within 30 minutes during working hours, has the authority to expeditiously employ sufficient dust mitigation measures to ensure compliance with all Rule requirements, and has completed the AQMD Fugitive Dust Control Class and has been issued a valid Certificate of Completion for the class; and ● Notify the SCAQMD Executive Officer in writing within 30 days after the site no longer qualifies as a large operation.	Verify inclusion in Plans and Specifications	Prior to approval of Plans and Specifications	Director, IWMD or Designee
5.4-2	To reduce equipment emissions, the following measures shall be implemented when feasible. ● Use low emission mobile construction equipment. "CARB Certified" heavy construction equipment conforms to the latest off-road CARB emission standards and is the lowest polluting equipment available. The use of this equipment would reduce heavy equipment NOx emissions by approximately 30 percent and heavy equipment PM10 emissions by approximately 50 percent from the emissions levels shown in Tables 5.4-3 through 5.4-5. This is a substantial reduction but will not reduce emissions to less than the significance thresholds. ● Maintain construction equipment engines by keeping them tuned. ● Use low sulfur fuel for stationary construction equipment. This is required by SCAQMD Rules 431.1 and 431.2. ● Utilize existing power sources (i.e., power poles) when feasible. This measure would minimize the use of higher polluting gas or diesel generators. ● Use aqueous diesel fuel where feasible and reasonably commercially available. ● Use cooled exhaust gas recirculation (EGR) where feasible and reasonably commercially available. Several of the mitigation measures listed above are advanced emission control technologies that are currently not commercially available. For example, aqueous diesel fuel reduces NOx formation by reducing combustion temperatures, which results in lower NOx emissions. According to the SCAQMD, the current availability of this fuel technology is limited, and it may not be available for use at the landfill. In addition, with EGR diesel engines, a small amount of hot exhaust gas is routed through a cooler and is mixed with	Verify inclusion in Plans and Specifications	Prior to approval of Plans and Specifications	Director, IWMD or Designee

Table G.A: Mitigation and Monitoring Reporting Program

MM No.	Mitigation Measures	Method of Verification	Timing for Mitigation Measures	Responsible Party
	fresh air entering the engine. The exhaust gas helps reduce the temperature during combustion, which lowers the formation of thermal NOx. EGR technology is in the development phase and has not been fully commercialized. To the extent that the advanced emissions-control technologies become reasonably commercially available, or are required by the CARB from grading contractors, then such advanced emissions-control technologies will be used. Furthermore, a requirement to install diesel particulate filters on construction equipment used at the landfill was considered to further reduce emissions. However, the availability of construction equipment retrofitted with diesel particulate filters is limited. This is a result of operational problems in diesel engines equipped with these filters. Therefore, this potential mitigation measure for construction is considered infeasible.			
2025 Subsequent EIR to the 2001 GDP EIR				
4.1-1	All off-road diesel-powered equipment used during project operation shall have engines that meet or exceed the California Air Resources Board Tier 4 Final emissions standards.	Verify inclusion in Plans and Specifications for Flare 3	Prior to approval of Plans and Specifications for Flare 3	Director, OCWR or Designee
GREENHOUSE GAS EMISSIONS				
2025 Subsequent EIR to the 2001 GDP EIR				
Previously adopted mitigation measures 4.9-3 and 4.9-4 from the 2001 GDP EIR, and mitigation measures 5.4-1 and 5.4-2 from the First Supplemental EIR to the 2001 GDP EIR would be implemented to address impacts related to greenhouse gas emissions.				
NOISE				
2001 GDP EIR Mitigation Monitoring and Reporting Program – Landfill Component				
4.10-1	Although the construction associated with landfilling under the GDP is not anticipated to result in significant noise impacts on residential uses adjacent to the site, the IWMD shall reduce landfill operations noise impacts to the extent feasible based on available funds through the use of landscaping, berms at the face of each landfill lift, phased construction of the landfill areas and the use of buffer areas between noise sources and sensitive recreation receptors.	Plan Check	Prior to approval of the Final Design of each landfill phase	Director, IWMD
2001 GDP EIR Mitigation Monitoring and Reporting Program – Circulation Component				
4.10-2	During final design, the Director PF&RD shall mitigate traffic noise impacts through the use of landscaping buffers and setbacks from the street right-of-way by incorporating these features in the design of the street improvements.	Plan Check	Prior to approval of Final Design	Director, PF&RD
4.10-3	During construction operations, the Director PF&RD shall mitigate noise levels associated with the construction of on-site roadways adjacent to sensitive receptors through the use of limited construction hours, landscape buffers and sound barriers as determined appropriate.	Plan Check	Prior to approval of Final Design	Director, PF&RD
2001 GDP EIR Mitigation Monitoring and Reporting Program – Recreation Component				
4.10-4	The PF&RD/HBP shall mitigate noise levels associated with the construction of recreation uses adjacent to sensitive receptors through the use of limited construction hours and landscape buffers as determined appropriate.		Plan	Check
AESTHETICS				
2001 GDP EIR Mitigation Monitoring and Reporting Program – Landfill Component				
4.11-1	Prior to final design, the IWMD, shall establish landscape standards for plantings in areas to be revegetated or screened from view. These guidelines shall illustrate all plant materials, sizes, species and quantities plus irrigation and preservation techniques. There shall be a variety of landscape types addressed including revegetating graded slopes and earthen berms, and screening of landfill operations structures and permanent landfill buildings. Roads and trail cuts will be revegetated with natural grasses, shrubs and trees to blend with the landscape character of adjacent areas. Additionally, trees selected for planting shall comply with the appropriate state and local regulatory requirements for the protection of groundwater.	Plan Check	Prior to approval of the Final Design of each landfill phase	Director, IWMD/ Director, PF&RD/HBP
4.11-2	During final design and construction, the IWMD shall ensure that plantings will be integrated with earthen berms and cut slopes to screen undesirable views. For these situations, the landscape design guidelines shall include grading guidelines which will address issues such as the areas where berms are recommended, the sizes of such berms and recommended slope gradients to minimize soil erosion.	Field Inspection	During final design of each landfill phase and construction	Director, IWMD/ Director, PF&RD/HBP
4.11-3	During final design, the IWMD shall incorporate design features to ensure that the design and exterior treatment of landfill operations structures and permanent recreation buildings vary in their visual character. Because of varying topography and vegetative cover, each structure and Zone will be visually unique in its apparent size and quality. Building materials shall be selected so that, in all conditions, all visible permanent structures will blend with the surrounding natural environment. A light earthtone surface color such as beige or sand is the desired exterior treatment color.	Plan Check	Prior to final design of landfill operational structures or permanent recreation facilities	Director, IWMD
4.11-4	As early as possible in the construction and operation of the active and closed landfill areas, the IWMD shall plant the landscape areas that will take the longest time to establish and achieve their desired visual effects. In general, rehabilitation priorities will be established based on size and visibility of the area to be landscaped. In most cases, these will be the landfilling areas in Zones 1 and 4 that are visible from adjacent land uses.	Plan Check	During preliminary design of future landfill phases	Director, IWMD
4.11-5	IWMD shall ensure that the design and construction of any permanent environmental control structures which occur within 200 feet of a major ridgeline are constructed in a manner which minimizes visibility off-site so as not to interrupt the natural horizon line in the existing landscape.	Plan Check	Prior to approval of permanent environmental control structure	Director, IWMD

Table G.A: Mitigation and Monitoring Reporting Program

MM No.	Mitigation Measures	Method of Verification	Timing for Mitigation Measures	Responsible Party
4.11-6a	The IWMD shall ensure that the design and layout of the landfill areas includes landscaping to reduce the visual impact of the landfill surfaces following the closure of each landfill area. The IWMD shall ensure that the landscaping consists of vegetation with plantings that are consistent with the surrounding natural terrain. The IWMD shall ensure that the landscaping plantings include appropriate transitions with areas of native vegetation and areas landscaped for recreation uses. A recommended candidate plant species palette is shown in Table 4.11-1 (refer to the Draft EIR).	Plan Check	Prior to approval of Final Closure Plan	Director, IWMD
4.11-6b	Following temporary or final closure of landfill surfaces, hydroseeding shall be applied to the landfill areas and slopes by the IWMD. Hydroseeding shall be applied consistent with the Standard Specifications for Public Works Construction.	Field Inspection	Following temporary or final closure of landfill surfaces	Director, IWMD
2001 GDP EIR Mitigation Monitoring and Reporting Program – Circulation Component				
4.11-7	During final design, the Director PF&RD shall establish landscape standards for plantings in areas to be revegetated or screened from view. These guidelines shall illustrate all plant materials, sizes, species and quantities plus irrigation and preservation techniques. There shall be a variety of landscape types addressed, including revegetating graded slopes and earthen berms. Roads and trail cuts shall be revegetated with natural grasses, shrubs and trees to blend with the landscape character of adjacent areas. Trees selected for planting shall comply with the appropriate state and local regulatory requirements for the protection of groundwater.	Plan Check	Prior to approval of Final Design	Director, PF&RD
4.11-8	During final design and construction, the Director PF&RD shall ensure that plantings will be integrated with earthen berms and cut slopes to screen undesirable views. For these situations, the landscape design guidelines shall include grading guidelines which will address issues such as the areas where berms are recommended, the sizes of such berms, and recommended slope gradients to minimize soil erosion.	Plan Check	Prior to approval of Final Design	Director, PF&RD
4.11-9	During design, the Director PF&RD shall ensure that the siting of permanent circulation and roadway structures does not place any structures along ridgelines so as not to interrupt the natural horizon line in the existing landscape.	Plan Check	Prior to approval of Final Design	Director, PF&RD
2001 GDP EIR Mitigation Monitoring and Reporting Program – Recreation Component				
4.11-10	During final design, the PF&RD/HBP shall establish landscape standards for plantings in areas to be revegetated or screened from view. These guidelines shall illustrate all plant materials, sizes, species and quantities plus irrigation and preservation techniques. There shall be a variety of landscape types addressed, including revegetating graded slopes and earthen berms, and screening of landfill operations structures and permanent recreation buildings. Roads and trail cuts shall be revegetated with natural grasses, shrubs and trees to blend with the landscape character of adjacent areas. Trees selected for planting shall comply with the appropriate state and local regulatory requirements for the protection of groundwater.	Plan Check	Prior to approval of final design for recreation improvements	Director, PF&RD/HBP
4.11-11	During final design and construction, the PF&RD/HBP shall ensure that plantings will be integrated with earthen berms and cut slopes to screen undesirable views. For these situations, the landscape design guidelines shall include grading guidelines which will address issues such as the areas where berms are recommended, the sizes of such berms and recommended slope gradients to minimize soil erosion.	Plan Check	Prior to approval of final design and construction for recreation improvements	Director, PF&RD/HBP
4.11-12	During design, the PF&RD/HBP shall ensure that the siting of permanent aboveground recreation structures does not place any structures along ridgelines so as not to interrupt the natural horizon line in the existing landscape.	Plan Check	Prior to approval of final design for recreation improvements	Director, PF&RD/HBP
LIGHT AND GLARE				
2001 GDP EIR Mitigation Monitoring and Reporting Program – Circulation Component				
4.12-1a	Prior to approval of final design, the PF&RD/Road Programs shall ensure that all lighting design schemes for the interim and ultimate GDP circulation and roadway uses incorporate available technology, including fixtures, refractors, shields and lenses, to minimize potential glare.	Plan Check	Prior to approval of final design	Director, PF&RD/Road Programs
4.12-1b	In conjunction with final design, the PF&RD/Road Programs shall ensure that light fixtures along landfill access roads and parking areas; arterial roadways; and recreation access roads and parking areas are hooded and contain direct cutoff refractors to concentrate lighting on-site and minimize potential spill of light onto adjacent land uses.	Plan Check	In conjunction with final design	Director, PF&RD/Road Programs
4.12-1c	The PF&RD/Road Programs shall ensure that light standards for landfill access roads and parking areas, arterials, and recreation access roads and parking facilities are a maximum height of 40 feet.	Plan Check	Prior to approval of final design	Director, PF&RD/Road Programs
4.12-2	As part of the construction documents for the circulation and roadway uses, the PF&RD/Road Programs shall ensure that security lighting for construction staging areas for these uses is sited to minimize visibility of the lighting from adjacent land uses.	Plan Check	Prior to approval of construction documents	Director, PF&RD/Road Programs
2001 GDP EIR Mitigation Monitoring and Reporting Program – Recreation Component				
4.12-3	Prior to approval of final lighting design, the PF&RD/HBP Landscape Architecture Design Division shall ensure that all lighting design schemes for interim and ultimate GDP recreation uses incorporate available technology, including fixtures, refractors, shields and lenses, to minimize potential glare.	Plan Check	Prior to approval of final lighting design	Director, PF&RD/HBP Landscape Architecture Design Division
4.12-4a	In conjunction with final design, the PF&RD/HBP Landscape Architecture Design Division shall ensure that light fixtures along arterial roadways and recreation access roads, parking areas and structures are hooded and contain direct cutoff refractors to concentrate lighting on-site and minimize potential spill of light onto adjacent land uses.	Plan Check	Prior to approval of final lighting design	Director, PF&RD/HBP Landscape Architecture Design Division
4.12-4b	The PF&RD/HBP Landscape Architecture Design Division shall ensure that light standards for recreation access roads, parking facilities and some recreation structures are a maximum height of 40 feet.	Plan Check	Prior to approval of final lighting design	Director, PF&RD/HBP Landscape Architecture Design Division

Table G.A: Mitigation and Monitoring Reporting Program

MM No.	Mitigation Measures	Method of Verification	Timing for Mitigation Measures	Responsible Party
4.12-5	As part of the construction documents for the recreation uses, the PF&RD/HBP shall ensure that security lighting for construction staging areas for the recreation uses is sited to minimize visibility from adjacent land uses.	Plan Check	Prior to approval of final lighting design	Director, PF&RD/HBP
PUBLIC SAFETY AND RISK OF UPSET				
2001 GDP EIR Mitigation Monitoring and Reporting Program – Landfill Component				
4.13.1-1	Prior to opening any recreation uses on-site, the IWMD and the PF&RD/HBP shall develop and implement site operating procedures that separate refuse and recreation vehicles either by separate access routes or separate internal circulation patterns immediately after accessing the site.	Plan Check	Prior to opening recreation uses on-site	Director, IWMD/ Director, PF&RD/HBP
4.13.1-2	The IWMD shall continue to implement on-site traffic operations procedures regarding on-site posted traffic speed limits and traffic controls for the landfilling operations in Zones 1 and 4.	Plan Check	Prior to approval of the Final Design of a landfill phase or ancillary infrastructure facility	Director, IWMD
4.13.1-3	Prior to the approval of construction plans, the IWMD shall ensure that construction activities for the landfilling uses which may temporarily bring construction equipment and ordinary vehicular traffic into closer contact, will continue to be mitigated by traffic control consisting of limiting access of vehicular traffic to construction areas. The traffic control plans for the 2001 GDP construction areas shall be consistent with existing PF&RD/Road Programs traffic control policies and procedures.	Plan Check	Prior to approval of the construction plans for landfilling uses	Director, IWMD
4.13.2-1	The IWMD will continue to implement its policy not to accept hazardous materials for disposal in the landfill. This policy will include, but not be limited to, visual inspection of loads at the fee booth and on the active face of the landfill during unloading; continued operation of the radiation detection systems at the fee booths; and landfill personnel recording the license plates of vehicles turned away at the entrance.	Field Inspection	Ongoing	Landfill Site Supervisor
4.13.2-2	Prior to opening any recreation uses on-site, the IWMD and PF&RD/HBP shall develop and implement on-site operating procedures that separate the recreation users and trash vehicles as they enter the site and that no members of the public are allowed access to the landfill areas in Zones 1 and 4 where mixing operations and disposal of biosolids with other refuse on the active face of the landfill occur.	Plan Check	Prior to opening any recreation uses on-site	Director, IWMD/ Director, PF&RD/HBP
4.13.2-3	The IWMD shall maintain and implement operating procedures for the acceptance and disposal of non-hazardous ASW, including documentation of all ASW loads received at the landfill.	Field Inspection	Ongoing	Manager, Landfill Operations
4.13.2-4	The IWMD shall continue to maintain operating procedures for the safe handling and removal of waste oil and other potentially hazardous waste materials from the on-site vehicle maintenance facility.	Field Inspection	Ongoing	Manager, Landfill Operations
4.13.2-5	The IWMD shall maximize protection of the public and landfill workers from accidental exposure to hazardous materials at the HHWCC, consistent with all applicable state and federal regulations. These measures shall include, but not be limited to, separation of recreation users from the HHWCC; proper handling and disposal of the HHW collected at the HHWCC; and on-site emergency response personnel and equipment.	Plan Check/ Field Inspection	Ongoing	Manager, Landfill Operations
4.13.4-1	The IWMD shall maintain on-site operating procedures for the avoidance and control of surface fires. These practices shall include, but not be limited to, the provision of fire extinguishers and watering vehicles, posting of No Smoking signs, ground clearing and general safe operating practices.	Plan Check/ Field Inspection	Ongoing	Manager, Landfill Operations
4.13.4-2a	Prior to the opening of public access roads on-site, the IWMD shall coordinate with the PF&RD/Road Programs on the placement of fire warning signs along public roadways through the site, warning motorists of potential fire hazards, fire conditions and other relevant information.	Plan Check	Prior to the opening of public access roads on-site	Director, IWMD/ Director, PF&RD Road Programs
4.13.4-2b	The IWMD and the PF&RD/Road Programs will ensure that all roads serving landfilling activities include road signs warning motorists and landfill patrons of potential fire hazards, fire conditions and other relevant information. This signing shall be consistent with the requirements of the County of Orange for roadway signing.	Field Inspection	Ongoing	Director/IWMD/ Director, PF&RD/Road Programs
4.13.4-2c	Prior to approval of construction plans, the IWMD shall ensure that all construction contractors and employees engaged in construction for the landfilling uses implement safe working practices regarding the potential for surface fires associated with construction equipment and personal vehicles. These practices, subject to the approval of the Orange County Fire Authority, shall include the installation of spark arresters on equipment that has the potential to emit sparks or glowing embers; avoiding parking vehicles in areas with high or very dry vegetation; restrictions on employee smoking; the use of open flames or fire in high hazard areas and other similar safe working practices.	Plan Check	Prior to approval of construction plans	Director, IWMD/ Director, PF&RD/Road Programs
4.13.4-3	Prior to commencing any new landfill phase, mitigation program or development project on the Prima Deshecha property, the grading plans and building plans will be reviewed and approved by the Orange County Fire Authority.	Plan Check (Review by OCFA)	Prior to commencing any landfill phase, mitigation program, or development project	Director, IWMD
4.13.5-1	The IWMD shall continue to ensure that the design and operation of the GDP landfilling activities include a LFG control system consisting of a network of collection wells, flare stacks and ERF capacity as needed as LFG generation increases, and a monitoring program, basically expanding the existing LFG control system on-site.	Plan Check	Ongoing	Director, IWMD
4.13.5-2	Prior to the issuance of building permits and during structure siting and final design, the IWMD and PF&RD/HBP shall ensure, as part of the structure siting and final design, that the construction of permanent structures with enclosed spaces on landfilled areas will not occur unless the building is designed with protection from migrating landfill gas approved by the Solid Waste Local Enforcement Agency. Such protection designs could include: gas impermeable membrane underlying the structure and/or venting of enclosed spaces in the building, particularly spaces in contact with the ground or building foundation. In addition, the building designs will incorporate an explosive gas alarm system where this would be considered to increase the overall safety of the building for occupants or users of the building.	Plan Check	Prior to issuance of building permits and during structure siting and final design	Director, IWMD/ Director, PF&RD/HBP

Table G.A: Mitigation and Monitoring Reporting Program

MM No.	Mitigation Measures	Method of Verification	Timing for Mitigation Measures	Responsible Party
2001 GDP EIR Mitigation Monitoring and Reporting Program – Circulation Component				
4.13.1-4	The County's PF&RD/Road Programs shall develop and implement on-site traffic operations procedures regarding on-site posted traffic speed limits and traffic controls for the La Pata Avenue extension.	Plan Check	Prior to approval of construction documents	Director, PF&RD/Road Programs
4.13.1-5	As part of the construction documents and operating procedures, PF&RD/Road Programs shall ensure that construction activities for the circulation uses, which may temporarily bring construction equipment and ordinary vehicular traffic into closer contact, will be mitigated by traffic control consisting of limiting access of vehicular traffic to construction areas. The traffic control plans for the 2001 GDP construction areas shall be consistent with existing County of Orange traffic control policies and procedures.	Plan Check	Prior to approval of construction documents	Director, PF&RD/Road Programs
4.13.4-3a	Prior to the opening of public access roads on-site, the PF&RD/Road Programs shall coordinate with the Orange County Fire Authority on the placement of fire warning signs along public roadways through the site, warning motorists of potential fire hazards, fire conditions and other relevant information.	Plan Check	Prior to opening public access roads on-site	Director, PF&RD/Road Programs
4.13.4-3b	The PF&RD/Road Programs shall ensure that all roads serving landfilling activities include road signs warning motorists and landfill patrons of potential fire hazards, fire conditions and other relevant information. This signing shall be consistent with the requirements of the County of Orange for roadway signing.	Plan Check	Prior to approval of construction documents	Director, PF&RD/Road Programs
4.13.4-4	As part of the construction documents, the Director PF&RD shall ensure that all construction contractors and employees engaged in construction for the circulation uses implement safe working practices regarding the potential for surface fires associated with construction equipment and personal vehicles. These practices, subject to the approval of the Orange County Fire Authority, shall include at a minimum, the installation of spark arresters on equipment which has the potential to emit sparks or glowing embers, avoiding parking vehicles in areas with high or very dry vegetation, restrictions on employee smoking and the use of open flames or fire in high hazard areas and other similar safe working practices.	Plan Check	Prior to approval of construction documents	Director, PF&RD/Road Programs
2001 GDP EIR Mitigation Monitoring and Reporting Program – Recreation Component				
4.13.1-6	Prior to opening any recreation uses on the site, the IWMD and the PF&RD/HBP Regional Park Operations Division shall develop and implement site operating procedures that separate refuse and recreation vehicles either by separate access routes or separate internal circulation patterns at the point of site access.	Plan Check	Prior to opening any recreation uses on the site	Director, IWMD Director, PF&RD/HBP
4.13.1-7	Prior to the implementation of specific recreation improvements, the PF&RD/HBP Regional Park Operations Division shall develop and implement on-site traffic operations procedures regarding on-site posted traffic speed limits and traffic controls for the recreation uses in all zones.	Plan Check	Prior to approval of final design for recreation uses	Director PF&RD/HBP Regional Park Operations Division
4.13.1-8	The PF&RD/HBP Regional Park Operations Division shall continue to ensure that when construction and landfill equipment cross La Pata Avenue on the site at the intersections with temporary access roads, landfill personnel use flags and other measures to stop traffic on La Pata Avenue in order to allow the equipment to safely cross La Pata Avenue. In no case is the through traffic on La Pata Avenue to be delayed more than for the crossing of five construction vehicles at one time.	Plan Check	Prior to approval of construction documents	Director, PF&RD/HBP Regional Park Operations Division
4.13.1-9	As part of the construction documents and operating procedures, the PF&RD/HBP Regional Park Operations Division shall ensure that construction activities for the recreation uses, which may temporarily bring construction equipment and ordinary vehicular traffic into closer contact, will be mitigated by traffic control consisting of limiting access of vehicular traffic to construction areas. The traffic control plans for the GDP construction areas shall be consistent with existing County of Orange Transportation Department traffic control policies and procedures.	Plan Check	Prior to approval of construction documents	Director, PF&RD/HBP Regional Park Operations Division
4.13.2-6	Prior to opening any recreation uses on the site, the IWMD and the PF&RD/HBP shall develop and implement on-site operating procedures that separate the recreation users and trash vehicles as they enter the site and preclude access to the landfill areas by members of the public in Zones 1 and 4 where mixing operations and disposal of biosolids with other refuse on the active face of the landfill occur.	Plan Check	Prior to opening any recreation uses on-site	Director, IWMD Director, PF&RD/HBP
4.13.4-5	Prior to the opening of public access roads on-site, the PF&RD/HBP shall coordinate with the PF&RD/Road Programs on the placement of fire warning signs along public roadways through the site, warning motorists of potential fire hazards, fire conditions and other relevant information.	Plan Check	Prior to the opening of public access roads on-site	Director, PF&RD/HBP Director, PF&RD/Road Programs
5.13.4-6	Prior to approval of construction plans, the PF&RD/HBP shall ensure that all construction contractors and employees engaged in construction for the recreation uses implement safe working practices regarding the potential for surface fires associated with construction equipment and personal vehicles. These practices, subject to the approval of the Orange County Fire Authority, shall include at a minimum, the installation of spark arrestors on equipment having the potential to emit sparks or glowing embers; avoiding parking vehicles in areas with high or very dry vegetation; restrictions on employee smoking and the use of open flames or fire in high hazard areas; and other similar safe working practices.	Plan Check	Prior to approval of construction plans	Director, PF&RD/HBP OCFA
4.13.5-3	As part of the structure siting and final design, the PF&RD/HBP shall ensure that the construction of permanent structures with enclosed spaces on landfilled areas will not occur unless the building is designed with protection from migrating landfill gas approved by the Solid Waste Local Enforcement Agency. Such protection designs could include: gas impermeable membrane underlying the structure and/or venting of enclosed spaces in the building, particularly spaces in contact with the ground or building foundation. In addition, the building designs shall incorporate an explosive gas alarm system where this would be considered to increase the overall safety of the building for occupants or users of the building.	Plan Check	Prior to issuance of building permits and during structure siting and final design	Director, PF&RD/HBP
4.13.5-4	As part of the design, siting and operation of recreation uses on landfilled areas, the PF&RD/HBP shall ensure that campfires and other open fires are not constructed or allowed on the ground in recreation areas located in landfilled areas in landfill Zones 1 and 4. Aboveground barbecues and other aboveground stoves shall be allowed only in designated recreation areas, after testing conducted by IWMD and PF&RD/HBP which indicates that these types of stoves would not create or result in a fire hazard.	Plan Check	Prior to approval of final design for recreation uses	Director, PF&RD/HBP

Table G.A: Mitigation and Monitoring Reporting Program

MM No.	Mitigation Measures	Method of Verification	Timing for Mitigation Measures	Responsible Party
TRANSPORT OF DISEASE VECTORS				
2001 GDP EIR Mitigation Monitoring and Reporting Program – Landfill Component				
4.14-1a	During landfill operations, the IWMD shall periodically monitor landfilling activities and operations in Zones 1 and 4 for the presence or potential presence of vectors including mosquitos, flies, rodents and birds, until the closure of all active landfilling and recycling activities in these zones. The IWMD will implement vector control procedures as necessary to control these pests. The IWMD will coordinate this activity with the VCD and will ensure that landfill operations staff involved in these activities are properly trained to recognize the signs of possible vector infestations and in the proper use, handling, storage and disposal of pesticides and poisons used to control these vectors.	Field Monitoring	Ongoing	Landfill Site Supervisor
4.14.1b	The IWMD shall coordinate with the Orange County Local Enforcement Agency as ii conducts its monthly site inspections. The IWMD shall implement alternate, updated or new vector control procedures as requested by the LEA.	Site Inspection	Monthly	Director, IWMD
4.14-2	Following approval of the 2001 GDP, the IWMD shall ensure that the final construction plans submitted by the construction contractors identify specific measures to remedy standing bodies of water on construction sites to the extent possible, including avoiding damming of surface flows; filling in potholes and low spots; grading and stockpiling soil such that standing bodies of water are not created; and equipment storage practices that do not result in the collection of water in or around the equipment.	Plan Check	Prior to approval of construction plans	Director, IWMD
4.14-3	Following approval of the 2001 GDP, the IWMD shall ensure that the final construction plans reflect the specific measures that will be implemented during site clearing activities by the construction contractor to remove and properly dispose of vegetation and other site clearing wastes as soon as possible.	Plan Check	Prior to approval of construction plans	Director, IWMD
4.14-4	Following approval of the 2001 GDP, the IWMD shall ensure that the final construction plans submitted by the contractor reflect specific measures to properly collect and dispose of wastes generated during construction, including waste building materials, excess soil, and food wastes generated by employees.	Plan Check	Prior to approval of construction plans	Director, IWMD
4.14-5	Following approval of the 2001 GDP, the Orange County Vector Control District shall determine the existence of species on the subject property which have the potential to carry and/or transmit the hantavirus. If warranted, specific vector control measures shall be identified and reflected on the final construction plans submitted for approval and implemented in a manner meeting the approval of the Vector Control District.	Site Inspection	Prior to approval of construction plans	Director, IWMD
2001 GDP EIR Mitigation Monitoring and Reporting Program – Circulation Component				
4.14-6	During site operations as well as part of the closure and post-closure maintenance activities, the PF&RF/Road Programs shall regularly inspect the roadway surface and shoulders of La Pata Avenue for the presence of potholes and other surface features that allow for the collection of standing water, as part of its county-wide roadway inspection and maintenance programs. PF&RD/Road Programs shall ensure that these surface flaws are repaired as soon as feasible, to reduce the potential for vectors using these standing water bodies for breeding.	Field Monitoring	Ongoing	Director, PF&RD/Road Programs
4.14-7	During site operations as well as part of the closure and post-closure maintenance activities, the PF&RD/Road Programs shall conduct regular trash collection along the shoulders on La Pata Avenue, to collect trash blown from trash trucks or thrown out car windows, as part of its county-wide roadway trash collection program.	Field Monitoring	Ongoing	Landfill Site Supervisor
4.14-8	As part of the construction documents for the circulation and roadway improvements, the Director PF&RD shall ensure that the construction contractors remedy standing bodies of water on construction sites to the extent possible, including avoiding damming of surface flows; filling in potholes and low spots; grading and stockpiling soil such that standing bodies of water are not created; and implementing equipment storage practices that do not result in the collection of water in or around the equipment.	Plan Check	Prior to approval of construction documents	Director, PF&RD
4.14-9	As part of the construction documents and during site clearing activities, the Director PF&RD shall ensure that during site clearing activities, the construction contractor removes and properly disposes of vegetation and other site clearing wastes as soon as possible.	Field Monitoring	During site clearance activities	Director, PF&RD/Road Programs
4.14-10	As part of the construction documents for the circulation and roadway improvements, the Director PF&RD shall ensure that the construction contractor will be responsible for the proper collection and disposal of wastes generated during construction, including waste building materials, excess soil and food wastes generated by employees.	Plan Check	Prior to approval of construction documents	Director, PF&RD/Road Programs
2001 GDP EIR Mitigation Monitoring and Reporting Program – Recreation Component				
4.14-11a	Prior to opening any recreation use to the public, the PF&RD/HBP shall include rodent- and fly-proof refuse disposal containers in the recreation areas for visitor use.	Plan Check	Prior to opening any recreation use to the public	Director, PF&RD/HBP
4.14-11b	After the opening of each recreation use to the public, the PF&RD/HBP shall ensure that visitor and landscaping wastes generated in the recreation areas are collected regularly and are disposed of properly, in the active landfill area, for recycling or for disposal in another facility, as appropriate.	Site Inspection	Ongoing	Director, PF&RD/HBP
4.14-12a	If the golf course in Zone 1 is designed to contain water features, the PF&RD/HBP shall ensure as part of the operating contract for the golf course that the operator maintains a regular site inspection and pest control program to control mosquitos and flies potentially attracted to the water features.	Concession Contract	Prior to execution of the contract	Director, PF&RD/HBP
4.14-12b	If any of the other recreation areas are designed to contain water features, the PF&RD/HBP shall ensure that its, or any contract operator's, facility maintenance procedures include a regular site inspection and pest control program to control mosquitos and flies potentially attracted to the water features.	Concession Contract	Prior to execution of the contract	Director, PF&RD/HBP
4.14-13	Following approval of the 2001 GDP, the PF&RD/HBP shall ensure that the final construction plans submitted by the construction contractors will remedy standing bodies of water on construction sites to the extent possible, including avoiding damming of surface flows; filling in potholes and low spots; grading and stockpiling soil such that standing bodies of water are not created; and equipment storage practices that do not result in the collection of water in or around the equipment.	Plan Check	Prior to approval of construction plans	Director, PF&RD/HBP
4.14-14	Following approval of the 2001 GDP, the PF&RD/HBP shall ensure that the final construction plans reflect the specific measures that will be implemented during site clearing activities by the construction contractor to remove and properly dispose of vegetation and other site clearing wastes as soon as possible.	Plan Check	Prior to approval of construction plans	Director, PF&RD/HBP
4.14-15	Following approval of the 2001 GDP, the PF&RD/HBP shall ensure that the final construction plans submitted by the construction contractor reflect the specific measures to properly collect and dispose of wastes generated during construction, including waste building materials, excess soil, and food wastes generated by employees.	Plan Check	Prior to approval of construction plans	Director, PF&RD/HBP

Table G.A: Mitigation and Monitoring Reporting Program

MM No.	Mitigation Measures	Method of Verification	Timing for Mitigation Measures	Responsible Party
4.14-16	Following approval of the 2001 GDP and prior to the commencement of any GDP recreation development operations, the Orange County Vector Control District shall determine the existence of species on the subject property which have the potential to carry and/or transmit the hantavirus. If warranted, specific vector control measures shall be identified and reflected on the final construction plans submitted for approval and implemented in a manner meeting the approval of the Vector Control District.	Field Inspection	Prior to commencement of any GDP recreation development operations	Director, PF&RD/HBP Orange County Vector Control District
UTILITIES/UTILITIES AND SERVICE SYSTEMS				
2001 GDP EIR Mitigation Monitoring and Reporting Program – Landfill Component				
4.16-1	Prior to approval of construction and grading plans, the IWMD will include, as part of the construction documents, requirements that the construction contractors coordinate with SCE and SDG&E to ensure that their facilities on the site are protected to prevent significant disruption to utility services during construction. The contractor will be required to provide written documentation of this coordination to the IWMD.	Plan Check	Prior to approval of construction and grading plans	Director, IWMD/ Officials of SDG&E and SCE
4.16-2	The IWMD will coordinate with Santa Fe Pacific Pipeline Partners Inc., during final design of the landfilling uses in Zone 4 regarding the precise location and depth of the existing pipelines on the site. The IWMD shall coordinate the landfill construction schedules with Santa Fe Pacific Pipeline Partners Inc., to allow the company to relocate its pipelines, if needed, prior to IWMD initiating construction of landfilling improvements in Zone 4 that would otherwise impact these pipeline facilities.	Plan Check	During final design of landfilling uses on Zone 4	Director, IWMD
4.16-3a	Prior to the commencement of any landfilling operations, a soils report and plans for all sewage disposal systems shall be submitted to the County's Plumbing/Mechanical Plan Checking Section for review and approval.	Plan Check	Prior to issuance of building permits for occupied	Plan Check
4.16-3b	Results of percolation tests and a log of soil borings, performed and reported by a Registered Environmental Health Specialist, Registered Civil Engineer or Registered Geologist, in accordance with Environmental Health's "On-Site Sewage Disposal System Guidelines" shall be submitted to the County's Plumbing/Mechanical Plan Checking Section for review and approval. The Land Use Unit of Environmental Health shall be notified at least 48 hours prior to soil testing in order to be present during testing, if deemed necessary.	Plan Check	Prior to issuance of building permits for occupied structures	Manager, Plumbing/Mechanical Plan Checking Section
4.16-3c	Each proposed individual sewage disposal system shall be designed in accordance with Environmental Health's "On-Site Disposal System Guidelines."	Plan Check	Prior to issuance of building permits for occupied structures	Manager, Environmental Health
4.16-3d	An additional soil percolation system, equal to a maximum of 100 percent of the original design capacity or as deemed necessary by the Manager, Environmental Health, shall be constructed and connected.	Plan Check	Prior to issuance of building permits for occupied structures	Manager, Environmental Health
2001 GDP EIR Mitigation Monitoring and Reporting Program – Circulation Component				
4.16-4	Prior to approval of construction and grading plans, the Director PF&RD will include, as part of the construction documents, requirements that the construction contractors coordinate with SCE and SDG&E to ensure that their facilities on the site are protected to prevent significant disruption to utility services during construction. The contractor will be required to provide written documentation of this coordination to the IWMD.	Plan Check	Prior to approval of construction and grading plans	Director, PF&RD/ Officials of SDG&E and SCE
2001 GDP EIR Mitigation Monitoring and Reporting Program – Recreation Component				
4.16-5	Prior to approval of construction and grading plans, the IWMD will include, as part of the construction documents, requirements that the construction contractors coordinate with SCE and SDG&E to ensure that their facilities on the site are protected to prevent significant disruption to utility services during construction. The contractor will be required to provide written documentation of this coordination to the IWMD.	Plan Check	Prior to approval of construction and grading plans	Director, PF&RD/HBP Officials of SDG&E and SCE
4.16-6	During final design of the recreation uses in Zone 4, PF&RD shall coordinate with Santa Fe Pacific Pipeline partners, Inc., regarding the precise location and depth of the existing pipelines· on the site. The PF&RD/HBP shall coordinate the recreation construction schedules with Santa Fe Pacific Pipeline Partners, Inc., to allow the company to relocate its pipelines, if determined necessary, prior to initiating construction of recreation improvements in Zone 4 that would otherwise impact these pipeline facilities.	Plan Check	Prior to final design of the recreation uses in Zone 4	Director, PF&RD/HBP Santa Fe Pacific Pipeline Partners
4.16-7a	Prior to implementation of the 2001 GDP recreation uses, the PF&RD/HBP shall reach agreement with either the Santa Margarita Water District or the Capistrano Valley Water District to supply non-potable water to the site for landscaping use.	Service Contract	Prior to implementation of the GDP recreation uses	Director, PF&RD/HBP Santa Margarita Water District or Capistrano Valley Water District
4.16-7b	If determined necessary, the PF&RD/HBP will pursue redefinition of the jurisdictional boundaries of the service areas or improvement districts of the selected water agency to include the site in order to provide a uniform supply of non-potable water to the site. If an improvement district cannot be formed, the PF&RD/HBP will provide independent funding for the necessary water facility improvements and shall donate those funds to the appropriate water agency providing service to the site.	Service Contract	Prior to implementation of the GDP recreation uses	Director, PF&RD
4.16-8	For structures requiring sanitary facilities, PF&RD/HBP shall construct an on-site sewage disposal system in accordance with County standards in effect at that time.	Plan Check	Prior to construction of recreation uses on-site	Director, PF&RD/HBP
First Supplemental EIR to the 2001 GDP EIR				
4.16-1	Prior to approval of construction and grading plans, the IWMD will include, as part of the construction documents, requirements that the construction contractors coordinate with SCE and SDG&E to ensure that their facilities on the site are protected to prevent significant disruption to utility services during construction. The contractor will be required to provide written documentation of this coordination to the IWMD.	Plan Check	Prior to approval of construction and grading plans	Director, IWMD/Officials of SDG&E and SCE
4.16-2	The IWMD will coordinate with Santa Fe Pacific Pipeline Partners Inc. during final design of the landfilling uses in Zone 4 regarding the precise location and depth of the existing pipelines on the site. The IWMD shall coordinate the landfill construction schedules with Santa Fe Pacific Pipeline Partners Inc. to allow the company to relocate its pipelines, if needed, prior to IWMD initiating construction of landfilling improvements in Zone 4 that would otherwise impact these pipeline facilities.	Plan Check	During final design of landfilling uses in Zone 4	Director, IWMD or Designee

Table G.A: Mitigation and Monitoring Reporting Program

MM No.	Mitigation Measures	Method of Verification	Timing for Mitigation Measures	Responsible Party
4.16-3a	Prior to the commencement of any landfilling operations, a soils report and plans for all sewage disposal systems shall be submitted to the County's Plumbing/Mechanical Plan Checking Section for review and approval.	Plan Check	Prior to issuance of building permits for occupied structures	Manager, Plumbing/Mechanical Plan Checking Section
4.16-3b	Results of percolation tests and a log of soil borings, performed and reported by a Registered Environmental Health Specialist, Registered Civil Engineer or Registered Geologist, in accordance with Environmental Health's On-Site Sewage Disposal System Guidelines shall be submitted to the County's Plumbing/Mechanical Plan Checking Section for review and approval. The Land Use Unit of Environmental Health shall be notified at least 48 hours prior to soil testing in order to be present during testing, if deemed necessary	Plan Check	Prior to issuance of building permits for occupied structures	Orange County Plumbing/ Mechanical Plan Checking Section
4.16-3c	Each proposed individual sewage disposal system shall be designed in accordance with Environmental Health's On-Site Disposal System Guidelines.	Plan Check	Prior to issuance of building permits for occupied structures	Manager, Environmental Health
4.16-3d	An additional soil percolation system, equal to a maximum of 100 percent of the original design capacity or as deemed necessary by the Manager, Environmental Health, shall be constructed and connected.	Plan Check	Prior to issuance of building permits for occupied structures	Manager, Environmental Health
5.6-1	SCE and SDG&E electrical transmission facilities will be relocated or re- routed, if necessary, in order to avoid service interruptions during construction of landslide remediation measures through the center of the site. IWMD will coordinate closely with SCE and SDG&E in the development of a plan to ensure cost-effective and efficient temporary facility relocation and post-construction re-establishment of transmission lines through the site.	Verify inclusion in Plans and Specifications	Prior to approval of Plans and Specifications	Director, IWMD or Designee

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