The following mitigation measures would be implemented by CDPR as part of the Science Study:

AIR QUALITY

MITIGATION MEASURE AIR-1

- Work areas, including stockpiled sediments, shall be wet down regularly;
- Traffic speed on the unpaved horse trail road shall be limited to 15 miles per hour; and
- All equipment engines shall be maintained in good condition, in proper tune (per manufacturer's specifications), and in compliance with all State and Federal requirements; and
- Efforts shall be made (where practicable) to minimize idling times for all construction equipment utilized by the proposed project.

BIOLOGICAL RESOURCES

MITIGATION MEASURE BIO-1

- A qualified wildlife biologist shall monitor project implementation to ensure that active nesting behavior by all raptors and threatened and endangered bird species is protected through use of appropriate buffers, rerouting of haul trucks or suspension of project activities:
- A bio-monitor shall be present regularly on-site during all phases of project implementation to ensure that perimeter construction fencing is being maintained and to minimize the likelihood that nests containing eggs or chicks are abandoned or fail due to construction activity. A bio-monitor shall perform a pre-construction survey and also perform periodic inspections of the construction site during all phases of project implementation to ensure that impacts to all sensitive plants and wildlife are minimized. Regular inspections should take place once or twice a week, depending on the sensitivity of the resources. The biomonitor shall send weekly monitoring reports to CDPR and shall notify both CDPR and CDFG immediately if project activities extend outside the permitted project footprint:
- A minimum 400-yard buffer zone south of the slough mouth shall be incorporated into the project design to minimize impacts to the over-wintering population of snowy plover. This buffer shall be staked and delineated with signs as described in MITIGATION MEASURE REC-1; all vehicle traffic and primary construction activities shall be prohibited from this area;
- The project shall utilize a-project monitors and-including qualified western snowy plover biologists to ensure compliance with the above measure and to monitor plover behavior. The monitor, in consultation with the CDPR, shall have the authority to suspend work as needed or increase the required buffer to up to 600 yards south of the slough mouth to protect the plover;
- All heavy equipment operation shall be prohibited from the dunes and beach berm, except where the horse trail road and Monument Road enter the beach, where steel grating plates shall be employed at dune crossing points. All construction activity would be precluded from the beach berm which would be staked and signed "no vehicle entry" and enforced by project monitors.
- Monument Road would be used as the wet-weather truck haul route; and
- The horse trail road would be used only during dry weather conditions and regular monitoring and/or implementation of sediment control measures (see MITIGATION MEASURE GEO-1) would be required to ensure erosion is minimized.

CULTURAL RESOURCES

MITIGATION MEASURE CULTURAL-1

A historic study, including a map and literature review, in order to define the precise location of the remains and foundations of historic WW-II buildings that lie beneath and around Monument Road shall be completed:

- Archaeological testing to identify building foundation edges, confirm mapped building locations and current elevation for remains of those historic structures in close proximity to or underlying Monument Road that have the potential to be affected by compression or compaction from heavy vehicle use or by any road repairs/improvements deemed necessary for successful implementation of the proposed project shall be undertaken;
- An engineering review of the structural adequacy of Monument Road to (1) accommodate heavy haul equipment, (2) the estimated potential for such haul traffic to cause substantial damage to the road, (3) identify any possibility of subsurface compaction or compression below the road grade, (4) recommendations for any road improvements that would be necessary to prevent damage to the road and those resources beneath the road, and (5) determination of any road improvements needed to accommodate the project and/or return the road to its pre-project state shall occur; and
- The roads utilized for sediment transportation and the surrounding areas shall be photo documented before, during, and after completion of the project in order to document environmental conditions before, during, and after all stages of work;
- All vehicles associated with the project shall remain on designated roadways at all times, with the exception of clearly defined beach areas. An archaeologist shall conduct "spot checks" of the work to ensure the transport vehicles are remaining on the designated roadways;
- In the event that road work is necessary before, during, or after the completion of the project, a qualified archaeological monitor shall be required to be present during the work to ensure that any accidental discoveries of archaeological resources are correctly identified and evaluated for their significance. The Native Americans on the contact list shall be advised of the road work and invited to participate in the monitoring activities. The monitor(s) shall have the authority to temporarily stop work in the immediate vicinity of the find, if necessary. Work shall be suspended until the appropriate evaluations and treatments are conducted and approval is obtained from CDPR to continue work. During this time, work may be redirected to other areas while the cultural resources are evaluated;
- In the event any human remains, associated funerary objects, or items as defined by the Native American Graves Protection and Repatriation Act (NAGPRA), including sacred objects and objects of cultural patrimony, are discovered during any ground-disturbing activities, work shall be stopped immediately and the archaeologist(s) shall be immediately consulted. In addition, the following guidelines shall be adhered to:
 - All discovery remains shall be treated with dignity and respect and unnecessary disturbance of remains or associated objects will be avoided;
 - o The area of discovery shall be isolated and the State Representative notified; and
 - Pursuant to Health and Safety Code §7050.5, the County Coroner shall be notified to make a determination whether the remains are Native American or not; and
- Any recovered artifacts shall be collected and prepared for curation according to Departmental standards. If road improvements or upgrades are required, an archaeological monitor shall be present during all road repair/construction activities and empowered to stop work or direct other modifications as needed to protect cultural remains.

GEOLOGY AND SOILS

MITIGATION MEASURE GEO-1

- Detailed best management practices (BMPs) shall be developed prior to implementation of the proposed project to address erosion, sedimentation, and surface water runoff concerns;
- The horse trail road would not be used during rain events. Additionally, the road would be monitored and any necessary erosion control measures would be implemented to prevent erosion and sedimentation to the surrounding marsh areas. At the discretion of the project monitor and State Park personnel, erosion control measures may include limited use of gravel within the existing

road bed and installation of silt fencing and straw waddle and/or other sediment-retention measures along the edges of the road. The road would be restored to its existing condition upon cessation of the proposed project.

HAZARDS AND HAZARDOUS MATERIALS

MITIGATION MEASURE HAZMAT-1

- All equipment shall be inspected for leaks immediately prior to the start of project activities, and regularly inspected henceforth until equipment is removed from the premises;
- The contractor(s) shall prepare an emergency spill response plan prior to the start of the project and maintain a spill kit on-site throughout the duration of the proposed project. The emergency plan shall include a map delineating staging areas, where refueling, lubrication, and maintenance of equipment may occur. In the event of a spill or release of any chemical during activities associated with the proposed project, on or adjacent to wetlands or on park property, the contractor shall immediately notify the appropriate CDPR staff (e.g., project manager or supervisor). Emergency containment procedures shall be initiated immediately to prevent wetland or beach contamination;
- Equipment shall be cleaned and repaired outside park boundaries, with the exception of emergency situations. All contaminated water, sludge, spill residue, or other hazardous compounds shall be disposed of outside park boundaries, at a permitted or authorized location; and
- All sediment being transported, sorted, and deposited shall be first screened, tested, and treated for trash, fecal coliform bacteria, heavy metals, petroleum distillates and any other contaminants. If treatment does not bring sediment to acceptable usable levels, sediment shall be disposed of at an approved disposal site.

MITIGATION MEASURE HAZMAT-2

- Sediment used for the proposed project shall be screened, tested, and treated; a tracking log or similar safeguard procedure shall be used to ensure all necessary soil testing has been conducted and all identified hazardous substances have been removed prior to the transport and deposition of sediment onto the beach; and
- Workers shall employ the following measures to minimize exposure to potential pathogens associated with untested sediment or that which was found to be contaminated and not approved of for disposal on beach:
 - 1. Wash hands regularly, especially before eating, drinking, smoking, or using the restroom
 - 2. Wear gloves
 - 3. Cover wounds with clean, dry bandages

MITIGATION MEASURE HAZMAT-3

- A safety plan shall be developed and reviewed by all project staff prior to the start of any work, including measures to reduce fire hazards;
- Spark arrestors or turbo-charging (which eliminates sparks in exhaust) and fire extinguishers shall be required for all heavy equipment;
- Work crews shall be required to park vehicles away from flammable vegetation, such as dry grass and brush. At the end of each workday, heavy equipment shall be parked over mineral soil, asphalt, or concrete to reduce the chance of fire; and
- Park staff shall be required to have a State Park radio on-site, which would allow for direct contact
 to the California Department of Forestry and Fire Protection and centralized dispatch center, to
 facilitate the rapid dispatch of control crews and equipment in case of a fire. Fire suppression
 equipment (i.e., fire extinguishers) shall also be available on park grounds.

HYDROLOGY AND WATER QUALITY

MITIGATION MEASURE WATER QUAL-1

- Sediment shall be screened to remove trash during the sorting process;
- Sediment shall be tested for fecal coliform bacteria and treated through aeration and UV exposure as necessary prior to use;

- Sediment shall be tested for contaminants such as heavy metals and petroleum distillates prior to transport to beach; and
- If contamination is detected, sediments shall not be deposited on beach unless contamination can be removed or treated to acceptable levels.

Noise

MITIGATION MEASURE NOISE-1

- Construction activities should generally be limited to daylight hours. No work shall take place on holidays. Work should be avoided on holiday weekends (e.g., Thanksgiving, Christmas, New Years):
- Internal combustion engines used on the project site would be equipped with a muffler type recommended by the manufacturer. Equipment and trucks should utilize the best available noisecontrol techniques (e.g., engine enclosures, shrouds, intake silencers, ducts, etc.) whenever feasible and necessary; and
- Truck speed shall be regulated to less than 25 mph (15 mph on the horse trail road per MITIGATION MEASURE AIR -1) to reduce noise levels and protect public safety.

RECREATION

MITIGATION MEASURE REC-1

- CDPR should post notices at key access points in the TRNERR that detail the proposed project's construction schedule, including the timing and duration of planned road or trail closures, and include a map of alternative beach access points and trails which would remain open to the public. Additionally, as soon as the contractor's schedule is established, the open and closed information will be added to the park's website (http://www.tijuanaestuary.org). All notices and boundary markers shall be sturdy enough that they will not make noise in the wind that may distract or startle horses (i.e., use orange mesh or wooden fencing instead of ribbon markers):
- CDPR should post a larger visible sign along Monument Road east of the project area warning the public of ongoing construction activities and likely disruption of recreational access off of Monument Road;
- CDPR Visitor Center staff should be informed of the project and briefed to direct the public to other trail and beach access points;
- CDPR should provide notice of the project on its website;
- All sediment hauling and beach area construction activities shall be prohibited on holiday weekends (i.e., November 27 through 30, 2008 for Thanksgiving, December 25 through 28, 2008 for Christmas, January 1 through 4, 2009 for New Year's); and
- Monument Road should remain open to BFSP overlook; a flagger should be provided as needed to
 ensure safe public access to this facility-; and
- Heavy equipment operators shall be briefed on equipment-equestrian interaction safety. In the event of an encounter with an equestrian during construction, all vehicles shall stop until they are at least 100 yards apart. Honking horns, flashing lights, and yelling at riders and horses shall be prohibited.

TRANSPORTATION/TRAFFIC

MITIGATION MEASURE TRANS/TRAFF-1

- Notice of hours of project operation and duration, along with a map of the aerial extent of activities and potential access closures shall be posted at all beach and trail access points leading into the project vicinity;
- Project traffic control monitors shall be posted at the north and south ends of the beach with the
 authority to turn beach users away during periods of high activity. However, reasonable attempts
 shall be made to keep as much of the project area open to access as is deemed safe during project
 implementation; and

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