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Debbie Morriset
County of Ventura
Resource Management Agency
Planning Division
800 South Victoria Ave., L#1740
Ventura, California 93009

**Subject: Wetland Creation/ Dune Enhancement Plan for McGrath Parcel in Ventura County, California**

Dear Ms. Morriset:

ENSR reviewed the December 2004 Wetland Creation/Dune Enhancement Plan prepared by Impact Sciences for The McGrath Parcel (Plan) located in Ventura County, California. The Plan thoroughly covers the conditions (biology, hydrology, soils, wetlands and functionality) that currently exist at the site. In addition, the Plan outlines in detail the potential for onsite wetland creation and restoration and the approach that would be taken for wetland creation and restoration activities.

In general, the Plan, including construction plans, maintenance, monitoring and adaptive management, was well thought out, researched, and presented. However, there are several issues that require further attention.

First and foremost, the basic premise of conducting wetland mitigation at a site which consists of dune habitat, degraded dune habitat, and anthropogeniclly created wetlands is questionable. The site description indicates that historically dune habitat existed onsite. However, disturbance to the site has caused the dunes to stabilize allowing for the formation of soil in areas of the site. In addition, disturbance to the sites has caused eroded pockets deep enough to be at or near the water table to support native hydrophytic species, thus the areas now meet the criterion of a wetland under the California Coastal Act. It is based upon the presence of soils and wetlands that this site has been deemed as acceptable as a wetland mitigation area.

Sand dunes are considered a unique and sensitive biological resource by the California Coastal Commission. It is ENSR's opinion that degraded dune habitat should be restored to dune habitat rather than constructed wetland habitat. Thus, ENSR recommends that further research into the historical presence and specific locations of dunes and wetlands on-site be performed in order to better discern the appropriateness of this site as a wetland mitigation area. Specifically, ENSR would like to see a determination of the area of habitat at the project site which can be characterized as degraded dune habitat and the amount of this degraded dune habitat area that would be removed by this project to create wetland

habitats. This sort of determination could be based on review of historic aerial photographs or other historic records.

Second, the section (p. 30) on Schedule and Project Phasing indicated that prior to the initiation of Phase 2, an evaluation of the hydrophytic status and the performance standards for the wetland vegetation in the central swale will be evaluated. ENSR feels that hydrology is an important factor in determining the long-term success of wetland creation and restoration due to the role of hydrology in sustaining wetland vegetation. Thus, hydrologic monitoring should be included as a part of the pre-Phase 2 evaluation in addition to wetland vegetation monitoring in order to determine if the groundwater is saturating or inundating the surface in the wetland areas and whether, in the long term, adequate hydrology is available to sustain the wetland vegetation. It should be noted that hydrologic monitoring is discussed in the monitoring section. Thus, it should be relatively easy to implement hydrologic monitoring as a part of the pre-Phase 2 evaluation.

Third, ENSR feels that in addition to posting signs at 100-foot intervals along the boundary fence, interpretive signs should be posted along the access path and other publicly accessible areas to educate the public about the biology and ecology of the wetland and dune habitat that exist on site and the role of restoration in protecting these habitats.

Finally, ENSR recommends the use of solarization as the preferred method of ice plant removal over top-soil removal. Solariszation is the smothering of plants with plastic sheeting until seeds or plants have been cooked. Solarization can be achieved by layering good quality, UV resistant black plastic sheeting over ice plant areas for 2-3 weeks. For best results black plastic should be in direct sunlight and the soil should be damp. This encourages the seeds to germinate, after which they die due to high temperatures under the plastic. This method is particularly effective in the hot, summer months.

We appreciate the opportunity to review this report and would be happy to discuss our comments and recommendations. If you have questions or would like additional information, please feel free to contact either of us.

Sincerely,

Catrina Mangiardi

William Gorham

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Environmental Scientist

William Gorham
Senior Program Manager