The Santa Barbara Audubon Society (SBAS) has recognized the unique value of the Devereux Slough habitat for many years and designated the wetland as an “Important Bird Area” in acknowledgement of its importance to the region’s avifauna. Since the late 1990’s, Audubon members have been promoting a shared vision of restoring the full extent of the former estuary. The North Campus Open Space (NCOS) Coastal Wetland Restoration project will maximize the long term value of this coastal wetland to avifauna and the larger food web by restoring a wide diversity of wetland types, by providing, but delineating, public access, and by sustainably designing the project to work within the naturally variable hydrology of this intermittent tidal system. The project will also support adaptation to climate change. We support the restoration of 100 acres, including expansion of estuarine and freshwater wetlands.

Herein we wish to comment on the draft Mitigated Negative Declaration for the project.

**Excavation.** The project proposes the more limited of two excavation options evaluated, at 355,000 cubic yards (p 12). As sea level rises, created mudflats and Pickleweed marsh will be flooded. Audubon proposes some Contingencies in the Plan, in the event that opportunities arise, with some environmental evaluation at this time.

These actions could be considered adaptive management actions.

1) Remove more golf course fill and create a larger wetland area if suitable offsite recipients of Ocean Meadow Golf Course soils are identified and costs are covered for the excavation and transfer of soils.

2) When it becomes advantageous and feasible to remove more soil to create more sub-tidal habitat, place that soil gradually over time in the riparian alley parallel to and N of Venoco Rd. The tolerant willows and cottonwoods can survive, provided they are ‘buried’ gradually.

The grading is proposed in 2 phases, including the removal of 100,000 cubic feet from 40 acres of the former golf course and the Whittier parcel in 2016, and 225,000 cubic feet from 60 acres of the golf course in 2017 (p 73). The fill sites on the South Parcel are described. We request that the exact areas of the donor sites be specified at this point in the document. Phases I and II are well delineated on page 291 and Table 5.12-3, but we would like to see a general description earlier in the document (e.g., eastern and western Golf course areas). A significant question during early planning of the restoration was whether the eastern (downstream) or western (upstream) areas of the Golf Course should be excavated first.

In general, this project avoids actions in the lower Devereux basin. We think this may not be the best approach. Determination of optimal functioning of NCOS warrants a discussion of the actions that could be executed in lower Devereux that would maximize the value and function of ecological resources in the NCOS. In particular, we are thinking of sediment removal in some portions of lower Devereux Creek to create the complex of habitats that reflects the historical condition once existing in the entire system. Sediment
removal can be done in areas that do not jeopardize the alluvial fan, which supports a Snowy Plover population, a policy we support.

Sea Level Rise (SLR). SBAS detects misleading passage in the discussion of Sea Level Rise. The intent of this discussion is to examine flooding as part of the slough’s hydrological functions. Page 28 in the Introduction reads: “In response to a rise in sea level, tide levels will increase relative to site topography if marsh accretion does not keep pace with the rise in water levels.” Tide level (elevation of the tide) will be dictated largely by ocean level, not by accretion. We suggest that the sentence be deleted and replaced by a discussion of the hydrological factors likely to affect flooding. The potential for flooding is a function of site topography and SLR. Clarification of this section is important because it pits project design against the uncertainty surrounding the extent of inundation we are likely to experience from SLR. As currently stated, the suggestion is that marsh accretion is the primary force dictating flooding. Project design, and post-project modifications, will determine the slough’s capacity to accommodate flood and tidal waters. The discussion of habitats should focus on trade-offs. In other words, changes due to SLR involve gains in some habitat types, such as middle marsh and perhaps deep water habitats, while causing a diminishment in others. The Salicornia marsh, or high marsh, will be established, in part, through restoration of areas peripheral to existing wetlands.

Freshwater Pond.

“Establish a large seasonally ponded feature at the northern site boundary, west of the Phelps Creek tributary connection that would have potential benefits to migratory shorebirds and other wildlife.” (p.63)

Audubon considers this feature to be extremely valuable as bird habitat, and considers the absence of a description of its size and planned management in the Plan to be a significant deficit. It appears that the location may be where freshwater seeps are found; is this correct? Have freshwater seeps been mapped? Is this pond included in Table 2.5-1? Perhaps it is shown as the 0.5 acres of Created Freshwater/Brackish wetland? These issues need to be clarified.

Plover habitat.

Approximately 2.75 acres of marsh plain habitat would be created on the southeastern area of the project site along the golf course/South Parcel property boundary. This area would be augmented with sand and not revegetated to create conditions suitable for nesting snowy plovers. This design would mimic conditions that occur in a two- to three-acre area of the lower slough, located just south of the Devereux Creek Bridge and Venoco Road, that is currently used by snowy plovers as a nesting site. (p.63)

It seems very unlikely that Western Snowy Plovers will use this habitat. It may depend on the density and type of vegetation surrounding the marsh plain. Is this adjacent to extensive mudflats where invertebrate food sources would be available? Snowy plovers usually feed on invertebrates found in kelp wrack and on sand beaches, so it is not at all clear that this habitat would be suitable for snowy plovers. In addition, this area is close enough to trails that human disturbance makes it unlikely to be used as a breeding habitat. Finally, as noted in the Utilities comment, the power lines along Venoco Rd. serve as a perch site for predators. This free access for predators probably suppresses plover use at the NW corner of Devereux Slough and probably will prevent colonization by plovers at the NCOS site.

Local genetic stock plants.

To the extent possible, plant materials would be salvaged from the site or collected and grown from local sources to preserve local genetic integrity. (p64)

We recommend alternative wording: In all cases (necessary exceptions to be specified) To the extent possible, plant materials would be salvaged from the site or collected and grown from local indigenous* sources to preserve local genetic integrity.

*not from previous restoration sites if plant propague sources are not known to be be from the Devereux Ellwood Open Space Area.

The Cheadle Center and Coal Oil Point Reserve have been very stringent about the use of species and genotypes of restoration plants from the Devereux Ellwood Open Space Area. “The Extent Feasible” is
worrisome, especially as hydroseeding is proposed, which requires large amounts of seeds. Restoration efforts should only use plant materials known to be native to the project area. Sterile, non-native grasses can be used, or hydromulch without seeds for erosion control.

Clarification is needed on the possible use of Plantago insularis. We are unfamiliar with this non-native plantain, and web research finds S&S Seed sells the seeds, but also uses it, in a ground up form, as a tackifier for hydroseeding. If seeding of this plant is suggested to produce a temporary ground cover, this is a concern. Non-native plantain species are a major weed in some areas of adjacent Coal Oil Point Reserve.

The 100 acres proposed for restoration (85 acres planted) is a hugely ambitious project and seed solely from the Devereux-Ellwood area is challenging, but Audubon is concerned about the introduction of non-indigenous genotypes of native plant species and of non-native plant species.

A review of the Preliminary Vegetation Plant List (Appendix B, p383) shows some species not known by us to be present in the Devereux Ellwood Open Space (DEOS) area, such as Limonium californicum and Suaeda calceoliformis. These, are, however, found at Goleta Slough. How about the use of Juncus textilis? Alnus rhombifolia, and Frangula californica? If species are not in the DEOS presently, each of these species should be addressed if it is thought to be extirpated, and proposed sources for re-introduction materials need to be specified. Reference to the California poppy, Eschscholzia californica should expressly state the variety “Coastal poppy”, var maritima, as well that the seed will be collected at Coal Oil Point Reserve.

**Tree Removal.** Extensive tree removal is proposed, 132 live trees from the golf course, and 11 from the South Parcel (p125). Of these, only 5 trees are determined to be “Scenic trees” and thus proposed for 1:1 mitigation. Audubon recognizes the value of habitat conversion to saltmarsh and seasonal wetland is a high value, and trees must be removed, and are not appropriate in the new habitats. SBAS considers Policy SCEN - 07 (p106) not applicable to this project due to habitat type conversion. But the draft MND does not adequately address the habitat value of the existing trees, even through most are non-native. The native trees are dismissed since they were planted as landscape trees. The former Ocean Meadows Golf Course is a popular birdwatching area, with many migrant bird species observed there. The trees that are being retained along the northern border of the project site will maintain a significant avian habitat. The Eucalyptus windrow on the western South parcel is valuable roost and nesting site for raptors.

Audubon proposes that the area west of the current Ellwood Marine Terminal (to be removed in a separate project) be evaluated for a Coast live oak woodland. Current vegetation is largely Pampas grass and Coyote brush. This would provide, eventually, with alternative arboreal habitat.

What species of trees are proposed for the mitigation for lost scenic trees? And where would they be planted?

Tree removal will first be trees in the areas to be excavated. Next should be identification of trees with cavities and favor those for preservation, where feasible. The third evaluation criterion is to eliminate those trees that reduce anticipated functions in adjacent habitats. Regarding cavities, the Melaleuca tree on the south side of the clubhouse has cavities that hosts nesting Western Bluebird.

**Utilities.** Section MND 5.4 (d), p. 151 should be changed to show a Potentially Significant Impact rather than a Less than Significant impact. There is no available mitigation until the power lines along Venoco Road are removed. A discussion in the MND on this issue is necessary. SBAS calls for undergrounding of the barrier created by power lines along Venoco Rd. as part of this project. Holmgren (2014, *Physical Impediments in the Ecosystem*, p.30) reported the collision of a Trumpeter Swan with these wires. SBAS feels strongly that we cannot allow for any more deaths resulting from the natural and frequent passage of birds or bats between these NCOS and Devereux Slough.

Section 5.4 should acknowledge that this barrier to movement HAS ALREADY affected a Federally Endangered Species (Trumpeter Swan; removed 2009 from ES list) and that the potential
for future such impacts is high. Added to this is the fact that these lines serve as perch points for predators of Belding’s Sparrow to the south and to Snowy Plover in the newly created unvegetated sandy habitat to the north of Venoco Rd. These threats to listed taxa constitute an existing Significant Impact that can only be mitigated by undergrounding of the lines.

**Management, Monitoring and Performance Standards.**

SBAS recommends a management focus on Ecosystem Complexity. As a consequence, maintenance needs to be adjusted seasonally (p92). We would like to see details of seasonal management, that encourages the establishment of vertebrate resources.

“All plantings shall have a minimum of 75 percent of the desired total cover after three years and 90 percent of the desired cover after five years for the life of the project. If the survival and cover criteria have not been met, CCBER will be responsible for replacing planting to achieve these requirements.” (p94)

SBAS believes that **habitat openness** is valuable for wildlife, for example, as raptor foraging habitat. 75 percent cover might be the desired vegetative cover, especially in native grassland areas. Snakes, lizards, and small mammals cannot exist in dense planted habitats. **Restoration must be measured by its success in establishing interactions among trophic levels, including top bird predators. The goal should be to establish trophic interactions.** Planting, monitoring, and maintenance should be re-oriented with this goal in mind, requiring a completely different approach.

We would like to see performance standards, success criteria, and monitoring schedules applied to wetlands and mudflats as well to plant restoration areas.

**Project Site Trail Access, 2.6.1 (p76).** The document states that this is a concept plan for the public trails, as shown in Figure 2.6-1 (p77). SBAS requests that the MND states that final siting of trails and viewing areas be determined at a time when the best placement and best views to protect resources can be determined, and that trails and viewing areas be designed to last into the foreseeable future.

**Trails.** The proposed trails are shown on Figure 2.6-1 and Figure 5.16-6 (p335). The South Parcel appears to be highly fragmented by trails, which reduces its habitat value. Many of the Type B and C trails could be eliminated to create more extensive and continuous habitat. Some observation points on South Parcel could be incorporated into one trail. This alternative should be evaluated.

**Research.** Though stated as an objective (3.2; p380), we did not see any designed opportunities for research. One need is to study the responses of Coastal Sage Scrub to fire. Would this be feasible here?

The document is provides designs for the irrigation system to assist the restoration of native terrestrial plants. The plan also needs to consider the management of aquatic habitat, particularly with insuring that aquatic plants have adequate water or inundation at the right times. This is a glaring gap in the management of restored areas. Similarly we need to remove exotic plants when they threaten the areas re-vegetated with native species, including in mudflat habitats. We want to see this concept embraced and this language in the document.

**Science Advisory Committee.** Although the names of the document preparers is found in the cover sheet (Rodriquez Consulting), and Appendix E: the Wetland Delineation (Sage Consulting), we wish for the individuals involved to be listed somewhere. The Science Advisory Committee is mentioned (Appendix A, page 375): we would like the members of this committee listed.

**Minor corrections/clarifications:**

**Southern tarplant:** typo (p29) in scientific name, *Centromadia parryi* ssp. *australis*, not *Centromedium*.

“**Generalized ESHA**: Figure 1.4-7 (p35) shows a large area on the western boundary of the South parcel, identified as “generalized ESHA” A Eucalyptus windrow is present here, with raptor habitat; small wetlands and possibly native grasslands are also present. A text description of this ESHA is suggested.
**Project Area Map. Map of Project area.** Fig 2.1-1 (p59) shows the restoration project site not as far south as Venoco Rd and not as far west as the western end of the golf course. It appears to extend as far as Storke Road (where student housing has been built). The map needs to be corrected. Figure 1.4-4 appears to show the Project site boundary correctly, in greater detail.

** Phelps Creek Grading.** Fig 2.3.3 (p71) needs clarification. Are the contour lines the existing or proposed topography?

**Vehicle Access/Parking.** The 30-space parking lot off Whittier Drive (p82): the document should indicate if this is proposed as paid parking, similar to most campus parking.

Venoco Road is proposed to become a bicycle/pedestrian path, accessible only to emergency vehicles (p27). The Plan should recognize and include that maintenance vehicles will have continued access, both for COPR and CCBER staff for habitat restoration and maintenance.

**Photos.** Figure 5.1-1 shows the location of photos in the document. Photos 1, 2 & 3 are missing, and photos 4 & 5 (p108 & 111) are included twice.

**Wetland Types,** Table 5.4-1. The dominant plants which are non-native should be noted, such as with an asterisk and footnote.

**Summary.** Thank you for the opportunity to comment on the MND for the **North Campus Open Space Restoration Project.** Santa Barbara Audubon supports this ambitious restoration project, which will be a major benefit to Devereux Slough, its watershed, the community, and many native habitats and species. We wish to ensure that the project maximizes the benefits to the Devereux ecosystem and minimizes the negative impacts of project implementation.

Sincerely,

Darlene Chirman  
Co-Chair Conservation Committee

Cherie Topper  
Executive Director