BALLONA WETLANDS BASELINE MONITORING - SUMMARY

Ballona Wetlands Working Group Meeting

May 20th, 2009; 5-7pm

The Santa Monica Bay Restoration Commission (SMBRC) will collect physiochemical, biological and human use data at the Ballona Wetlands Ecological Reserve in Los Angeles, California. This comprehensive baseline assessment will facilitate the development and progress of a long-term monitoring plan. Data collected during the first year assessment will inform the sampling design (number, frequency and location) of the long-term monitoring program. The project objective is to increase knowledge of the health and functioning of Ballona Wetlands to inform management and restoration, while developing reproducible, scientifically valid and peer-reviewed regional wetland monitoring protocols. Annual reports will be prepared upon completion of both the baseline assessment and long-term monitoring plan and will be publicly available through the SMBRC's website. Long-term monitoring will continue in subsequent years with funding authorized by the State Coastal Conservancy.

The project will improve our understanding of the condition of a large, Southern Californian intertidal wetland in an urban environment and contribute to improved wetland protection and an adaptive, long-term restoration plan for Ballona Wetlands. The baseline assessment and long-term monitoring plan will establish an informed, scientifically valid basis for improved watershed management to protect, prevent and reduce pollution to the wetlands.

The baseline assessment plan will include a survey of site conditions in three categories: (1) physical and chemical processes, (2) biological processes, and (3) human activity. Each of these categories includes a set of subcategories with indicators and protocols to assess the health and functioning of the wetlands (Table 1). Surveys will be employed across all habitats within the Ballona Wetlands and will include Ballona Creek, estuarine wetland habitats, freshwater and riparian habitats, seasonal marshes, transitional areas, and upland habitats (Figure 1). Data collected will be primarily quantitative for consistent comparison and analysis.

Table 1. Assessment Categories and Indicators

CATEGORY	SUBCATEGORY	INDICATOR(S)
PHYSICAL AND CHEMICAL	Sediment / soils	constituents, grain size, water content, organic content
	Water quality	constituents, salinity, dissolved O_2, pH, conductivity, dissolved solids
	Hydrology	tidal range, salinity, water flow
	Topography	bathymetry, elevation, depth, habitat mapping
BIOLOGICAL	Plants / vegetation	cover, diversity, abundance, important species
	Birds	diversity, abundance, important species
	Mammals	diversity, abundance, important species
	Herpetofauna	diversity, abundance, important species
	Fish	diversity, abundance, important species, biomass
	Invertebrates	diversity, abundance, infauna/epifauna/terrestrial
HUMAN ACTIVITY	Trash	mass*, distribution*
	Human data	quantitative use – volunteers, visitors*

*Site-specific indicators not included in IWRAP protocols

Figure 1. Map of the Ballona Wetlands and main habitat types.

The starred sites will incorporate water quality, sediment, benthic invertebrate, and fish sampling. Please note that the site locations are still in the planning stage and are subject to change before the baseline assessment program begins. Vegetation and avifauna surveys will be conducted throughout Ballona in all habitats.