Project Description

Los Peñasquitos Lagoon Sedimentation and Siltation TMDL

Description of the Proposed Activity

The proposed activity is the adoption of an amendment to the San Diego Regional Water Board's Basin Plan (Basin Plan) to incorporate a total maximum daily load (TMDL) for sedimentation/siltation in Los Peñasquitos Lagoon (Lagoon). The Basin Plan designates beneficial uses of waterbodies, establishes water quality objectives for the protection of these beneficial uses, and outlines a plan of implementation for achieving and maintaining those objectives and protecting water quality. In addition to establishing a total maximum daily load for sedimentation/siltation, this Basin Plan amendment allocates those loads to sources and includes an implementation plan and compliance schedule for reducing pollutant loading to meet the allocations and reduce the amounts of sediment to levels that protect the beneficial uses of the water in the Lagoon.

The Lagoon is a salt marsh lagoon located in the central portion of San Diego County. The Lagoon receives freshwater inputs from Los Peñasquitos, Carroll Canyon, and Carmel Creeks. The TMDL applies to the entire Lagoon. Approximately 54 percent of the contributing Los Peñasquitos watershed has been developed (e.g., low density residential, industrial/transportation, and commercial institutional land uses), with 46 percent of that area classified as impervious. The largest single land use type in the Los Peñasquitos watershed is open space. A map of the watershed is attached.

The beneficial use that is most sensitive to increased sedimentation is estuarine habitat. Estuarine uses may include preservation or enhancement of estuarine habitats, vegetation, fish, shellfish, or wildlife (such as marine mammals or shorebirds). Impacts associated with increased and rapid sedimentation include: reduced tidal mixing within Lagoon channels, degraded and (in some cases) net loss of riparian and salt marsh vegetation, increased vulnerability to flooding for surrounding urban and industrial developments, increased turbidity associated with siltation in Lagoon channels, and constricted wildlife corridor. The water in the Lagoon does not currently support its beneficial use for estuarine uses due to sedimentation and siltation loads that exceed water quality objectives.

The San Diego Water Board's goal in adopting the TMDL through this Basin Plan amendment is to eliminate the water quality problems caused by sedimentation and siltation in the Lagoon, and specifically to ensure that sedimentation and siltation does not interfere with attainment of the estuarine beneficial use. Adoption of a TMDL is required by section 303(d) of the federal Clean Water Act.

The TMDL for sedimentation and siltation, and its derivation, are discussed in the Technical Support Document. This report contains the technical and environmental characteristics of the TMDL. The TMDL will be implemented primarily through

regulation of urban runoff via waste discharge requirements, adopted by the San Diego Water Board, which implement federal National Pollutant Discharge Elimination System regulations. The primary dischargers are municipalities located in the Los Peñasquitos watershed and the California Department of Transportation. The Basin Plan amendment establishes wasteload allocations for dischargers that can be met over a phased compliance schedule and that should result in attainment of water quality standards. The wasteload allocations and their derivation are discussed in the Technical Support Document. The Implementation Plan, compliance schedule, environmental analysis, and economic analysis are currently under development.

Implementation actions by the dischargers will primarily include development of a Sediment Load Reduction Plan that will describe the best management practices necessary to reduce sediment loads to the Lagoon. Some implementation actions will likely require that the dischargers obtain various federal, state, or local permits, including as examples dredge and fill permits from the Army Corps of Engineers, streambed alteration agreements from the Department of Fish and Game, waste discharge requirements from the State Water Board and San Diego Water Board, and local grading permits issued by local agencies. These agencies are expected to conduct more detailed environmental analyses, as appropriate, when approving specific implementation actions once those actions are identified and proposed by the dischargers.

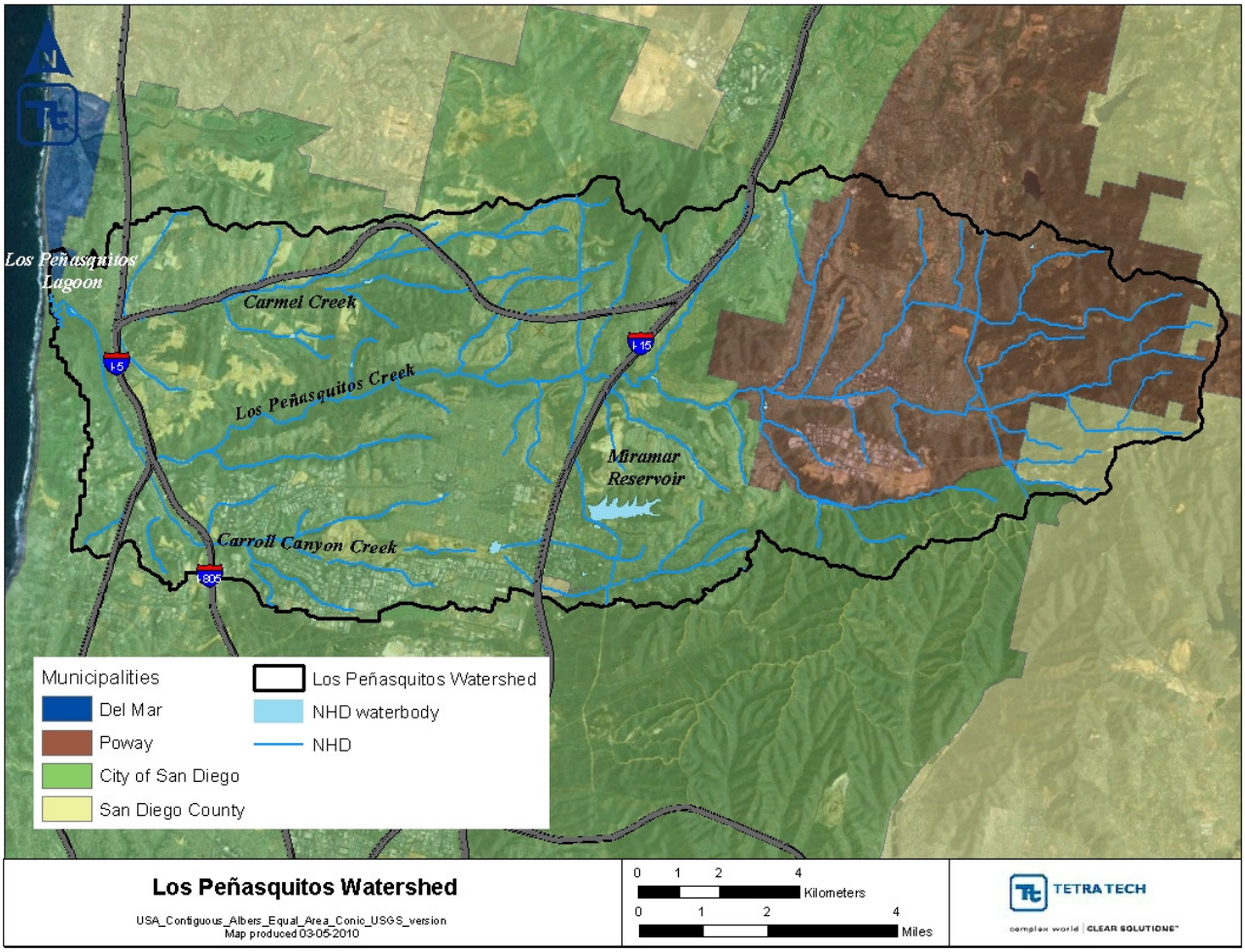

Figure 1. Map of Los Peñasquitos Watershed. (Tetra Tech, 2010)