

Nitrogen Selenium Management Program BMP Strategic Plan

Abstract

The Nitrogen and Selenium Management Program (NSMP) Best Management Practice (BMP) Strategic Plan is the culmination of a multiple year process to develop a watershed restoration plan for nitrogen and selenium impairments in the Newport Bay watershed in Southern California. Hydrologic changes in the watershed have led to the mobilization of selenium and agricultural land uses, specifically from fertilizers, have led to elevated concentrations of nitrogen in the watershed. The development of the BMP Strategic Plan encompassed research, testing and evaluation of nitrogen and selenium BMPs and treatment technologies, the formulation of watershed restoration alternatives, watershed modeling of the developed alternatives, and identification of costs associated with technologies and watershed restoration alternatives. The approach of the BMP Strategic Plan takes into account that the BMPs for the treatment of selenium are not yet proven technologies and that better understanding of groundwater in the watershed is needed. Therefore, the BMP Strategic Plan uses a phased approach that incorporates adaptive management principles through two phases, Phase I – Technology Validation and Phase II – Full-Scale Implementation.