



SECTION A-11, WATER QUALITY MONITORING

A-11.0 WATER QUALITY MONITORING

In response to EPA Clean Water Act regulations, in 1990 the County of Orange, the Orange County Flood Control District, and incorporated cities (Permittees) obtained NPDES Stormwater Permits (First Term Permits) from the Santa Ana Regional Water Quality Control Board. First term permits were superseded by new permits issued in 1996 (Second Term Permits) and 2002 (Third Term Permits).

The Permittees developed a Drainage Area Management Plan (DAMP) to assist in implementing stormwater pollution control measures. Through this DAMP, the Permittees intend to continue to improve existing stormwater quality management practices and, where necessary, to address identified problems and to implement new practices.

The DAMP details monitoring efforts to be implemented throughout the Santa Ana region of Orange County over the course of the Third Term Permits (DAMP Section 11.0). As discussed in the Santa Ana Regional Water Quality Control Board Municipal NPDES Stormwater permit, Order No. R8-2002-0010, the relevant third term monitoring program for the City of Newport Beach includes participation in a monitoring program with the following components:

- Mass Emissions Monitoring - Measure loads in order to estimate the total mass emissions, assess trends over time, and determine if emissions are contributing to exceedances of water quality objectives
- Estuary / Wetlands Monitoring - Monitor the Upper Newport estuary to determine the effects of runoff associated with increased urbanization on these areas.
- Water Column Toxicity Monitoring - Analyze mass emissions samples for aquatic toxicity to determine the impacts of runoff on toxicity of receiving waters
- Bacteriological / Pathogen Monitoring - Obtain and analyze monitoring data on bacteria in sampled waters to determine the impacts of runoff upon existing beneficial uses within receiving waters.
- Bioassessment - Cooperate with the Southern California Coastal Water Research Project (SCCWRP) in efforts to evaluate the biological index approach for Southern California and to design a research project for developing an Index of Biological Integrity (IBI) for the region
- Reconnaissance - Develop new reconnaissance strategies to identify and prohibit illicit discharges
- Land Use Correlations - develop and implement strategies for determining the effects of land use on the quality of receiving waters
- TMDL/303(d) Listed Waterbody Monitoring - Continue to participate in the Regional Monitoring Program for the San Diego Creek Nutrient TMDL, and evaluate the impacts of runoff on all impairments within the Newport Bay watershed and other 303(d) listed waterbodies



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Wet and dry season monitoring programs are currently under development and are anticipated by mid-2003.