

DATE ISSUED: September 13, 2001

REPORT NO. 01-191

ATTENTION: Natural Resources and Culture Committee
Agenda of September 19, 2001

SUBJECT: Report on Ocean Monitoring

SUMMARY

THIS IS AN INFORMATION ITEM ONLY. NO ACTION IS REQUIRED ON THE PART OF THE COMMITTEE OR THE CITY COUNCIL.

BACKGROUND

The City of San Diego's Metropolitan Wastewater Department operates one of the most comprehensive ocean monitoring programs in the world. This program has historically been carried out in response to the regulatory requirements for the ocean disposal of treated wastewater. At the time of the first successful application for a waiver from secondary treatment, the San Diego City Council passed City Ordinance 0-18206 reaffirming its commitment to protection of the coastal ocean environment and the continuation of a comprehensive monitoring program. The purpose of this report is to present the results of last year's monitoring efforts.

DISCUSSION

The attached Annual Receiving Waters Monitoring Report is the summation of annual ocean monitoring for Calendar Year 2000. The Ocean Monitoring Program is designed to assess the impact of wastewater discharged through the Point Loma Ocean Outfall on the marine environment.

The major objectives of the program are to provide data which satisfy the requirements of the NPDES permit, demonstrate compliance with the California Ocean Plan, track movement and dispersion of the wastewater field, and identify any biological or chemical changes which may be associated with the wastewater discharge. These data are used to document the effects of the discharge on water quality, ocean sediments and marine biota, and have been pivotal in the City's successful application for a 301(h) waiver from secondary sewage treatment. These data will be equally important in future applications for renewal of the City's 301(h) waiver.

The monitoring program is divided into several elements:

The water quality portion includes sampling to detect the presence of bacteriological indicators of sewage contamination along the shoreline and in the adjacent offshore waters. Data for various physical and chemical parameters (sea temperatures, water clarity, dissolved oxygen, salinity, pH, oil and grease, total suspended solids) are also collected.

The benthic monitoring portion includes sampling and analysis of soft-bottom invertebrate communities and the physical and chemical structure of associated sediments (sediment quality).

The trawl element of the program involves collecting and monitoring populations of bottom-dwelling fish and large invertebrates (e.g., sea stars, sea urchins) that occur in the region.

Additionally, the fish community studies are supplemented with bioaccumulation analyses that are designed to determine the presence of chemical contaminants in fish tissues. These analyses are performed on fish collected at trawl and rig-fishing sites off Point Loma.

The study area is centered around the discharge site and encompasses over 95 square miles. Shoreline monitoring extends south to Imperial Beach and north to Ocean Beach. The offshore monitoring includes an area on the coastal shelf from Imperial Beach to La Jolla and from the 30-ft depth contour seaward to a depth of 380 ft. Raw data, detailed descriptions of analytical and quality assurance methods, and a statistical interpretation of the data are compiled in reports which are submitted to the Environmental Protection Agency and the Regional Water Quality Control Board. The reports are also available for public review.

A description of the findings of the City's monitoring effort for 2000 is found in the executive summary of the attached document. Overall, we are pleased to report that there are no significant impacts on the marine environment which can be attributed to the discharge. The water in the Point Loma kelp bed, which is subject to the California Ocean Plan bacterial standards for water contact sports, was 100% compliant with those standards during 2000. There is also no evidence that the wastewater plume reached or affected any of the shoreline sites during the year. Additionally, there is presently no evidence of any significant long-term negative impact on sediment quality or marine fish and invertebrate communities near and beyond the outfall. The high level of waste field dilution associated with deepwater discharge site and strong currents in the area has resulted in naturally occurring oceanographic conditions being the dominant factor affecting changes in the marine environment near the Point Loma outfall.

CONCLUSION

The results of the ocean monitoring activities conducted during 2000 verify that the City of San Diego's wastewater treatment and disposal system is performing as intended. As a result, the ocean ecology and natural resources off Point Loma are being protected. Additionally, the

monitoring continues to validate the justification for the waiver from secondary treatment that allows San Diego to provide wastewater services and environmental protection at a reasonable cost to the ratepayer.

Respectfully submitted,

Scott Tulloch
Director
Metropolitan Wastewater Department Director

Approved by: George I. Loveland
Senior Deputy City Manager

LOVELAND/TULLOCH/ACL

Note: The attachment is not available in electronic format. A copy is available for review in the Office of the City Clerk.

Attachment: 1. City of San Diego, 2000 Receiving Waters Monitoring Report, June 2001