

## OUTFALL MONITORING SCIENCE ADVISORY PANEL (OMSAP)

### 2003 MONITORING REVIEW WORKSHOP #3

Thursday, July 24, 2003, 10:00 AM – 3:00 PM

EPA Boston

**FINAL**

#### **SYNOPSIS OF RECOMMENDATIONS**

**Nutrient flux measurements.** MWRA presented results of the nutrient flux measurements and proposed eliminating urea measurements since urea is only a minor component of the net nitrogen flux in Massachusetts Bay and Stellwagen Basin and the measurements have not added to the understanding of benthic responses to nitrogen loading. MWRA also proposed eliminating porewater profiles of nutrients, alkalinities, and dissolved sulfides. These measurements are not routine, but are instead used to understand the patterns seen in the laboratory flux data. Since there are other parameters measured that can explain patterns in flux data, MWRA proposed that porewater profiles are not sampled unless significant changes in the fluxes or very low redox values are measured. MWRA also presented their plans to change the method they use to measure denitrification. Though a newer method (membrane inlet mass spectrometer or MIMS) provides different results from the established method used since 1992, the scientists that conduct the measurements feel that the data are more accurate. OMSAP deliberated over these three proposed revisions and voted to recommend these changes to EPA and MADEP. OMSAP requests that MWRA compare the newer MIMS denitrification method with another stoichiometric method to see if the results are comparable.

**Benthic community monitoring.** MWRA presented results of their monitoring and proposed revisions to the sampling beginning in 2004. They proposed to continue sampling the infaunal community at NF12 and NF17 annually and to randomly split the remaining stations into two equal subsets that would be sampled on alternating years. The entire benthic community monitoring sampling design will be reviewed again when the 2005 data are being analyzed. The nearfield sediment profile imaging study will continue unchanged through 2005. OMSAP reviewed the statistical analyses presented at the workshop and recommended that EPA and MADEP accept the proposed revisions. OMSAP would like to have a discussion at their October 21, 2003 meeting on the implications of the change in sampling on the thresholds.

**Update on improving data collection from moorings.** At their June workshop, OMSAP recommended that MWRA investigate options that would improve the data collection from several buoys in Massachusetts Bay. OMSAP, MWRA, USGS, and NOAA are currently having discussions on how to augment the instrument arrays on the USGS and NOAA moorings near the MWRA outfall. MWRA will present a progress report at the October 21, 2003 OMSAP meeting.

**Workshop #2.** OMSAP approved the synopsis of their June 18-19, 2003 workshop with no amendments.

**MWRA's schedule for submitting the proposed revisions to EPA/MADEP.** This plan will include changes that were requested on an interim basis and other changes that have been discussed at the workshops.

- MWRA will submit proposed revisions to OMSAP, public, EPA, and MADEP in late summer
- OMSAP will meet October 21, 2003 at WHOI, Redfield Auditorium
- OMSAP will submit recommendations to EPA and MADEP after their October meeting
- MWRA will submit a final draft on Friday, November 14, 2003, notice in Environmental Monitor
- Formal public and regulatory comment period
- EPA and MADEP makes determinations on proposed revisions
- MWRA will implement approved revisions in 2004

**MWRA's information briefing for this workshop is located at:**

[http://www.mwra.state.ma.us/harbor/html/omsap\\_briefing.htm](http://www.mwra.state.ma.us/harbor/html/omsap_briefing.htm)

**ATTENDANCE:**

**Members Present:** Andy Solow, WHOI (chair); Bob Beardsley, WHOI; Bob Kenney, U. Rhode Island; Norb Jaworski, retired; Judy Pederson, MIT/Sea Grant; and Jim Shine, Harvard School of Public Health.

**Observers:** Ellen Baptiste Carpenter, Battelle; Bruce Berman, Save the Harbor/Save the Bay; Jim Blake, ENSR; Todd Callaghan, MCZM; Cathy Coniaris, MADEP; Christian Krahforst, MA Bays Program; Mike Delaney, MWRA; Winnie Donnelly, MADEP; David Dow, NMFS; Tom Fredette, USACE; Sal Genovese, Safer Waters in MA; Anne Giblin, Marine Biological Laboratory; Doug Hersh, MWRA; Carlton Hunt, Battelle; Ken Keay, MWRA; Ben Kelly, SH/SB; Suh Yuen Liang, MWRA; Matt Liebman, EPA; Nancy Maciolek, ENSR; Mike Mickelson, MWRA; Tara Nye, Association to Preserve Cape Cod; Andrea Rex, MWRA; Larry Schafer, observer; Jane Tucker, MBL; and Grace Vitale, MWRA.

**MEETING HANDOUTS:**

- Agenda
- July 2003 OMSAP/PIAC/IAAC membership lists
- Draft June workshop summary
- Information briefings and overheads of presentations