

Attachment V
Agreement of NMFS, EPA, and MWRA
Concerning Implementation of Conservation Recommendations

Massachusetts Water Resources Authority (MWRA) is constructing an extended ocean outfall, which will discharge treated effluent from the MWRA's new Deer Island wastewater treatment plant. National Marine Fisheries Service (NMFS), Environmental Protection Agency (EPA), and MWRA agree, that since endangered and/or threatened marine species are present within the area which could potentially be affected by this discharge, the outfall falls within the class of projects which "may affect" protected species, within the meaning of the Endangered Species Act (ESA). Because the outfall falls within this "may affect" category, Section 7 of the ESA require that EPA consult with NMFS before issuing a discharge permit.

On September 8, 1993, that consultation concluded when NMFS issued its Biological Opinion. The Biological Opinion found that the MWRA outfall is not likely to jeopardize endangered or threatened species.

Along with the Biological Opinion, NMFS issued a number of "Conservation Recommendations". These recommendations, which suggest optional measures that may be taken to further protect endangered or threatened species, are designed to minimize any possibility of adverse effects on such species. The recommendations are discretionary and non-binding. See 40 C.F.R. § 402.14 (j).

After the Biological Opinion was issued, NMFS began a series of discussions with the EPA and MWRA concerning implementation of the conservation recommendations. The agencies have also received comments on the Conservation Recommendations from scientists both within and outside the agencies. These discussions and comments have helped clarify the intent and purpose of the conservation recommendations. It has become clear that some of the recommendations have been addressed by earlier work. In some cases, the agencies have identified more effective means of achieving NMFS' purpose than the methods proposed by the original recommendations.

NMFS, EPA, and MWRA are strongly committed to the protection of endangered and threatened species, and to continued to develop and implement practical methods of reducing threats to those species. The agencies have developed the attached plan for implementation of the Conservation Recommendations to reduce the potential for adverse effects on protected species.

NMFS, EPA, and MWRA also acknowledge that MWRA expects to propose a reduction in the number of batteries of secondary treatment to be constructed at Deer Island. At the time it makes its proposal, MWRA will address the potential impacts of any reduction in the number of batteries upon endangered and threatened species, and will provide the agencies with information relevant to whether MWRA's proposal would affect any of the assumptions upon which the Biological Opinion was based, including any change in the quantity or quality of effluent discharged from the ocean outfall. Upon receipt of any such MWRA proposal, NMFS and EPA will review it to determine what further action is required pursuant to the ESA.

This agreement is intended to reflect the mutual understanding of NMFS, EPA, and MWRA, and is not intended to create legal rights in any other party.

CONSERVATION RECOMMENDATIONS IMPLEMENTATION PLAN

Permit Actions

1. EPA will require chronic toxicity testing in its draft NPDES permit (EPA cannot make commitments on the content of the final permit before receiving public comments). MWRA agrees not to oppose such a requirement.
2. EPA's draft NPDES permit will include limits on priority pollutants, where such pollutants are or may be discharged at a level which has a reasonable potential to cause or contribute to any exceedance of a State

water quality standard.

3. MWRA will continue its efforts to reduce pollutant loadings to its treatment facilities through aggressive enforcement of its Industrial Pretreatment Program, and will continue to comply with the federal court order concerning pretreatment.
4. Implementation of the baseline monitoring program has been a requirement of the federal court order since June, 1992. NMFS, EPA, and MWRA agree that the court order is an appropriate mechanism for enforcement of the monitoring program.
5. By March, 1995, MWRA will develop a draft contingency plan that describes how treatment plant operations can be modified to respond to any problems indicated by monitoring. EPA and NMFS will review this framework, which will also be made available to the public. NMFS and/or EPA may recommend further work if it believes that MWRA's plans are not sufficiently detailed or are inadequate for any other reason. NMFS, EPA, and MWRA agree that the purpose of this planning effort is to reduce the time that would be needed to respond to any need for removal of nutrients and toxics at a future date.

Modeling Actions

1. The MWRA has released a draft report on the results of its three-dimensional dilution model for stratified conditions. EPA and NMFS are reviewing this report.
2. MWRA has reported to NMFS and EPA on updated projections of future wastewater loadings due to future development in the Boston area in its CSO System Master Plan in December, 1994.

Monitoring Actions

1. MWRA has reported to the Outfall Monitoring Task Force on the proportion of chemical contaminants in its effluent associated with particulate and dissolved states. The Task Force is now evaluating the information. In consultation with the Task Force, EPA, NMFS, and CZM will determine future monitoring needs.
2. Prior to commencement of the discharge, MWRA will review the status of USGS studies concerning transport, resuspension, and accumulation of particulates and toxic contaminants in Massachusetts Bay, and shall report on the results (or interim results, if the studies have not yet been completed) of those studies and their significance for outfall-related impacts. EPA and NMFS will review this report and make appropriate recommendations on further action or studies. If these studies are not complete by the time the discharge begins, MWRA shall continue to review the progress of the studies and shall periodically report on the significance of any new results for outfall-related impacts.
3. NMFS, EPA, and MWRA agree that plume tracking studies will be done as a special study under the existing monitoring plan. NMFS, EPA, and MWRA agree that studies defining density accumulation horizons may be useful for plume tracking, but that it is unnecessary to specify a particular technology at this point. MWRA agrees to coordinate its sampling with pilot hydroacoustic studies which may be proposed by NOAA for the summer of 1995 to compare with methods already being used to define water column density structure.

Endangered Species Protection Actions

1. EPA/NMFS will request that the Marine Mammal Working Group on Unusual Marine Mammal Mortalities identify any potential pathogens from sewage effluent that may serve as disease vectors for marine mammals. If any such pathogens are identified, MWRA will test for these pathogens in its effluent. Based on treatment effectiveness, MWRA, in consultation with appropriate elements of EPA (e.g. ORD), will

determine the potential for these pathogens to survive discharge into salt water. MWRA/EPA will report the results to NMFS.

2. Consistent with the existing recovery plans for the humpback and northern right whales, a recovery plan implementation team, comprised of federal and non-federal whale and other marine researchers, will review whale related research and monitoring activities in Massachusetts and Cape Cod Bays.
3. EPA and NMFS will continue their consultations regarding water quality criteria and standards, and will consult on cumulative impacts of ocean discharge and disposal as appropriate.
4. EPA and NMFS will continue their efforts concerning impacts of toxins on endangered marine mammals. For example, EPA's Narragansett Lab is conducting analyses of humpback whale body burdens and is considering spatial partitioning to develop sampling methods. The NMFS Northwest Fisheries Science Center is conducting analyses on North Atlantic cetacean tissues.

4/8/95

Date

Rolland A. Schmitt
Assistant Administrator for Fisheries
National Marine Fisheries Service
National Oceanic and Atmospheric Administration

4/12/95

Date

Patricia L. Meaney
Acting Regional Administrator
Environmental Protection Agency

3/27/95

Date

Douglas B. MacDonald
Executive Director
Massachusetts Water Resources Authority