

DREDGED MATERIAL MANAGEMENT OFFICE



**DREDGED MATERIAL  
MANAGEMENT OFFICE  
(DMMO)**

**ANNUAL REPORT**

*January 1, 2000 through December 31, 2000*

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## **Dredged Material Management Office (DMMO)**

### **2000 Annual Report**

The San Francisco Bay Area's pilot Dredged Material Management Office (DMMO) has completed its review of the dredging activities for calendar year 2000 (January 1 through December 31, 2000). The DMMO is a joint program of the San Francisco Bay Conservation and Development Commission (BCDC); the San Francisco Bay Regional Water Quality Control Board (RWQCB); the California State Lands Commission (SLC); the U.S. Army Corps of Engineers, San Francisco District (USACE); and the U.S. Environmental Protection Agency, Region IX (EPA). In late 1995, a pilot program was initiated to determine whether and how a permanent program such as this should be established and operated. The attached report prepared by the staff of the participating DMMO agencies, evaluates the program's status.

During 2000, the DMMO reviewed and made final recommendations regarding 34 dredging and dredged material disposal projects in San Francisco Bay. The DMMO reviewed projects proposing in-Bay, ocean and upland disposal during 2000, including projects proposing exclusively upland disposal. Of the proposed dredged material reviewed during 2000, approximately 12 percent of maintenance material was unsuitable for unconfined aquatic disposal. This material was suitable for other disposal locations, such as levee maintenance, wetland restoration and capping for landfills. This report also presents data on the volumes of maintenance dredging that occurred in 2000, from projects that were reviewed in various years by the DMMO. The total amount of maintenance dredging in 2000 was relatively low (1.6 million cubic yards). Just over half (0.9 million cubic yards) of the material from maintenance dredging projects in 2000 was disposed of at in-Bay disposal sites. Most of the remaining material was disposed of at the Deep Ocean Disposal Site, 50 miles offshore of San Francisco. A small amount of maintenance dredging material went to beneficial reuse projects, but all of the material from a very large new work project was reused.

The DMMO staff members also contributed in a substantive manner to development of the Management Plan for the Long Term Management Strategy for the Placement of Dredged Material in San Francisco Bay Region (LTMS), including numerous LTMS public workshops and preparation of Management Plan text. Other milestones and accomplishments of the DMMO during 2000 include publication of a guidance document and continued participation in the LTMS working groups on topics of interest to the public.

The staffs of the DMMO agencies have recommended to the Dredging Management Committee, which oversees the DMMO, that the DMMO be made a permanent program. Staff members further recommend that the pilot phase continue until the DMMO is formalized as a permanent program.

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## I. INTRODUCTION

The Pilot Program of the multi-agency Dredged Material Management Office (DMMO) was established to foster a comprehensive and consolidated approach to handling dredged material management issues to reduce redundancy and delays in the processing of dredging permit applications, while ensuring environmental protection. The DMMO, in part, grew out of the Long Term Management Strategy for the Placement of dredged material in the San Francisco Bay Region (LTMS), which was started in 1990.

In 1995, the LTMS agencies formed a pilot DMMO, under existing authorities and budgets. The DMMO member agencies are the EPA, USACE, RWQCB, BCDC, and the SLC. The USACE acts as the “host” of the DMMO and takes on responsibilities associated with this role. The California Department of Fish and Game (CDFG) and the National Marine Fisheries Service (NMFS) actively participate in the DMMO as commenting resource agencies.

The roles, responsibilities and jurisdictions of the DMMO agencies differ, depending primarily on the proposed dredged material disposal or reuse site. As a result, member agencies may play only an advisory role in certain aspects of the permitting process. Decisions made by the DMMO do not in any way supercede the primary role of the permitting agencies, which remain free to accept or reject recommendations from commenters, including the DMMO staff. In practice, however, the discussions at the DMMO meetings help inform the primary permitting agencies of specific concerns and issues of the member agencies, often before finalization of project documents. This encourages and facilitates necessary project modifications at an early stage in project planning when such changes are more easily and economically accomplished.

The DMMO facilitates the processing of dredging permit applications within existing laws, regulations and policies. It was specifically designed to provide a mechanism for consistent review of permit applications through coordinated efforts by DMMO member agencies. It also provides a mechanism to allow the involvement and participation of permit applicants and interested parties during the application process. No new regulatory statutes were initiated in the formation of the pilot DMMO. All applicable regulatory authority and processes of the member agencies remain in full force and effect. The DMMO meetings are typically held twice monthly at the USACE offices in San Francisco and are open to public participation.

The geographic area of the DMMO includes all of the San Francisco Bay Estuary up to Sherman Island, its major tributaries to the point where navigation is no longer feasible, upland areas surrounding the estuary, and the ocean disposal site designated by the EPA (the San Francisco Deep Ocean Disposal Site, or SF-DODS).

The member agencies are also committed to coordination with the pertinent resource agencies (CDFG, NMFS, and U.S. Fish and Wildlife Service), the Central Valley Regional Water Quality Control Board (regarding reuse of Bay dredged material in the Sacramento-San Joaquin Delta region) and the California Coastal Commission (regarding ocean disposal of dredged material). In addition to posting meeting schedules, and agendas on the DMMO Web site at <http://www.spn.usace.army.mil/conops/dmmo.htm>, the USACE sends electronic copies of these items to members of all these agencies.

## II. PREVIOUS REPORTS

The first six-month pilot phase of the DMMO, as well as the initial development period, were described in the *Dredged Material Management Office (DMMO) Six-Month Pilot Phase Review Report* (March 1997). The initial pilot phase report was approved and accompanied by a revised Memorandum of Understanding (MOU). The report was presented and discussed, and public comments were addressed, at a joint LTMS Policy Review Committee (PRC) and BCDC public meeting.

The second six-month pilot phase of the DMMO was reported in the *Dredged Material Management Office (DMMO) Second Six-Month Pilot Phase Review Report* (January 1998) and was presented and discussed at a PRC meeting, at which public comments were addressed.

The third phase report, representing the period from October 1, 1997 through December 31, 1998 was completed in May 1999 and was presented and discussed at a BCDC public meeting.

The fourth phase report, representing the period from January 1, 1999 through December 1999 was completed in April 2000 and presented at the first independent DMMO Annual Meeting held April 28, 2000.

This report covers the period from January 1, 2000 through December 31, 2000. The annual meeting to discuss activities and other topics of the DMMO is scheduled for April 12, 2001.

## III. ISSUE RESOLUTION

The DMMO MOU directs that each annual report contain an analysis of issues that arose during that phase and provide recommendations for further actions to be reviewed and approved by the Dredging Management Committee. A majority of issues arising during the first four pilot phases have been addressed and resolved. The outstanding issues are described below.

**A. Issue:** DMMO project tracking. In accordance with the MOU, the DMMO “host” agency (USACE) is to develop and maintain an electronic tracking database of permit information for DMMO projects.

**Results:** In 2000, the USACE made substantial progress in converting the existing spreadsheet-based project tracking system into a Microsoft Access database. It is anticipated that this new database will be accessible at the DMMO Web site in the future.

**Recommended Action:** The DMMO agency staff will continue to work towards finalizing the new project tracking database and making it available on the DMMO Web site. In the meantime, summary project tracking information (e.g., on-going projects, locations and volume) will continue to be made available in a spreadsheet format on the Web site.

**B. Issue:** Lack of a database for tracking sediment testing results impairs the DMMO’s ability to make recommendations on Sampling and Analysis Plan (SAP) adequacy and sediment suitability determinations. Project past history, especially results of physical, chemical and biological testing, are necessary for the approval of a SAP or granting a request for a Tier I determination. Some SAPs and Tier I requests either do not contain any past data or they present incomplete historical information. Thus, evaluation may rely on institutional memory or files that are difficult to retrieve and may be incomplete, potentially resulting in inconsistent recommendations or project delays.

**Results:** The RWQCB initiated efforts to develop a sediment characteristics database in 1999. Due to lack of resources, the database is not complete or up to date. The DMMO agencies anticipate that with implementation of the LTMS, more support for this effort will be available, and more work on the database can proceed.

**Recommended Action:** Coordinate this effort with LTMS data management efforts.

**C. Issue:** Need to encourage resource agencies to become more involved in the DMMO. Resource agency participation can facilitate project review, at the same time insuring environmental protection by bringing up and resolving issues early in the permitting process. U.S. Fish and Wildlife Service, because of personnel resource constraints, has been unable to participate.

**Results:** In 2000, NMFS became an active participant in the DMMO. The U.S. Fish and Wildlife Service continues to be included on distribution of all DMMO agendas and minutes.

**Recommended Action:** Continue to encourage U.S. Fish and Wildlife Service participation; include them on DMMO distribution lists and provide them with meeting schedules, agendas and minutes.

**D. Issue:** The USACE and EPA headquarters required each region and district to publish regional and local guidance on the new Inland Testing Manual (ITM) by July 1, 1999.

**Results:** The DMMO agencies published draft regional ITM guidance on June 11, 1999 (as PN 99-3) in advance of the deadline, and became one of the first regions in the nation to do so. DMMO members are finalizing responses to comments in anticipation of issuing final guidance in 2001.

**Recommended Action:** Complete response to comments, issue final guidance in 2001.

**E. Issue:** Need for Sampling and Analysis Plan (SAP)/Quality Assurance Project Plan (QAPP) guidance. Guidance on sampling, reporting, and data quality requirements is needed for project proponents. Such guidance would help avoid unnecessary project delays, streamline the review of applications, and provide consistent data for agency decisions regarding dredged material suitability.

**Results:** The DMMO published a draft Sampling and Analysis Plan (Quality Assurance Project Plan) Guidance for Dredging Projects within the San Francisco District (Public Notice 99-4) on July 1, 1999 for comment. This document provides guidance to project proponents on how to prepare and submit sampling plans and testing result reports, and uses EPA national guidance on the preparation of Quality Assurance Project Plans. The DMMO is currently working on addressing public comments and revising the document. Project proponents are encouraged to use the draft SAP guidance until the final document is completed. Furthermore, the DMMO is encouraging dredging proponents (particularly those with numerous or frequent projects, such as ports) to prepare overall Quality Assurance Project Plans (QAPP). These QAPPs address the standard components of all SAPs (e.g., detection limits, sampling and core logging procedures), and can be used in conjunction with project-specific SAPs that focus on sample locations, compositing, and other specific details of the project or dredging episode. The Ports of Oakland and San

Francisco have approved QAPPs that have successfully reduced the time and effort expended both by the Ports and by the DMMO agencies for review of individual projects.

**Recommended Action:** Continue review and revision of the guidance document. Continue to encourage applicants to prepare overall QAPPs for multiple or episodic projects. Finalize Public Notice 99-4 SAP Guidance in 2001 and post on the DMMO Web site.

**IV. ACCOMPLISHMENTS**

During 2000, the DMMO continued to accomplish the goals and objectives set forth in the 1995 General Operating Principles of the DMMO. The DMMO continued review of dredging project proposals, preparation of guidance documents, maintained the DMMO Web site, initiated (through the LTMS Management Plan process) and took part in a number of working groups relevant to the DMMO efforts, and continued staff education activities. These efforts are described below.

**A. PROJECT REVIEW**

The DMMO discussed 61 projects during the year (see Appendix A for details on the projects considered). Of those, the DMMO made final recommendations on 34 projects proposing a total of approximately 2.3 million cubic yards of dredging. Table 1 provides summary information on projects for which the DMMO completed review in 2000.

**Table 1.** Volume proposed for dredging by projects for which DMMO made final recommendations during calendar year 2000.

	Volume proposed for disposal	
	<i>cubic yards</i>	<i>% of total volume</i>
By Proposed Disposal Location		
In-Bay	1,218,692	53
Beneficial Reuse	310,042	13
Ocean	775,000	34
By Suitability Determination		
Suitable for unconfined aquatic disposal	2,019,692	88
Unsuitable for unconfined aquatic disposal	284,042	12
<b>Total</b>	<b>2,303,734</b>	

Just over half of the material from reviewed projects was proposed for in-Bay disposal. Approximately one-third of the material was proposed for ocean disposal; this material comes from just two USACE projects: maintenance dredging of Oakland Harbor and maintenance dredging of Richmond Inner Harbor. The remaining material, 13%, was proposed for beneficial reuse at various locations, including landfills (for daily cover) and Winter Island (for levee maintenance).

In 2000, a higher proportion of material was determined to be unsuitable for unconfined aquatic disposal than in previous years. This year, about 12% of material fell into this category, while historically this value has been below 5%. As would be expected, a higher proportion of the new work material, approximately 20%, was unsuitable for unconfined aquatic disposal. If only maintenance dredging is considered, approximately 10% of the material (from the Richmond

Marina Entrance Channel and Port of San Francisco Piers 35 and 45) was unsuitable for unconfined aquatic disposal. There is no indication that this apparent increase in the amount of material unsuitable for unconfined aquatic disposal reflects an overall trend in the quality of Bay sediments. The DMMO agencies will continue to report on results of suitability determinations in future Annual Reports, and will investigate further should long-term trends in dredged material quality appear to change.

The volumes in the table above are proposed only, and the actual amounts and timing of dredging will depend on several factors. The DMMO process is just a portion of the permitting process for dredging. After obtaining a suitability recommendation on sediment quality from the DMMO, project proponents must obtain authorizations from appropriate regulatory agencies, secure funding, and arrange for a dredging contractor to perform the work. All these steps can take weeks to years. Therefore, these numbers cannot be used to predict, for example, that in-Bay disposal in 2001 will be 1.2 million cubic yards. For some of the projects in Table 1, dredging was completed in 2000. For other projects, dredging may not occur for some time.

The USACE tracks actual dredging and disposal volumes, and provides quarterly reports of these volumes to the other DMMO agencies. The complete annual report of disposal volumes is available from USACE. Table 2 summarizes the dredging and disposal volumes for calendar year 2000 (Appendix B contains more detailed information for calendar year 2000 dredging and disposal). Approximately 3.9 million cubic yards of material were disposed of during the year. Of this volume, 23% went to in-Bay disposal, 18% was disposed of at the deep ocean disposal site (SF-DODS), and 59% went to beneficial reuse. These percentages are dominated by the Port of Oakland’s Berths 55-58 deepening project; as part of this new work project, over 2.2 million cubic yards of material were used to provide fill material (beneficial reuse) for reconfiguration of the Port’s Middle Harbor area. For comparison with previous years, it is more appropriate to focus on the fate of maintenance dredging materials. Considering only maintenance dredging, almost half of the dredged material was disposed of at SF-DODS or at beneficial reuse sites. The LTMS policies encouraging that alternatives to in-Bay disposal be found for new work and USACE projects appear to be succeeding in diverting material from in-Bay disposal. The total amount of in-Bay disposal in 2000 was below the long-term LTMS goal of one million cubic yards; in addition to successes of the LTMS, this is partially due to the low total volume of maintenance dredging in 2000.

**Table 2.** Dredged material disposal during calendar year 2000.

Disposal Type	All Dredging		Maintenance Dredging		New Work	
	<i>cubic yards</i>	%	<i>cubic yards</i>	%	<i>cubic yards</i>	%
In-Bay	881,720	23	881,720	54	0	0
Ocean	710,827	18	710,827	44	0	0
Beneficial reuse	2,277,076	59	34,301	2	2,242,775	100
Total	3,869,623		1,626,848		2,242,775	



## **B. DMMO WEB SITE**

The DMMO Web site, initiated in June 1998, continues to be maintained and updated by the USACE. During 2000, we reorganized the Web site. The Web site provides access to:

- DMMO meeting schedules and agendas
- DMMO MOU
- DMMO Annual Reports
- DMMO Newsletters
- Dredging Permit Consolidated Application Form and Instructions
- Local and federal guidance for sediment testing and dredged material management
- Links to the LTMS EIS/R
- Meeting schedules and agendas for LTMS public workshops and workgroup meetings
- Links to DMMO member agency Web sites

## **C. TIER I GUIDANCE**

On November 1, 2000, the DMMO, through the Corp of Engineers, published Public Notice 00-1 "Guidance for Requests for Tier 1 Decisions". This guidance is intended to assist dredging applicants in preparing adequate Tier 1 requests. Also included is a list of required items for a complete request. The purpose of this guidance is to facilitate preparation of these requests and thus streamline the review. This guidance document is posted on the DMMO Web site.

## **D. WEB VERSION OF DMMO APPLICATION**

The DMMO is designing a web based version of the Dredging Permit Consolidated Application Form. The intention is to allow applicants to type directly into the web form. Currently the application is only available as a portable document file (pdf) that be downloaded from the DMMO web site and printed, but not filled in electronically, or as a paper copy from one of the DMMO agencies. A "beta" version will be sent to a volunteer subset of project proponents and consultants for their use and comments. After addressing any comments, the DMMO will finalize the web form that we expect to make available to applicants and their contractors at the DMMO Web site. It was anticipated in the 1999 Annual Report, that an electronic application form would be released in 2000, but due to other priorities and redirection from an electronic to web version, the release has been delayed.

## **E. LTMS MANAGEMENT PLAN PARTICIPATION**

DMMO members have played an active role in developing, preparing for and participating in all the LTMS public workshops. Several of the DMMO staff have also been involved in the actual writing and review of the Management Plan document, preparation for and participation in LTMS Management Committee meetings and some of the DMMO staff also participate in the LTMS mid-level policy group.

DMMO members have held additional meetings of two LTMS working groups; a disposal site monitoring group and a sediment quality guidelines group. There were seven and five meetings

respectively, in 2000. Members of the DMMO participate in one or both of these groups. Due to personnel shortages and Management Plan development, these meetings were suspended after the summer of 2000.

Because DMMO members have participated in all aspects of the Management Plan development, other DMMO priorities (e.g., finalization of SAP and ITM guidance documents) have been delayed. The draft LTMS Management Plan was published in June 2000. It is anticipated that the final version will be published by the end of 2001.

#### **F. 2000 ANNUAL MEETING**

On April 28, 2000, the DMMO held its first independent Annual Meeting. The annual report for 1999 was presented. Dr. Jack Word, of MEC Analytical Systems Inc. gave a presentation entitled "Identification and Accounting for Confounding Factors in Sediment Testing". Also during the afternoon session, there was a panel discussion of testing laboratories chaired by the RWQCB. They discussed appropriate bioassay species and test conditions for estuarine environments and other testing issues. Other topics included: Public Notices 99-3 and 99-4, terminology in SAPs and result reports, the DMMO activities for the upcoming year and other efforts affecting dredging and dredged material disposal for Bay area projects. The meeting was well received by those attending. It was mentioned that the DMMO is truly open to the public and is providing a service to the dredging community.

#### **G. NEWSLETTER**

The purpose of the newsletter is to disseminate information and policies that may be of use to applicants and their representatives in the permitting process, particularly issues related to sediment testing and results reporting. The DMMO will publish the newsletter as needed to provide necessary guidance in advance of publication of more formal documents (e.g. ITM and SAP guidance). The first newsletter, dated March 10, 2000 was mailed out to interested parties on the LTMS and DMMO mailing lists. It addressed items that had come up during the DMMO's review of SAPs and test results reports. To be added to the distribution list for the subsequent newsletters, please contact David Dwinell of the USACE.

#### **H. CENTRAL COAST DMMO**

In April 2000, the DMMO held the regular biweekly DMMO meeting in Monterey to demonstrate the process to interested resource agencies and the public in the Monterey Bay area. Agencies attending included USACE, EPA, RWQCB, Regions 2 and 3, BCDC, SLC, DFG, Coastal Commission, and Monterey Bay National Marine Sanctuary. After the DMMO meeting, the group met to discuss the possibility of setting up a DMMO process for Central Coast region. Discussions included agency responsibilities, DMMO responsibilities, and differences between the San Francisco Bay and Central Coast regions and other topics. The DMMO member agency staff will continue to support the Central Coast agencies in their effort to develop a DMMO, and to assist them in development of an MOU and in other areas, as requested.

#### **I. DMMO STAFF EDUCATION AND TRAINING**

During 2000, the DMMO agencies continued to include education and training, both internal and external, as a primary objective. Education and training include: informal internal workshops

regarding the roles, regulations and responsibilities of the member agencies speakers at DMMO meetings; DMMO coordination and self-evaluation meetings; site visits; and participation in regional and national meetings and workshops relating to dredging and dredged material management. "Internal" training, such as field visits, are often imperative to agencies' understanding of a particular project or process (e.g., hopper dredging). Similarly, internal meetings, workshops and retreats, addressing coordination and communication, are necessary to ensure that DMMO members continue to work well as a team. As important, is "external" training where DMMO members learn what other groups dealing with dredging and dredged material management are doing. The DMMO is an efficient and effective body, a necessary component to the success of LTMS, and a resource to the regulated public. The state of the art and the science continues to evolve and DMMO staff members need to learn about these changes in order to remain effective. Attendance at workshops, seminars and training, particularly those outside the Bay area, by DMMO members is needed to ensure that we keep current with regulatory and technical changes.

During 2000, the DMMO accomplished a number of our training goals. These are summarized below

**Internal Training:**

- A DMMO coordination, policies and "self-evaluation" workshop was held in April 7, 2000.

**Site Visits:**

- Port of Oakland Harbor tour
- Port of Oakland Berths 55-58 tour
- City of Martinez Marina and Disposal Site
- Marin Yacht Club
- McAvoy Harbor
- City of San Leandro Disposal Site
- Winter Island Disposal Site
- Coast Guard Vessel Traffic Service (USACE)
- CRG Laboratory in San Diego, CA

**External Training:**

- National USACE/EPA Ocean Dumping/Dredging Coordinators Meeting
- CALFED Bay-Delta Program on Levees & Channels (January, Sacramento)
- GeoSea presentation: Sediment Transport for Santa Cruz and Moss Landing (January, Santa Cruz)
- Mercury presentation by BTAG of EPA (March, San Francisco)
- Regional Monitoring Program Annual Meeting (April, San Francisco)
- SETAC annual meeting (April, Davis)
- Geographic Information System class (April, CRREL)
- Methyl Mercury presentation from WES (June, San Francisco)
- EMAP presentation (August, San Francisco)
- WEDA Conference (September, Seattle)
- Conference on Dredged Material Management (October, Long Beach)
- PCB presentations by RWQCB (September and November, Oakland)
- Dredged Material Management Conference at MIT (December, Cambridge, MA)

## V. ON-GOING AND FUTURE ACTIVITIES

As the DMMO continues to evolve, our responsibilities increase. We recognize the need to coordinate more fully with other dredging proponents in the region, such as in the Monterey Bay Region, within the Sacramento Delta and in southern California). We hope to extend the DMMO concept to other areas, particularly those that are within the jurisdiction of the USACE San Francisco District and EPA Region IX. We feel that our experiences can assist other groups in developing similar programs. In addition, we have discussed the need for additional guidance to the regulated public. On-going and proposed future activities of the DMMO are described below.

**A. Continue to coordinate review of project proposals:** The DMMO will continue to coordinate review of dredging project permit applications. It is expected that the DMMO increasingly will be involved in review of projects proposing disposal of dredged material at the ocean disposal site and at beneficial reuse sites. Further details regarding the DMMO's role is included in the LTMS Management Plan.

**B. Regional Implementation Manual:** The DMMO agencies will prepare a Regional Implementation Manual which, ultimately, will compile testing requirements for dredged sediment disposal at beneficial reuse, in-Bay and ocean sites based on Federal and State guidance.

**C. Promulgate guidance on in-Bay Mixing zones:** The RWQCB and the USACE are working jointly to develop an appropriate model to use to calculate a mixing zone. They have investigated the use of STFATE and will be conducting workshops and preparing supporting materials to explain the use and consequences of this model.

**D. Update the Alcatraz (SF-11) Environs Reference database:** EPA intends to publish a revised database.

**E. SF-DODS database:** EPA, working with the USACE, developed a sediment chemistry and bioassay reference database that can be used in the same manner as the SF-11 database (<http://www.epa.gov/region09/water/dredging/sfdods/index.html>). Potential applicants may choose to forgo actual sampling of the reference site, and instead compare the results of their dredged material evaluations with the reference database. As with SF-11, this comparison is considered conservative because neither reference database takes into account non-statistically significant values for bioassays.

**F. Future reports and annual meetings:** The DMMO will continue to produce annual reports covering calendar years and to hold annual meetings. The annual meetings are independent of other regularly scheduled DMMO meetings and are open to the public. The annual meetings include presentations and discussions of matters relevant to management of dredged material disposal in the Bay area and the DMMO's progress in addressing them.

**G. Project tracking for future use in LTMS planning:** Included as Appendix B to this report are the monthly volumes dredged during 2000 listed by project. Section IV-A of this report provides a summary table and discussion of these data. The DMMO will continue to track this information and make summaries available to the LTMS agencies for planning purposes.

## **VII. CONCLUSIONS**

The DMMO has continued to improve review of dredging project proposals, encourage intra- and inter-agency consistency in the decision making process, while ensuring environmental protection. The DMMO continues to expand its role in dredging and dredged material management in the Bay area by increasing our review of projects proposing upland disposal, by participating in working groups of concern to dredged material management, and by increasing public participation in the process. The agencies recommend that the pilot DMMO be finalized and only continue in a pilot phase, pending formalization of the program. In the future the agencies comprising the DMMO will act to formalize this arrangement through an updated MOU, which will clearly describe the procedures under which the DMMO will operate.