

ATTACHMENT A

LOS ANGELES BASIN CONTAMINATED SEDIMENTS TASK FORCE CONTAMINATED SEDIMENT LONG TERM MANAGEMENT STRATEGY PROPOSED REPORT STRUCTURE AND OUTLINE

OVERALL REPORT STRUCTURE

Management Strategy Report

- ~50 page management document summarizing approach and decisions
- Decision toolbox with rationale for alternatives selected
- Decision framework
- Recommendations for on-going activities and future plans
- Include vehicle for addressing dissenting opinions
- Outline and contents to be prepared collaboratively during CSTF meetings
- Sections 9 and 11 of the Support Document may serve as a starting point for developing the outline of the Strategy Report
- Coordination with Los Angeles Regional DMMP document

Management Strategy Support Document

- Provide a history of the issues
- Exploration of alternatives
- Background descriptions
- Results of CSTF evaluations and sponsored studies
- Summarize the technical appendices, as needed
- Draft proposed outline attached for consideration

Management Strategy Technical Appendices

- Provide detail for specific issues that form the basis of the Strategy decisions
- Existing technical documents produced by CSTF or individual CSTF members
- Provided as reference to support decision framework
- Draft proposed outline attached for consideration

**MANAGEMENT STRATEGY SUPPORT DOCUMENT
DRAFT PROPOSED OUTLINE**

1.0 EXECUTIVE SUMMARY

2.0 INTRODUCTION

- 2.1. Overview of Contaminated Sediments in the Los Angeles Basin
 - 2.1.1. Management Areas
 - 2.1.1.1. San Pedro Bay
 - 2.1.1.2. Los Angeles River Estuary
 - 2.1.1.3. Marina del Rey
 - 2.1.1.4. Ballona Creek
 - 2.1.2. History of contaminated sediment related activities in the region
 - 2.1.3. Need for oversight of dredging and disposal of contaminated sediments
- 2.2. Overview of the Contaminated Sediments Task Force (CSTF)
 - 2.2.1. CSTF Development Process
 - 2.2.1.1. Enabling legislation
 - 2.2.1.2. Structure and function of the CSTF
 - 2.2.2. Development of a long term management strategy
 - 2.2.2.1. Goals of the strategy
 - 2.2.2.2. Previous studies
 - 2.2.2.3. Identification of data needs
 - 2.2.2.4. Overview of affected environment
 - 2.2.3. Public Participation
 - 2.2.3.1. Annual Meetings
 - 2.2.3.2. Public Review
 - 2.2.3.3. Response to Public Comments
- 2.3. Overview of the Los Angeles Region DMMP
 - 2.3.1. Objectives of the DMMP
 - 2.3.2. DMMP Timeline
 - 2.3.3. Coordination with the CSTF Strategy Report

3.0 AFFECTED ENVIRONMENT

- 3.1. Marine Resources in the Study Area
 - 3.1.1. Benthos
 - 3.1.1.1. Habitat Conditions
 - 3.1.1.2. Benthic Invertebrates
 - 3.1.2. Finfish
 - 3.1.3. Wildlife
 - 3.1.3.1. Avian
 - 3.1.3.2. Marine mammals
 - 3.1.4. Coastal wetland, estuaries, submerged aquatic vegetation, and intertidal areas

- 3.1.4.1. Wetlands
- 3.1.4.2. Estuaries
- 3.1.4.3. Submerged aquatic vegetation
- 3.1.4.4. Hard substrate intertidal community
- 3.2. Commercial and Recreational Resources
- 3.3. Threatened and Endangered Species of the Los Angeles Coastal Region
- 3.4. Historical and Archeological Resources
- 3.5. Navigation and Shipping
- 3.6. Upland Infrastructure and Natural Resources
 - 3.6.1. Transportation
 - 3.6.2. Land Use
 - 3.6.3. Air Quality
 - 3.6.4. Groundwater Resources

40 CONTAMINATED SEDIMENTS IN THE LOS ANGELES REGION

- 4.1 Description of Contaminated Sediments
 - 4.1.1 Physical Characteristics of Contaminated Sediments
 - 4.1.1.1 Grain Size
 - 4.1.1.2 Water content
 - 4.1.1.3 Permeability and Strength
 - 4.1.1.4 Variability by Location
 - 4.1.2 Locations of Contaminated Sediments
 - 4.1.2.1 Hot spots
 - 4.1.2.2 Areas of concern
 - 4.1.3 Amounts of Contaminated Sediments
 - 4.1.3.1 By Area
 - 4.1.3.2 Projected amount by dredging agency
 - 4.1.4 Characterization of Contaminants
 - 4.1.4.1 Most Commonly Occurring by Area
 - 4.1.5 Biological Community Effects of Contaminated Sediments
 - 4.1.5.1 Direct Toxicity
 - 4.1.5.2 Bioaccumulation of Contaminants
 - 4.1.5.3 Human Risk from Contaminants
- 4.2 Sources of Contaminants
 - 4.2.1 Ports and Marinas
 - 4.2.1.1 Historical Sources
 - 4.2.1.2 Current Sources
 - 4.2.2 Study Area (Watersheds)
 - 4.2.2.1 Historical Sources
 - 4.2.2.2 Current Sources
- 4.3 Sediment Transport/Circulation in the Study Areas
 - 4.3.1 Resuspension
 - 4.3.2 Effects of Coastal Currents/Circulation

- 4.4 Review of Relevant Contaminated Sediment Regulations
 - 4.4.1 Federal Regulations
 - 4.4.2 State Regulations
 - 4.4.3 Local Regulations

5.0 DEVELOPMENT OF REGIONAL SEDIMENT SCREENING THRESHOLDS

- 5.1 Goals and Objectives – Sediment Quality Guideline (SQG) Approach
- 5.2 Technical Approach/Project Description
 - 5.2.1 Database development
 - 5.2.1.1 Structure
 - 5.2.1.2 Function
 - 5.2.1.3 Applicability and Maintenance
- 5.3 Review of Existing Available Guidelines
- 5.4 Regional Differences in Contaminated Sediments
- 5.5 Development of threshold levels
- 5.6 Applicability
 - 5.6.1 Existing Regulations
 - 5.6.2 Use of CSTF-developed SQGs in determining contaminated sediment fate in the LA region
 - 5.6.3 Decision flowchart

6.0 MANAGEMENT OPTIONS

- 6.1 Introduction
- 6.2 No Action Alternative
- 6.3 Contaminant Reduction at the Source
- 6.4 Sediment Source Reduction/Containment
- 6.5 In-situ Remediation
- 6.6 Dredge Material Disposal Options
 - 6.6.1 Aquatic Disposal
 - 6.6.1.1 Current Regulations
 - 6.6.1.2 Potential Options
 - 6.6.1.2.1 Ocean Disposal
 - 6.6.1.2.2 Confined Aquatic Disposal
 - 6.6.1.2.3 Confined Disposal Facility
 - 6.6.1.2.4 Shallow Water Habitat Creation
 - 6.6.2 Upland Disposal
 - 6.6.2.1 Current Regulations
 - 6.6.2.2 Potential Options
 - 6.6.2.2.1 Upland Confined Disposal Facility
 - 6.6.2.2.2 General/Engineered Fill
- 6.6.3 Analysis of Available Options
- 6.7 Dredge Material Beneficial Reuse Options
 - 6.7.1 Current Regulations

6.7.2 Identification of Potential Treatment Technologies

- 6.7.2.1 Dewatering
- 6.7.2.2 Soil Stabilization
- 6.7.2.3 Soil Washing
- 6.7.2.4 Soil Blending
- 6.7.2.5 Vitrification
- 6.7.2.6 Cement Lock Technology
- 6.7.2.7 Other

6.7.3 Potential End Uses

- 6.7.3.1 Temporary Storage
 - 6.7.3.1.1 Aquatic Storage Sites
 - 6.7.3.1.2 Upland Storage Sites
- 6.7.3.2 Nearshore Fill
- 6.7.3.3 Upland Fill
- 6.7.3.4 Landfill Daily Cover
- 6.7.3.5 Wetland Construction
- 6.7.3.6 Brownfield Re-Development
- 6.7.3.7 Mine and pit reclamation
- 6.7.3.8 Products
 - 6.7.3.8.1 Manufactured soil
 - 6.7.3.8.2 Aggregates
 - 6.7.3.8.3 Cement
 - 6.7.3.8.4 Glass

7.0 CONTAMINATED SEDIMENT SOURCE REDUCTION

7.1 Description of Sources of Contaminants

7.1.1 Stormwater Runoff

- 7.1.1.1 Watershed
- 7.1.1.2 Port Runoff

7.1.2 Boating/Port Operations

7.1.3 Atmospheric Deposition

7.2 Watershed Management

7.2.1 Existing Watershed Management and Source Reduction Efforts

- 7.2.1.1 Ballona Creek
- 7.2.1.2 Marina del Rey
- 7.2.1.3 Los Angeles River
- 7.2.1.4 Dominguez Channel
- 7.2.1.5 All other areas

7.2.2 Total Maximum Daily Loading (TMDLs) Process

- 7.2.2.1 Timelines for different watersheds
- 7.2.2.2 Opportunities for coordinated effort

7.3 Stormwater Management Efforts

7.3.1 Regional Programs

- 7.3.2 CSTF Stormwater Database
 - 7.3.2.1 Database Development Structure, Function, Maintenance
- 7.3.3 Land Uses and Stormwater Contamination
- 7.4 Identification of Primary Sources of Contaminated Sediments
- 7.5 Recommendations For Source Control Measures
 - 7.5.1 BMPs
 - 7.5.2 Coordination with other efforts

8.0 MANAGEMENT OF DREDGING AND DISPOSAL OPERATIONS AND DISPOSAL SITES

- 8.1 Description of Dredging Equipment
- 8.2 Effects of Dredging and Disposal Operations
 - 8.2.1 Sediment resuspension
 - 8.2.2 Release/Re-mobilization of Contaminants
 - 8.2.3 Noise and Air Pollution
 - 8.2.4 Navigation and Shipping
 - 8.2.5 Historical and Archeological
 - 8.2.6 Recreational Resources
- 8.3 Description of Best Management Practices (BMPs)
 - 8.3.1 Dredging BMPs
 - 8.3.2 Disposal BMPs
 - 8.3.3 Evaluation of Effectiveness of BMPs
 - 8.3.4 Criteria for Use of Each BMP
- 8.4 Monitoring Requirements During Dredging and Disposal
 - 8.4.1 Compliance with Existing Regulations
 - 8.4.2 Dredge Monitoring Requirements
 - 8.4.3 Disposal Monitoring Requirements
 - 8.4.3.1 Monitoring and Management Requirements for Disposal Sites
 - 8.4.3.1.1 Aquatic Disposal Sites
 - 8.4.3.1.1.1 Compliance with existing regulations
 - 8.4.3.1.1.2 Draft CAD Site Management Plan
 - 8.4.3.1.2 Upland Disposal Sites
 - 8.4.3.1.2.1 Compliance with existing regulations
 - 8.4.3.1.2.2 Confined Disposal Facilities
 - 8.4.3.1.3 Landfills
 - 8.4.3.1.4 Beneficial Reuse
 - 8.4.3.1.4.1 Compliance with existing regulations
 - 8.4.3.1.4.2 Treatment Facility
 - 8.4.3.1.4.3 Treated Sediments
 - 8.4.3.1.4.4 Contaminated Sediment Products

9.0 SELECTION OF DISPOSAL ALTERNATIVES

- 9.1 Evaluation Process
- 9.2 Consequences of No Action
- 9.3 Environmental Factors
- 9.4 Cost Factors
- 9.5 Ocean Disposal
 - 9.5.1 Qualifications
- 9.6 Nearshore Aquatic Disposal
 - 9.6.1 Cost Considerations
 - 9.6.2 Costs of different alternatives
 - 9.6.3 Environmental Considerations
 - 9.6.3.1 Resuspension of contaminants
 - 9.6.3.2 CAD site monitoring and long term effectiveness
 - 9.6.3.3 Biological exposure to contaminants and Bioaccumulation
 - 9.6.4 Regulatory Considerations
 - 9.6.4.1 Permitting
 - 9.6.4.2 Liability
- 9.7 Upland Disposal
 - 9.7.1 Cost Considerations
 - 9.7.2 Environmental Considerations
 - 9.7.3 Regulatory Considerations
- 9.8 Beneficial Reuse
 - 9.8.1 Cost Considerations
 - 9.8.2 Environmental Considerations
 - 9.8.3 Regulatory Considerations
- 9.9 Feasible Disposal Options
 - 9.9.1 Identification of Feasible Options
 - 9.9.1.1 Disposal Alternative Evaluation Criteria
 - 9.9.1.1.1 Short-term effectiveness
 - 9.9.1.1.2 Long-term effectiveness
 - 9.9.1.1.3 Implementation
 - 9.9.1.1.4 Environmental Effects
 - 9.9.1.1.5 Cost
 - 9.9.2 Procedure for Selecting Appropriate Disposal Alternative for Each Project
 - 9.9.2.1 Environmental effects matrix
 - 9.9.2.2 Cost matrix
 - 9.9.2.3 Decision flowchart

10.0 UNIFIED REGULATORY APPROACH

- 10.1 CSTF Advisory Committee
 - 10.1.1 Members
 - 10.1.2 Purpose, Structure and Function
 - 10.1.3 Guidelines and Procedures
- 10.2 Streamlined Evaluation Procedures
 - 10.2.1 Master Dredging Permit Application
 - 10.2.2 Standardized Best Management Practices
 - 10.2.3 Other Recommendations

11.0 FUTURE ACTIVITIES OF THE CSTF

- 11.1 Updates or Revisions to Long-Term Management Plan
- 11.2 Maintenance of Stormwater/Sediment Monitoring Electronic Database
- 11.3 Long-Term Monitoring and Funding of Confined Aquatic Disposal Site
- 11.4 Implementation of Source Control Measures
- 11.5 Funding Issues
- 11.6 Coordination with the Los Angeles DMMP

12.0 ADOPTION AND IMPLEMENTATION OF THE STRATEGY

- 12.1 California Coastal Commission
- 12.2 Los Angeles Regional Water Quality Control Board
- 12.3 U.S. Army Corps of Engineers
- 12.4 U.S. Environmental Protection Agency

ACRONYMS AND ABBREVIATIONS

GLOSSARY

REFERENCES

FIGURES/MAPS

TABLES

MANAGEMENT STRATEGY TECHNICAL APPENDICES

- **AB 673**
- **Advisory Committee Guidelines**
- **Pilot Project Reports**
- **Beneficial Reuse Market Study**
- **Master Dredge Permit Application**
- **Resuspension of Sediments during Dredging**
- **The Beneficial Reuse of Dredged Material for Upland Disposal**
- **Draft CAD Site Monitoring Plan**
- **Sediment Quality Guideline Report**
- **Sediment Quality Database**
- **Watershed Report**
- **Stormwater Database**
- **CAD Site Long-term Monitoring Report (if available)**
- **Implementation Strategy Report**