

Workshop on Asset Management and Risk Assessment of Coastal Structures

Dates: June 18-19, 2008

Location: Downtown Chicago

Hotel: Homewood Suites, downtown

Chairman: Dr. Jeffrey A. Melby, CHL

Chair Committee:

Jim Clausner, George Domurat - Administration

Ned Mitchell – Technical Content

Rebecca Soileau - Facilitator

Linda Sorn – Oversee District representation

Dinah McComas - Organization

Carolyn Ables – Organization

Tracy Chaney – Organization

Workshop Goals

1. Formation of a Product Delivery Team (PDT) to investigate how various tools and data sources will be used towards objective and rational coastal structures asset management (AM). Topics to be covered in-depth include:
 - Coastal Asset inventories/databases - eCoastal, ECID, Google Earth interface
 - Structural Condition Surveys and Condition Assessment
 - Functional Condition Surveys
 - First principles engineering with reliability and life-cycle management
 - AM with weighting of metrics concerning structural condition, structure function, economic significance, environmental benefits, and life safety.
2. Input to the product delivery team (PDT) towards development of a standard coastal structures prioritization framework for O&M funding.
3. Collaboration among Corps and ERDC personnel concerning AM methods already in use at the District, Division, and national levels, as well as new developments in Decision Support, Risk Analysis, Condition Assessment, GIS Tools, and Corps Inventories.

Products

- A formal report of the workshop proceedings will be produced. The proceedings will include consensus statements developed by the breakout discussion groups concerning specific AM strategies, as well as a prioritized list of future actions towards a unified coastal structures AM framework.

Workshop working Agenda

Wednesday, Block 1 – 8 am: Introduction

Welcome and Introduction – Dr. Jeff Melby, CHL/ERDC **Presentation 01**

- Overview of workshop goals
- Introductions of workshop participants

Asset Management Overview – Jose Sanchez, HQ **Presentation 02**

- Summary of USACE Asset Management program

Navigation Business Line AM – Jim Walker, HQ **Presentation 03**

Coastal Structure Asset Management PDT – George Domurat, SPD **Presentation 04**

- 5x5 Matrix for O&M Prioritization

Initial Discussion of Workshop Process and Expectations – Rebecca Soileau, MVP
Presentation 05

9:45 am BREAK

Wednesday, Block 2 – 10 am: District Asset Management Initiatives

Inland structures AM – Jim Fisher, LRP **Presentation 06**

Great Lakes AM Program – Linda Sorn, LRC **Presentation 07**

Great Lakes Condition Assessment – Paul Bijhouwer, LRB **Presentation 08**

Great Lakes Economic Analysis – John Brown, LRB **Presentation 09**

Portland AM Program – Heidi Moritz, NWP **Presentation 10**

11:30 am LUNCH

Wednesday, Block 3 – 1 pm: R&D Products – Condition and Inventory

Overview of ERDC Coastal Structures R&D – Dr. Jeff Melby, ERDC/CHL
Presentation 11

- Life-cycle risk analysis of coastal structures

Condition Assessment Tools – Cheryl Pollock, ERDC/CHL **Presentation 12**

- Field Tools
- Condition Index Rating Table and COSCA software **Presentation 13**

- Condition Assessment Methodology – David McKay, ERDC/CERL **Presentation 14**
- Dealing with Ambiguous Condition Ratings
 - Capturing Condition History

- Databases and associated tools – Elizabeth Burg, ERDC/CHL; Mark Penton, SAM **Presentation 15**
- Enterprise Coastal Inventory Database (ECID)
 - Google Earth interface

Wednesday, Block 4 – 2:30 pm: Breakout Groups, Round 1

Description of Breakout Group Activities – Rebecca Soileau **Presentation 16**

Group 1: Support Metrics for AM – Heidi Moritz/Ned Mitchell

Group 2: Condition assessment – Cheryl Pollock/David McKay

Group 3: Prioritization Strategies for AM – George Domurat/Jim Clausner

3:45 pm BREAK

Wednesday, Block 5 – 4 pm: Regroup, Recap, Discussion

Takeaways from Breakout Discussions – Rebecca Soileau

- Summary of breakout group discussions – Group Leaders
- Additional input from other workshop participants
- Discussion items for Day 2 breakout groups

END OF DAY 1

Thursday, Block 1 – 8:30 am: R&D Products – Economics and Decision Support

CSMART: Coastal Structures Management, Analysis, and Ranking Tool –
Ned Mitchell, CHL/ERDC **Presentation 17**

- Using CSMART for decision-support
- Data sets/measures of significance included
- Incorporation with condition and functional assessments

New Software for Major Rehab of Jetties and Breakwaters – Keith Hofseth, IWR

Presentation 18

- Consequences of functionality loss

9:45 am BREAK

Thursday, Block 2 – 10 am: Breakout groups, Round 2

Description of Breakout Group Activities – Rebecca Soileau

Group 1: Support Metrics for AM Follow-up – Moritz/Mitchell

- Review of Day 1 Discussions
- Short-term action items

Group 2: Condition assessment Follow-Up – Pollock/McKay

- Review of Day 1 Discussions
- Short-term action items

Group 3: Asset Management Follow-Up – Domurat/Clausner

- Review of Day 1 Discussions
- Short-term action items

11: 45 am LUNCH

Thursday, Block 3 – 1:30 pm: Regroup, Recap, Discussion

- Recaps of breakout group discussions – Group Leaders
- Additional input/feedback concerning coastal structures AM
- Coastal Structures AM PDT organization/formation - Domurat
- Wrap-up and Conclusion – Melby

END OF WORKSHOP