

Research and Development Programs and Processes

Dr. Tony C. Liu
Directorate of Research & Development
tony.c.liu@usace.army.mil



US Army Corps
of Engineers

Directorate of Research & Development

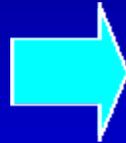
Technology Investment Process Civil Works



HQ/MSC's

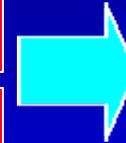


CW
Strategic
Plan

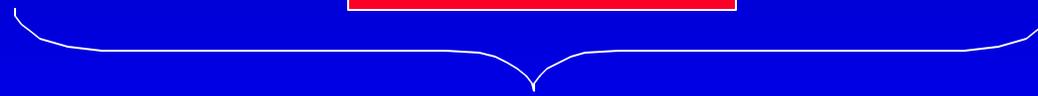


Murder
Board/RDRC

FRG's/RDRC



Technology
Investment
Strategy



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FOC's

FOC's



Technology
Alternatives

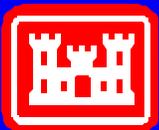


Life Cycle,
ROI
Analysis

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Objectives

- Align R&D Investments with Strategic Directions of Corps
- Structure R&D Around Business Programs
- Create Balanced (Short and Long Term) Investment Strategy
- Increase Role of MSC's (Requirements and Transition)
- Enhance Corporate Technology Transfer



Strategic Challenges

- Balancing WR Demands & EQ Concerns
- Repairing Damage to Environment from Past Development
- Addressing the Performance & Safety Implications of an Aging WR Infrastructure
- Ensuring the Capability to Respond to Natural Disasters
- Minimizing Institutional Inhibitors of Effective WR Management



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CW Strategic Plan, FY 02-06

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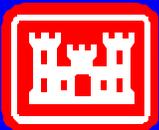
RESEARCH AREAS

- Navigation Systems
- Flood & Coastal Protection
- Environmental Technologies
- **Infrastructure Engineering**
- Geospatial Technologies
- Decision Support Technologies



Infrastructure Engineering

- High-Performance Materials & Systems
- Geotechnical Engineering
- Concrete & Structural Engineering
- Earthquake Engineering
- Risk Analysis for Dam Safety



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Directorate of Research & Development

Roles & Responsibilities - HQ Elements

- **R&D Directorate**
 - Policy Guidance
 - Investment Strategy & Five-Year Plan
 - HQ Oversight on Program Execution
- **CW R&D Committee**
 - Oversight for DCW
 - Approval of R&D Program & Funding
- **The Gang**
 - Oversight for CW R&D Committee
 - ID and Prioritize CW Technology Requirements
 - Recommend Funding Allocations Across Research Areas
 - R&D Performance Evaluation



CW R&D Gang (12)

- Leader – Don Dressler
- Business Programs
 - Barry Holliday, Harry Kitch, Darrell Lewis, Pete Luisa
- Technical
 - Roy Braden, Charlie Chesnutt, Forester Einarsen, M. K. Miles, Jim Wolcott
- R&D
 - Tony Liu, Dave Mathis



Roles & Responsibilities - HQ Elements

- **Research Area Managers**
 - Advocate for Technology Areas
 - Research Area Guidance and Coordination
 - Recommend Program Funding Within Research Area
 - Implementation Strategy
- **Program Monitors**
 - Program Oversight
 - Recommend WU Funding Within R&D Program
 - Technical Policy Guidance & Implementation

