Civil Works Transformation

SMART Planning & Ecosystem Restoration

NCER 2013 Schaumburg, IL Jeff Trulick HQ USACE OWPR



US Army Corps of Engineers PLANNING SMART BUILDING STRONG





USACE Planning 101



- 1983 Principles and Guidelines
- Planning Guidance
 Notebook ER 1105-2-100



USACE Legacy Study Process

- SOME planning studies were taking a decade
- SOME planning studies were producing amazing amounts of technical information which was not improving decisions
- Growth in study portfolio and flat study funds from Congress
- Trend line was not getting better
- Agency had to change or be changed



Turning Ideas into Action

- Improve **Planning Program delivery** (investigations and CG) **and** instill Civil Works wide **accountability**
- Develop a sustainable National & Regional
 Planning operational and organization model
- Improve Planner knowledge and experience (build the bench)
- Modernize Planning Guidance and Processes



Turning Ideas into Action

- A disciplined approach for reducing current feasibility study portfolio
- All Civil Works functional elements held responsible & accountable
- Five imperatives for change applied to all feasibility studies full transition by 2014



The "Five Imperatives for Change"

- Reaffirm Federal and Corps interest and role in resolving the problem
- Ensure resources needed are identified and available
- Recognize for most studies, there is no single "best plan"
- Manage appropriate level of detail and acknowledge uncertainty
- Ensure vertical integration throughout the study



And ... the "3x3x3" Rule

- Under \$3M total
- Within 3 years
- Using 3 levels of enhanced vertical teaming
- 100 page main reports, with appendices that fit in a 3" binder

8 February 2012 MG Walsh memo to field*



What is "SMART" Planning?

Specific Measurable Attainable Risk-Informed Timely



SMART Feasibility Study Process



- Apply critical thinking throughout the study
- Develop the Feasibility Report as you go
- Target Completion: No more than 3 years for Chief's Report



Tools for SMART Planning

- Planning Charette intensive workshop bringing together Study Team and Vertical Team
- Decision Management Plan maps path to the next major study decision
- Risk Register documents study and project uncertainty / risk so it can be managed
- Decision Log
- Examples, Tips, Tools & Techniques on the SMART Planning Guide
- Communication



What's Different?

- Process and outputs are decision focused
- Risk and uncertainty is acknowledged and managed
 - Only collect data needed to make the decision
 - Make decision and move on to next decision
 - Level of detail (of data / decision) grows over time
 - Vertical Team agreement on "acceptable" level of uncertainty
- Report developed from the beginning of the study



What's Not Different

- Focuses on decision making in a progressive 6-step planning process
- Incorporates quality engineering, economics, real estate and environmental analysis
- Fully compliant with all laws & policies
 - Includes public involvement



Results & Performance

- Studies completed in a more reasonable amount of time
- Studies cost significantly less
- High quality and concise decision documents
- Decisions informed by managing risk and acknowledging uncertainty
- Strong, viable Civil Works Project portfolio developed
- Almost 700 major studies, now approx. 200



How might 3X3 affect ER?

- Use existing info and data MORE
- Generate new info only for critical decisions and risks, not all disciplines
- Modeling may be truncated or higher level
- May see higher costs which we need to work down during detailed design
- May have less detail than some have grown to expect



How might 3X3 affect ER?

- NEPA process and associated laws and regs will be followed, perhaps with different "models" (e.g., programmatic or tiered)
- Agencies MAY need to be more integrated, less review based, more decision based
- Public and stakeholders need better documents to review and comment
- Habitat output calculations less voluminous, more high level, what is best decision?



How might 3X3 affect ER?

- May be more reliance on adaptive management during and after construction
- Acknowledge what we don't know due to race for a planning decision
- Decisions may be made with more reliance on professional experience rather than computers
- Leads to fewer studies and need to collaborate



Projects to watch*

- Hudson Raritan Estuary (New York)
- Central Everglades Planning Project(CEPP)
- Truckee River Meadows Project (CA, NV)
- Westside Creeks (San Antonio, TX)
- GLMRIS (this region)
- Des Plaines River (this region)
- Several Gulf Coast projects (MSCIP & LCA)
- *Also may be a WRDA (new rules)



Planning SMART Guide

Published online at <u>www.corpsplanning.us</u> – allows for timely content updates

- Feasibility Study Phases
 - Scoping
 - Alternative Formulation & Analysis
 - Feasibility-Level Design
 - Chief's Report
- SMART Planning Tips & Tools
 - Tips for Highly Effective Studies
 - Business Line Guides
 - Risk Register Template
 - Decision Log
 - Report Synopsis Example
 - 100-Page Report Example
 - Review Primer
 - And more!



BUILDING STRONG_®