AAPA Harbors and Navigation Committee– Quality Partnership Initiative - Webinar

USACE Lessons Learned – Navigation Improvement Studies

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NDDNPCX

- Responsible for:
  - ► **ALL ECONOMIC PRODUCTION**
    - Accomplished with in-house staff and virtual team members
    - NDDNPCX is ultimately responsible
  - ► Review Plans - Reviews and endorses
  - ► Study review (ATR, IEPR)
- Get the NDDNPCX involved early

Port Information Needed for Corps Analyses

- Economics
  - Pilot Logs
  - Capacity of the Port
  - Facility Users
  - Trade Lanes
  - Operational constraints
- Environmental
  - Identifying the location of the DAs
- Engineering
  - Identification of problem reaches or areas

LESSONS LEARNED- General

- Clearly define and document
  - ▶ Problems and opportunities
  - ▶ Existing and future without project conditions
  - ▶ Baseline and forecast development
  - ▶ Alternatives analysis
- Why here? Why is this port important? What is the port investing?
- Develop, use, and update – Risk Register and Decision Log
- Proprietary data – what information can we share
- Ensure sufficient time and resource allocation for reviews

Lessons Learned – SMART Planning

- Charette
  - PDT and Vertical Team expert planners
  - Clearly defines and limits study scope
  - Involves various Resource Agencies
  - Team receives vertical team agreement on decisions fundamental to the study process
  - Draft Risk Register/Decision Log
- In Progress Reviews
  - Doesn’t have to include entire PDT or vertical chain (Economic IPR)

LESSONS LEARNED – Economic Modeling

- Certified Corporate Economic Model - HarborSym
- Reasons for development of corporate model
  - ► Avoid the black box – how does the model work?
  - ► Benefits developed using consistent methodology across studies
  - ► Eliminating project specific spreadsheet models (limited use) saves time and money
- Inputs/Outputs will go through ATR
- Model is evolving

LESSONS LEARNED - Risk Register/Decision Log

- Risk Register – living document
  - Used to document level of risk
  - Tool for reducing risk if appropriate
  - Needs to be evaluated periodically throughout the study process
  - Must determine - Is the level of risk still acceptable?
- Decision Log
  - Vertical chain concurrence each time risk register is updated

Review Plans

- Initial RP developed prior to executing the FCSA
- Identifies reviews, schedules, disciplines, etc.
- RP is basis for addressing Information Quality Act requirements
- Scalable reviews – based on project complexity
- Living document to be modified as necessary throughout study and extended to PED
- RP reviewed and endorsed by NDDNPCX
- Approved by MSC
- Posted on District website
- Contact NDDNPCX for example RPs

LESSONS LEARNED - Agency Technical Review

- Provide NDDNPCX Review Manager with sufficient lead time prior to review
- Cost Review
  - NDDNPCX coordinates with Cost Engineering MCX to accomplish cost review
  - Separate review completed and certified by the Cost Engineering MCX
  - Set up as separate DrChecks project
- All study documents, review reports, and guidance memorandums provided to ATR team (ATRT) before initiation of review
- Have kick-off webinar with PDT/ATRT to provide project overview and answer questions
- Ensure adequate time and resource for review
- Comments made using 4-part comment structure
- SMART Planning – multiple reviews ongoing. Sufficient time and resources must be provided

LESSONS LEARNED - IEPR

- Allow sufficient time in schedule
  - Initiate the review – Review Manager initiates at request of District
  - Accomplish the review
- Ensure PDT understands
  - Role of IEPR (including CWRB)
  - The process – no surprises
  - Comment/response structure
- Ensure sufficient funding to complete IEPR
- Work with IEPR to maximize value of their efforts

LESSONS LEARNED – Jacksonville Harbor

- Aggressive Schedule. “We Can’t Wait” Initiative Challenges
  - ► Benefits of the Planning Charette
  - ► Moving Forward with Uncertainty
  - ► Public Perception
  - ► Agency Challenges
- Agency Involvement. Start early particularly under an aggressive schedule
- Public workshops and meetings. Recommend even when not required by policy
- Focus on the next milestone

LESSONS LEARNED - Lake Worth/ West Palm Beach

- Availability of project delivery team. Priorities for projects need to be set upfront. Planning Technical Lead needs to be 75%-100% (workload) project dedicated to meet schedule demands.
- Funding is a DRIVER. A SMART project needs sufficient money upfront to support the intense workload necessary to meet deadlines.
- Vertical team input. Input from decision makers early in the process avoids issues later (e.g., economics and ship simulation widening decision).
- Continuous ATR. Helped avoid major issues later (economic and environmental models, etc.)
- Risk Workshop. Having risk workshop at the beginning of the study helps team focus funding and efforts on priority issues, as well as continue to update risks and adjust accordingly.
- Decision Log. Spreadsheet format is useful.
- Information Sharing. Method needs to be established.

Take Away Message

- NDDNPCX is responsible for all Economic production on Deep Draft Navigation Studies
- NDDNPCX coordinates all ATRs and IEPRs
- Engage NDDNPCX early and often
- Due to economies of scale, we have improved the efficiency of each study