

# *Planning Overview*

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# Prior to New Study

- Sponsor Requests Assistance – Letter of Intent
- Galveston District submits new start proposal
- Budget competition (limited new starts)
- Initial study funds received
- Negotiate Project Management Plan
- Sign Feasibility Cost Share Agreement
  
- Sponsor Cost Share
  - ▶ 50% typically; can be provided as Work-in-Kind



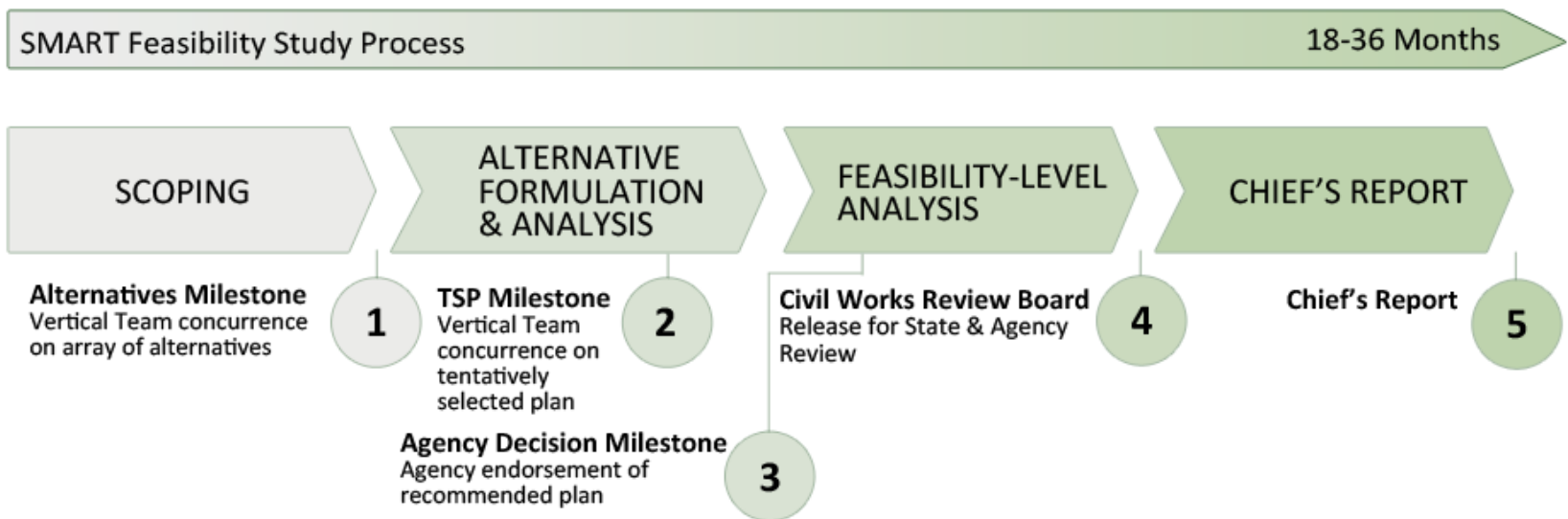


# ***Feasibility Planning Phase Milestones***

- **Initiate Study** - execute FCSA, receive \$\$
- **Alternative Measures Milestone (AMM)**
- **Tentatively Selected Plan (TSP)**
- **HQ & Public review** of draft report
- **Agency Decision Milestone (ADM)**
- **District Engineer signs** final report and FONSI or ROD
- **Division Engineer's Public Notice** ~ 36 mos. (CMR MSC)
- **Senior Leaders Panel**, formerly **Civil Works Review Board (CWRB)**
- **HQ, State & Agency review** of final report
- **Chief of Engineers Report**
- **ASA(CW) coordination with OMB**; briefing
- **OMB clearance**
- **ASA(CW) transmittal** to Congress



# Feasibility Phase Milestones





# The Expectation

- A study scope that will produce a decision document within 3 years for \$3 million or less
- Or, if risks are unacceptable, an exemption request that lays out the scope, schedule and budget necessary to produce a policy compliant decision document

IAW Planning Bulletin 2012-04





# It's Not 1 Size Fits All

- Some studies can be completed for less than \$3 million
- Many more will fall around \$3 million
- Some will require exemptions in order to be policy compliant and technically sound
  
- Do not break complex studies into smaller parts just to keep the parts below \$3M each – keep a systems perspective





# ***Feasibility Planning Phase Purposes***

- **Find a good solution**
- Document compliance with §905(a) of WRDA 1986
- Document compliance with U.S. Water Resource Council's Principles & Guidelines (P&G), 1983
- Document NEPA compliance
- Documentation for decision-makers
- Recommend a project for authorization
- Support the budget development process






# ***Requirements of §905(a) of WRDA 1986***

Prepare a feasibility report that:

- describes the economic, environmental, and social benefits and detriments of the recommended plan and alternative plans;
- describes a nonstructural alternative;
- describes the engineering features, purposes, scope, and scale of the recommended plan;
- describes the Federal and non-Federal participation in the recommended plan; and
- demonstrates public acceptability and that States, other non-Federal interests, and Federal agencies have been consulted.







# ***P&G\* Requirements: The Federal Objective***

*“The Federal Objective of water and related land resources planning is to contribute to National Economic Development (NED) consistent with protecting the Nation’s environment pursuant to national environmental statutes, applicable executive orders and other Federal requirements.”*

Or NER for ecosystem restoration studies

*\*The updated PR&G broaden the focus from NED to all benefit accounts and from a monetary focus to a combination of monetary/non-monetary, quantitative/qualitative. USACE guidance unchanged until legislative limits are lifted from appropriations bill.*





# ***P&G Requirements (continued)***

- Applies to all Federal water resources planning agencies
- Six Step Planning Process
- Consult affected states, other nations and the public
- Interdisciplinary Planning
- Formulate the NED plan and other plans
- Risk and Uncertainty
- Procedures for NED Benefit and NER Evaluation





# *Feasibility Planning Phase Products*

- Feasibility Report with:
  - Environmental Impact Statement (EIS) & Record of Decision (ROD) or Environmental Assessment (EA) & Finding of No Significant Impact (FONSI)
  - Engineering Appendix
  - Real Estate Plan
  - Other appendices & supporting documentation
- Sponsor Financial Self-certification
- Project Management Plan (PMP)



# Planning and Engineering

SMART Feasibility Study Process

18-36 Months

SCOPING

ALTERNATIVE  
FORMULATION  
& ANALYSIS

FEASIBILITY-LEVEL  
ANALYSIS

CHIEF'S REPORT

**Alternatives Milestone**  
Vertical Team concurrence  
on array of alternatives

1

**TSP Milestone**  
Vertical Team  
concurrence on  
tentatively  
selected plan

2

**Agency Decision Milestone**  
Agency endorsement of  
recommended plan

3

**Civil Works Review Board**  
Release for State & Agency  
Review

4

**Chief's Report**

5

Focus on alternatives  
evaluation to identify a  
tentative plan for more  
detailed design

Focus on scaling the  
measures and features for  
the recommended plan/LPP



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# *Alternatives Milestone*

Purpose: Vertical team agreement on the focused array of alternatives that will undergo continued analysis to identify a TSP. Refine the PMP to focus remaining study activities on key alternatives; NEPA scoping; policy issues.

Procedures:

- District provides HQ documentation of without-project condition, evaluation of preliminary plans, plans to be evaluated further and policy issues.
- Documented in Report Synopsis, Risk Register, Decision Management Plan
- District revises PMP; amends FCSEA if needed.





# ***Tentatively Selected Plan (TSP)***

Purpose: To obtain vertical team concurrence on the tentatively selected plan prior to public review of the draft report.

Procedures:

- District holds in-progress reviews (IPRs) with the vertical team throughout study process and conduct DQC or targeted ATR as work is developed.
- When PDT identifies TSP, hold an IPR to brief vertical team; provide documentation of costs, benefits, and impacts of alternative plans; status of NEPA, engineering, real estate; issues.
- District schedules TSP milestone meeting and submits report synopsis, risk register, and decision management plan
- District releases draft report.





# ***HQ & Public Review of Draft Report***

Purpose: NEPA requires 45-day public review;  
HQ reviews adequacy of “decision document”.

Procedures:

- District submits report for concurrent ATR, policy, legal and public review; files DEIS with USEPA.
- HQ identifies policy and legal compliance issues;
- District responds to all comments; evaluates for impacts to TSP and scope of remaining work; confers with vert team to resolve issues.
- District updates the risk register and decision management plan; schedules ADM meeting





# Agency Decision Milestone (ADM)

Purpose: Executive level agreement that TSP is appropriate and detailed analysis should proceed as described in DMP

Procedures:

- PDT develops a summary of significant issues from concurrent reviews and proposed actions
- Hold IPR with the vertical team, as necessary
- District updates the risk register and decision management plan;







# ***State & Agency (S&A) Review of Final Report***

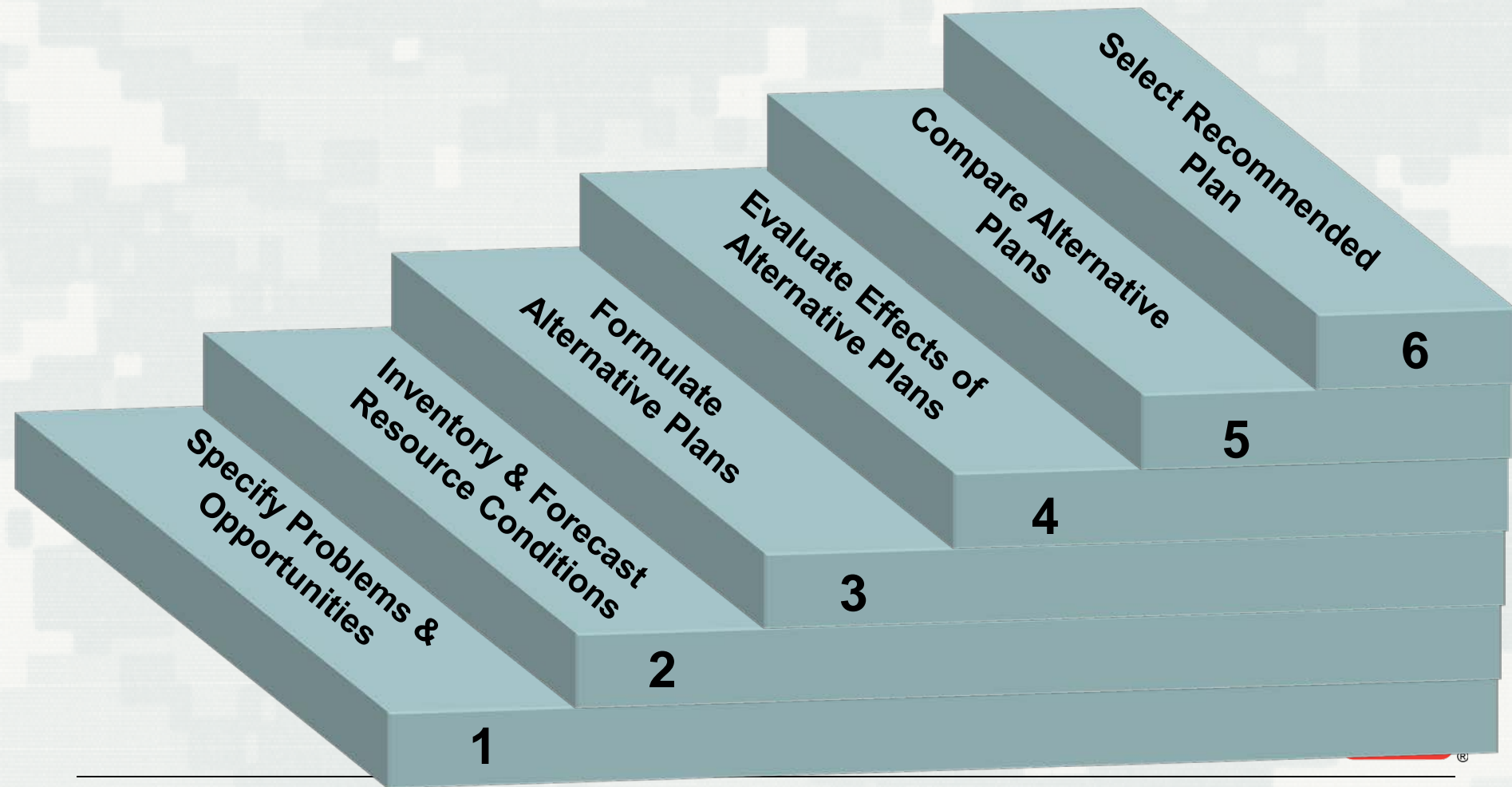
Purpose: NEPA requires 30-day public review; EO & law require S&A review.

Procedures:

- CWRB recommends release of final report for state & agency review
- Chief of Engineers approves release
- HQ prepares Chief of Engineers Report.
- ASA(CW) transmits to OMB
- OMB to Congress



# *P&G - Six Step Planning Process*





# ***Step 1 - Identify Problems and Opportunities***

- Problem = negative; opportunity = positive
- Must relate to the Federal objective or state/local concerns
- Basis for setting objectives (achieve) & constraints (avoid) to guide formulation of plans (see Step 3)
- Specific statements of the desired outcome; present or future tense; not restrictive
- Sources: Prior studies; sponsor, public & agency input





# ***Step 2 - Inventory & Forecast Resource Conditions***

## **Existing Conditions**

- Focus on resources being impacted:
  - **Physical / Environmental / Socioeconomic**
- Define historical and existing conditions; trends





# ***Step 2 - Inventory & Forecast Resource Conditions***

## **Future Without-Project Conditions**

- Forecast future **without-project** conditions
  - Qualitative / Quantitative metrics
  - Assumptions are important
- Refine problems and opportunities (Step 1)
- Baseline for formulation and evaluation





# ***Step 3 - Formulate Alternative Plans***

- The process of building plans that meet the objectives and avoid the constraints
  - Management measures: basic features/activities
  - Plan: one or more measures
  - Program: one or more plans; large area
- Consider structural and nonstructural
- Protect the environment; mitigation
- Formulate the Federal plan and others



## ***Step 3 - (continued)***

- Formulation / Evaluation criteria:
  - **Completeness**: includes all features and costs needed to realize benefits claimed
  - **Effectiveness**: degree to which objectives are achieved; needs are met
  - **Efficiency**: cost effective
  - **Acceptability**: public, agencies, sponsor; meet Federal, state and local law
- Iterative - Reformulate




# ***Step 4 - Evaluate Effects of Alternative Plans***

- **Forecast future resource conditions** with each alternative plan (i.e., with-project)
- **Compare without- and with-project conditions**
- **Assess** (i.e., quantify) **incremental effects**:
  - ▶ Costs, economic benefits, environmental impacts, social impacts
  - ▶ Magnitude, duration, location
  - ▶ Describe risk and uncertainty
- **Appraise** (i.e., judge) **effects**: good or bad?
- **Evaluate against objectives, constraints**, and Principles and Guidelines criteria
- **Reformulate**, if needed







# ***Step 4 - P&G's System of Accounts for Display of Effects***

- **National Economic Development**
  - Economic costs (\$) and benefits (\$); required
- **Environmental Quality**
  - Air, water, floodplains, wetlands, fish & wildlife habitat, endangered species (units vary)
- **Regional Economic Development**
  - Property values, jobs, tax revenues (\$ units)
- **Other Social Effects**
  - Life Safety
  - Historical and cultural properties
  - Social Vulnerability



# *Step 5 - Compare Alternative Plans*

- **Steps:**

1. Compare effects in the “four accounts”
2. Describe significant differences
3. Describe tradeoffs

- **Focus on objectives, constraints, P&G criteria, environmental requirements**

- **Outputs:**

- NED / NER / Combined Plan
- Locally Preferred Plan(s)

- **Basis for ranking and plan selection**





# ***Step 6 - Select Recommended Plan***

- **The “No Action”** is the default recommendation
- **Recommend the NED / NER / Combined Plan** (i.e., maximizes net benefits) unless ASA(CW) grants an exception.
- **Locally Preferred Plan (LPP) Exceptions**
  - $LPP < NED / NER / Combined\ Plan$
  - $LPP = 1\% \text{ Flood Protection} > NED$
  - $LPP > NED / NER / Combined\ Plan$



A close-up photograph of the American flag, showing the blue field with white stars and the red and white stripes. The flag is draped and slightly wrinkled. In the lower right quadrant, a small, golden sandcastle with two towers and a central archway is placed on the red stripes. The word "Questions?" is written in a white, bold, italicized serif font across the center of the image.

*Questions?*