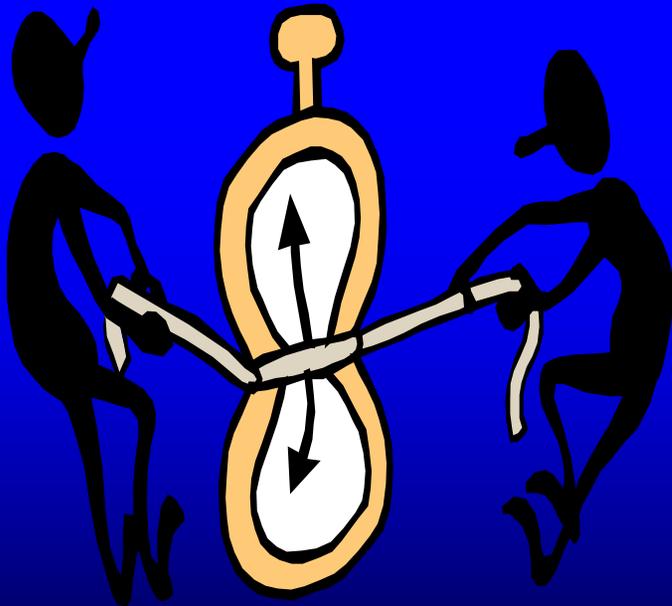


Module 10



STEP 4 Conduct Reconnaissance Study

OBJECTIVES:

The module will discuss the following:

- ◆ Goals and purposes of the
 Reconnaissance (recon) Phase.
- ◆ What is involved in the recon phase?
- ◆ Results and products



Reconnaissance Study GOAL:

Reconnaissance Phase:



Determine whether the Corps should investigate the problems in more detail during the second phase of the study (the feasibility study)

Study is 100% Federally funded!



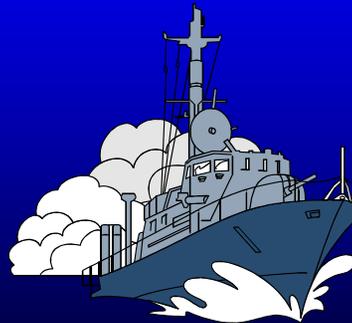
PURPOSES OF RECONNAISSANCE STUDY:

1. Define water resources problems and identify solutions
2. Decide whether there is a Federal interest in continuing into feasibility studies
3. Identify a local sponsor
4. Prepare a Project Management Plan (PMP)



Reconnaissance Study SCOPE:

- ◆ Can investigate single problem - navigation, flood control or ecosystem restoration
- ◆ OR, can investigate multiple problems
 - Comprehensive watershed studies



Establishment of Study Team:

Project Manager/Technical Team Leader

Environmental Specialist

Economist

Real Estate Specialist

Hydraulics/Hydrology Engineer

Geotechnical Engineer

Cost Estimator



Reconnaissance Studies:

◆ Planning Guidance Notebook:
ER 1105-2-100 Appendix G

▼ See also PGM 99-01

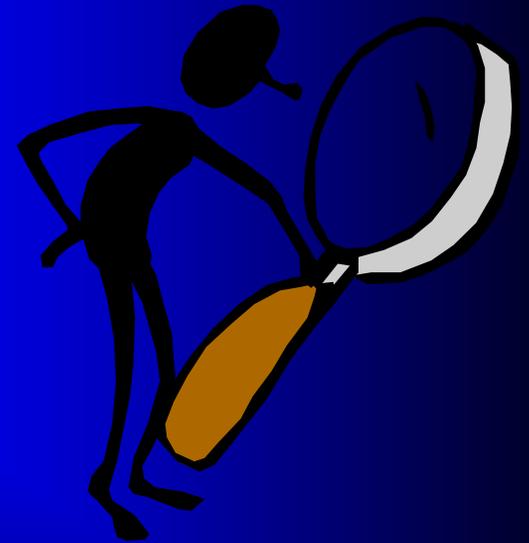
◆ Planning Guidance Letter 97-10

Guidance: What it says!

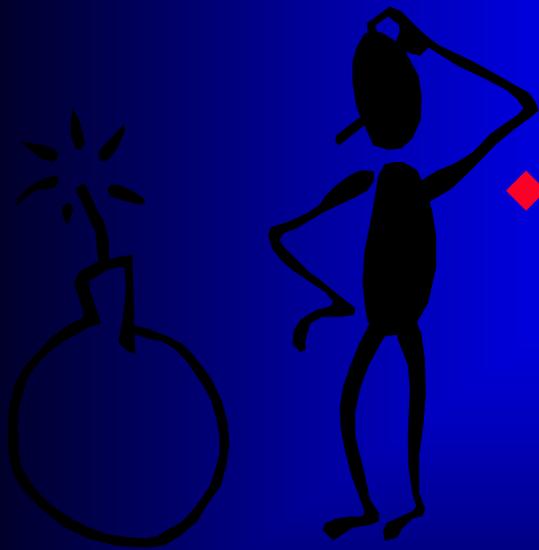
- ◆ Most effort should be devoted to preparation of PMP.
- ◆ Goal is to execute FCSA within 12 months.
- ◆ Generally, \$100,000 in cost!
- ◆ Recon recommendation shall be based on professional and technical judgement.
- ◆ No detailed tasks.
- ◆ A Section 905(b) Analysis is prepared.

1. Problem Identification

- ◆ **Verify/understand water resources problem(s).**
- ◆ **Use existing, readily available data**
- ◆ **Coordinate with sponsor(s) and Federal, State, and local agencies**



2. Determine Federal Interest



- ◆ Identify potential solutions using professional & technical judgement.
- ◆ Identify a Federal interest:
 - ▼ Consistent with Army/Corps implementation and budgetary policies.
 - ▼ High likelihood of economic justification
 - ▼ High likelihood of environmental acceptability

Navigation Solutions

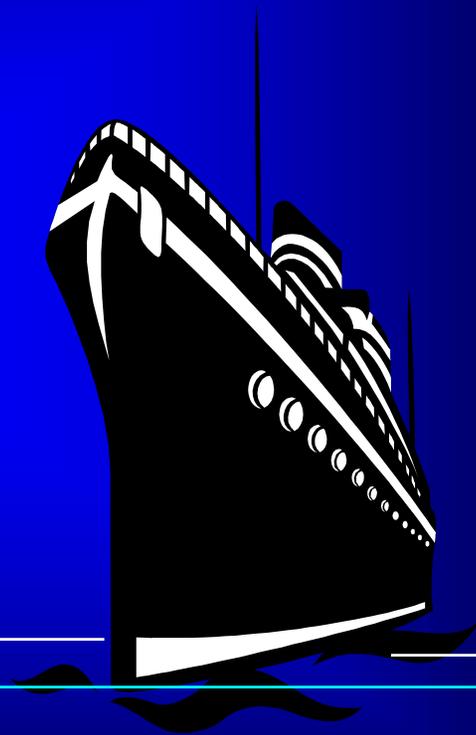
Various channel depths

Various channel alignments

Construction of jetties

Locks and dams

Non-structural projects



Flood Damage Prevention Solutions

Construct dams

Construct levees

Construct floodwalls

Deepen the river

Relocate homes and businesses

Floodproofing

and yes... "Stop the Rain"!



Ecosystem Restoration Solutions

Create and/or restore wetlands

Plant submerged aquatic vegetation

Remove fish blockages

Create fish habitat

Restore rivers and streams



Economic Justification =

it means... Benefits of project are greater than the project cost!

- ◆ Average Annual Benefits (\$) \geq Average Annual Costs (\$)
- ◆ Benefit-Cost Ratio \geq 1.0

It must be worth it !

Project Benefits:

◆ Flood Damage Reduction and Shore Protection Projects:

 Reduction in damages to structures and contents.

◆ Navigation Projects:

 Transportation savings
Reduction in vessel damages
Additional supplies vessels can carry
Reduction in travel time

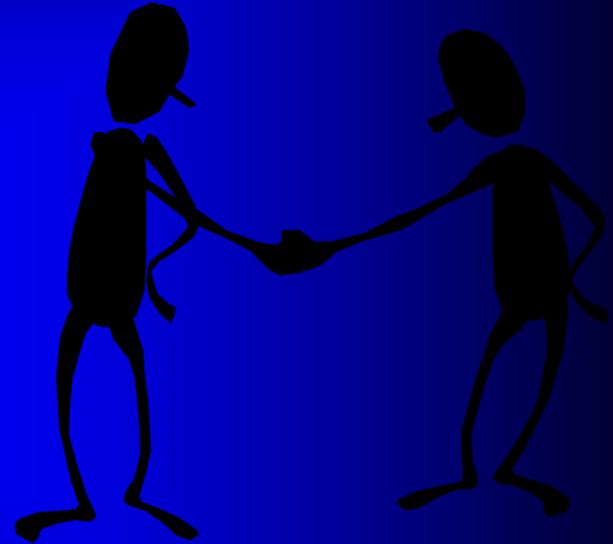
Ecosystem Restoration

- ◆ Non-monetary benefits
- ◆ Must quantify outputs, such as habitat units
- ◆ Must demonstrate that outputs are worth the costs -

“Cost effectiveness and incremental
analysis”

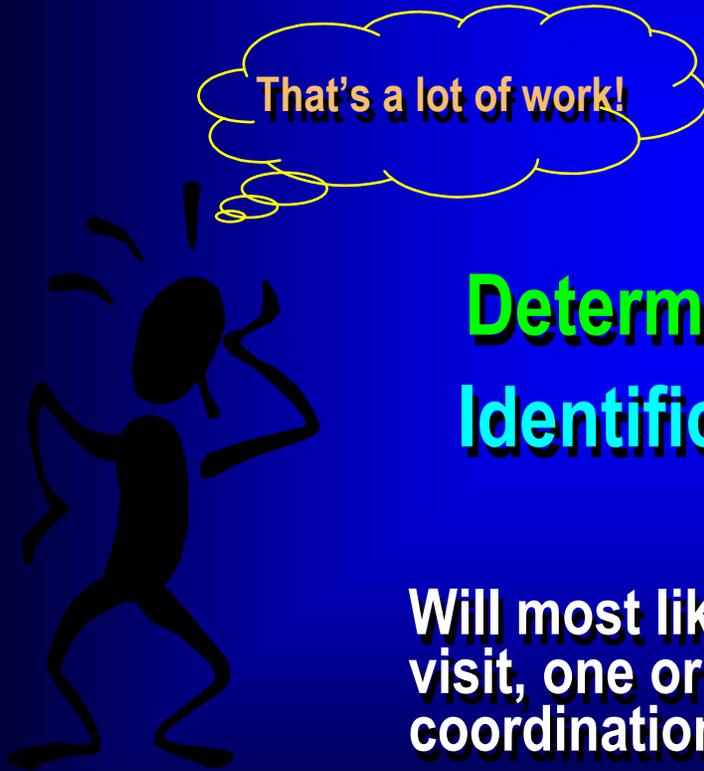
3. Identify Local Sponsor

- ▼ Local, state, or regional entity must support the project.
- ▼ Sponsor must be willing to cost share 50% of the feasibility phase.
- ▼ Sponsor must provide letter of intent (LOI) stating their willingness to cost-share.



Reconnaissance Phase...

First 3 steps - -



That's a lot of work!

Problem Identification

Determination of Federal Interest

Identification of Local Sponsor(s)

Will most likely be accomplished through a site visit, one or two meetings, and close coordination with local sponsor(s).

4. Prepare Project Management Plan (PMP)

- ◆ **Study Team must prepare the PMP**
- ◆ **Includes tasks and corresponding costs for conducting the feasibility study**
- ◆ **Most effort during the reconnaissance phase will be spent preparing the PMP**

(More on this later)



Products of Reconnaissance Phase

1. Section 905(b) Analysis

2. Project Mgmt. Plan (PMP)

3. Letter of Intent

FCSA

Section 905(b) Analysis...what's in it?

- ◆ **Study Authority**
- ◆ **Study Purpose**
- ◆ **Project Location/Congressional District**
- ◆ **Prior Studies & Reports/Existing Water Projects**
- ◆ **Plan Formulation**
- ◆ **Federal Interest**
- ◆ **Preliminary Financial Analysis**
- ◆ **and....**



Section 905(b) Analysis...what's in it?

(continued)

- ◆ **Summary of Feasibility Assumptions**
- ◆ **Feasibility Milestones**
- ◆ **Feasibility Costs**
- ◆ **Recommendations**
- ◆ **Potential Issues Affecting Feasibility Phase**
- ◆ **Views of Other Agencies**
- ◆ **Project Area map**

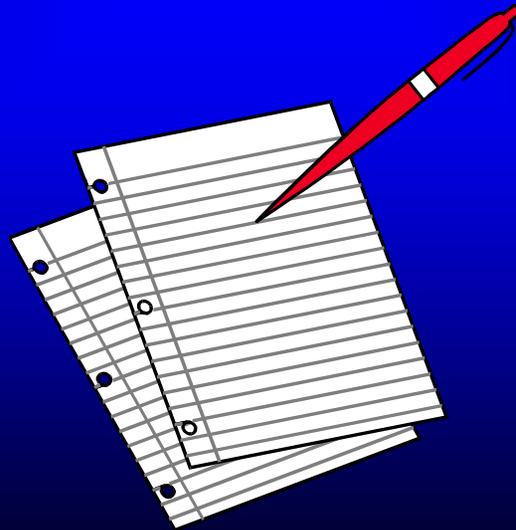


... and what's not.

- ◆ Detailed Cost Estimate (MCACES)
- ◆ Detailed Engineering/Design Studies/Data Gathering
- ◆ Detailed Environmental Evaluations
- ◆ Detailed BCR analyses
- ◆ Detailed Real Estate
- ◆ Detailed Report - See 905(b) examples
- ◆ Formal Coordination w/Federal & State Agencies
(i.e. FWCA, SHPO) - No money!!

Reconnaissance Phase:

- ◆ **Begins when District receives Federal funds to conduct study.**
- ◆ **Ends when the District Engineer signs the feasibility cost-sharing agreement.**



REFERENCES:

Planning Guidance Notebook (ER 1105-2-100)

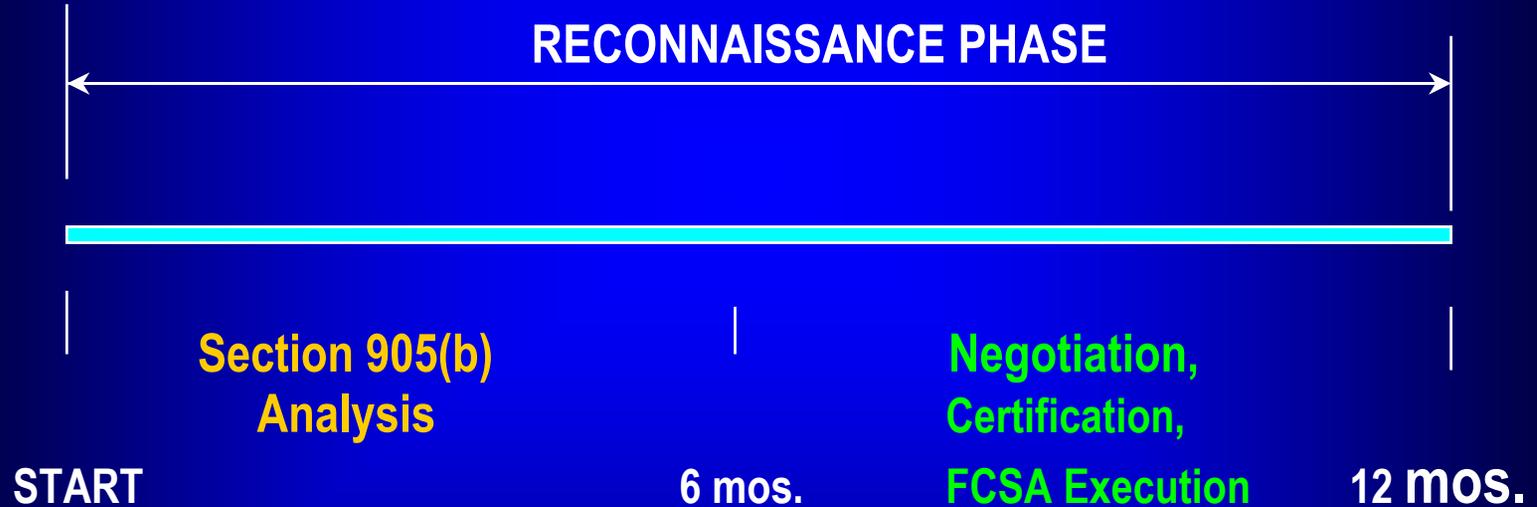
Principles and Guidelines (P&G)

Policy Guidance Letters (issued by Planning & Policy Division)

**Planning Guidance Memoranda (issued by Planning & Policy
Division)**

Policy Digest (EP 1165-2-1)

Recon Timeline



SUMMARY:

◆ 4 Purposes:

1. Identify Problem
2. Determine Federal Interest
3. Identify Sponsor
4. Prepare PMP

- ◆ Cost of Recon = \$100,000 (Generally)
- ◆ Most effort spent on PSP
- ◆ Use best professional judgement!

**sample
section 905(b)
Analysis**

Questions P P

