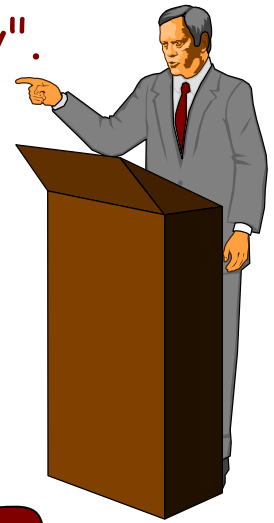
Address the professor as "Your Excellency".



## Lesson 5

# Investigations

(Formerly "General Investigations" (GI))

# BACKGROUND

- A project passes through three phases before construction begins:
  - Reconnaissance Study,
  - Feasibility Study, and
  - Preconstruction Engineering and Design (PED)

# BACKGROUND
## (Continued)

- All three are conducted under a single congressional study authorization.
-
  - As part of a Water Resources Development Act (WRDA)
  - **Or** in a survey resolution by an authorizing committee In accordance with the Rivers and Harbors Act of 1913 (33 U.S.C. 542) for the examination and review of an earlier Corps report.
  - The length of each phase varies project by project,
  - The size and the complexity of a project typically resulting in a longer process.

# Reconnaissance Study

- Better understand the nature of problem
- Determine the likelihood of a plan that is in the federal government's interest.
- Determine interest of non-federal sponsors phases of project development.
- Corps policy complete most reconnaissance studies within 12 months
- Cost of reconnaissance studies and related *project study plans* are generally limited to $100,000
- Done entirely at federal expense.
- Around a third of reconnaissance studies lead to feasibility studies
- Only 16 of every 100 reconnaissance studies lead to constructed projects.

# Reconnaissance Study
## (Continued)

- **Authorization**: Expedited Reconnaissance Studies are authorized under Section 905(b) of the Water Resources Development Act of 1986.
  **Study Goal**: Determine if the Corps should investigate a problem in more detail during the second phase of the study (the feasibility study).
- **Study Purpose**: Define water resource problems and identify solutions. Decide if there is Federal interest in implementing solutions to ecosystem degradation, flooding, and other related water resource problems. Identify a local sponsor.
- **Funding**: 100% Federal cost, not to exceed $ 100,000.
- **Schedule**: The study should be completed within 6-12 months from initial obligation of funds to signing of the Feasibility Cost Sharing Agreement (**FCSA**).
  - Start - 6 Months Prepare Section 905(b) Analysis Report
  - 6 Months - 12 Months
    - Negotiation of Project Study Plan and
    - FCSA Certification of FCSA (HQ Approval)
    - Execution of FCSA
    - Approved Peer Review Plan

# Reconnaissance Study

(Continued)

- **Reconnaissance Study Requirements:**
  - Determine if the water resource problem warrants Federal participation in a feasibility study;
  - Define the Federal interest, consistent with Army policy, costs, benefits, and environmental impacts;
  - Complete a 905(b) Preliminary Analysis Report;
    Prepare a Project Study Plan;
  - Assess the level of interest and support from non-Federal entities in cost-sharing of a feasibility study and project construction.
  - Obtain a letter of intent from the local sponsor;
  - Negotiate and execute a Feasibility Cost Sharing Agreement (FCSA).

# Reconnaissance Study

(Continued)

- **Reconnaissance Phase Products:**
  - Section 905(b) Analysis Report - This report is used as a basis for making a decision to proceed or not to proceed into the feasibility phase. The report will be submitted to our headquarters for review and approval as early as possible in the recon phase.
  - Study Authority
  - Study Purpose
  - Location of Project
  - Discussion of prior studies, reports, and existing water projects
  - Plan Formulation
    - Identified problems
    - Alternative plans

    Evaluation of alternatives
  - Federal Interest
  - Preliminary Financial Analysis
  - Summary of Feasibility Study Assumptions
  - Feasibility Study milestones
  - Feasibility Study Cost Estimate
  - Recommendations
  - Issues
  - Views of other Resource Agencies
  - Project Area Map

# Reconnaissance Study

(Continued)

- **Reconnaissance Phase Products**: (Continued)

- Project Study Plan (PSP) - The PSP is developed to guide the development and preparation of the feasibility study and is utilized in cost shared feasibility study negotiations. The plan is a collaboration between the Sponsor and the Corps.
- The PSP will include a detailed description of the project, a breakdown of feasibility study work activities and responsibilities, draft schedules and cost estimates, coordination procedures and a quality control plan.
- Letter of Intent -
  The local sponsor declares its intent to cost share in the feasibility study and project construction costs.
- Feasibility Cost Share Agreement:
  **Negotiable**
  - Study Plan
  - Feasibility Study Schedule
  - Feasibility Study Cost
  - Mix of Cash/In-Kind
- **Non-Negotiable Items**
  - Project Cost Sharing Percentage
  - Boilerplate Provisions

# Feasibility Study

- If a non-federal sponsor is found and the Corps recommends proceeding, a feasibility study begins.
- Cost of the feasibility and environmental studies is split equally between the Corps and the non-federal project sponsor.
- Feasibilities (with Engineering Appendix) usually take about 3 years to complete
- Objective is to formulate and recommend solutions to the problem.
  - Alternative plans,
  - Engineering feasibility,
  - Benefit-cost analyses,
  - Assess environmental impacts under the National Environmental Policy Act of 1969 (NEPA, 42 U.S.C. 4321).8

# Feasibility Study

**(Continued)**

- Evaluation of federal water resources projects, including Corps activities, is governed by *Principles and Guidelines for Water and Related Resources Implementation Studies. (P&S)*

- Feasibility analysis determinations whether the project warrants further federal investment
  - i.e., if the project has sufficient National Economic Development benefits. (NED)

# Feasibility Study

## (Continued)

- Chief's Report
  - The feasibility phase ends when the Chief of Engineers signs a final recommendation on the project,
  - Report to ASA(CW) and OMB
  - Informational copy of Report to Congress
  - Congress normally uses a favorable Chief's Report as the basis for authorizing projects.
  - Since the mid-1990s, Congress has authorized a significant number of projects based on these informational copies, prior to the projects receiving a full review by the Assistant Secretary and OMB.

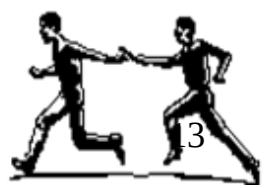
# Feasibility Study

**(Continued)**

- Some recent WRDAs have also included authorizations for projects that were still undergoing feasibility analyses;
  - Generally authorized contingent on a Chief's Report being available by December 31 of the year the WRDA was enacted.

# Preconstruction Engineering and Design (PED)

- Follows the feasibility analysis
- Takes about two years, on average,
- Conducted while pursuing congressional authorization for the project and construction funding.
- PED 75-25%. Costs are ultimately distributed between the federal and non-federal sponsor in the same proportion as the cost-share arrangement for the construction phase.
- Once PED is complete the project receives congressional authorization, federal funds for construction can be/are sought annually in the Energy and Water Development Appropriations Act.



# Budget Process

## RECONNAISSANCE PHASE

- Criteria for Inclusion in Program
  - ✓ State the Authority/Resolution
  - ✓ Demonstrate Damages
  - ✓ Identify Local Sponsor
  - ✓ 12 months & $100k

- PROGRAMS MATERIALS
  - ✓ Prepare Justification Sheet
    (See Handout H-5-2)
  - ✓ Update P2 database
  - ✓ As needed, Prepare Fact Sheet

    (RIT can advise on Fact Sheet preparation – similar to that for Feasibility)

# Budget Process

- **Feasibility Phase**
  - **Already have Study Authority**
  - **Criteria for Inclusion in Program**
    - ✓ **Favorable Recon report (905b)**
    - ✓ **Seamless Funding (no new start decision)**
    - ✓ **Local Sponsor 50-50 cost share**
    - ✓ **Duration – 3 years**
    - ✓ **Peer Review Plan**
  - **Programs Materials**
    - ✓ **Prepare Justification Sheet** (See Handout H-5-3)
    - ✓ **Update P2 database**
    - ✓ **As needed, fact sheet/issue paper**

# Budget Process

- **Preconstruction, Engineering & Design (PED) Phase**
  - **PED Type and New Start Decision**
  - **Cost-sharing 75-25 during PED**
  - **Division Engineer's Notice**
- **Programs Materials**
  - **Justification Sheet**
  - **PRISM Update**
  - **Fact sheet/issue paper**

# READY FOR CONSTRUCION

- Handoff to Construction
  - Project has been authorized for Construction and Project has completed Preconstruction Engineering and Design (PED) and P&S on first contract

# PROGRAMS MATERIALS

- **JUSTIFICATION SHEETS**
  - **See Referenced Program EC**
- **P2 ACCESS & INPUT (Automated Info - Database)**
  - **CECW-I and P2 Manual**
- **FACT SHEETS & ISSUE PAPERS**
  - **Issue Papers for Congressional Hearings**
  - **Fact Sheets during Mark-up**

# JUSTIFICATION SHEETS

- Critical Elements
  - Authorization
  - Financial Data
    - Costs should be accurate and add up
  - What are you doing with the budget year funding
  - Issues

# MEMBERS FACT SHEETS

- Authorization
- Financial Data – should be accurate
  - Include the capability for the project, not the amount requested
- Describe what the money will be used for
- Administrations position
  - Specifically – is this project within the Corps high priority outputs
- Issues and policy concerns
- Report/Act language, if necessary
  - If work is egregious or not authorized, provide language

# Fact Sheet Guidance

## Members Fact Sheets

- **PROJECT NAME AND STATE**: Some projects/studies cover multiple states i.e., Mississippi River Levees; Merrimack River Comprehensive Basin Study; John Glenn Great Lakes Program. It would be helpful to denote which state the project should be placed in for the budget tables.

  **AUTHORIZATION**: Shorthand for the authorization is acceptable, i.e. FCA 1928, R&HA 1968; however, it would also be helpful to include the appropriate section, i.e. Section 455, WRDA 86. If the project/study authorization is through one of the standing authorizations, CAP, PAS, etc, the section and the standing authorization citation should be stated in the authorization line.

- **SUMMARIZED FINANCIAL DATA**: Could be reduced to these lines:

  1) Estimated Federal Cost
  2) Estimated Non-Federal Cost
  3) Total Estimated Project Cost
  4) Allocation thru BY-1 (i.e., FY 2006)
  5) Allocation for BY (i.e., FY 2007)
  6) (Budget Request for BY+1 (i.e., FY 2008)
  7) Balance to Complete After BY+1
  8) Amount that could be used in BY+1 (This should be the <u>total amount</u> that could be used, not just the additional capability, in other words <u>budget amount plus capability</u>)

# Fact Sheet Guidance

## (Continued)

- **LOCATION AND DESCRIPTION (two items, not one)**: A more useful location and description would read as follows --- the project consists of a 15 mile levee along the left descending bank of the XYZ River providing flood protection to 15,000 acres of farmland as well as two small municipalities.
- **PROPOSED ACTIVITIES FOR CURRENT FY**: Describe major items of work that are ongoing or scheduled.
- **APPLICATION OF THE AMOUNT THAT COULD BE USED IN THE BUDGET FISCAL YEAR:** Distinguish between budgeted work and added items. If several items are listed, show dollars for each.
- **ISSUES AND OTHER INFORMATION:** Indicate economics, where applicable, and state whether it is justified or not with a clear and succinct statement; if the project is reimbursable, make it clear it is; indicate whether authorization is needed to implement request; state other discussions as necessary.
- **ADMINISTRATION POSITION:** Be direct, specific, and consistent (don't use terms like "seem to be"); be consistent for projects with the same purpose; be consistent for same project from previous year (if different, so state)
- **CONGRESSIONAL INTEREST:** Show ALL members with a specific interest in the project, with their District number, but highlight by bolding the member's name where the project is located, and underline the member or members who submitted the request.

# VTC FACT SHEETS

- Critical Elements – Congressional Adds
  - Authorization
  - Financial data
  - Decision Document status
  - State proposed plan to accomplish this work
  - Add 905 (b) Statement
    - Where it is proposed to do a Sec 905(b) analysis, funds to continue into the feasibility phase are subject to HQ certification of the 905(b) as being consistent with policy.

# Remaining Items

## (PY 2009, Items Not Listed Under States)

| | |
|---|---|
| **Items Not Listed Under States:** | |
| Coordination Studies With Other Agencies: | |
| Other Coordination Programs | 4,080,000 |
| Planning Assistance to States | 7,000,000 |
| Committee on Marine Transportation Systems | 100,000 |
| Collection and Study of Basic Data: | |
| Coastal Field Data Collection | 1,400,000 |
| Environmental Data Studies | 75,000 |
| Flood Damage Data | 220,000 |
| Flood Plain Management Services | 8,000,000 |
| Hydrologic Studies | 250,000 |
| International Water Studies | 200,000 |
| Precipitation Studies (National Weather Service) | 225,000 |
| Remote Sensing/Geographic Information System Support | 150,000 |
| Scientific and Technical Information Centers | 50,000 |
| Stream Gaging (U.S. Geological Survey) | 600,000 |
| Transportation Systems | 350,000 |
| Automated Info Systems Tri-CADD | 350,000 |
| Research and Development | 16,892,000 |
| Other – Misc | 9,975,000 |
| **Items Not Listed Under States** | **49,917,000** |

# SUMMARY

- Components or Phases of GI
- Criteria for Inclusion in Budget
- HQ Remaining Items
- Sample Project / Budget Materials

# ASK THE PROFESSOR

*"Really, I'm fine. It was just a fleeting sense of purpose—I'm sure it will pass."*