



**US Army Corps
of Engineers®**

PLANNING BULLETIN

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Subject: SMART Planning in the Reconnaissance Phase

Applicability: This bulletin provides updated guidance on the format and content of the reconnaissance report (Section 905(b) analysis), superseding Planning Guidance Memorandum (PGM) 99-01 and augmenting section G-7 and G-8 of Appendix G, Amendment #1, 30 June 2004 of Engineer Regulation 1105-2-100 (the Planning Guidance Notebook). This bulletin applies to all reconnaissance studies except initial watershed assessments.

1. This Planning Bulletin provides implementation guidance for reconnaissance studies reflecting the incorporation of risk-based decision making principles. The identification of Federal interest, sponsor interest, and study scoping are the primary reconnaissance phase outcomes, therefore proper incorporation of SMART Planning principles in the reconnaissance phase is critical to developing a strong foundation for the feasibility study.
2. The reconnaissance phase extends from initial obligation of reconnaissance funds to a signed Feasibility Cost Sharing Agreement (FCSA). The reconnaissance phase will generally cost no more than \$150,000 and be federally funded. The duration of the reconnaissance phase will normally be no more than 12 months and in all cases is to be limited to 18 months consistent with the intent of the Water Resources Act of 1986, as amended. Typically, a Section 905(b) analysis will be completed within six months to ensure adequate time and resources to develop the Project Management Plan (PMP) and the Review Plan (RP) and negotiate the FCSA.
3. Section 905(b) Analysis.
 - a. Existing, readily-available data will be used during the reconnaissance study. Sources of available data, including information from the potential non-federal sponsor, other agencies, state, and local government agencies will be used to the maximum extent possible. Additional information will be included in the analysis only in unusual situations where such information is required for determining if the water resource(s) problems warrant Federal participation in feasibility studies and defining the federal interest.
 - b. The Project Delivery Team (PDT) will employ risk-informed decision making based on professional and technical judgment throughout this phase of study, utilizing experienced staff to participate on and/or advise the PDT throughout the process. The PDT is expected to develop and utilize a risk register to support all decision making, and communicate risks and

remaining uncertainties with the potential non-federal sponsor and the vertical team. Use of vertical team members during the 905b analysis will be used as needed.

c. Discussions with the potential non-federal sponsor about sources and significance of study risks, what can be done about the risks, remaining uncertainties and what it means for the sponsor and other interests will be initiated at the start of the reconnaissance phase and continue throughout the study.

d. As part of Fish and Wildlife Coordination Act and in accordance with Section 106 of the National Historic Preservation Act and the Archaeological Resources Protection Act (ARPA), the District will initiate coordination to notify applicable agencies and other consulting parties such as the U.S. Fish and Wildlife Service (FWS), the National Marine Fisheries Service (NMFS), the State Historic Preservation Officer (SHPO), the Tribal Historic Preservation Officers, if appropriate, for pre-decisional, government-to-government consultation, and state agencies exercising administration over the fish and wildlife, and cultural preservation activities and resources. Districts will also obtain information pertinent to the study at the initiation of the reconnaissance phase.

e. The Section 905(b) analysis will address the requirements of Section 905(b) of the Water Resources Development Act of 1986, as amended. The report will include an analysis commensurate with this phase of study of the federal interest, costs, benefits, environmental impacts of proposed action(s), and an estimate of the costs of preparing the feasibility report. Economic, environmental and cultural investigations will be limited to qualitative assessments of benefits and costs of a limited number of potential solutions in sufficient detail to indicate that a solution to the water resource problem will likely warrant Corps participation. Quantification of benefits and costs is not required. Meaningful qualitative descriptions of likely benefits and costs are sufficient for determining if the water resource(s) problems warrant federal participation in feasibility studies. The analysis will also describe areas of risk and remaining uncertainties that affect feasibility phase assumptions (ref. Sec 905(b) analysis template.).

f. Reconnaissance phase activities, including plan formulation, coordination with the non-federal sponsor and state and federal agencies, public involvement, and development of a risk informed PMP will be carried forward and used, as appropriate, in the feasibility phase.

g. The Section 905(b) analysis provides the foundation for the Report Synopsis in the feasibility phase.

h. MSCs have delegated authority to approve a policy compliant Section 905(b) analysis. The MSC will provide a copy of the approval memorandum and Section 905(b) analysis to the Regional Integration Team (RIT) at Headquarters.

4. Project Management Plan Preparation, Coordination, and Feasibility Cost Sharing Agreement.

a. Following MSC approval of the Section 905(b) analysis and recommendation to continue study, the PDT begins development of the PMP. The PMP forms the basis for estimating the total study cost and non-federal sponsor share. It also is the basis for assigning tasks between the Corps, the sponsor and for establishing the value of in-kind services. While developing the PMP, the District Commander must discuss with the prospective non-federal sponsor(s) the objectives of the feasibility study, necessary level of detail, cost of studies, and scheduling of activities for the feasibility study. The areas of risk and uncertainty identified in the risk register inform the development of the feasibility phase Decision Management Plan(s) and the scope and scale of tasks within the PMP.

b. Vertical team alignment with the scope and scale of the PMP is required via the 3x3x3 Compliance Memorandum (reference PB2014-01).

c. The District may execute the FCSA after the following have been completed:

- MSC Commander approval of the Section 905(b) analysis.
- Completion of PMP negotiation.
- Approval of the feasibility study Review Plan by the MSC Commander.
- 3x3x3 Compliance Memorandum submitted to the HQUSACE Chief of Planning & Policy, or approved 3x3x3 exemption approved by the DCG-CEO.
- ASA(CW) approval of any requested deviations to the model FCSA.
- Receipt of the initial feasibility work allowance.

d. The signed FCSA concludes the reconnaissance phase and initiates the feasibility phase. A copy of the signed FCSA, PMP, the approved Review Plan, and study schedule must be provided to the HQUSACE RIT.

5. Point-of-contact for the Reconnaissance Phase is Ms. Susan B. Hughes, 202-761-4121.



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Section 905(b) (WRDA 86) Analysis Template
Full Name of Study

1. **STUDY AUTHORITY.** *State the study authority. Only include the latest authority, as amended.*
2. **STUDY PURPOSE.** *Briefly describe the study purpose.*
3. **RECOMMENDATION / FINDING OF FEDERAL INTEREST.** *Recommend whether to continue to a feasibility study or not, based on consistency with Army and budgetary policies and likelihood of a project meeting criteria for federal participation in project implementation.*
4. **STUDY AREA.** *Briefly describe the study area and existing and future without project conditions, considering the relationship to Sections 6-8 (problems, opportunities, objectives and constraints). The study area may encompass administrative regions, political jurisdictions, states, or watersheds. The Planning Guidance Notebook defines the study area as, "the area within which significant project impacts occur. The origins and destinations of products likely to use the waterway are normally included in the study area." Include a map of the study area.*
5. **SUMMARY OF APPLICABLE PRIOR STUDIES, REPORTS AND EXISTING WATER PROJECTS.** *Reference what is used for preliminary inventory and forecast conditions, and formulation of alternatives.*
6. **SCOPING.** *The scope and scale of water resource needs should be carefully evaluated as problems, opportunities, and planning objectives are identified with the public, stakeholders, and potential sponsors.*
7. **PROBLEMS / OPPORTUNITIES.** *State the problems and opportunities related to your study. Develop a clear problem statement; a simple assertion of the basic problem. Then, list opportunities. Include existing and future without project conditions.*
8. **PLANNING GOALS / OBJECTIVES.** *State the study goals and objectives. Set the goals first; then establish objectives that will help attain the goals. Goals are few and idealistic in any given study and are typically general, broad, conceptual, timeless ideas. Objectives are developed from the problems and opportunities. An objective is a statement of the intended purposes of a project; it is a statement of what an alternative plan is trying to achieve. Some general characteristics to use when developing objectives are to be specific, flexible, measurable, attainable, congruent, and acceptable. List your objectives in order of highest priority.*
9. **PLANNING CONSTRAINTS.** *A constraint is a restriction that limits the extent of the planning process. Constraints are designed to avoid undesirable changes between without- and with-plan conditions. Universal planning constraints are the legal and policy constraints that apply to every planning study and are not necessary to include in the Section 905(b) analysis. Study-specific planning constraints are statements of things unique to a specific planning study that alternative plans must avoid, and will be listed in order of highest priority.*

10. FISH AND WILDLIFE RESOURCES CONSIDERATIONS. *Identify the presence and general location of known fish and wildlife resources within the study area that must be approached with care; make preliminary determinations of the likely impacts that potential alternative plans would have on these fish and wildlife resources; briefly describe potential mitigation features that would address these impacts; and, develop the scope of fish and wildlife resources surveys, studies and analyses to be conducted during the feasibility study stage.*

11. HISTORICAL AND CULTURAL RESOURCES CONSIDERATIONS. *Identify the presence and general location of known historical and cultural resources within the study area that must be approached with care; make preliminary determinations of the likely impacts that potential alternative plans would have on these historical and cultural resources; briefly describe potential mitigation features that would address these impacts; and, develop the scope of historical and cultural resources surveys, studies and analyses to be conducted during the feasibility study stage.*

12. FORMULATING ALTERNATIVE PLANS. *Plan formulation is the process of building alternative plans that meet planning objectives and avoid planning constraints. Alternative plans are a set of one or more management measures functioning together to address one or more planning objectives. A management measure is a feature or activity that can be implemented at a specific geographic site to address one or more planning objectives.*

12.1 Management Measures. *Identify your preliminary management measures and which objective(s) they address.*

12.2 Screening of Measures. *Screening is the ongoing process of eliminating, based on planning criteria, measures that will no longer be considered. Criteria are derived from the specific planning study, based on the planning objectives, constraints, and the opportunities and problems of the study/project area. List preliminary criteria used to screen your measures.*

13. ARRAY OF ALTERNATIVES. *Keeping in mind that alternative plans will be formulated through combinations of screened management measures, list the preliminary structural and nonstructural alternative plans formulated by the PDT. Discuss the likely benefits, costs, and environmental impacts and outputs for each alternative analyzed based on available information and professional judgment.*

14. KEY FEASIBILITY STUDY ASSUMPTIONS AND ASSOCIATED UNCERTAINTIES. *Discuss assumptions made with respect to future conditions and the formulation and evaluation of alternatives. Identify the key uncertainties that may significantly impact the feasibility scope of work, and explain how they are addressed in the project management plan and the study risk register developed by the PDT. In other words, given the types of alternatives expected to be formulated in the feasibility study, what analyses are assumed to be required to evaluate, compare, and identify trade-offs between those alternatives? Those assumptions drive the scope of work, and it is important to describe the uncertainties that could cause a change in analytical approach during the feasibility study.*

15. FEASIBILITY PHASE COST ESTIMATE AND SCHEDULE. *Include simple summary statement of feasibility study total costs, and federal and non-federal share. More detailed costs will be provided in the Project Management Plan and potentially adjusted following vertical team alignment. Because an FCSA cannot be executed until receipt of the initial feasibility work allowance, the study schedules must always accurately reflect known federal budget realities.*

16. LETTER OF INTENT. *The Section 905(b) analysis will include a letter of intent from the potential non-federal sponsor(s) stating its willingness to pursue the feasibility study described in the Section 905(b) analysis and to share in its cost and the cost of project construction.*

(District Engineer Signature Block)