

Part 601 – Development of Watershed Project Plans

Subpart B – Project Plan Requirements

601.10 Planning Standards and Criteria

A. NRCS National Planning Procedures Handbook (NPPH)

The NPPH provides guidance in the planning aspects of NRCS technical assistance for all programs.

B. NRCS Field Office Technical Guide (FOTG)

The FOTG provides resource information that is helpful in planning. It provides “Quality Criteria and Guidelines” for the development of conservation systems. The practice standards provide direction during project planning and implementation. The “Conservation Practice Physical Effects” component provides a method to evaluate alternative conservation systems.

C. Principles and Guidelines (P&G)

Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies (P&G) was prepared by the President’s Water Resources Council to facilitate a consistent format for water resources project plans to be funded with Federal dollars. P&G also provides guidance for the development of a NED plan, which is required for all water resource plans.

D. Channel Modification Guidelines

The Channel Modification Guidelines provide policy on channel modifications and the coordination requirements between the U.S. Fish and Wildlife Service and NRCS during the planning process. These guidelines are found in Title 190, General Manual (GM), Part 410, Subpart B, Sections 410.27 and 410.28.

601.11 Water Resource Projects

A. Water Resource Projects

Many traditional NRCS watershed projects qualify as water resource projects. These projects identify monetary benefits. If the project involves financial assistance for a reservoir larger than a farm pond, it probably qualifies as a water resource project. For these watershed projects the P&G is utilized to develop the NED plan.

B. Non-Water-Resource Projects

Many types of projects qualify as non-water-resource projects. Projects with nonmonetary benefits may qualify. Projects for watershed protection to address soil erosion, water quality, water conservation, fish and wildlife habitat restoration, ecosystem restoration and energy conservation usually qualify as non-water-resource projects. Projects may address ground water as well as surface water quality. The NED plan development is not required for non-water-resource projects. The recommended plan should be the least costly environmentally acceptable method of achieving the agreed upon level of protection. Locally implemented projects, without Federal financial assistance, also qualify as non-water-resource projects.

601.12 Plan Formulation

A. Alternatives

- (1) Practical systematic procedures for formulating alternatives are discussed in the NPPH. The procedure used will be described in the plan.
- (2) Ensure that all necessary conservation practices are included in each alternative so that it will function as planned and produce the effects intended. Interdependent practices should be treated as one practice.
- (3) Develop alternatives using incremental analysis, to allow the project sponsors to understand the impact of an added increment of treatment in terms of economics, environmental effects, and project costs.
- (4) Estimate the expected land user participation for each alternative plan that includes long-term contracts with land users whose participation is voluntary. Participation rates are used to determine the total costs and benefits of the alternatives. Participation rates should be developed through the public participation process and documented in the plan.
- (5) The analysis of alternatives should not include significant changes in cropping sequence or land use conversion (except on class VI through VIII cropland) unless it has been determined that the changes will most likely take place.
- (6) The analysis of alternatives includes the effects on each of the concerns identified during scoping. This can be accomplished by computing the change from the current condition to the resource indicator chosen for the particular concern.
- (7) The analysis of alternatives includes all costs, including operation, maintenance, and replacement, expected to be incurred over the period of analysis.
- (8) Water resource projects are developed utilizing the P&G. The P&G states that, “The Federal objective of water and related land resources project planning is to contribute to national economic development consistent with protecting the Nation’s environment, pursuant to national environmental statutes, applicable executive orders, and other Federal planning requirements” (P&G, Principles Section 2).
- (9) During the planning of a water resource project, an alternative that reasonably maximizes net national economic development benefits, consistent with the Federal objective, is to be formulated. The NED account identified in P&G is used to determine which alternative reasonably maximizes net national economic development benefits. This plan is to be identified as the NED plan (P&G, Guidelines Section 1.6.3). The NED plan is to be selected unless the Secretary of a Department or head of an independent agency grants an exception when there is some overriding reason for selecting another alternative based upon other Federal, State, local or international concerns (P&G, Guidelines Section 1.10.2(a)).
- (10) When planning a non-water-resource project, the recommended plan should be the least costly environmentally acceptable method of achieving the agreed upon level of protection. The range of measures studied should be limited to those considered to be acceptable for installation in the watershed. This does not mean that only those measures desired by land users will be considered. The determination is an equal responsibility of the SLO, the public, and NRCS. Each option does not necessarily need to eliminate all problems or reach a predetermined level of resource protection.
- (11) Watershed Program projects are federally assisted local projects. The SLO must select an alternative. Likewise, if the responsible Federal official (RFO) has preferences among the alternatives, they must be disclosed to the public along with the rationale. The planning process may reveal an alternative preferred by the SLO that the SLO can implement without Federal financial or technical assistance.

Sponsors may recommend selection of a plan other than the NED plan. The RFO is to determine whether the reasons for selecting a plan other than the NED plan merit the granting of an exception (P&G, Guidelines Section 1.10.2(c)). The Chief of NRCS is the RFO and decides whether to grant an exception to the NED plan requirement.

- (12) Exceptions may be granted to address any local, State, national, or international concern. Even so, NRCS assistance will still be limited to the purposes authorized by the Public Law 83-566.
- (13) Watershed projects will be formulated in keeping with the intent of Executive Order 11988, Floodplain Management (7 CFR Section 650.25).
 - (i) If the recommended plan leaves a risk of loss of life from the 100-year flood, the plan must include the following:
 - A thorough description of the remaining flood hazard in the benefit area for the 100-year and 500-year floods, including the approximate number, kinds, and location of properties subject to continued flooding and the depths and velocities of flooding.
 - A map showing the urban areas expected to be flooded by the 100-year and 500-year floods with and without the project.
 - (ii) To ensure land use is compatible with the level of protection or remaining hazard, the SLO must agree to adopt (or see that the appropriate unit of government adopts) land use regulations that meet the standards for the regular National Flood Insurance Program, unless such regulations are already in place. This is a statutory prerequisite to financial assistance for flood prevention measures and is one of the provisions in the watershed agreement. These floodplain management features should be included as nonproject features of the plan.
- (14) If the NED plan leaves a risk of loss of life in an urban or built-up area, consideration will be given to adding to the NED plan to reduce the risk. Because this would require an exception to the NED requirement, there must be adequate rationale for adding increments to the NED plan. In determining the apparent risk of loss of life, consideration should be given to the structural and use characteristics of the improvement, the depth of flooding, and the velocity of flood flow in and immediately adjacent to the improvement.
- (15) Urban and built-up areas are those areas that are either present or likely future (within the next 20 years) areas to be used for residences, industrial sites, commercial sites, construction sites, institutional sites, public administration sites, railroad yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment plants, and water control structures and spillways. This land should be in contiguous units of at least 40 acres. Generally, the density should average one or more residences or other structures per 1.5 acres. In strip developments, the density should be 20 or more residences or other structures per mile. The likelihood of future development can be determined from existing land use plans, trends, and local, State, and Federal policy concerning land use and development needs.

B. Future-Without-Project or No-Action Alternative

The future-without-project (FWOP) conditions alternative is required to be developed to meet NEPA, P&G, and NRCS planning criteria. It projects the changes in resource concerns from the current condition to the condition that would exist in the future if no NRCS action is taken. The evaluation period of this alternative should be the same as that of other alternatives so that a consistent comparison can be made. The effects of all alternatives on resource concerns are measured from the current conditions. The FWOP

conditions alternative is utilized by SLOs and RFOs to make decisions about which alternative is selected.

C. Evaluation Period

There is no further guidance in the handbook corresponding to this section in the manual.

D. Enhancement and Mitigation of Environmental and Visual Values

Mitigation measures should be identified and described in all plans. NRCS often performs mitigation without recognizing it and taking credit. The various forms of mitigation include the following:

- (i) Avoiding the impact altogether by not taking a certain action or parts of an action.
- (ii) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- (iii) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
- (iv) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- (v) Compensating for the impact by replacing or providing substitute resources or environments.