

## PART 510 – PLANNING

### ND510.0 General

A. The Nine-Step Conservation Planning Process is at the core of all NRCS programs and activities, and is essential to ensuring successful engineering projects. Typically employees should be assigned job approval authority for planning at a level equivalent to their design job approval level, given that preliminary engineering work completed during planning typically constitutes 20 to 40% of the overall design effort. An adequate level of preliminary design is required, prior to entering into a program contract, to ensure engineering practices:

- ✓ Will effectively address the resource concerns and meet the objectives identified by the producer and NRCS planner in Steps 1 and 2.
- ✓ Are based on sound inventory and analysis information developed in conjunction with Steps 3 and 4. The extent of data collection and analysis, in terms of existing infrastructure, topography, soils, hydrology, preliminary hydraulic calculations, structural design, etc. is entirely dependent on site specific conditions and based on the professional judgment of the NRCS employees working on the preliminary design. The intent of data collection at this point is to ensure alternatives developed are feasible for site conditions, and they can be accurately evaluated in the decision making process.
- ✓ Are based on a sound scientific analysis of reasonable alternatives in Step 5 of the planning process. Although producer's many times initiate a program application with a specific implementation alternative in mind, a good planning effort typically entails exploration of others as well.
- ✓ Include a reasonable evaluation of costs and benefits for each identified alternative, in Step 6 of the planning process. Expected materials, quantities, and actual construction costs versus estimated cost share for each alternative is a key consideration of the producer in many cases, and should be provided to them at a +/- 20% degree of accuracy at this point in the process. On more complex projects, that may require some level of conceptual design documents be prepared so that they may consult with potential construction contractors.

A thorough preliminary design effort, with a high level of producer involvement, typically results in a high percentage of practices being implemented on schedule, with minimum modifications in terms of extents. More importantly, it enables good communication with producers and eliminates frustrations that can occur when agency engineering requirements are not understood up front. Ideally, the individual who will ultimately complete the design work is heavily involved in the planning effort as well.

B. Planning for engineering practices that will result in a potential rise in flood water surface elevations within a Regulatory Floodway as identified by ND State Water Commission and/or the National Flood Insurance Program must be approved by the State Conservation Engineer. Examples of potential projects in this category include incised stream/river channel restoration,

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dikes or embankments for animal waste facilities within floodplains, or fills associated with culvert or bridge installations. Ring dikes around individual farmsteads are specifically exempt as outlined in ND Century Code Chapter 61-16.2-10.

- C. Site investigation work during the planning phase of Wetland Restoration projects is particularly critical when termination of subsurface drainage (tile breaks) or surface drainage (ditch plugs) may cause flooding or saturation impacts on adjacent property. If the planned project will impact adjacent property, the cooperators will be required to secure written concurrence for the project by the neighboring landowner. Likewise, if a planned Wetland Enhancement project will raise saturation levels beyond those that occurred prior to drainage, normal pool elevation shall be at least 0.5 feet below the low point of potentially impacted adjacent properties without concurrence by the neighboring landowner. All Wetland Restoration or Enhancement projects that may impact adjacent property shall be reviewed and approved by the Area Engineer during the planning phase.