

UNITED STATES DEPARTMENT OF AGRICULTURE
Soil Conservation Service - Regional Technical Service Center
7600 West Chester Pike, Upper Darby, Pennsylvania 19082

June 27, 1973

RTSC TECHNICAL NOTE - WATERSHEDS - UD-31

RE: RC&D Economics-14-Basic Data
RB Determination of Changed Land Use of Flood
WS Plain Land in Watershed Projects, RC&D Measures

The purpose of this technical note is to supplement information contained in chapter 4 and 15 of the Economics Guide and recommend procedures to obtain sound estimates of future changes in flood plain land use, for use in project formulation, and estimating flood water damages and enhancement type benefits. This technical note cancels TSC-Watersheds Memorandum-UD-2, dated January 23, 1967.

General

In view of the added responsibilities placed on the Service in the last few years, we need a greater official commitment supporting our basic data and its analysis from the sponsors and other local organizations, particularly where urban expansion is a factor. Adequate consideration should be given to Service policies concerning:

- (1) the need for local organization to control (regulate or prevent) to the extent possible, development (both reconstruction and new) in areas subject to flooding by the with project 100-year event
- (2) the level of flood protection
- (3) minimizing the adverse effects from project actions
- (4) the consideration of non-structural measures, and
- (5) the use of enhancement benefits for project justification

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RTSC's
WO Dir., River Basin Division
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SOIL CONSERVATION SERVICE
Morgantown, W. Va.

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In making the necessary land use projections, consideration should be given to existing comprehensive and functional plans and possible adoption of land use regulations, flood plain zoning and flood proofing regulation and probable effects on the changes in flood plain use expected to occur without the project, as well as what changes will occur in the future with the project. This requires knowledge of the local area regarding the probable future land use of the project area.

In many areas, the future without project projection may have already been made by the various local or regional planning commissions. These groups are usually cooperative and if given project effectiveness, they will estimate changes in their projections due to the project. Consequently, the possibility of obtaining the needed projections from these groups should be explored.

Other data sources and reports, such as River Basins reports and Conservation Needs Inventory data will also be helpful.

Data Collection

Future use of flood plain area, with and without the project, can be estimated on the basis of the combined thinking of those individuals and groups who, through their close knowledge of the area and existing plans and regulations, are qualified to provide the necessary projections. Either or both of the following procedures can be followed to obtain the desired information:

(1) Committee (s) of qualified people can be established to obtain and provide data and information pertinent to the projected flood plain land use, urban development, and the related land values during the evaluation period. One over-all committee or a separate committee for each phase of the study might be used.

Participation of the committee (s) might include, as applicable; representatives of the regional and local planning boards, sponsors, SCS, Extension Service, ASCS, local chambers of commerce, leading farmer, and any other concerned group or agency.

A committee report summarizing pertinent information, basic data considered, their views as to future land use, urban developments and values in the flood plain should be prepared and given to the WWPP. This report would be useful for making the necessary future land use projections with alternative project levels of protection and for without project conditions.

2. The WWPP economist may obtain the required data by working closely with the above mentioned qualified persons or groups to collect information pertinent to the expected future land use, urban developments and land values in the flood plain. A record of this information should be made and a summary report, if needed, should be prepared by the person doing the contacting. This summary report is useful for making future land use projections with alternative project levels of protection and for without project conditions.

Data Analysis

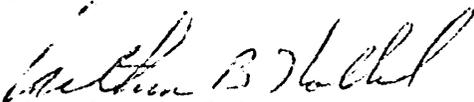
After projections have been made, they should be carefully reviewed by the planning staff and concerned state staff personnel. Agricultural land use projection should consider the land use capability of the affected soils, management ability of the farmers, expected cropping patterns, and crop yields.

Urban land use projection should consider factors such as; the kind of projected developments, their extent, soils suitability, associated costs and alternative locations, the timing of developments, the alternative levels of protection needed, and the land values with and without the project.

Decision and Documentation

A joint group decision with the sponsors should then be made and recorded, concerning the amount of expected future land use and developments to be used in project formulation and evaluation.

Copies of all relevant data collected, including zoning maps, plans, analysis decisions, etc., should be placed in the project files and become part of supporting data.



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