



IWR-PLAN DECISION SUPPORT SOFTWARE

OVERVIEW: The U.S. Army Corps of Engineers Institute for Water Resources (IWR) has developed IWR-PLAN Decision Support Software to assist with formulating and comparing alternative plans. IWR-PLAN can assist with plan formulation by combining solutions to planning problems and calculating the additive effects of each combination, or "plan". IWR-PLAN can assist with plan comparison by conducting cost effectiveness and incremental cost analyses, identifying the plans which are the best financial investments and displaying the effects of each on a range of decision variables.

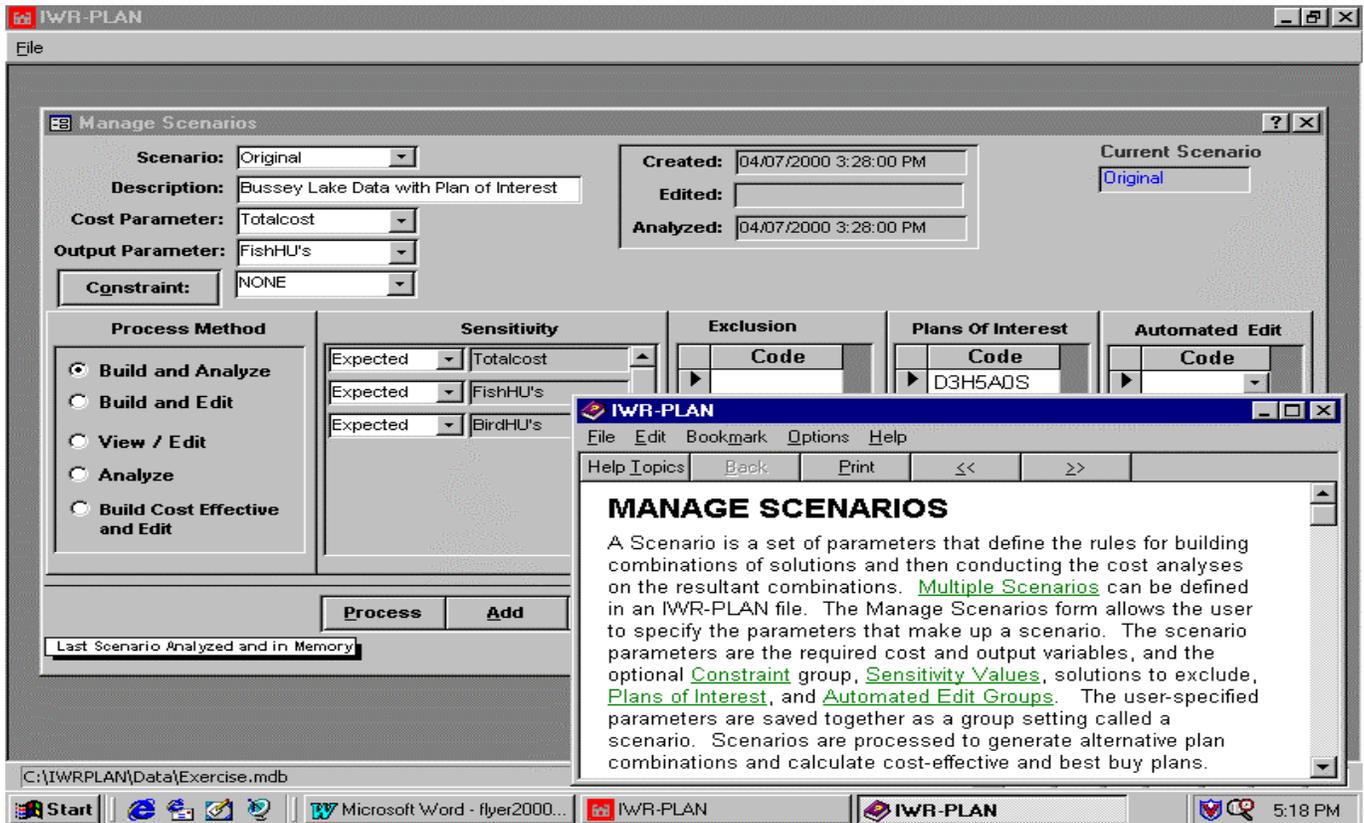
IWR-PLAN builds upon the basic plan formulation and comparison framework of the DOS program ECO-EASY, developed within the Corps' Evaluation of Environmental Investments Research Program. IWR-PLAN's system transforms ECO-EASY to Windows 95, 98, 2000 or NT operating environments while adding new functions. Development of IWR-PLAN has been carried out within the Corps' Decision Support Technologies Research Program, conducted at IWR. The Corps of Engineers and the Natural Resources Conservation Service together co-sponsored IWR-PLAN development.

IWR-PLAN Version 3.0 was completed in March 2000 and is available to download free of charge via the IWR-PLAN web site. The IWR-PLAN web site also provides operating instructions, Frequently Asked Questions, tutorial exercises, and a news board for announcing program developments, such as upgrades. Upgrades providing additional refinements, new functions, and new reporting and graphical outputs are scheduled for later in 2000.

FUNCTIONAL CAPABILITIES: The system will formulate alternative combinations of solutions and compare their effects on up to ten user-specified decision parameters. Derived parameters can be defined that are formulaic combinations of other decision variables. Constraints can be set, specifying minimum and maximum acceptable values for each decision variable. IWR-PLAN's sensitivity module allows examination of the implications of uncertainty in decision variable estimates. "Plans of interest" can be identified and displayed throughout the analyses regardless of cost effectiveness. Automated editing enables the user to account for non-additive plan effects.

Multiple scenarios can be examined from a single set of input data. Scenarios may differ as to what decision variables are included in the cost effectiveness analyses, what solutions are included, what sensitivity values are used, what constraints are applied, what plans of interest are included, and whether automated edits are applied. The results from different scenarios can be compared through IWR-PLAN's multiple scenario comparison module.

A variety of graphing and reporting options are available. All graphs and data in an IWR-PLAN file are directly exportable to a range of other programs to assist with reporting. To speed data entry, data may be imported from Excel spreadsheets. IWR-PLAN comes with an on-screen help system which provides instruction for all forms and functions in the program. A "Walk-Through" mode is also available for the novice user. An example IWR-PLAN screen (the Manage Scenarios form) with on-screen help displayed is shown on the other side of this page. Also provided are two example graphs from IWR-PLAN: a graph of all plans differentiated by cost effectiveness criteria and a graph of "best buy" plans resulting from incremental cost analysis.



MORE INFORMATION: For more information on IWR-PLAN, please visit IWR's home page (<http://www.wrsc.usace.army.mil/iwr/>), then click on "Products". The planning methodology upon which IWR-PLAN is based is described in Evaluation of Environmental Investments Procedures Manual – Cost Effectiveness and Incremental Cost Analyses (IWR Report 95-R-1, May 1995), also available from IWR's web site. Overview training is available through several Corps PROSPECT training courses. Field practitioner workshops can also be arranged.

POINT OF CONTACT: For more information regarding IWR-PLAN or training opportunities, please contact:

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Updated 7 April 2000

