
C H A P T E R 4

Using the Project Manager

The project manager window of HEC-GeoRAS is the initial window available to the user. The project manager allows the user to access project management and data processing options.

This chapter discusses project management options and summarizes data processing windows.

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Project Definition and the Default Directory

A complete project is the collection of all the GIS data necessary to create an HEC-RAS import file and the converted HEC-RAS export file data for inundation mapping. Project pathnames are stored in an ascii file using the *.prj* extension. The user is not allowed to change the extension. The project file is composed of the following:

Project Component	Description
Project	The project name.
DTM	The Digital Terrain Model (DTM) for the river network and channel geometry.
Units	The units of the project as read from the DTM header.

Project Component	Description
Contour Coverage	The Contour Coverage constructed from a DTM.
Main Channel Invert Coverage	The line coverage of the river and reach network.
Main Channel Banks Coverage (<i>optional</i>)	The line coverage of the location of the channel banks.
Flow Paths Coverage (<i>optional</i>)	The line coverage of the hydraulic flow path in the left overbank, main channel, and right overbank.
Cross Section Cut Lines Coverage	The line coverage of the location and expanse of cross sections.
RAS Import File	The data file created from extracting geometric data from the DTM using the RAS Coverages.
RAS Export File	The file of water surface profiles and bounding polygons formatted for import into GIS. Exported from RAS.
Water Surface Elevation Coverage	A cross section cut line coverage containing the elevation of the water surface at each cross section for each profile.
RAS Water Surface Profile List	A list of the water surface profiles exported from RAS.
GIS Water Surface Profile List	A list of the water surface profiles which have an associated inundation coverage and depth grid.
Bounding Polygon Coverage	The polygon coverage of the modeled region for the given water surface.
Depth Grid	The depth grid for the given water surface profile.

The default project directory is the directory from which ARC/INFO is

initiated. All coverages and files created are placed in the default directory, unless the entire pathname is specified.

Project Manager Options

The project manager provides options from managing projects and processing data. The project manager is shown in Figure 4-1.

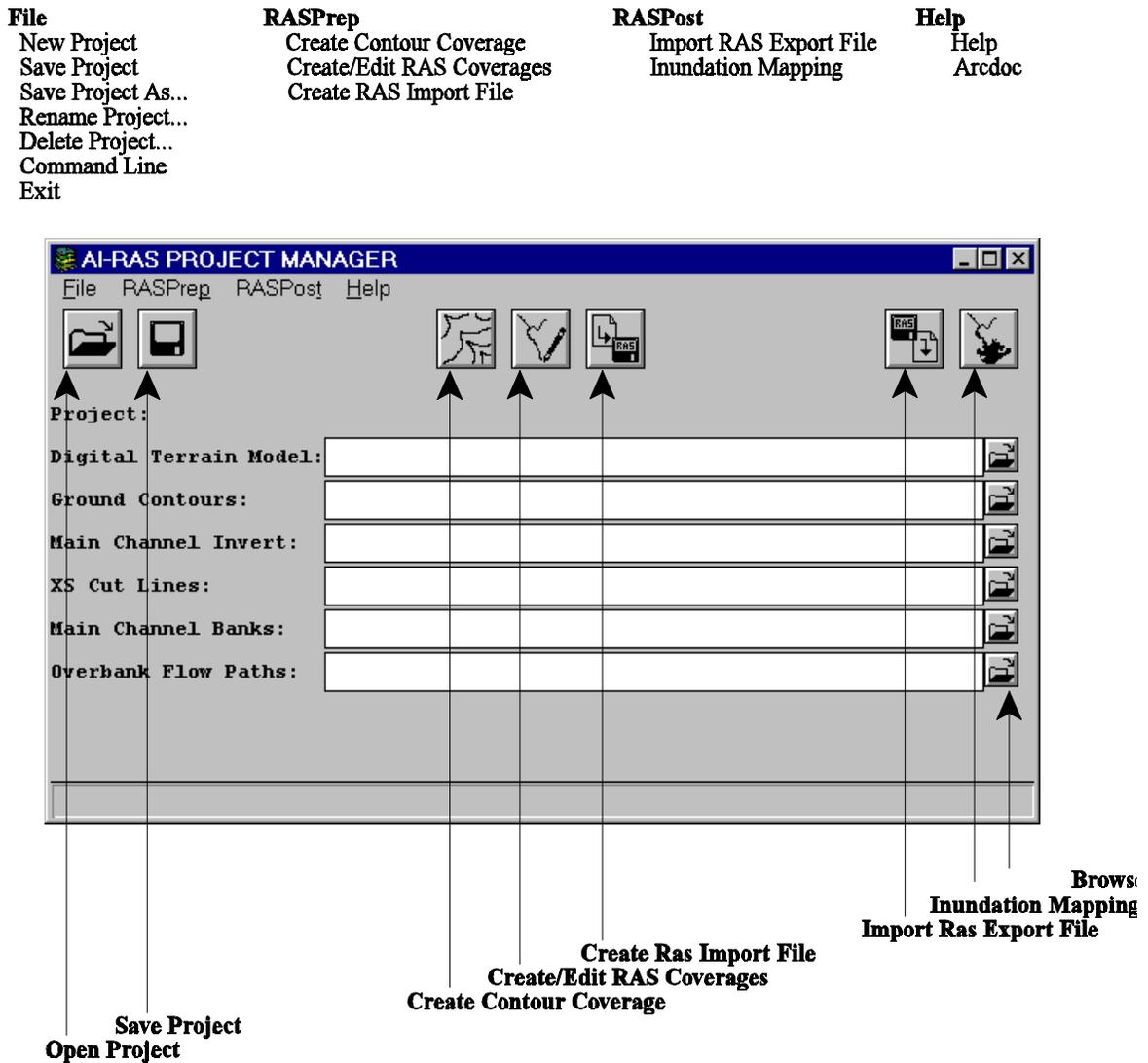


Figure 4-1 HEC-GeoRAS Project Manager options

Project Management

Projects are managed with options available from the **File** menu of the project manager. The options are listed:

File menu command	Description
New Project	Creates a new project. Closes the current project, prompting the user to save the project, and then to enter the new project name.
Open Project	Opens an existing project. Closes the current project, prompting the user to save the project if anything has been changed.
Save Project	Saves the current project.
Save Project As	Saves the current project to a new filename. Prompts the user, if the new name conflicts with an existing project.
Rename Project	Allows the user to rename the current project.
Delete Project	Deletes the project file. The user is prompted for confirmation of deletion.
Command Line	Returns the user to the ARC Prompt for command line execution. Type &RETURN to return to the Project Manager window. <i>Only very experienced ARC/INFO users should use the interactive Command Line option.</i>
Exit	Quits HEC-GeoRAS.

Processing Windows

The project manager window allows access to preprocessing and postprocessing windows. The windows accessed are as follow:

Window	Description
Create Contour Coverage	Creates a contour coverage from a DTM. The user may supply the contouring interval. The default contouring interval is one unit as read from the DTM. Run from ARC.
Create/Edit RAS Coverages	Provides the user with arc editing tools and an editing window to display coverages. Run from ARCEDIT.
Create RAS Import File	Provides the user with a window that displays the coverages to be used in creating the import file. Allows for the user to select the cross section sampling method. Run from ARC.
Import RAS Export File	Imports an HEC-RAS Export File containing water surface profiles. Allows the user to select the file (*.gis) to import. Creates a coverage to hold water surface elevations at each cross section and an index file: <i>tempindex9999</i> . Provides the user with a menu to select the water surface profiles to be created and the grid-cell resolution for the associated depth grid. Creates the file <i>wsp.menu</i> in the current workspace, from which the window is invoked. Creates the polygon coverage with the prefix <i>f_</i> , the flow depth grid prefixed <i>d_</i> , and the water surface tin prefixed by <i>t_</i> (later deleted). Run from ARCPLOT.

Window	Description
Inundation Mapping	Provides the user with a window for displaying the extent and depth of inundation for various water surface profiles. Creates the file <i>wsp_draw.menu</i> , from which the window is invoked. Provides access to printing options. Run from ARCPLOT.