

## HEC-GEORAS - ARCINFO

**Model Uses** View and manipulate geospatial data for the use in HEC-RAS.

**Major Categories** Hydrology and Water Use

**Subject Knowledge Level**  
Intermediate

**Minor Categories** Flood; Flow; Run-off; Temperature

**Technical Difficulty Level**  
Advanced

**Model Type** Other

**Geographic in Nature?**  
Yes

### **Abstract**

HEC-GeoRAS for ArcInfo is a package of ArcInfo macros specifically designed to view and manipulate geospatial data for use in the Hydrologic Engineering Center's River Analysis System (HEC-RAS). The graphical user interface allows users with minimal GIS experience to create a HEC-RAS import file containing geometric attribute data from an existing digital terrain model (DTM). Water surface profile data exported from HEC-RAS simulations may also be viewed using HEC-GeoRAS. The HEC-GeoRAS macros are written in the arc macro language (AML) and require the ArcInfo program with the TIN extension.

### **Future Developments**

None noted

### **Model Limitations**

Requires use and knowledge of ArcInfo

### **Model Features**

- Creation of HEC-RAS import files for ease of use of HEC-RAS.
- Viewing of the HEC-RAS Water Surface Profile.
- Project Manager Tools.

### **Required Data Types**

At this time, HEC-GeoRAS requires a DTM in the form of a triangulated irregular network (TIN). The DTM must be a continuous surface that includes the bottom of the river channel and all of the floodplain to be modeled. Because all cross-section data will be extracted from the DTM, only high resolution DTMs should be considered for hydraulic modeling. HEC-GeoRAS does not build a TIN or provide tools for building a TIN.

### **Model Outputs**

HEC-RAS input file

### **Source**

US Army Corps of Engineers

### **Source (URL)**

[http://www.hec.usace.army.mil/software/hec-ras/hecras-arcinfo\\_download.htm](http://www.hec.usace.army.mil/software/hec-ras/hecras-arcinfo_download.htm)

### **Hardware Requirements**

Same as those for ArcInfo 7.x

		<b>Supported Platforms</b>	
<b>DOS</b>	<input type="checkbox"/>	<b>UNIX</b>	<input checked="" type="checkbox"/>

### **Software Requirements**

HEC-GeoRAS ArcInfo is a package of AML Macros written for use in ArcInfo 7. ArcInfo 7.1 or higher may be run from the UNIX or Windows NT operating systems. The TIN feature of ArcInfo is required to use the HEC-GeoRAS.

<b>Windows</b>	<input checked="" type="checkbox"/>	<b>Macintosh</b>	<input type="checkbox"/>
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### **Cost, Licensing and Availability**

Free. USACE typically does not provide support to non corps users.