

## FESWMS-2DH

**Model Uses** FESWMS-2DH simulates two-dimensional surface water flow for uses such as analyzing complicated hydraulic conditions, such as bridge crossings.

**Major Categories** Hydrology and Water Use

**Subject Knowledge Level**  
Intermediate

**Minor Categories** Surface Water; Flow

**Technical Difficulty Level**  
Intermediate

**Model Type** Physical Model

**Geographic in Nature?**  
No

### **Abstract**

FESWMS-2DH is a modular set of computer programs that simulates two-dimensional, depth-integrated, surface-water flows. FESWMS-2DH consists of an input data preparation program (DINMOD(1)), flow model FLOMOD(1), simulation output analysis program (ANOMOD(1)), and graphics conversion program (HPLOT(1)). The programs have been developed to analyze flow at bridge crossings where complicated hydraulic conditions exist, although they may be applied to many types of steady or unsteady flow problems. Shallow rivers, flood plains, estuaries, and coastal seas are examples of surface-water bodies in which flows may be essentially two-dimensional in the horizontal plane.

### **Future Developments**

Unknown

### **Model Limitations**

Unknown

### **Model Features**

FESWMS-2DH contains four separate sub-programs and routines:

- DINMOD - Data Input Preparation Program
- FLOMOD - Flow Model
- ANOMOD - Simulation and output analysis
- HPLOT - Graphics Conversion Program

### **Required Data Types**

Users input data such as depth and flow rate into the DINMOD program.

### **Model Outputs**

Users input data such as depth and flow rate into the DINMOD program.

### **Source**

US Geological Survey

### **Source (URL)**

<http://water.usgs.gov/software/feswms.html>

### **Hardware Requirements**

None noted.

**Supported Platforms**

DOS	<input checked="" type="checkbox"/>	UNIX	<input type="checkbox"/>
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### **Software Requirements**

None noted.

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

Free, available from the link above.