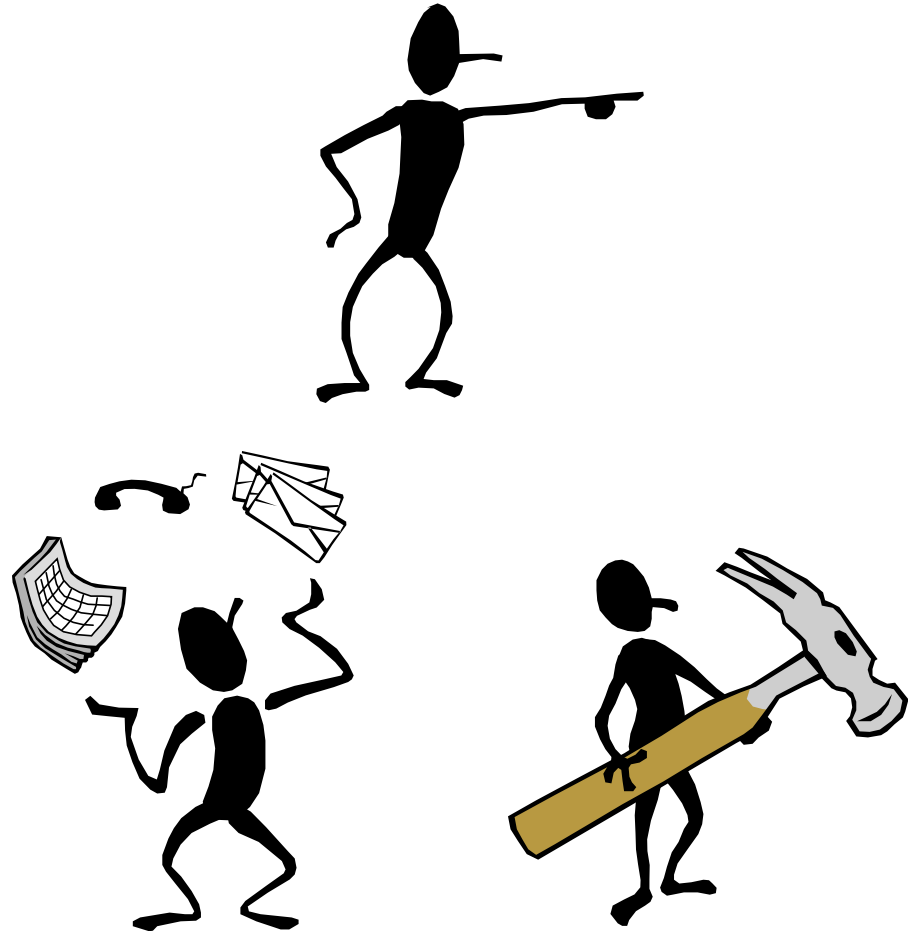


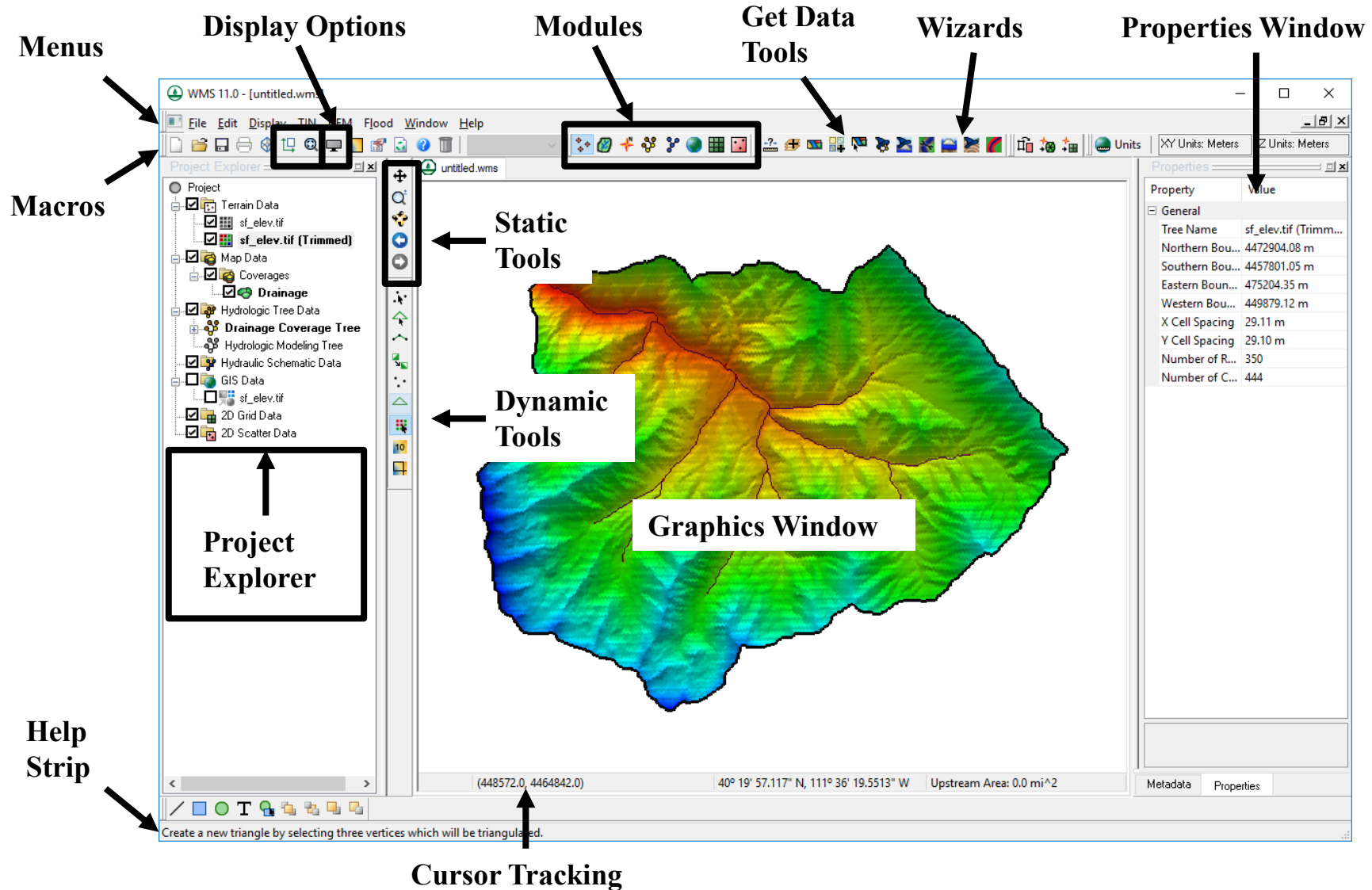
Introduction and Overview

1. Use digital terrain data to automate drainage basin delineation.
2. Compute drainage basin parameters commonly used in hydrologic models.
3. Use Land Use and Soils geographic data to compute runoff coefficients and curve numbers.
4. Set up input data files for industry standard models used to develop peak flow estimates and hydrographs.
5. Identify and use sources of electronic data such as web sites and proprietary data.
6. Set up input data for hydraulic models to run a floodplain delineation and determine hydraulic properties.
7. Basic overview of the GSSHA 2D hydrologic model

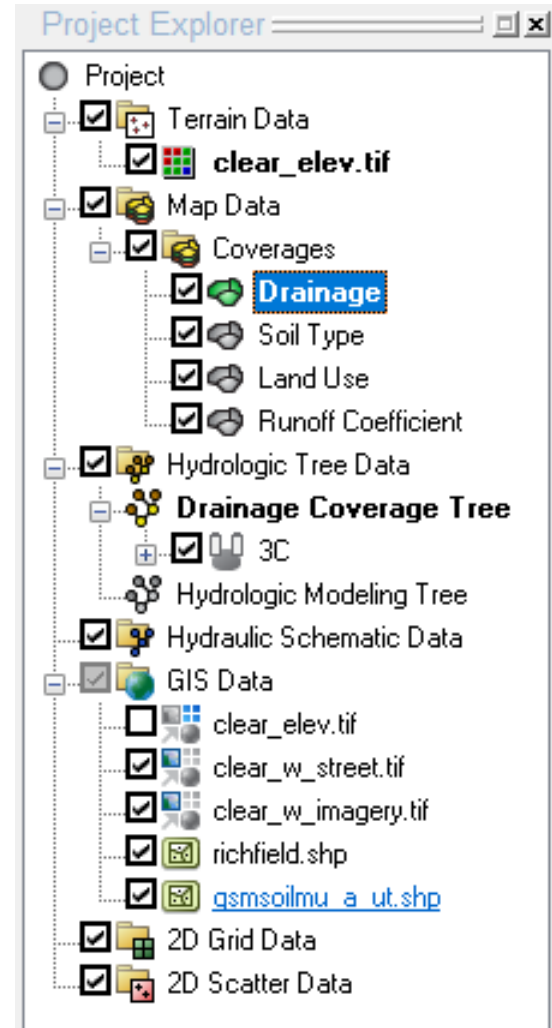
- Lecture
- Demonstration
- Workshop
- Review



- Upon completion of this lesson, we will be able to:
 - Describe the process for building a hydrologic model in WMS
 - List the primary functions and features of the WMS interface



- Entries for Geometric Objects
 - DEM data
 - Map coverages
 - Hydrologic and hydraulic simulation data
 - Images, GIS and CAD data
- Turn on/off data objects
- Right-click to operate on items in Project Explorer



- Terrain Data – Edit elevation data.
- Drainage – Automate basin delineation.
- Map – Create points, arcs, and polygons.
- Hydrologic Modeling – Define and run hydrologic simulations.
- Hydraulic Modeling – Define and run hydraulic simulations.
- GIS – Import geospatial data
- 2D Grid – Distributed modeling and gridded data.
- Scatter – x, y, z data

- A) The GIS module
- B) The Terrain module
- C) The 2D Grid module
- D) The Scatter module

▪ The correct answer is:

- A) The GIS module
- B) The Terrain module
- C) The 2D Grid module
- D) The Scatter module

Display | TIN | DEM | Flood | Window

Display Options...
Contour Options...
Grid Options...
Refresh Ctrl+R
Frame Image Ctrl+F
Display Projection...

Display Options

- Drawing Grid
- Lighting Options
- Hydrological Modeling Data
- Map Data
- Display Order
- TIN Data
- Data
- Age Data
- Data
- id Data
- atter Data
- ata

z-mag
ication: 0.10000000149
und color:
<DR Color:
inactive
e Color:
y option pages
isting data only

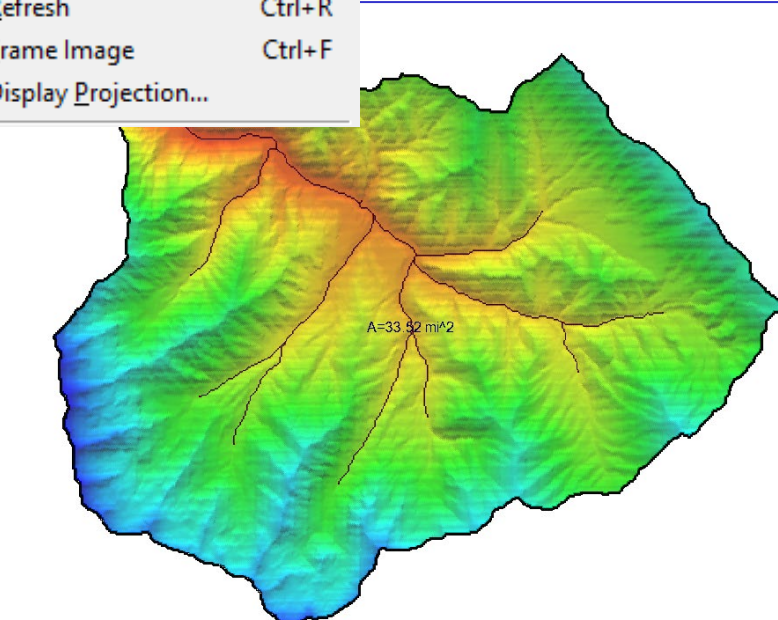
DEM




Point Display Step: 1
Min Accumulation For Display: 1.5 [mi²] Change Units...

☒ Watershed
☒ Stream
☐ Flow Direction
☒ Flow Accumulation Accumulation Intervals...
☒ Color Fill Drainage Basins
☐ Display Basin Patterns
☒ Fill Basin Boundary Only
☒ DEM Contours Options...

All off All on

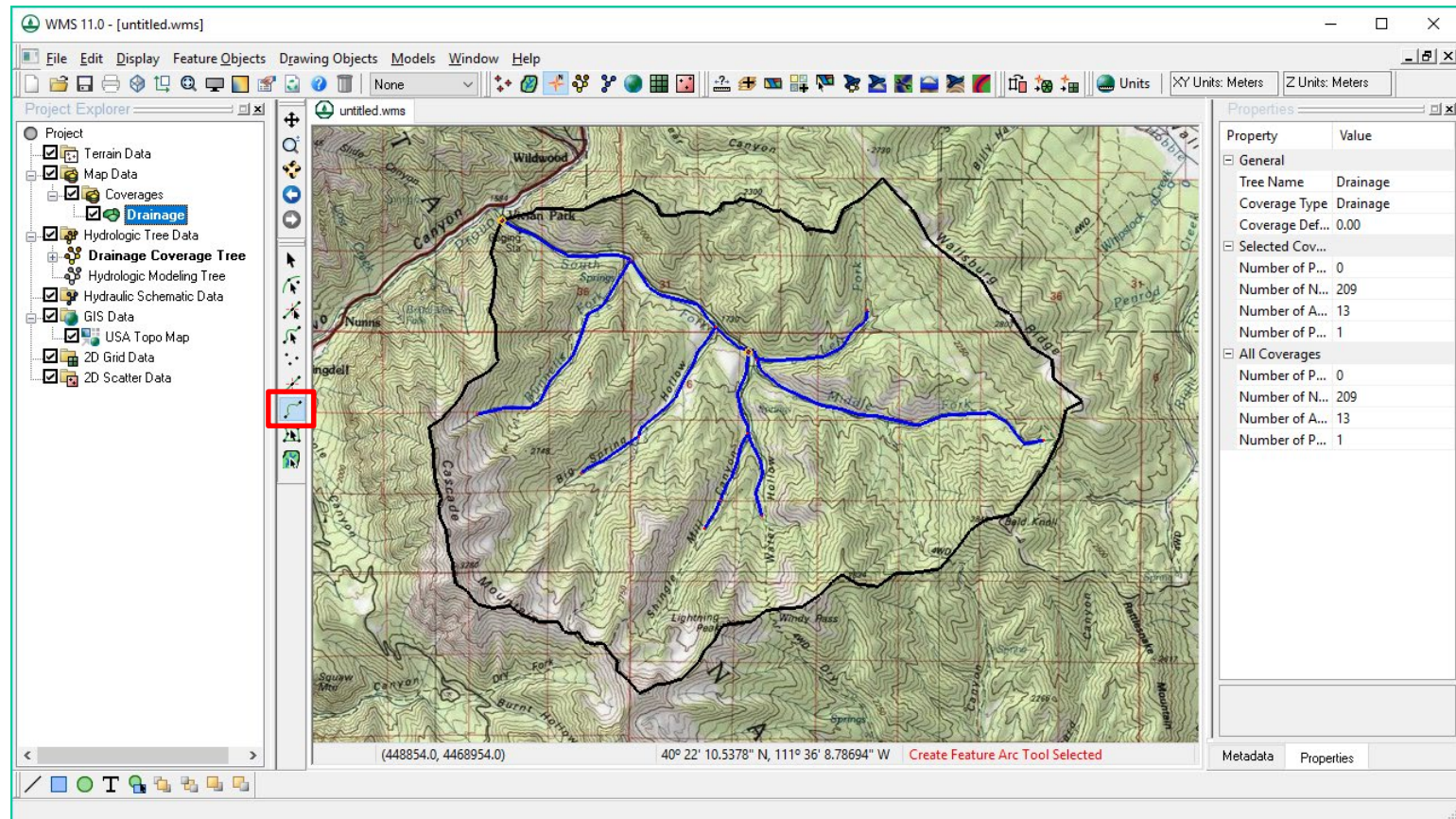
A=33.92 mi²

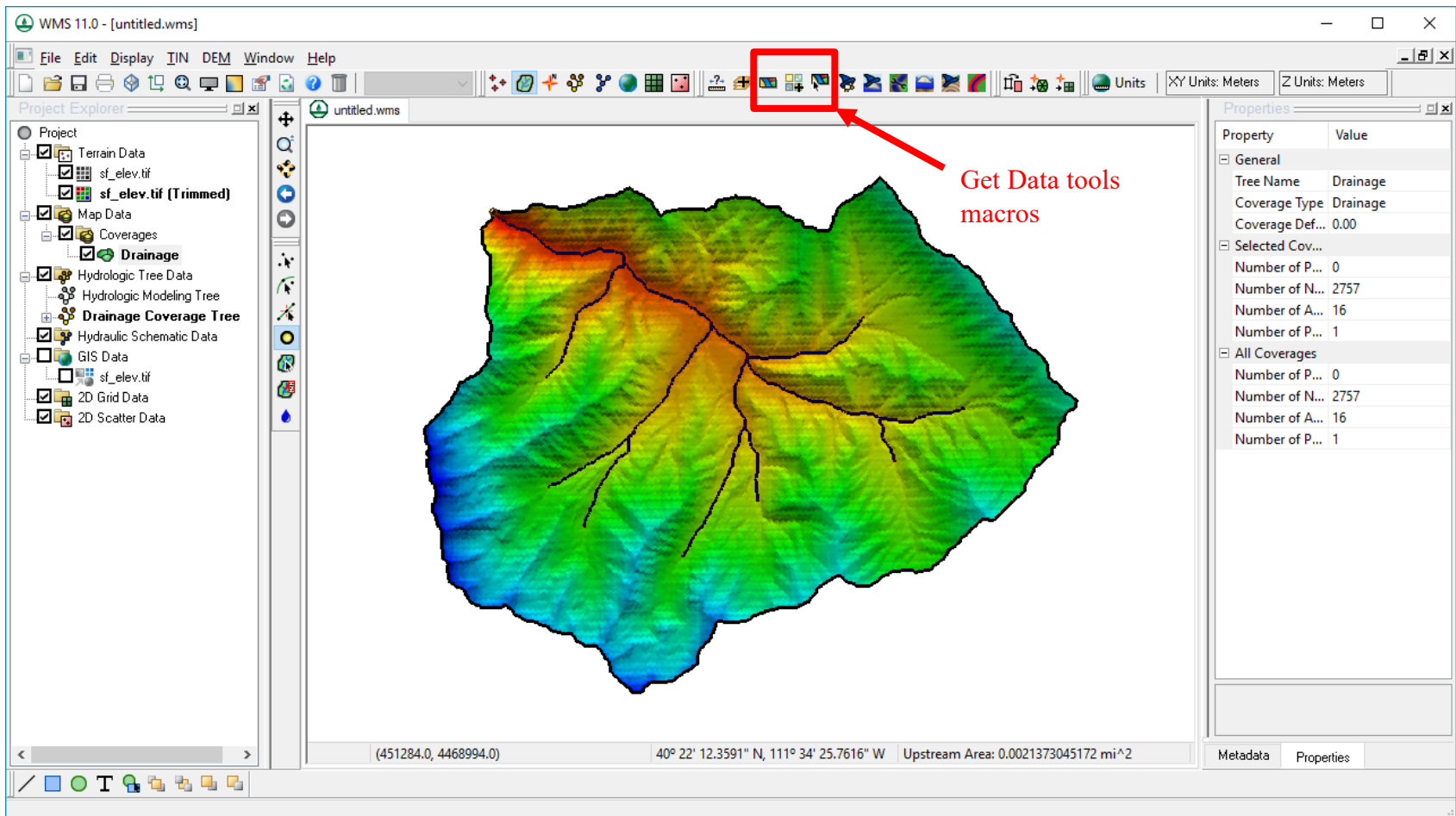


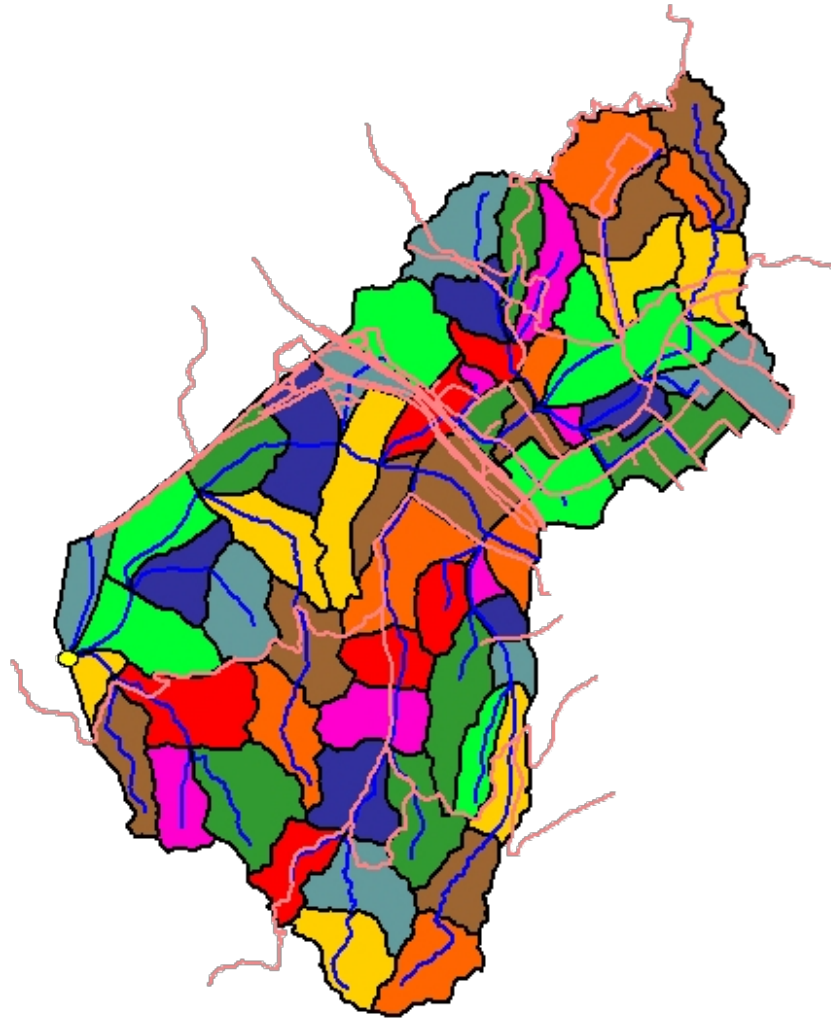
- Zoom Option 
 - Draw a box
 - Click to zoom in
 - Shift-click to zoom out
 - Mouse wheel
- Pan 
 - Hold down mouse wheel
- Rotate 
 - 3D view
 - Click rotate around center
- Plan view and frame



- Base Map Data
 - Images
 - Geographic Information Systems (GIS) data
 - Computer-Aided Design (CAD) data
- Elevation Data
 - Digital Elevation Models (DEMs)
 - Triangulated Irregular Networks (TINs)
 - Light Detection and Ranging (LiDAR)



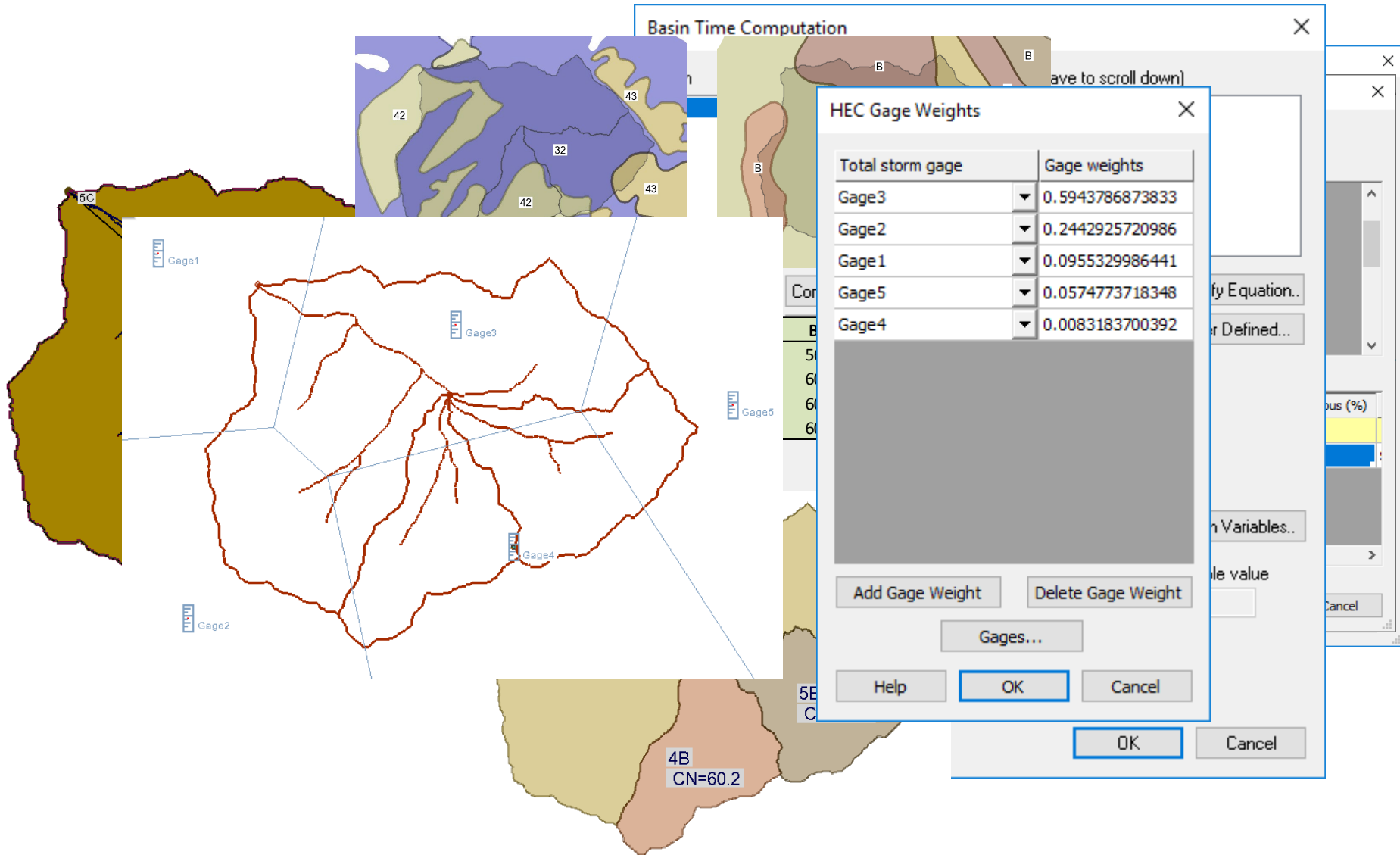


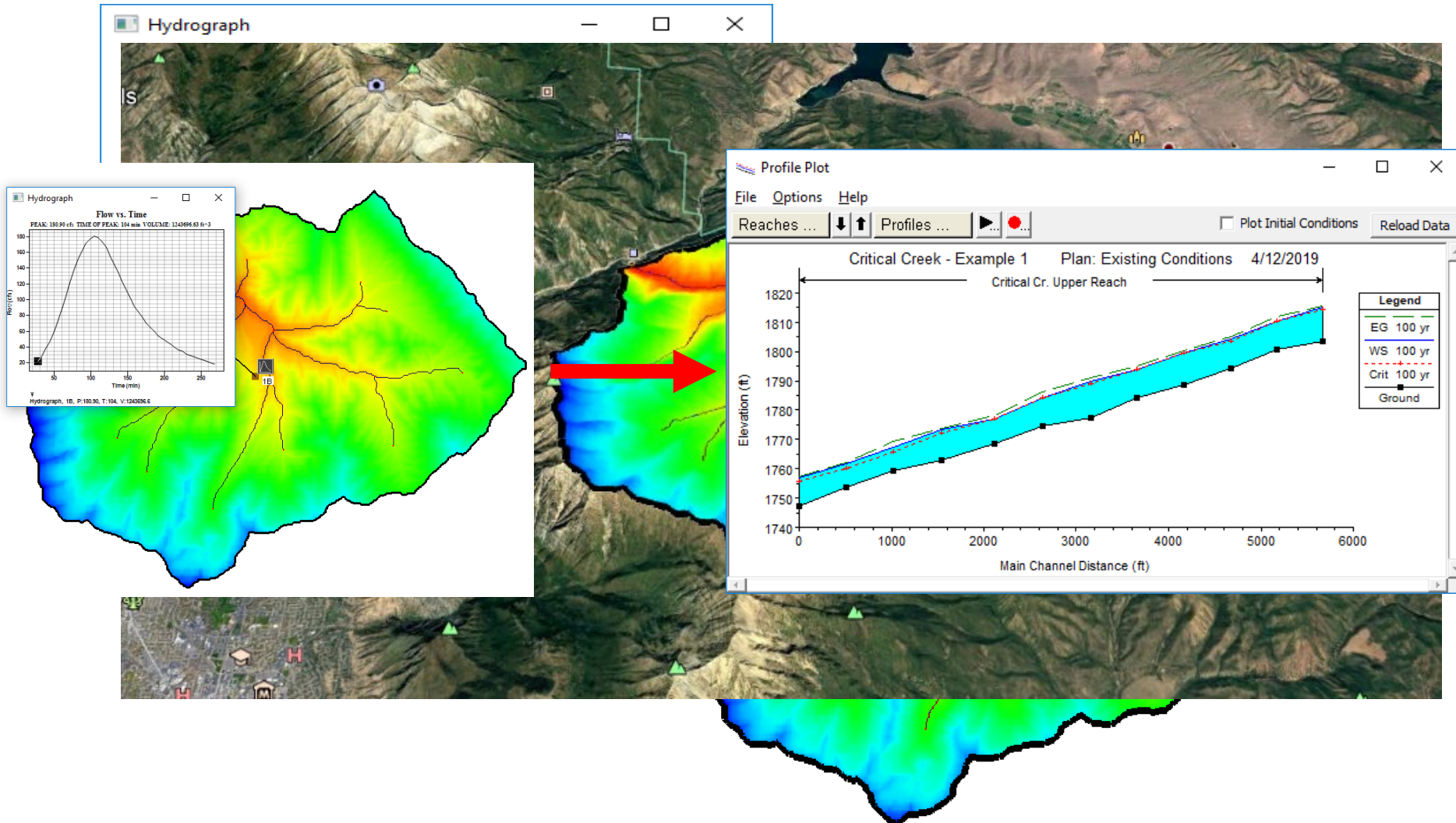


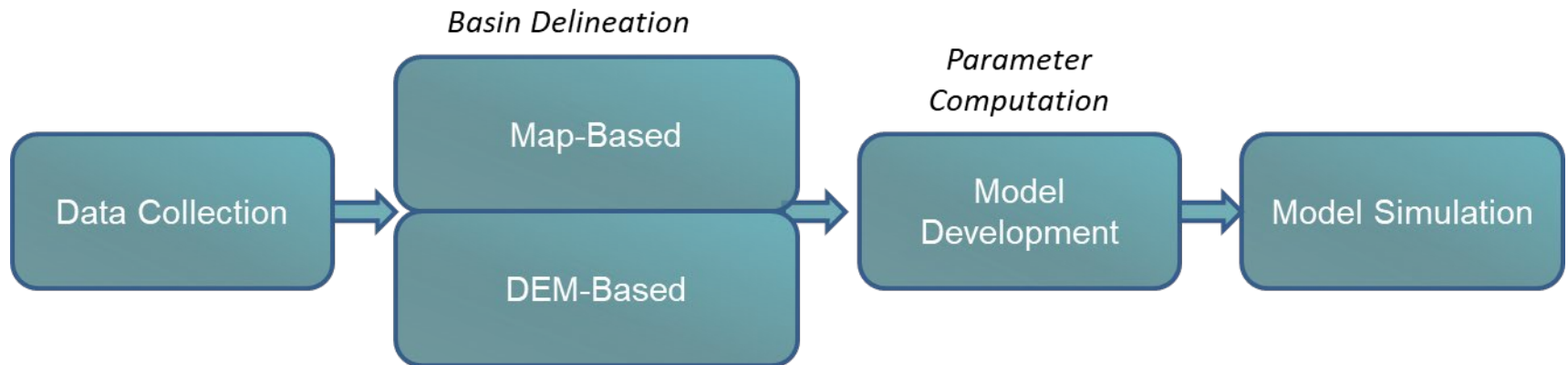
- A) Importing GIS or CAD files
- B) Manually digitizing boundaries and streams using scanned base maps
- C) Using digital elevation data to automate the procedure
- D) All of the above

The correct answer is:

- A) Importing GIS or CAD files.
- B) Manually digitizing boundaries and streams using scanned base maps.
- C) Using digital elevation data to automate the procedure.
- D) All of the above.







- We are now able to:
 - Describe the process for building a hydrologic model in WMS
 - List the primary functions and features of the WMS interface

- Let's practice ...
- **Exercises** folder for instructions
- **Intro** folder contains the data files required for the exercise.