Converting an ASCII Digital Elevation Model* file to a Raster Image in ArcMap 9.x

Understanding the Data

Although most GIS software systems make use of proprietary binary codes, almost all systems have import-export capabilities for translating between ASCII and binary formats. With ArcMap 9.x that import capability is found within the **ASCII to Raster** tool. This tool converts an ASCII file representing raster data to a raster dataset.

The GRCA (Grand River Conservation Authority) manages water and other natural resources on behalf of 38 municipalities and 925,000 residents. The GRCA will be used in this example because it is one of many organizations that distributes data in ASCII format. The focus of this procedure will be on the 25m digital elevation model.

A.   Converting an ASCII file to a Raster Image

1. Open **ArcMap: Start** > **Programs** > **ArcGIS** > **ArcMap**
2. Open the **ArcToolbox** by clicking the **ArcToolbox** button
   .
3. In the **ArcToolbox** menu *click* **Conversion Tools > To Raster > ASCII to Raster.**
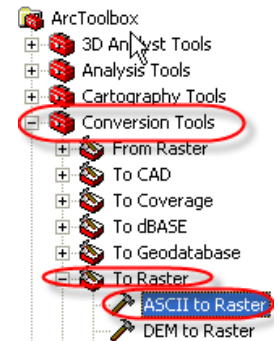
4. In the **Input ASCII raster file** text box use the **Open Folder**
   button to browse to the location of the ASCII file. **Note:** In this example the GRCA ASCII file is being used thus the input file is **dem25m.txt**.

5. In the **Output raster** text box use the **Open Folder** button to browse to the location on your hard drive where you wish to save the raster image.
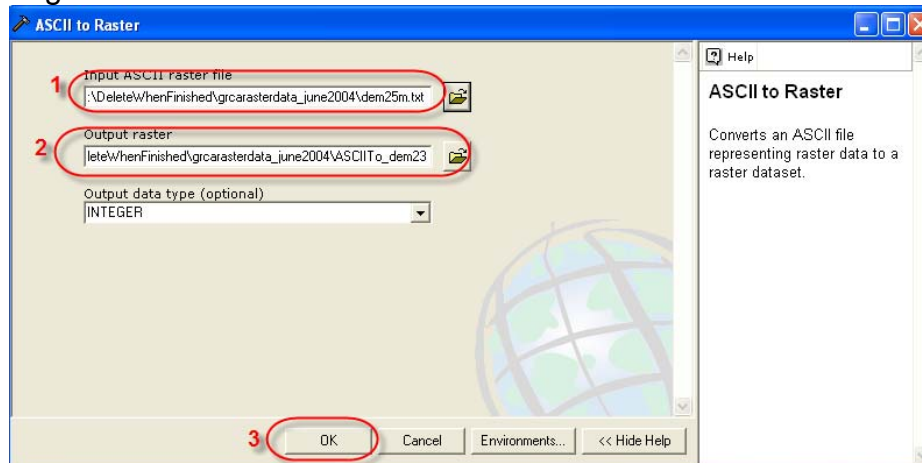
6. Leave everything else the same and *click* **OK.**
7. Once ArcMap successfully executes the command, the raster image will be displayed in the data frame. You can close the execution window.
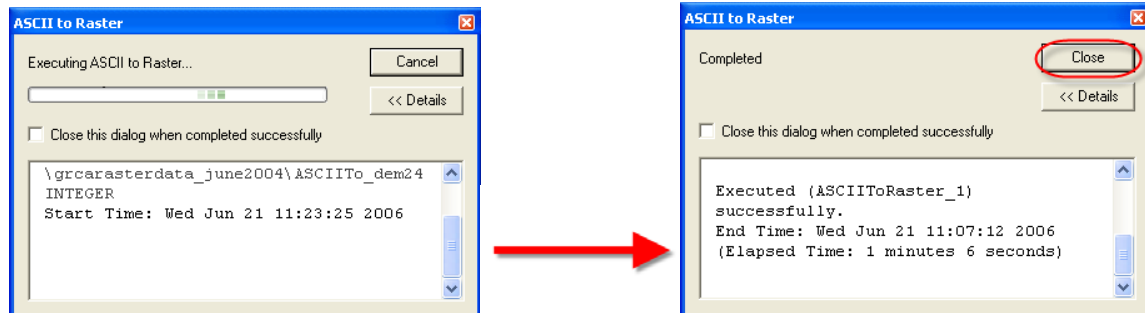
If the procedure was carried out correctly, your final map should look similar to the one below:
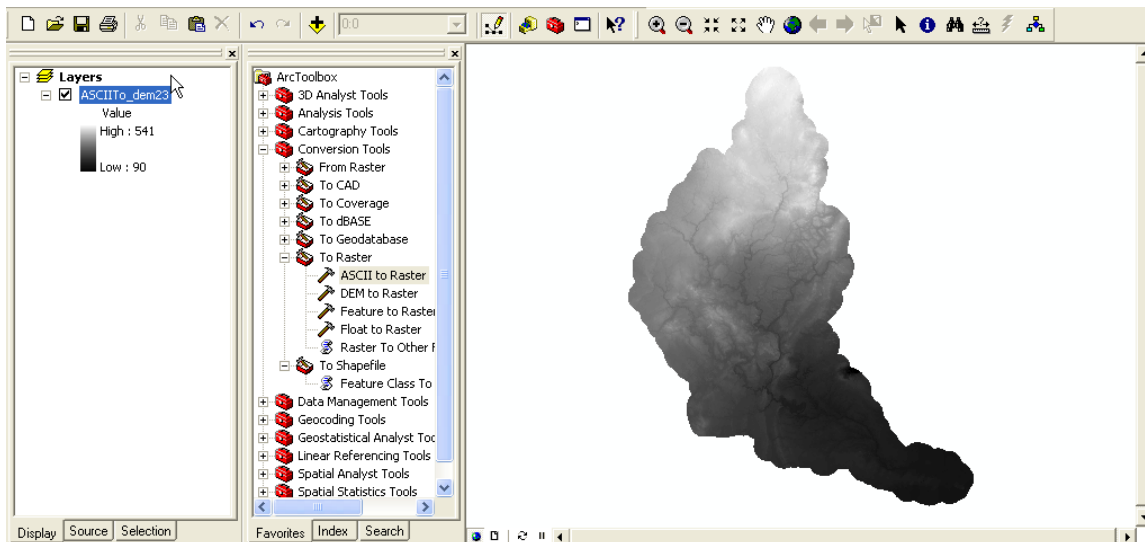
*ASCII Data
ASCII is an acronym for the **A**merican **S**tandard **C**ode for **I**nformation **I**nterchange. ASCII was originally developed to allow compatibility between different types of data processing equipment including computers and teletype machines. Each manufacturer had its own way of representing letters in the alphabet, numbers and control codes. ASCII functions as a common denominator between computers that otherwise have nothing in common. It works by assigning standard numeric values to letters, numbers, punctuation marks and other characters such as control codes. An uppercase "A," for example, is represented by the number "65."