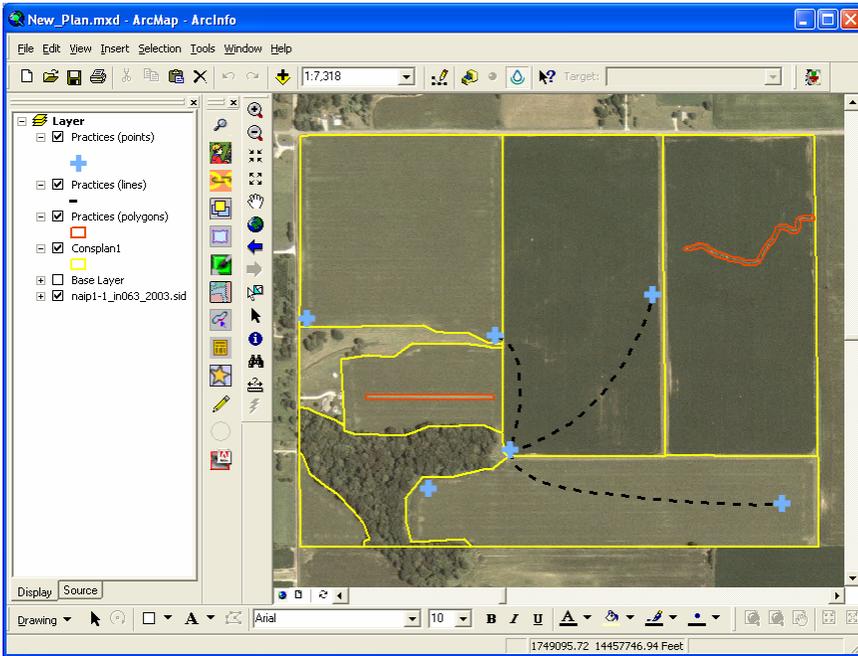


# Uploading Land Unit or Practice Data in Customer Service Toolkit to GPS Units Using MN DNR-Garmin

Due to the manner in which land unit and practice data is stored in Customer Service Toolkit (CST), it is necessary to change settings commonly used in the MN DNR-Garmin software for the data to transfer correctly. Note that this is only necessary for CST's land unit and practice data; no changes are necessary for Resource Inventory or 'On Your Own' datasets. This document outlines the recommended procedure.



The example used in these instructions is shown to the left. The process outlined below will illustrate how to transfer practice point information from the ArcMap document to the Garmin GPS receiver using the MN DNR-Garmin software.

These instructions assume that:

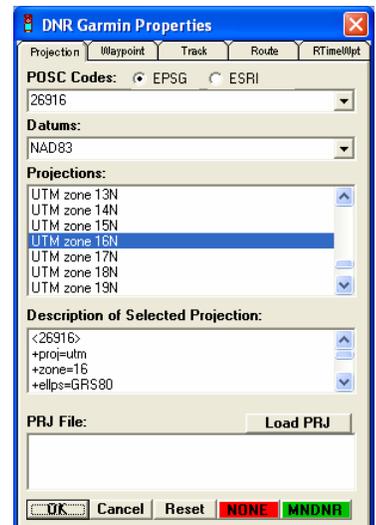
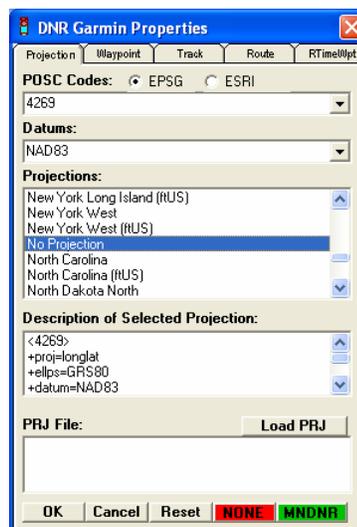
1. An ArcMap document containing point practice information is already open
2. The MN DNR-Garmin software (version 5.1.1) is running
3. A Garmin GPSMAP 76 receiver is on, connected to the computer, and is properly configured to exchange data with the computer.

## 1. Configuring MN DNR-Garmin for Practice Data

1.1. In the **File** menu of the MN DNR-Garmin software, select **Set Projection**. The DNR Garmin Properties dialog should appear similar to that on the right.

1.2. Change the selection in the **Projections:** window of that dialog to *No Projection*, as shown in this illustration.

1.3. Click the **OK** button to close the dialog.



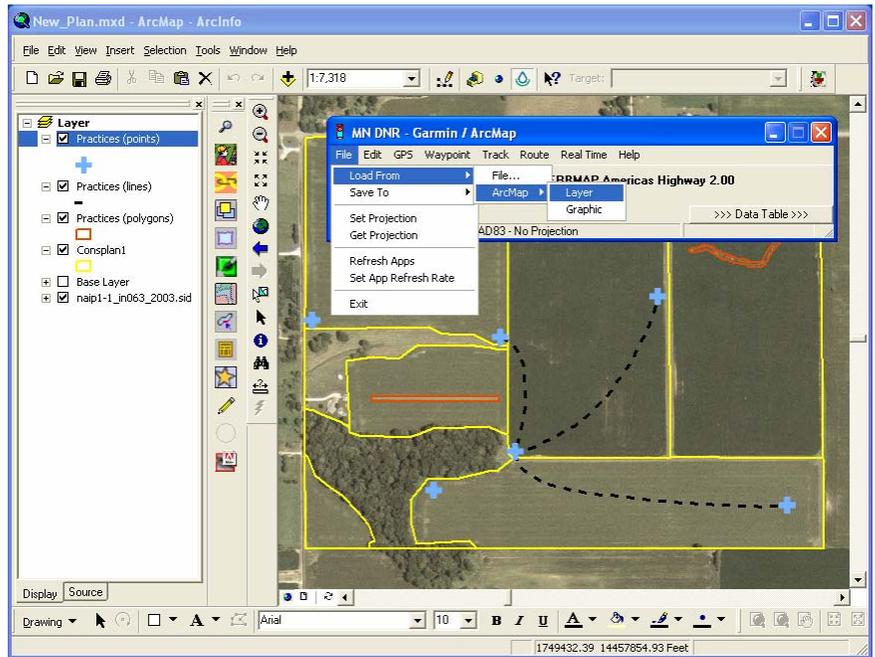
## 2. Transfer Practice Point Data from ArcMap to MN DNR-Garmin.

2.1. Arrange ArcMap and MN DNR-Garmin so that ArcMap's Table of Contents (TOC) is visible.

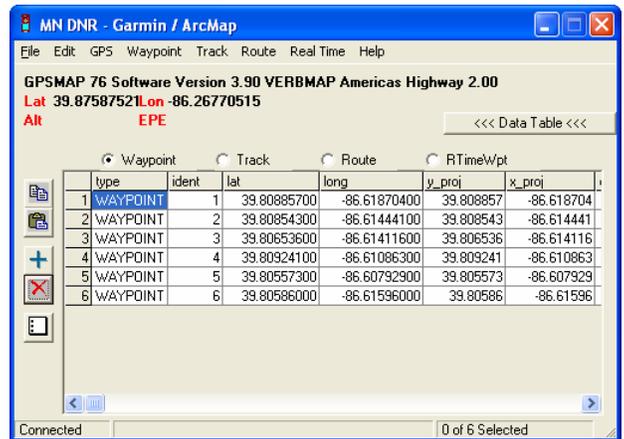
2.2. In ArcMap's TOC, click the entry for the point practice data. In this example, it is called Practices (points). The entry will appear highlighted (see illustration, right).

2.3. From the **File** menu of the MN DNR-Garmin software, select **Load From ► ArcMap ► Layer** (see illustration, right).

2.4. The *Identify Fields* dialog will appear. Accept the default values, and press the **OK** button (see illustration, below).



2.5. The coordinates for the data points now appear in MN DNR-Garmin (see illustration, right).

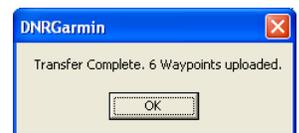


Notice that the values in *lat* & *y\_proj* columns are the same, as are the values in the *long* & *x\_proj* columns.

Normally, UTM coordinates would appear in the *x\_proj* & *y\_proj* columns, because that is the coordinate system used within NRCS by default. MN DNR-Garmin would then convert the UTM coordinates to decimal degrees, and place the results in the *lat* & *long* columns. But because land unit and practice information in CST is already in decimal degrees, it is not necessary for MN DNR-Garmin to convert the data.

### 3. Upload Points to GPS Unit

From the **Waypoint** menu of MN DNR-Garmin select **Upload**. When the process is finished a window similar to that on the right will appear. Press the **OK** button to acknowledge the message and close the window.



### 4. Reset Projection Settings

When you are done transferring land unit or practice information to your GPS unit, return the projection setting to *UTM zone 16N* following the procedure outlined in step 2 above.

At this point the waypoints are ready to use in the GPS unit. These instructions can be adapted to include uploading the practice line information as GPS tracks. The result would appear in the display view of a Garmin GPSMAP 76 similar to the illustration on the right.

