## Transforming Between NAD83 « NAD27 Using ArcView's Projection Utility Wizard

These instructions enable you to transform from one North American Datum (NAD) to another by using the Projection Utility Wizard extension in ArcView 3.x. You may adapt the instruction to suit your particular needs, be it the reverse datum transformation (NAD27 to NAD83), the reprojection to entirely different coordinate system, or simply to define the coordinate system of shapefiles.

#### ORIGINAL DATA THEME

Avi\_nad83.shp

a shapefile of vegetation polygons in NAD 83 UTM Zone 11

#### **CREATED DATA THEME**

Avi\_nad27.shp

the same vegetation polygon shapefile reprojected to NAD 27 UTM Zone 11

### Start the project:

- 1. Start ARCVIEW
- 2. ADD THEME: *Avi\_nad83.shp*
- 3. Choose FILE → EXTENSIONS...
- 4. Click a check beside <u>Projection</u> <u>Utility Wizard</u>
- 5. Click OK
- 6. Choose VIEW → PROPERTIES
- 7. Set the Map and Display UNITS
- 8. Save the project

# Perform the projection/datum transformation:

- 1. Choose FILE → ARCVIEW PROJECTION UTILITY...
- 2. Click BROWSE to navigate to the input shapefile: *Avi\_nad83.shp*
- 3. Click NEXT
- 4. Set the Current coordinate system:
  - Coordinate System Type: PROJECTED



- Name: NAD\_1983\_UTM\_Zone11
- Units: Meter
- Geographic Transformation: Click the DATUM tab and select NAD\_1983\_To\_WGS\_1984\_1 (for Canada)

You may need to click in the Advanced checkbox to view the tabs.

ArcView Projection Utility - Step 2		ArcView Projection Utility - Step 2	2
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		Area of Use:	POSC Code: 8088
Name		Canada, Central America, Mexico,	and United States (Alaska, CONUS)
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- 5. Click NEXT
- 6. Click YES to save the new information
- 7. Specify the New coordinate system:
  - Coordinate System Type: PROJECTED
  - Name: NAD\_1927\_UTM\_Zone11
  - Units: Meter
  - Geographic Transformation: Click the DATUM tab and select WGS\_1984\_3\_To\_NAD\_1927 (for Canada)

K ArcView Projection Utility - Step 3	ArcView Projection Utility - Step 3
Select the new coordinate system for your new shapefile(s).	Select the new coordinate system for your new shapefile(s).
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libite	Delta V: 158.0 Rotation Y: na
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Help Cancel < Back De	xt > Help Cancel <back qiext=""></back>

- 8. Click NEXT
- 9. Click BROWSE to navigate to where you want to save the new shapefile
- 10. Save as *Avi\_nad27.shp*
- 11. Click NEXT
- 12. Verify the settings then click FINISH

Be patient, this may take awhile...

13. Click OK once processing is finished

14. Click YES to add the projected data

You will need to select the shapefile and then choose the View to add it to. The data is now transformed from NAD83 to NAD27. Simply substitute your own file names and coordinate system projection and datum transformations in the appropriate steps above.

