

## **On-Going GIS/Mapping Projects: 2013**

### **GIS & Map Services, Bad River Natural Resources Department**

- **Develop Interactive Webmaps for:**
  - An overview of the Bad River Reservation
  - Tribal planners to access land ownership layers and fractionated interests
  - Providing a platform for online editing of data
- **Create and Update Layers for:**
  - **The Tribal Historic Preservation Office**
    - Map existing Tribal Historic and Cultural Sites
    - Link archaeological reports to cultural site (graves, mass burials, artifacts..etc.)
    - Georeference historical aerial imagery from the 1920's
    - Georeference historical plat maps from 1905, 1917, 1950, and 1980
  - **Land Ownership**
    - Digitize current and recent plat maps
    - Update land ownership layers yearly and create maps of current land ownership
    - Digitize existing leases and make layers available to Tribal Council for review
  - **Natural Resources**
    - Organize and document various layers such as geology, soils, streams, lakes...etc.
    - Assist with mapping and updating existing layers for wildlife and fish habitats
    - Update layers for the Natural Resources Integrated Resource Management Plan (IRMP)
    - Map out wetland delineations provided in other data formats (CAD)
    - Assist with watershed modeling using GIS
  - **Landscape & Terrain**
    - Acquire Light Detection and Ranging (LiDAR) data to inform climate change modeling
    - Acquire current, high resolution Aerial Imagery
    - Acquire infrared imagery for classifying vegetation around the Reservation and Bad River Watershed.
    - Use remote sensing techniques to classify vegetation throughout Bad River Watershed and Reservation for land change classification and for forestry management.
    - Creating Digital Elevation Models (DEMs) from LiDAR data and other sources (USGS)
  - **Infrastructure**
    - Provide detailed analysis for Biomass Site Selections
    - Update sewer pipelines, Rights-Of-Ways, and power Lines
    - Update and reorganize buildings and housing structures
    - Update layers of roads & trails to include proposed roads and emergency response contacts for the on and off reservation