GeoCommunicator – Web Services

GeoCommunicator (<www.geocommunicator.gov>) is the publication web site for information and spatial data from the Bureau of Land Management.

GeoCommunicator provides the capability for offering Web services that can be used with other applications or within the GeoCommunicator. The web services coordinate reference system is NAD83 Geographic, latitude, longitude using decimal degrees. The services use the Public Land Survey System (PLSS) data within GeoCommunicator. BLM is the authoritative data source for the PLSS data. Download of PLSS data is also available from GeoCommunicator.

A developer can consume the web services within their own applications.

**GeoCommunicator Derive Land Description (LD) GeoRSS** – The **Derive LD** web service provides the ability to pass the coordinates (latitude and longitude) of a point, line, box, or polygon using XML and have the land description (state, meridian, township, range, section, aliquot, lot) returned. Below is an example using an ESRI custom application to draw a box on the map and have a land description containing state, meridian, township, range, section, aliquot, and lot returned. DeriveLD Service Description link: [http://www.geocommunicator.gov/deriveld/deriveld.asmx](http://www.geocommunicator.gov/deriveld/deriveld.asmx)

**GeoCommunicator Find Land Description (LD) GeoRSS** – The **Find LD** web service provides the capability to pass a land description (state, meridian, township, range, section, aliquot, lot) and have the latitude and longitude returned for the coordinates that define the boundary of the shape. The coordinates can be used to draw the area on a map. Below is an example using an ESRI custom application to enter a land description and have it drawn on the map. FindLD Service Description link: [http://www.geocommunicator.gov/findld/findld.asmx](http://www.geocommunicator.gov/findld/findld.asmx)
GeoCommunicator Survey Data Exporter GeoRSS – provides the capability to acquire survey data for townships within the Public Land Survey System. The requestor submits a list of townships, the desired format (KML, GPX, List, or GeoRSS), and the desired export content (all points, all points and lines, or control points). The system returns the township data in the specified format. The image below shows a request for the survey data. Survey Exporter Service Description link: http://www.geocommunicator.gov/SurveyDataExporter/SurveyDataExporter.asmx

Township GeoCoder – provides the capability to convert PLSS land descriptions into latitude and longitude and vice versa. This is useful for finding the land descriptions of a point location such as a well location. You can also pass in a land description and have the latitude and longitude of the centroid returned. Township GeoCoder Service Description link: http://www.geocommunicator.gov/TownshipGeocoder/TownshipGeocoder.asmx

For information on the Web services use the GeoCommunicator Contact Us. http://www.geocommunicator.gov/GeoComm/contact.htm