

# Streaming Web Mapping Services to Your Desktop

**Updated: February 3, 2010**  
*(newest URLs and notes are in red)*

*(Note: This document needs a **major** update,  
especially regarding new federal Web Mapping Services !)*

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## Introduction

This document consists of a synoptic tour of Wisconsin's state and local Internet Map Services. These include systems developed with ArcIMS (with and without ArcSDE), a few with ArcGIS Server, the open source Map Server, and other software including Oracle. Users can access these "front door" URLs using a web browser, such as Internet Explorer.

Users can also download free desktop clients as an alternative to accessing web sites with a browser. ESRI offers three such packages: ArcExplorer 9.x Java edition, ArcExplorer Java Edition for Educators 3.2.1, and ArcGIS Explorer 9.x to access many of these services. A bit of trial and error may be necessary to find the URL from which the service is actually served; often, this merely involves "pruning" the URL listed here. (You can generally also launch the service in a browser, right click on the map display frame, copy and paste the service's URL.) *NOTE: Not all services have been developed to allow streaming to clients such as these, and ArcMap.*

Those services that are published including their geodetic datum, map projection, and coordinate system are especially useful, since two or more services in the same coordinate system can be simultaneously loaded in one of these clients and viewed. In ArcExplorer, The second through nth service can also be made variably transparent; themes in a service can be reordered, or even discarded. With AEJEE, projection on the fly of different coordinate systems can be accomplished. *(Note: Although AEJEE does **not** recognize WTM83(91), WCCS, or WISCRS !)*

ESRI's ArcMap 9.x gives more capabilities to the users of these web mapping services. This includes on-the-fly map projection, and often data extraction and download, and metadata acquisition and use. The first service added to the view determines the data frame's coordinate reference. If you want to use a service which has not yet published its coordinate reference information, you can add such a service first, and reset the data frame's properties. Often, you can discover a county site's coordinate reference information by checking the **Wisconsin Land Information Program (WLIP) Land Information Modernization & Integration Plans.**

<http://www.doa.state.wi.us/category.asp?linkcatid=739&linkid=133&locid=9>

Note the initial offerings of Open Geospatial Consortium (OGC) Web Mapping Service (WMS), and emerging Web Feature Services (WFS). *Yes, and maybe even some WCS!* Users of ArcMap 9.3.1 and ArcGIS Explorer (**Build 900**) can add these services directly to the view. The paradigm is shifting; you don't necessarily need to acquire a copy of geospatial data in order to use it, if you too can rely on web services.

## **Acknowledgements**

Thanks to A.J. Wortley, Wisconsin State Cartographer's Office, and David Hart, UW Sea Grant GIS Specialist, for assistance in compiling and maintaining these web links. In the future, we hope to see all Internet map service developers and providers generate searchable metadata identifying the key characteristics of their sites, to be posted through the **Wisconsin Land Information Clearinghouse**. <http://sco.wisc.edu/wisclinc/index.php>

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## Understanding ESRI's Free "Explorer" Applications

<http://www.esri.com/software/arcexplorer/explorer.html>

### **ArcGIS Explorer 9.x**

<http://www.esri.com/software/arcgis/explorer/index.html>

### **ArcExplorer 9.x—Java Edition**

<http://www.esri.com/software/arcexplorer/download.html>

### **ArcExplorer—Java Edition for Education Version 2.3.1**

<http://www.esri.com/software/arcexplorer/download.html>

*Note: Allows map projection on the fly ,attribute table display, flexible symbolization, feature labeling, and map layout.*

### **ArcExplorer User Manuals**

[Using ArcExplorer—Java Edition](#)

[Introduction to ArcExplorer—Java Edition for Education](#)

## **ESRI ArcGIS Online Services**

<http://arcgisonline.esri.com/>

*Try these out:*

### **Group: WDNR Science Services**

<http://www.arcgisonline.com/home/search.html?t=groups&q=wisconsin>

### **Content: Wisconsin**

<http://www.arcgisonline.com/home/search.html?t=content&q=wisconsin>

*See especially the ArcMap Projects for:*

### **State Agency and University Services**

<http://www.arcgisonline.com/home/item.html?id=2a13a296e47f42c1aaadc0e8cb531951>

### **Wisconsin Spatial Data Repository**

<http://www.arcgisonline.com/home/item.html?id=52d7f5cf40c94c8485d203cf0492aa28>

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## Internet Map Servers in Wisconsin

The following sites are given as examples of current Internet mapping service development efforts. County and municipal web mapping sites in Wisconsin can also be accessed at two sites maintained by the **University of Wisconsin Sea Grant Institute**, which includes a hyper-linked map.

<http://coastal.lic.wisc.edu/wisconsin-ims/wisconsin-ims.htm> *(Now includes municipal sites !)*

State and county sites are also being linked through the **Wisconsin Land Information Clearinghouse (WiscLINC)**, with "metadata lite" about each service. Such elements will include: Publisher, Content Title, Coverage Area, Content Type, and Content Theme Keywords. Search for all Wisconsin sites, using Interactive Maps (currently 98 links), and Web Mapping Services (currently 26 links). <http://www.sco.wisc.edu/wisclinc/>

### Wisconsin (Ramona) GIS Inventory Survey

<http://www.sco.wisc.edu/wisclinc/survey/>

#### [Go to the WI GIS Inventory Survey !](#)

#### [2009 Report on County GIS Data Systems](#)

[Appendix B: Individual maps from report](#)

[Summary table of results](#)

[\(PDF\) PowerPoint Summary presentation](#)

The 2009 Report on County GIS Data Systems is a report on the [Wisconsin GIS Inventory](#) survey results as of March 2009. This survey has been an annual Wisconsin Land Information Program (WLIP) requirement for both the 2008 and 2009 grant years and had full participation from all 72 counties

## Wisconsin Coordinate Systems

<http://sco.wisc.edu/coordsys/index.php>

### Wisconsin Coordinate Reference Systems (WISCRS), 2006

[http://sco.wisc.edu/pubs/WisCoordRefSys\\_April2009.pdf](http://sco.wisc.edu/pubs/WisCoordRefSys_April2009.pdf)

[http://sco.wisc.edu/coordsys/docs/WISCRS\\_Final\\_Report\\_Oct06.pdf](http://sco.wisc.edu/coordsys/docs/WISCRS_Final_Report_Oct06.pdf)

*(Note: In ArcGIS 9.2, all of Wisconsin's County coordinate systems have been redefined, following this documentation. The European Petroleum Standards Group (EPSG) provides a registry of coordinate system definitions; WISCRS have not yet been registered.)*

### Original Wisconsin Coordinate Systems Handbook (WCCS), 1991-2006

<http://www.geography.wisc.edu/sco/pubs/wiscoord/wiscoord.php>

### Wisconsin Transverse Mercator -- WTM83(91)

<http://www.dnr.state.wi.us/maps/gis/wtm8391.html>

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## Wisconsin State Agency Systems

### Wisconsin Department of Natural Resources List of Interactive Web Mapping Applications

<http://www.dnr.state.wi.us/maps/gis/applist.html>

*(Note: All of the WDNR ArcIMS services are in WTM83(91), although the coordinate reference system tags have been “temporarily” removed from the imagery layers to disenable server-straining reprojection on the fly. If using with another service, as in ArcMap, add these services first, and define the frame’s coordinate system as WTM83(91).)*

#### WebView ArcIMS

<http://maps.dnr.state.wi.us/webview>  
<http://dnrmaps.wisconsin.gov/webview>

#### Air Monitoring Network, ArcIMS

<http://dnrmaps.wisconsin.gov/imf/imf.jsp?site=wisards>

#### Boat and Developed Shore Fishing Access Sites ArcIMS

<http://dnr.wi.gov/org/land/facilities/boataccess/index.html>

#### Managed Lands ArcIMS

[http://www.dnr.state.wi.us/org/land/facilities/dnr\\_lands\\_mapping.html](http://www.dnr.state.wi.us/org/land/facilities/dnr_lands_mapping.html)

#### Recreational Opportunities ArcIMS

<http://dnrmaps.wisconsin.gov/imf/imf.jsp?site=mgdlands.recreational>

#### Acquisition History ArcIMS

<http://dnrmaps.wisconsin.gov/imf/imf.jsp?site=mgdlands.stewardship>

#### Stewardship Grant Acquisitions ArcIMS

<http://www.dnr.state.wi.us/org/caer/cfa/LR/Stewardship/mapping.html>

#### Chronic Wasting Disease Status Maps ArcIMS

[http://dnrmaps.wisconsin.gov/imf/imf.jsp?site=cwd\\_imf](http://dnrmaps.wisconsin.gov/imf/imf.jsp?site=cwd_imf)

#### GIS Registry of Closed Remediation Sites ArcIMS

<http://dnrmaps.wisconsin.gov/imf/imf.jsp?site=brrts>

#### Remediation and Redevelopment Sites ArcIMS

<http://www.dnr.wi.gov/org/aw/rr/gis/index.htm>

#### Surface Water Data Viewer (SWDV)

[http://www.dnr.state.wi.us/org/water/data\\_viewer.htm](http://www.dnr.state.wi.us/org/water/data_viewer.htm)  
<http://dnrmaps.wisconsin.gov/imf/imf.jsp?site=SurfaceWaterViewer>

- An interactive mapping tool providing primarily water-related data.
- Wisconsin Digital Wetlands Inventory
- Impaired waters (Clean Water Act Section 303(d) listed waters)

- Outstanding and Exceptional Resource Waters (ORW/ERWs)
- Monitoring Stations
- Boating Ordinances (Locations and Downloadable Documents)
- Aquatic Invasives Infestations
- Nonpoint Runoff Waterbody and Watershed Rankings
- Dams, Floodplain Delineations, and more ...
- SWDV has four "themes".

#### **SWDV Dam Safety Theme ArcIMS**

<http://dnrmaps.wisconsin.gov/imf/imf.jsp?site=SurfaceWaterViewer.damsafety>

#### **SWDV Floodplain Analysis Database Theme ArcIMS**

<http://dnrmaps.wisconsin.gov/imf/imf.jsp?site=SurfaceWaterViewer.floodplain>

#### **SWDV Designated Waters Theme ArcIMS**

<http://dnrmaps.wisconsin.gov/imf/imf.jsp?site=SurfaceWaterViewer.deswaters>

#### **Surface Water Integrated Monitoring System (SWIMS)**

<http://dnr.wi.gov/org/water/swims/>

<http://prodoasjava.dnr.wi.gov/swims/> (user: read pwd: only)

- *SWIMS is a Wisconsin DNR data system that holds a wide variety of data (water, sediment) chemistry, physical, and macroinvertebrate (biological) data. The SWIMS system is the state's repository for water and sediment monitoring data collected under the Clean Water Act and is the source of data sharing through the federal Water Quality Exchange Network. SWIMS is also the data system that Citizen Volunteers will use to document water quality monitoring efforts for many of our state's lakes and streams.*

#### **Water Assessment, Tracking and Electronic Reporting System (WATERS)**

<http://dnr.wi.gov/org/water/WATERS/>

<http://prodoasjava.dnr.wi.gov/wadrs/> (user: read pwd: only)

- *WATERS Supports Water Quality Standards and Assessments, Water Division Goals Reporting, and Watershed Electronic Watershed Planning.*
- *Water Division Objectives, Goals, Performance Measures, and Success Stories.*
- *Clean Water Act Use Designations and Classifications (NR102, NR104).*
- *Outstanding and Exceptional Resource Waters Designations (NR102).*
- *Clean Water Act assessment data, including decisions regarding a waterbody meeting its attainable use, or whether or not the waterbody is considered "impaired".*
- *Fisheries Trout Classifications (Administrative Code, NR 1.02(7)).*
- *Watershed Planning.*

#### **Wisconsin DNR & Wisconsin Aquatic Gap Analysis Mapping Application**

<http://infotrek.er.usgs.gov/wdnrfish>

**Wisconsin DNR & UW-Madison Botany Department**  
**Wisconsin Aquatic and Terrestrial Resources Inventory (ATRI)**  
<http://wiatri.net/indexIE.htm>

**Comprehensive Planning ArcIMS**  
<http://maps.wiatri.net/Landuse/index.htm>

**ATRI Demonstration ArcIMS**  
<http://maps.wiatri.net/AtriDemo/index.htm>

**Pensaukee River Watershed Low Order Streams ArcIMS**  
<http://maps.wiatri.net/Pensaukee/index.htm>

**Wisconsin Eco Atlas**  
<http://ecoatlas.wiatri.net/>

**Wisconsin Legislative Technology Services Bureau**  
**Wisconsin Interactive Map Server (WIMS) ArcIMS**  
[http://www.legis.state.wi.us/ltsb/redistricting/interactive\\_map.htm](http://www.legis.state.wi.us/ltsb/redistricting/interactive_map.htm)

**Forward Wisconsin**

**LOIS Users Guide**  
[http://www.forwardwisconsin.com/forward\\_docs/category.php?category\\_id=63](http://www.forwardwisconsin.com/forward_docs/category.php?category_id=63)

**Location One Information System, Wisconsin Sites**  
[http://www.forwardwisconsin.com/forward\\_docs/category.php?category\\_id=26](http://www.forwardwisconsin.com/forward_docs/category.php?category_id=26)  
*(Note: Choose a specific building or site, then view map.  
This service is not streamable to ArcMap, ArcExplorer.)*

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## Wisconsin State Systems with Restricted Access

### Wisconsin Archaeological and Historical Resource Database (WisAHRD) ArcIMS Server

<http://www.wisconsinhistory.org/hp/wisahrd/>

<http://www.wisconsinhistory.org/hp/whpd/custom.asp>

(Note: Subscription Service, unless used on-site at WHS.)

### Wisconsin Department of Transportation

#### Wisconsin Information System for Local Roads (WISLR)

(Note: For access information: <http://www.dot.wisconsin.gov/localgov/wislr/index.htm>)

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## University of Wisconsin Systems

### UW-Madison Applied Population Laboratory

<http://www.ssc.wisc.edu/poplab/>

#### Get Facts

<http://www.getfacts.wisc.edu/>

#### WISSTAT

<http://www.wisstat.wisc.edu/>

#### Wisconsin Food Security Project Map Objects Server

<http://www.wisstat.wisc.edu/uwex/foodmaps.aspx>

#### WDOA Library of Comprehensive Plans

<http://www.doa.state.wi.us/category.asp?linkcatid=746&linkid=128&locid=9>

#### Wisconsin Municipal Comprehensive Plans

<http://www.getfacts.wisc.edu/?geo=mcd>

#### Wisconsin County Comprehensive Plans

<http://www.getfacts.wisc.edu/?geo=cty>

### UW-Madison Botany Department BioMapper ArcIMS **defunct**

<http://www.botany.wisc.edu/herbarium/>

<http://maps.botany.wisc.edu/>

## UW-Madison Environmental Remote Sensing Center

### Connecting to the ArcSDE/Oracle Spatial Database at ERSC

<http://www.ersc.wisc.edu/resources/database.php>

### Tips for ArcExplorer – Java Edition for Education Exercise 1: Catalog

[http://www.wisconsinview.org/tutorials/AEJEE\\_lesson1.htm](http://www.wisconsinview.org/tutorials/AEJEE_lesson1.htm)

**Exercise 2: Projections**

[http://www.wisconsinview.org/tutorials/AEJEE\\_lesson2.htm](http://www.wisconsinview.org/tutorials/AEJEE_lesson2.htm)

**Exercise 3: XY Data**

[http://www.wisconsinview.org/tutorials/AEJEE\\_lesson3.htm](http://www.wisconsinview.org/tutorials/AEJEE_lesson3.htm)

**MODIS Image Sample (download)**

[http://www.ersc.wisc.edu/resources/MODIS\\_Aqua\\_2003\\_10\\_06\\_1853z.zip](http://www.ersc.wisc.edu/resources/MODIS_Aqua_2003_10_06_1853z.zip)

**Lake Water Clarity Monitoring and Analysis  
with Satellite Remote Sensing MapServer**

<http://www.lakesat.org>

**ERSC ArcIMS Viewers**

<http://ies-emp.ersc.wisc.edu>

<http://parallax.ersc.wisc.edu/>

**WisconsinView**

<http://www.wisconsinview.org>

*(download NAIP, DNR MrSID DOPs, Landsat, Tornadoes, Floods;  
Now includes 133 Cities imagery at 1 foot resolution for Madison and Milwaukee, 2007,  
and Kenosha-Racine, 2005. Also includes NAIP 2008.)*

**WisconsinView & ERSC MapServer Testbed**

<http://speedy.ersc.wisc.edu/>

**UW ERSC NAIP 2008 WMS**

[http://relief.ersc.wisc.edu/cgi-bin/mapserv?map=/var/www/html/maps/2008\\_naip.map&](http://relief.ersc.wisc.edu/cgi-bin/mapserv?map=/var/www/html/maps/2008_naip.map&)

**UW-Madison Forest Ecology and Management**

**Wildland Urban Interface 2000 ArcIMS**

<http://silvis.forest.wisc.edu/projects/WUIMapper.asp>

**UW-Madison Sea Grant**

**Wisconsin Coastal Image Server**

<http://ortho.lic.wisc.edu/orthoserver/>

**Lake Superior Circle Tour MapServer**

[http://coastal.lic.wisc.edu/gwiz\\_mapserver/circletour/client\\_index.php](http://coastal.lic.wisc.edu/gwiz_mapserver/circletour/client_index.php)

**Lake Superior Coastal Map Viewer**

[http://maps.aqua.wisc.edu/lscmp/wlscmp\\_index.htm](http://maps.aqua.wisc.edu/lscmp/wlscmp_index.htm)

**UW Soil Science Extension and  
Wisconsin Department of Agriculture, Trade, and Consumer Protection (DATCP)  
Wisconsin Livestock Siting Law Interactive Map**  
<http://www.soils.wisc.edu/extension/235/>

**UW-Stevens Point, College of Natural Resources  
OASIS Interactive Mapping**

**Portage County, Wisconsin ArcIMS**  
<http://oasis.uwsp.edu/website/portage5>

**Treehaven Field Station ArcIMS**  
<http://oasis.uwsp.edu/website/treehaven>

**Stevens Point Urban Deer Survey ArcIMS**  
<http://oasis.uwsp.edu/website/deer>

**Wisconsin Forests ArcIMS**  
<http://oasis.uwsp.edu/website/forest2>

**UW-Madison Limnology Program  
North Temperate Lakes Long Term Ecological Research Program  
Spatial Data Catalog** *(Note: Not yet a web service !)*  
<http://www.limnology.wisc.edu/spatial/spatial.html>

**Wisconsin State Cartographer's Office**

**WiscMap MapServer**  
<http://sco.wisc.edu/wisclinc/viewer.php>

WMS Service Title: Control Points  
WMS link: <http://maps.sco.wisc.edu/cgi-bin/scowms.ctl>

WMS Service title: DNRServices  
WMS link: <http://maps.sco.wisc.edu/cgi-bin/scowms.dnr>

WMS Service title: DOAServices  
WMS link: <http://maps.sco.wisc.edu/cgi-bin/scowms.doa>

WMS Service title: DOTServices  
WMS link: <http://maps.sco.wisc.edu/cgi-bin/scowms.dot>

WMS Service title: DRGServices  
WMS link: <http://maps.sco.wisc.edu/cgi-bin/scowms.drg>

WMS Service title: WISCLAND  
WMS link: <http://maps.sco.wisc.edu/cgi-bin/scowms.wlc>

**(Geodetic) Control Finder, MapServer**

<http://sco.wisc.edu/geocat/index.php>

**Public Land Survey System PLSS Finder, MapServer**

<http://sco.wisc.edu/plss/help.php>

**Orthophoto Finder, MapServer**

<http://sco.wisc.edu/orthocat/index.php>

**Wisconsin Land Information Clearinghouse.**

<http://sco.wisc.edu/wisclinc/index.php>

**Wisconsin RAMONA On-Line Geographic Data Inventory Tool**

<http://sco.wisc.edu/wisclinc/survey/index.php>

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### **County Systems In Development and/or Intranet Only**

**Buffalo County ArcIMS** Intranet Only - Public Site Under Development

**Crawford County ArcIMS** -- In Development (Applied Data Consultants)

**Vilas County ArcIMS** -- in development (Varion Systems)

### **Wisconsin County Systems**

**Adams County ArcIMS**

<http://gis.msa-ps.com/MAPS/WI/Counties/Adams/Publicviewer/>

**Ashland County ArcIMS**

<http://www.ashlandcogiws.com/>

**Barron County ArcIMS**

<http://barronwi.mapping-online.com/BarronCoWi/>

**Bayfield County MapServer**

[http://www.bayfieldcounty.org/LandRecords/mapviewer\\_start.htm](http://www.bayfieldcounty.org/LandRecords/mapviewer_start.htm)

**Bayfield County ArcGIS Server (Flex)**

<http://www.bayfieldcounty.org/landrecords/index.htm>

**Brown County ArcIMS**

[http://www.co.brown.wi.us/planning\\_and\\_land\\_services/land\\_information\\_office/IMS.htm](http://www.co.brown.wi.us/planning_and_land_services/land_information_office/IMS.htm)

**Brown County ArcGIS Server**

<http://maps.gis.co.brown.wi.us:8399/BaseMap1/mapviewer.jsf?width=998&height=730>

[http://www.co.brown.wi.us/departments/page\\_5643b88dc22f/?department=85713eda4cdc&subdepartment=89ce08984445](http://www.co.brown.wi.us/departments/page_5643b88dc22f/?department=85713eda4cdc&subdepartment=89ce08984445)

**Burnett County ArcIMS**

<http://www.burnettcounty.org/>

**Calumet County ArcIMS**

<http://calumetcounty.plansightgis.com/Disclaimer.htm>

**Chippewa County ArcIMS**

<http://chippewawi.mapping-online.com/ChippewaCoWi/>

**Chippewa County Manifold Site** – *by subscription only !!*

[http://www.co.chippewa.wi.us/landrecords/Sample\\_Map/mainpage.asp](http://www.co.chippewa.wi.us/landrecords/Sample_Map/mainpage.asp)

**Clark County ArcIMS**

<http://www.co.clark.wi.us/ClarkCounty/departments/planningzoning/gis.asp>

**Columbia County ArcIMS**

<http://lrs.co.columbia.wi.us/website/ColumbiaCo/ColumbiaCo.asp>

**Dane County ArcIMS**

<http://dcimap.co.dane.wi.us/dcimap/index.htm>

**Dodge County GeoServer**

<http://www.dodgecountywebmap.com/>

**Door County GeoMoose**

<http://map.co.door.wi.us/>

**Douglas County ArcIMS**

<http://douglasco.mapping-online.com/>

**Dunn County ArcIMS**

[http://dunncountywi.govoffice2.com/index.asp?Type=B\\_BASIC&SEC={D8E5BD75-3819-4CF2-960D-909DA05BFF43}](http://dunncountywi.govoffice2.com/index.asp?Type=B_BASIC&SEC={D8E5BD75-3819-4CF2-960D-909DA05BFF43})

**Eau Claire County ArcIMS**

<http://eauclaireco.mapping-online.com/>

**Florence County MapGuide** (requires plugin)

<http://rmgis.ruekert-mielke.com/florenceco/>

**Fond du Lac County ArcGIS Server**

[http://gisweb.fdlco.wi.gov/gis\\_website/default.aspx](http://gisweb.fdlco.wi.gov/gis_website/default.aspx)

**Forest County ArcIMS**

<http://forestwi.mapping-online.com/ForestCoWi/>

**Grant County Tri-County ArcIMS**

<http://rmgis2.ruekert-mielke.com/tricounty/>

**Green County ArcIMS**

<http://gis.msa-ps.com/greencounty/publicviewer/startup.htm>

**Green Lake County ArcIMS**

<http://gis.co.green-lake.wi.us/>

**Iowa County ArcIMS, and Tri-County ArcIMS**

<http://rmgis2.ruekert-mielke.com/tricounty/>

**Jackson County ArcIMS**

<http://www.jacksoncountymapping.com>

**Jefferson County ArcIMS**

<http://lrs.co.jefferson.wi.us/>

**Juneau County ArcIMS**

<http://gis.co.juneau.wi.us/pvweb22/index.htm>

**Kenosha County ArcIMS**

[http://kcmapping.co.kenosha.wi.us/mapping\\_public/](http://kcmapping.co.kenosha.wi.us/mapping_public/)

**Kewaunee County ArcIMS**

<http://rmgis.ruekert-mielke.com/kewauneeCo>

**LaCrosse County ArcGIS Server**

[http://gisweb.fdlco.wi.gov/gis\\_website/default.aspx](http://gisweb.fdlco.wi.gov/gis_website/default.aspx)

**Lafayette County Tri-County ArcIMS**

<http://rmgis2.ruekert-mielke.com/tricounty/>

**Langlade County ArcIMS**

<http://www.langladecogiws.com/>

**Lincoln County ArcIMS**

<http://gismaps.co.lincoln.wi.us/website/lincolngis/viewer.htm>

**Manitowoc County ArcIMS**

<http://webmap.manitowoc-county.com/website/pasystem/>

**Marathon County ArcIMS**

[http://gismaps.co.marathon.wi.us/gisweb/ccdcc\\_pub/ccdcc.asp](http://gismaps.co.marathon.wi.us/gisweb/ccdcc_pub/ccdcc.asp)

**Marinette County MapGuide**

<http://webgis.marinettecounty.com/>

**Milwaukee County ArcGIS Server**

<http://www.county.milwaukee.gov/LandInformationProgr23113/LIOInteractiveMapping.htm>

**Monroe County ArcIMS Server**

<http://www.monroecogiws.com>

**Oconto County ArcIMS**

<http://solo.co.oconto.wi.us/ocontoco/>

**Oneida County ArcIMS**

<http://ocgis.co.oneida.wi.us/oneida/index.htm>

**Outagamie County ArcIMS**

[http://www.co.outagamie.wi.us/planning/Maps\\_main.htm](http://www.co.outagamie.wi.us/planning/Maps_main.htm)

**Ozaukee County ArcIMS**

<http://www.gis.co.ozaukee.wi.us/ozaukeeco/>

**Pepin County ArcIMS**

<http://www.pepinco-onlinemaps.com/>

**Pierce County ArcIMS**

<http://www.co.pierce.wi.us/Land%20Information%20Disclaimer.html>

*(Note: The following NEW section contains multiple Pierce County map services: Parcel Information; School Districts; Aerial Photos; Emergency Zones; Supervisory Districts; Zoning; Contours; Aerial Photos ('04 Color).)*

**Polk County ArcIMS**

<http://216.56.44.70/>

**Portage County ArcIMS**

<http://gisinfo.co.portage.wi.us/website/portagepa/viewer.htm>

**Price County ArcIMS**

<http://www.co.price.wi.us/webgis/html/>

**Racine County ArcIMS**

<http://www.sewrpc.org/regionallandinfo/racinemapping/>

**Richland County ArcIMS**

<http://gis.msa-ps.com/MAPS/WI/Counties/Richland/Publicviewer/viewer.htm>

**Rock County ArcIMS**

<http://68.249.68.135/Rock/disclaimer.htm>

**Rusk County ArcIMS**

<http://www.ruskcogiws.com/>

**Sauk County Map Guide Viewer (requires plugin)**

<http://www.co.sauk.wi.us/dept/mapping/welcome.htm>

**Sawyer County ArcIMS**

<http://sawyerwi.mapping-online.com/SawyerCoWi/>

**Shawano County ArcIMS**

<http://gis.co.shawano.wi.us/portal/Default.aspx>

**Sheboygan County ArcIMS**

<http://www.co.sheboygan.wi.us/landinformation/>

**St. Croix County ArcIMS**

<http://72.21.230.178/website/LRPortal/main.asp>

**Taylor County ArcIMS**

<http://taylorwi.mapping-online.com/TaylorCoWi/>

**Trempealeau County ArcGIS Server**

<http://www.trempeleocounty.com/landrecords/disclaimer.htm>

**Walworth County ArcIMS**

<http://www.co.walworth.wi.us/Information%20Systems/LID%20Website/divpageims.htm>

**Washburn County ArcIMS**

<http://washburnwi.mapping-online.com/WashburnCoWi/>

**Washington County ArcIMS**

<http://maps.co.washington.wi.us>

**Waukesha County ArcIMS**

<http://maps.waukeshacounty.gov/GISweb/waukco/waukco.asp>

**Waupaca County ArcGIS Server**

<http://public3.co.waupaca.wi.us/trAccess/Login.asp>

**Waushara County ArcIMS**

[http://www.co.waushara.wi.us/land\\_records.htm](http://www.co.waushara.wi.us/land_records.htm)

**Winnebago County MapServer**

[http://wcws2.co.winnebago.wi.us/winnco/winscript/wc\\_main.html](http://wcws2.co.winnebago.wi.us/winnco/winscript/wc_main.html)

**Wood County ArcIMS**

<http://landrecords.co.wood.wi.us/website/Public/disclaimer.asp>

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**Wisconsin Municipal Systems**

**Village of Ashwaubenon ArcIMS**

<http://map.ashwaubenon.com/>

**Village of Germantown, Washington Co.,Autodesk MapGuide**

<http://rmgis.ruekert-mielke.com/Germantown/>

**City of Green Bay**

<http://cgbsrvr01.itol.com/website/map/viewer.htm>

**City of Greenfield ArcIMS**

[www.ci.greenfield.wi.us](http://www.ci.greenfield.wi.us)

**City of Greenfield GIS Map / Property Data**

<http://rmgis2.ruekert-mielke.com/greenfield/>

**Village of Hartland MapGuide**

<http://www.villageofhartland.com/WebGISdisclaimer.asp>

**Village of Kewaskum, Washington Co., ArcIMS**

<http://rmgis.ruekert-mielke.com/kewaskum/>

**City of LaCrosse**

[http://209.206.210.193/pvweb2\\_1/index.htm](http://209.206.210.193/pvweb2_1/index.htm)

**City of Madison – Mad Maps GeoMedia Server**

<http://gis.cityofmadison.com/MADMAPS>

**City of Manitowoc ArcIMS**

<http://webmap.manitowoc-county.com/website/pasystem/>

**Town of Menasha ArcIMS**

<http://www.town-menasha.com/CDWeb/Mapinfo.htm>

**City of Milwaukee – Map Milwaukee ArcIMS**

<http://www.city.milwaukee.gov//display/router.asp?docid=3480>

<http://gis.milwaukee.gov/website/mm1>

**City of Milwaukee COMPASS -**

**Community Mapping and Analysis for Safety Strategies**

<http://www.city.milwaukee.gov/compass/>

<http://www.city.milwaukee.gov/compass/>

**City of Muskego ArcIMS**

<http://www.mapmuskego.com/>

**City of Pewaukee, Waukesha Co.,Autodesk MapGuide**

<http://rmgis.ruekert-mielke.com/PewaukeeCity/>

**City of Racine Geographic Information System**

<http://gisweb.cityofracine.org/>

**City of Reedsburg ArcIMS**

[http://www.reedsburgwi.gov/index.asp?Type=B\\_BASIC&SEC={F3095173-4D8F-461B-9E6B-B6B748889362}](http://www.reedsburgwi.gov/index.asp?Type=B_BASIC&SEC={F3095173-4D8F-461B-9E6B-B6B748889362})

**Village of Shorewood, Milwaukee Co., Autodesk MapGuide**

<http://rmgis.ruekert-mielke.com/shorewood/Default.asp>

**Village of Saukville, Ozaukee Co., Autodesk MapGuide**

<http://rmgis.ruekert-mielke.com/Saukville/>

**City of South Milwaukee GIS Portal**

<http://www.ci.south-milwaukee.wi.us/website/intro.htm>

**Village of Sussex, Waukesha Co., Autodesk MapGuide**

<http://rmgis.ruekert-mielke.com/Sussex/>

**City of Waukesha GIS Parcel Data**

<http://map.ci.waukesha.wi.us/>

**City of West Allis, Milwaukee Co., ArcGIS Server**

<http://geoweb.ci.west-allis.wi.us/>

**City of West Bend GIS Web Portal**

<http://arcims.ci.west-bend.wi.us/website/westbend/startadminf.asp>

**Village of Williams Bay ArcIMS**

<http://www.maps.ramaker.com/williamsbay/>

**For Municipal Systems under development, see individual vendor sites.**

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**Tribal Systems**

**Great Lakes Indian Fish and Wildlife Commission**

<http://www.glifwc.org/>

<http://www.glifwc-maps.org/>

**Tribal Systems under development (intranet only)**

**Chippewa-St. Croix Tribe ArcIMS**

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## Regional Systems

### **Southwest Wisconsin Regional Planning Commission GeoMoose**

<http://gis.swwrpc.org/geomoose2/geomoose.html>

### **Southeast Wisconsin Regional Planning Commission ArcIMS**

<http://www.sewrpc.org/regionallandinfo/>

Survey Documents

Aerial Photography

Regional Mapping

## **Regional Systems Under Development**

### **Bay-Lake Regional Planning Commission**

<http://maps.baylakerpc.org/>

#### **Door County 2008 Land Use Web Mapping Site**

<http://maps.baylakerpc.org/website/Door2008LU/viewer.htm>

#### **Florence County 1999 Land Use Web Mapping Site**

<http://maps.baylakerpc.org/website/Florence1999LU/viewer.htm>

#### **Kewaunee County 2006 Land Use Web Mapping Site**

<http://maps.baylakerpc.org/website/Kewaunee2006LU/viewer.htm>

#### **Marinette County 2001 Land Use Web Mapping Site**

<http://maps.baylakerpc.org/website/Marinette2001LU/viewer.htm>

#### **Oconto County 2007 Land Use Web Mapping Site-**

<http://maps.baylakerpc.org/website/Oconto2007LU/viewer.htm>

#### **Sheboygan County 2002 Land Use Web Mapping Site**

<http://maps.baylakerpc.org/website/Sheboygan2002LU/viewer.htm>

### **WMS Service Title: Door Co. 2008 Land Use**

<http://maps.baylakerpc.org:8080/wmsconnector/com.esri.wms.Esrimap?ServiceName=DoorCounty2008LandUse&>

### **WMS Service Title: Florence Co. 1999 Land Use**

<http://maps.baylakerpc.org:8080/wmsconnector/com.esri.wms.Esrimap?ServiceName=FlorenceCounty1999LandUse&>

### **WMS Service Title: Kewaunee Co. 2006 Land Use**

<http://maps.baylakerpc.org:8080/wmsconnector/com.esri.wms.Esrimap?ServiceName=KewauneeCounty2006LandUse&>

**WMS Service Title: Marinette Co. 2001 Land Use**

<http://maps.baylakerpc.org:8080/wmsconnector/com.esri.wms.Esrimap?ServiceName=MarinetteCounty2001LandUse&>

**WMS Service Title: Oconto Co. 2007 Land Use**

<http://maps.baylakerpc.org:8080/wmsconnector/com.esri.wms.Esrimap?ServiceName=OcontoCountyDRAFT2007LandUse&>

**WMS Service Title: Sheboygan Co. 2002 Land Use**

<http://maps.baylakerpc.org:8080/wmsconnector/com.esri.wms.Esrimap?ServiceName=SheboyganCounty2002LandUse&>

**WFS Service Title: SAMPLE Town of Manitowoc Land Use, ArcIMS Based**

[http://maps.baylakerpc.org:8080/wfsconnector/com.esri.wfs.Esrimap/TManitowocDRAFT2008\\_WFS?request=getcapabilities&service=WFS&version=1.0.0](http://maps.baylakerpc.org:8080/wfsconnector/com.esri.wfs.Esrimap/TManitowocDRAFT2008_WFS?request=getcapabilities&service=WFS&version=1.0.0)

**WFS Service Title: SAMPLE Town of Manitowoc Land Use, Map Server Based**

<http://maps.aqua.wisc.edu/cgi-bin/mapserv.exe?map=E:\ms4w\apps\chameleon\samples\map\sample-wfs.map&>

**Great Lakes Information Network, Data Access (GLINDA) Maps and GIS**

<http://gis.glin.net/>

(Note: These data are sorted by [ISO 19115 Topic Categories](#) and are available in many formats including [OGC WMS](#) and [WFS](#) web services, in addition to [PDF](#), [KML](#) (Google Earth), [SHP](#), and [GML](#) formats. Layers are accompanied by [FGDC-compliant metadata](#) and are ingested into [Geospatial Onestop](#). For more, please see the [GLINDA GIS FAQ](#).)

**GLINDA Regional Data List of WMS/WFS Servers**

<http://gis.glin.net/glindaWiki/doku.php>

**Great Lakes Observation System -- HarborView**

<http://glos.us/products.php>

<http://glos.us/hview/hview.php>

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## Selected Federal & National Systems

*(Note: Federal services are in flux ! Watch this section for new links to WMS, esp. from EPA, USGS.)*

### FGDC Cadastral Subcommittee

[www.nationalcad.org](http://www.nationalcad.org)

### FGDC Land Records Inventory

[http://www.nationalcad.org/lr\\_index.asp](http://www.nationalcad.org/lr_index.asp)

### Geospatial One Stop

<http://www.geodata.gov>

### USGS The National Map ArcIMS

<http://nationalmap.usgs.gov/index.html>

<http://nmviewogc.cr.usgs.gov/viewer.htm>

<http://gisdata.usgs.net/website/tnm/>

### USGS Seamless Data Distribution System

<http://seamless.usgs.gov/>

### USGS National Hydrography Dataset (NHD)

<http://nhd.usgs.gov/>

<http://nhdgeo.usgs.gov>

### USGS National Elevation Dataset (NED)

<http://ned.usgs.gov/>

### USGS Elevation Derivatives for National Applications (EDNA)

<http://edna.usgs.gov>

### Multi Resolution Land Cover Consortium (MRLC)

[http://www.mrlc.gov/mrlc2k\\_nlcd.asp](http://www.mrlc.gov/mrlc2k_nlcd.asp)

<http://gisdata.usgs.net/website/MRLC/viewer.php>

*(Note: National Land Cover 2001, % Impervious, Canopy themes.)*

### USGS Land Cover Analysis Tool (LCAT)

<http://lcat.usgs.gov>

*Note: Site is under development. Facilitates examining land cover change from NLCD 1992 to NLCD 2001.)*

### Upper Midwest Environmental Sciences Center

#### Upper Mississippi River Landcover Viewer

<http://umesc-gisdb01.er.usgs.gov/landcover/viewer.aspx>

### USGS Watershed Tools for Lake Michigan Monitoring

<http://gisdata.usgs.gov/website/LakeMich/>

### USGS Framework Web Feature Services

<http://frameworkwfs.usgs.gov/>

**NSDI Framework Data Services Usability Guidelines, Version 1.0**  
[http://geoleaders.com/NSDIFrameworkServices\\_Usability.pdf](http://geoleaders.com/NSDIFrameworkServices_Usability.pdf)

**National Water Information System Water-Quality Web Services**  
<http://qwwebservices.usgs.gov>

**Landscape Fire and Resource Management Planning Tools Project**  
<http://www.landfire.gov/>

**Environmental Protection Agency Enviromapper for Envirofacts**  
<http://www.epa.gov/enviro/emef/>

**EPA Enviromapper for Water – ArcGIS Server**  
<http://www.epa.gov/waters/enviromapper/index.html>

**EPA Water GeoServices**  
[http://epa.gov/waters/geoservices/services\\_desc.html#IdentifyServices](http://epa.gov/waters/geoservices/services_desc.html#IdentifyServices)  
(Note: Includes ArcIMS Image and Feature Service for Impaired Waters, Assessed Waters, Water Quality Standards, Fish Consumption Advisories, Sewage No Discharge Zones, Facilities that Discharge to Water, Nonpoint Source Projects, Beaches, and Clean Watersheds Needs.)

**EPA Reach Address Database Downloads**  
<http://epa.gov/waters/geoservices/docs/raddownloadfactsheet.html>

**EPA National Geospatial Program Data & Services**  
<http://www.epa.gov/geospatial/data.html>  
(Note: Includes ArcIMS Feature Services for Air Emissions Data, National Priority List (NPL) Data, Permit Compliance System (PCS) Data, Resource Conservation and Recovery Act (RCRA) Data, and Toxic Release Inventory (TRI) Data.)

**EPA Geographic Image and Feature Services**  
<http://www.epa.gov/geospatial/help.htm>

**EPA Basins 4.0**  
<http://www.epa.gov/waterscience/BASINS/>  
(Note: *BASINS 4.0 is based on free open source MapWindows; it includes automatic extraction and download of many federal geospatial datasets.*)

## **Federal Emergency Management Agency (FEMA)**

**National Flood Hazard Map Layers ArcIMS & WMS**  
<http://msc.fema.gov>  
<https://hazards.fema.gov/femaportal/wps/portal/NFHLWMS>

**Wisconsin Natural Resource Conservation Service  
Soil Survey Information and Products**  
[http://www.wi.nrcs.usda.gov/technical/soil/soils\\_products.htm](http://www.wi.nrcs.usda.gov/technical/soil/soils_products.htm)

**NRCS WebSoil Survey**  
<http://websoilsurvey.nrcs.usda.gov/app>

**NRCS Geospatial Data Gateway**  
<http://datagateway.nrcs.usda.gov/GatewayHome.html>

**NRCS Soil Data Mart**  
<http://soildatamart.nrcs.usda.gov/>

**Soil Data Access Query Services for Custom Access**  
<http://sdmdataaccess.nrcs.usda.gov> (*corrected URL*)

**NRCS Watershed Boundary Dataset**  
<http://www.ncgc.nrcs.usda.gov/products/datasets/watershed/index.html>

**NRCS Spatial Web Services** *Gone !*  
<http://sdmws.nrcs.usda.gov>  
Soils Image Service  
Soils\_feat Web Feature Service (WFS)  
Soils\_Agg\_Attr Web Map Service (WMS)  
Soils\_Agg\_Attr\_feat Web Feature Service (WFS)

**NRCS Interactive maps at NCGC**  
<http://nm6.ftw.nrcs.usda.gov/website/>

**USDA Farm Services Agency ArcIMS NAIP Imagery Viewer**  
<http://gdw.apfo.usda.gov/naip/viewer/viewer.htm>  
<http://gdw.apfo.usda.gov> (*Try adding to ArcMap, select NAIP UTM Zones 15N and 16N*)

**USDA National Agricultural Statistical Service (NASS) Cropland Data Layers**  
<http://www.nass.usda.gov/research/Cropland/SARS1a.htm>  
(*Note: Not a streamable service, but downloadable data.*)

**US Fish and Wildlife Service Wetlands Mapper & Data Download**  
<http://www.fws.gov/wetlands/data/index.html>

**US Fish and Wildlife Service WMS Services**  
<http://wetlandswms.er.usgs.gov/>

**US Dept. of Housing and Urban Development Locator Services**  
<http://egis.hud.gov>

**US National Oceanic and Atmospheric Administration  
National Geospatial Data Center Interactive Map Services**  
*(ArcIMS served as WMS; see especially Great Lakes Bathymetric Contours)*  
<http://www.ngdc.noaa.gov/maps/interactivemaps.html>

**The Geography Network** *Gone !*  
<http://www.geographynetwork.com>

USGS National Elevation Dataset (NED)  
Census Population Density  
*And many, many more ...*

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### **Other National Web Mapping Applications**

**Flash Earth**  
<http://www.flashearth.com>  
*"FlashEarth is an experimental application that uses satellite imagery and aerial imagery from online mapping websites without official consent."*

**Microsoft Live Search Maps**  
*(Not a streamable service; provides Pictometry oblique imagery for much of Wisconsin.)*  
<http://maps.live.com>

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## Representative Systems in Other States

### **Illinois Rivers Decision Support System**

[http://ilrdss.sws.uiuc.edu/maps/gis\\_arcims.asp](http://ilrdss.sws.uiuc.edu/maps/gis_arcims.asp)

### **USGS/Illinois EPA Water Quality site**

<http://maps.epa.state.il.us/website/wqinfo>

### **Indiana Geological Survey Interactive Maps**

<http://igs.indiana.edu/arcims>

### **Indiana Water Quality Atlas**

<http://iwqa.idem.in.gov>

<http://www.in.gov/idem/5219.htm>

<http://idemmaps.idem.in.gov/apps/iwqaui/interactivemap.aspx>

### **Iowa Geographic Image Map Server**

[http://cairo.gis.iastate.edu/new\\_site](http://cairo.gis.iastate.edu/new_site)

WMS Server: <http://komodo.gis.iastate.edu/server.cgi?wmtver=1.0&>

Service Name: [Iowa Geographic Image Map Server](#)

### **Iowa DNR Interactive Mapping**

<http://csbweb.igsb.uiowa.edu/imgate/introduction/home.asp>

<http://www.iowadnr.gov/mapping/index.html>

### **Kentucky Geography Network**

<http://kygeonet.ky.gov>

### **Kentucky Watershed Modeling Information Portal**

<http://kw mip.ky.gov/>

<http://kygeonet.ky.gov/kw mip/>

### **Michigan Center for Geographic Information MI Mapper, etc.**

<http://www.michigan.gov/cgi/>

<http://www.michigan.gov/cgi/0,1607,7-158-12654---,00.html>

### **Michigan Surface Water Information System**

<http://mcgiga.mcgi.mi.us/miswims/mcgi.aspx>

<http://www.mcgi.state.mi.us/miswims/MapPage.aspx>

### **Michigan State University's Digital Watershed**

<http://www.iwr.msu.edu/dw/>

### **Minnesota Land Management Information Center (LMIC)**

<http://www.lmic.state.mn.us/chouse/metalong.html>

### **Minnesota DNR Data Deli WMS Server**

WMS Server: [http://deli.dnr.state.mn.us/cgi-bin/wms?map=DELI\\_WMS\\_MAPFILE&](http://deli.dnr.state.mn.us/cgi-bin/wms?map=DELI_WMS_MAPFILE&ServiceName=MNDNR%20Data%20Deli%20WMS%20Serve)  
Service Name: [MNDNR Data Deli WMS Serve](#)

**Minnesota Pollution Control Agency**

<http://www.pca.state.mn.us/backyard/neighborhood.html>

**Missouri Watershed Evaluation and Comparison Tool**

<http://ims.missouri.edu/watershed319/locateHU.jsp>

**Missouri Watershed Inventory and Assessment Project (MOWIAP)**

<http://ims.missouri.edu/projects/mowiap/rank14hu.htm>

**North Carolina NC OneMap**

<http://www.nconemap.com>

**Pacific Northwest Water Quality Exchange**

<http://deq12.deq.state.or.us/pnwwqx/>

**Purdue University LTHIA GIS**

<http://www.ecn.purdue.edu/runoff/Index.html>

[http://www.ecn.purdue.edu/runoff/lthia/gis/lthia\\_gis.htm](http://www.ecn.purdue.edu/runoff/lthia/gis/lthia_gis.htm)

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**Industry Web Mapping Standards**

**Open Geospatial Consortium**

<http://www.opengeospatial.org/>

**OpenGIS® Specifications**

<http://www.opengeospatial.org/specs/?page=specs>