

Missouri High Resolution NHD Project

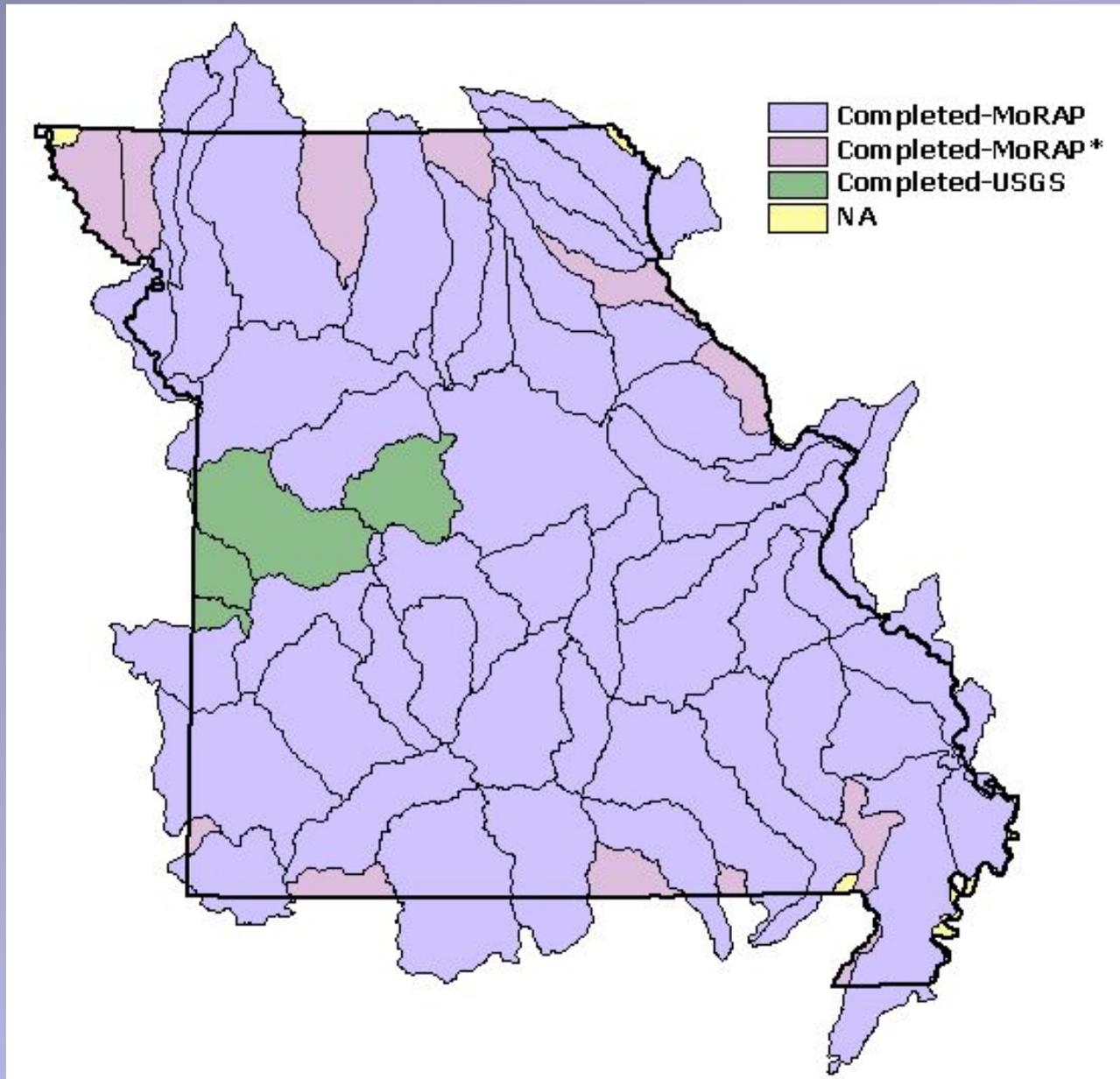
**National
Hydrography
Dataset**



Update for February 2003
Technical Committee Meeting



Status



Accessing MO NHD in the FOD

<http://edcnts14.cr.usgs.gov/Website/nhdserver/viewer.htm>

USGS EPA National Hydrography Dataset

Obtaining NHD Data [Return to NHD Data page](#) [Need help using this page? Click on HELP for complete instructions.](#)

Move

Zoom

Select

Misc

Download

Links

GLIS

SDTS

Help

Display Legend

Refresh Map

Layers

Visible Active

- States
- Medium Res points
- High Res points
- Medium Res lines
- High Res lines
- Medium Res polygons
- High Res polygons
- High Res subbasins
- Medium Res subbasins

AK

WA OR ID MT ND MN WI IL IN OH PA NY VT ME

CA NV UT CO KS MO IA AR TN NC VA

AZ NM TX LA MS AL GA FL

Main Map

USGS

0 1180mi

1. Use crosshatch to draw red box around state of Missouri

Obtaining NHD Data

[Return to NHD Data page](#) [Need help using this page? Click on HELP for complete instructions.](#)

The screenshot shows the USGS National Hydrography Dataset (NHD) web interface. The map displays high-resolution subbasins in orange and yellow across the central and southern United States. The interface includes navigation tools on the left, a legend on the right, and a status bar at the bottom.

Left Panel (Navigation Tools):

- Move:** Eight directional arrow icons for map navigation.
- Zoom:** Magnifying glass icons for zooming in and out.
- Select:** A cursor icon for selecting features.
- Misc:** Various utility icons.
- Download:** A download icon.
- Links:** Buttons for [GLIS](#), [SDTS](#), and [Help](#).

Right Panel (Layers):

- Display Legend:** A button to toggle the legend.
- Refresh Map:** A button circled in red, used to refresh the map data.
- Layers:** A list of layers with checkboxes and radio buttons:
 - States
 - Medium Res points
 - High Res points
 - Medium Res lines
 - High Res lines
 - Medium Res polygons
 - High Res polygons
 - High Res subbasins
 - Medium Res subbasins

Status Bar:

High Res subbasins is now the Active Layer

2. Make “High Res Subbasins” Visible and Active
3. Click [Refresh Map] button

Obtaining NHD Data

[Return to NHD Data page](#) [Need help using this page? Click on HELP for complete instructions.](#)

Move

Zoom

Select

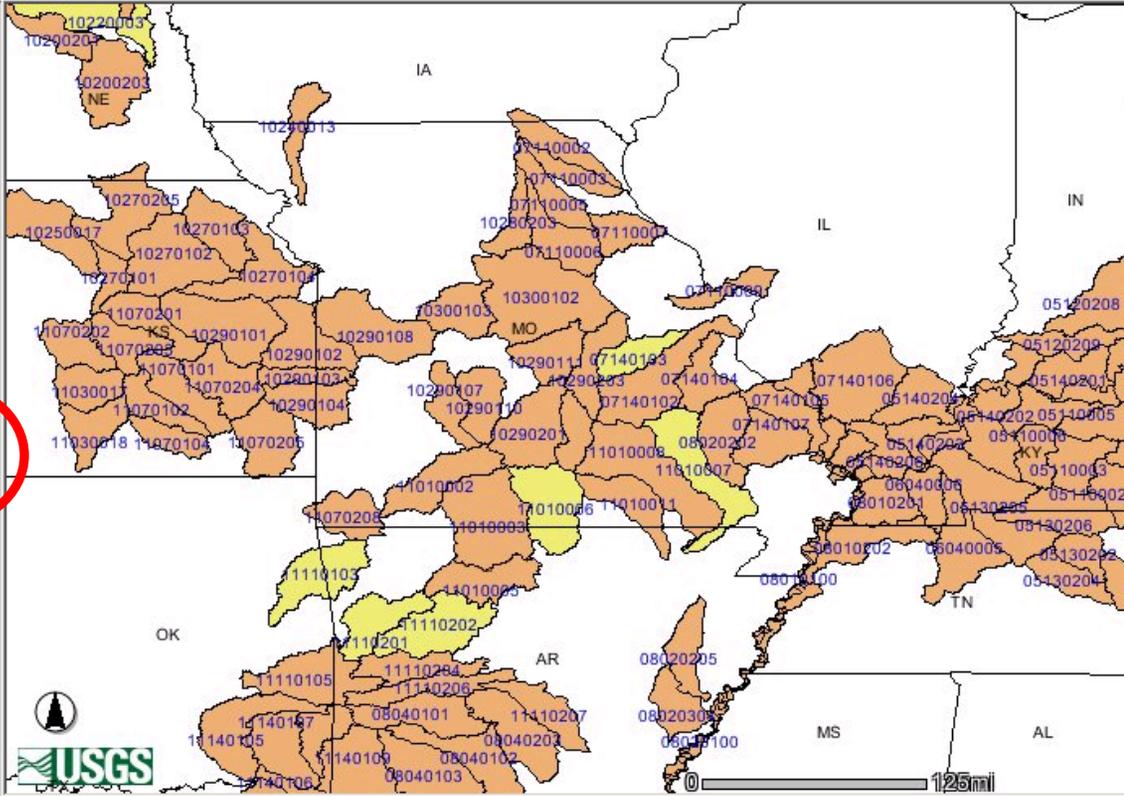
Misc

Download

Links

SDTS

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Display Legend

Refresh Map

Layers

Visible Active

- States
- Medium Res points
- High Res points
- Medium Res lines
- High Res lines
- Medium Res polygons
- High Res polygons
- High Res subbasins
- Medium Res subbasins

Download Dataset

Enter CU/Subbasin Number in High Res subbasins:

Download Dataset

4. Choose a Download Method:

Takes you to another web site with links to direct downloads

Download

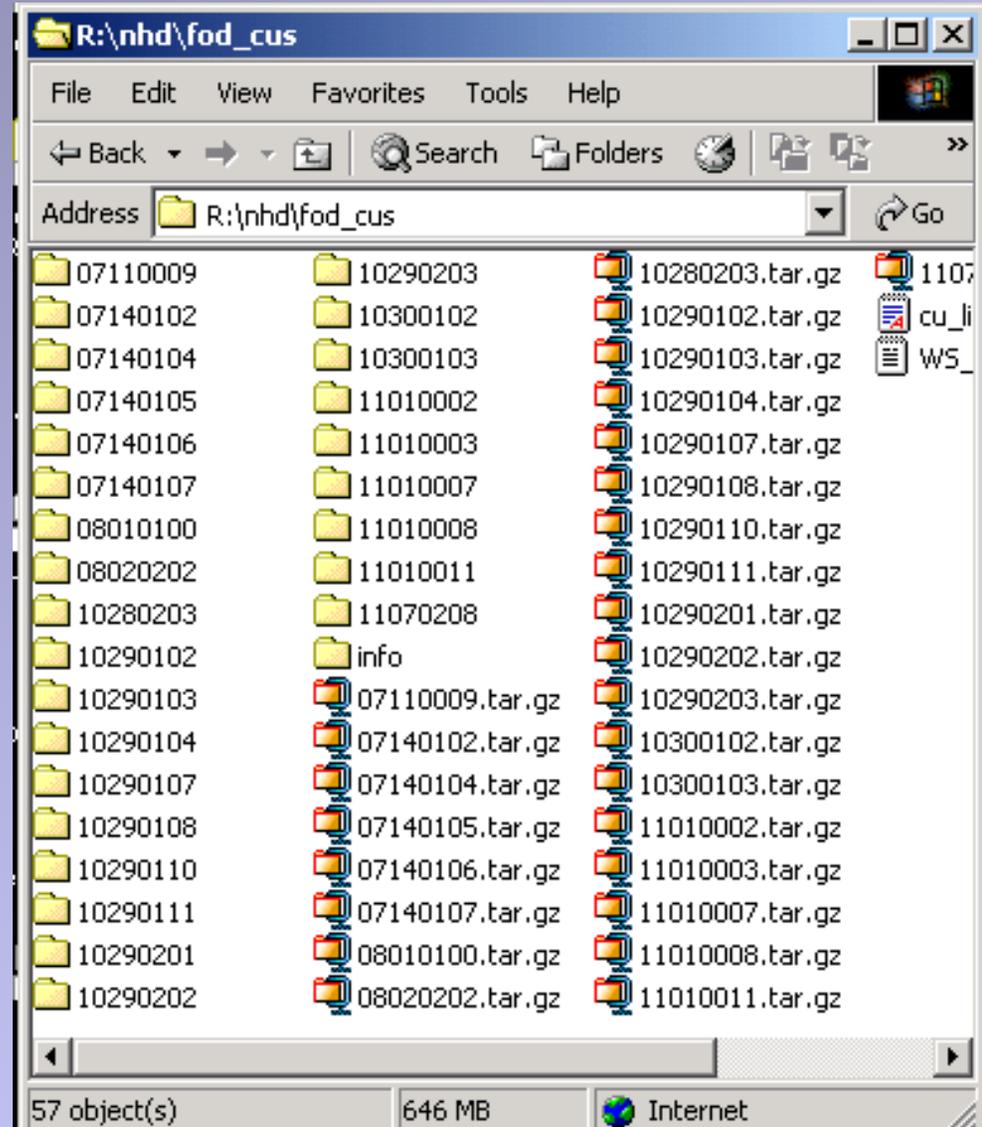


Brings up box to type CU number into

What you get

Tarred and Zipped files
07110009.tar.gz

These can be opened
using **WinZip** or
ArcInfo tar and gzip
commands



What you get

Tarred and Zipped files
07110009.tar.gz

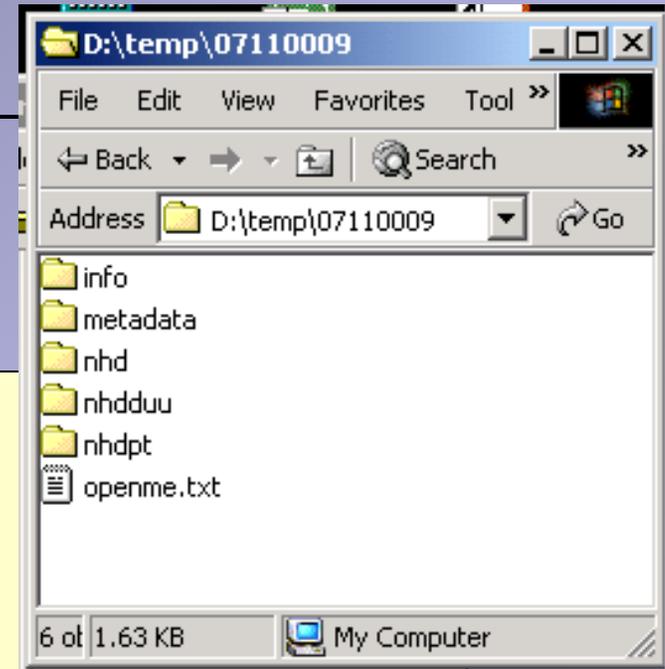
These tar.gz files inflate into workspaces containing the following:

NHD – Hydrography coverage containing streams and waterbodies in dynamic segmentation (i.e., routes and regions)

NHDDUU – Digital Update Unit for the CU that is essentially the CU boundary

NHDPT – Point coverage for the CU containing any hydrography point data (e.g., springs/seeps)

METADATA – Contains FGDC metadata for the CU and for the nhd program



How to use the data

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

Contains links to
Tools and
Applications,
including the **NHD
ArcView Toolkit**

The screenshot shows the USGS and EPA logos at the top. The USGS logo includes the text "USGS science for a changing world". The EPA logo includes the text "EPA United States Environmental Protection Agency". Below the logos, there is a navigation menu with buttons for "NHD Home", "Technical References", "Data", "Tools", "Applications", "Tutorial Series", "Technical Support", and "Maintenance". The "NHD Home" button is highlighted with a red arrow. To the right of the navigation menu is a large banner for the "National Hydrography Dataset" featuring a landscape image of a river and mountains. Below the banner, there are two paragraphs of text. The first paragraph explains that the NHD is a comprehensive set of digital spatial data containing information about surface water features like lakes, ponds, streams, rivers, springs, and wells. It also mentions that surface water features are combined to form "reaches" for linking water-related data to the NHD surface water drainage network. The second paragraph states that the NHD is based on USGS Digital Line Graph (DLG) hydrography data integrated with reach-related information from the EPA Reach File Version 3 (RF3). It notes that the NHD supersedes DLG and RF3 by incorporating them, not replacing them. At the bottom left of the screenshot, there is a yellow sticky note titled "NHD News" with two entries: "Presentations from the Dec. 2002 symposium on 'Terrain Analysis for Water Resources Applications' 01/21/03" and "NHD ArcView Toolkit Version 4.1.2 now available 11/21/02". A link to "NHD News Archive" is also visible at the bottom of the sticky note.

USGS
science for a changing world

EPA
United States
Environmental Protection
Agency

text version

▶ **NHD Home**

Technical References

Data

Tools

Applications

Tutorial Series

Technical Support

Maintenance

National Hydrography Dataset

The National Hydrography Dataset (NHD) is a comprehensive set of digital spatial data that contains information about surface water features such as lakes, ponds, streams, rivers, springs and wells. Within the NHD, surface water features are combined to form "reaches," which provide the framework for linking water-related data to the NHD surface water drainage network. These linkages enable the analysis and display of these water-related data in upstream and downstream order.

The NHD is based upon the content of USGS Digital Line Graph (DLG) hydrography data integrated with reach-related information from the EPA Reach File Version 3 (RF3). The NHD supersedes DLG and RF3 by incorporating them, not by replacing them. Users of DLG or RF3 will find the National Hydrography Dataset both familiar and greatly expanded and refined.

While initially based on 1:100,000-scale data, the NHD is designed to incorporate and encourage the development of higher resolution data required by many users.

NHD News

[Presentations from the Dec. 2002 symposium on "Terrain Analysis for Water Resources Applications" 01/21/03](#)

[NHD ArcView Toolkit Version 4.1.2 now available 11/21/02](#)

[NHD News Archive](#)

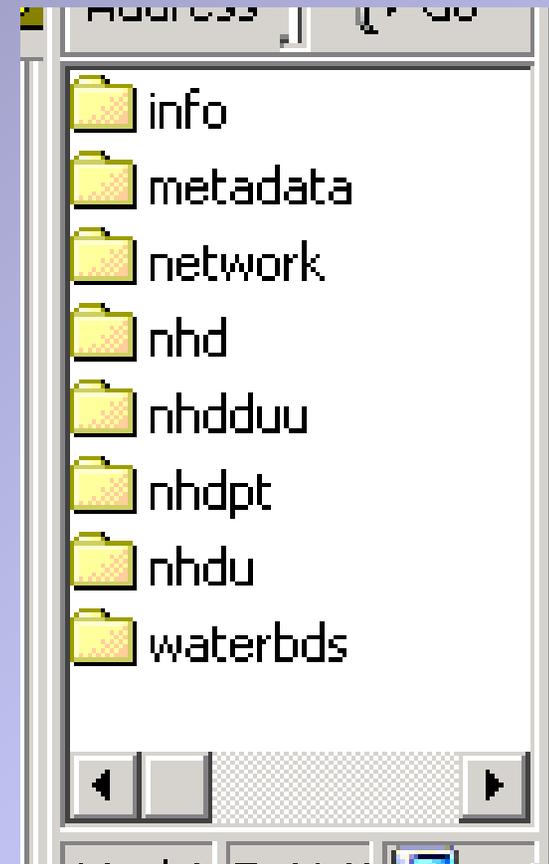
How to use the data

Another option...

AML program written by MoRAP and USGS ([nhd2arc.aml](#)) that converts the NHD coverage into 2 new coverages:

NETWORK – arc coverage of all streams, canals and artificial paths with necessary attribution

WATERBDS – polygon coverage of all waterbodies (ponds, lakes, and double-line streams) with necessary attribution



Updates

- All CUs in original agreement with USGS have been completed through production at MoRAP
- CUs are now being put through final QAQC at USGS and being loaded into the FOD
- There are 12 CUs that fall partially within MO that do not have complete NHD coverage
 - Currently partial data for these CUs can be acquired through MoRAP
 - Future hope is to receive an EPA grant to complete NHD coverage for Missouri