

**NHDPlus Release Notes for
Region 05
Last Updated 8/2/2010**

Data Release Note – 8/2/2010 – Flowline_Cat_Attr V01_02 Released

Two changes have been made to the FlowlineAttributesFlow Table: (1) All zero slopes have been changed to a nominal slope of 0.00005; and (2) the corresponding MAVELU and MAVELV estimates have been updated using the Jobson “slope” method for all Flowlines where these slopes have been changes. The result of this change is that the Jobson “noslope” method is never used. The reason for this change is that the NHDPlus Team has determined that the “noslope” method is not appropriate for zero slope applications. The Jobson velocity calculations are described in Appendix A- Step 6 of the NHDPlus User Guide.

Data Release Note – 10/17/2008 – NHD Component V01_03 Released

NHDFlowlineVAA.StreamOrde was set to zero to indicate that users are directed to use the new Stream Order/Stream Calculator fields that are available from the Data Extensions tab on the www.horizon-systems.com/NHDPlus web page.

Release Note 04/28/2008 – The problem with prj.adf parameter Zunits has been corrected in the elev_cm grids.

Release Note 12/13/2006 – Re-release of Region 05

Region 05 was re-released to correct some minor issues in the NHD component (V01_02) and to implement the NHDPlus versioning scheme in all components. The only data content changes occurred in the NHD component. All other components contain the same data as the original release.

Release Note – 11/1/2006 – Drainage Area

The drainage area and flow for Gage 03201500 includes the contribution of Kanawa River with the Ohio River upstream of this junction. However, this gage is located on the flowline just above this intersection so that the NHDPlus drainage area appears to be less than the gage drainage area. Gage 03115000 is located on the wrong flowline which makes the NHDPlus drainage area much less than the Gage drainage area. Other than these outliers, NHDPlus drainage areas match gage areas quite well. Note that Gage 03611500 includes the drainage area and cumulative UROM flows from Hydrologic Region 06. The NHDPlus values match that gage value quite well, with less than 1% difference for the cumulative drainage area and within 3.5% for the UROM mean annual flow estimate.

Release Note – 11/1/2006 – Flow

Other than the two outliers described in the drainage area section, the gage and NHDPlus flows tend to match quite well for both the UROM and the Vogel methods.

Release Note – 1/25/2006 – Source Elevation Data

Elevation Data (grid format), for all Hydro Regions except for Hydro Region 5 (the Ohio River Basin), were retrieved, July 2004, from the National Elevation Dataset (NED)

maintained by the U.S. Geological Survey. The NED for Hydro region 5 was retrieved October 2004. The data were used for production of a HydroDEM (used to produce catchments) for each production unit. This was done by mosaicking together the portions of each elevation grid that falls within a production unit area and then projecting from the original geographic coordinates to the national Albers projection given below.

Projection ALBERS
Datum NAD83 NADCON
Units METERS
Spheroid GRS1980
Xshift 0.0000000000
Yshift 0.0000000000
Parameters
29 30 0.000 /* 1st standard parallel
45 30 0.000 /* 2nd standard parallel
-96 0 0.000 /* central meridian
23 0 0.000 /* latitude of projection's origin
0.00000 /* false easting (meters)
0.00000 /* false northing (meters)

Release Note – 1/25/2006 – Watershed Boundary Data (WBD)

Only certified WBD was included for use as a “wall” drainage enforcement factor in HydroDEM production. These data are tiled by U.S. State, therefore only selected states with full certification were used. The publication date for each state's WBD varies. The following are the states (and WBD publication dates) for those states that were certified at the time of catchment production, that have drainage to the Mississippi River.

Illinois, 2002

Release Note – 1/25/2006 – Headwater Node Catchment errors

Headwater node catchment areas were not calculated for some (typically very short) headwater flowlines. This is expected for very short headwater flowlines, however, it was discovered that a small percentage of headwater flowlines (about 0.1 percent) that should have received headwater catchments did not. The problem was corrected and fixed prior to the determination of the production of the headwater-node-areas files, but not before stream slopes and other flow characteristics were determined. In these cases a slope of zero was assigned and the flow characteristics were determined based on regression equations that assumed that the slope of the reach is unknown.