

NHDPlus Release Notes for Region 17 Last Updated 8/2/2010

Data Release Note – 8/2/2010 – Flowline_Cat_Attr V01_04 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.

Release Note 06/05/2007 – The problem with IncrFlowU in FlowlineattributesFlow Tables has been fixed

New data is available in the NHDPlus17V01_03_Cat_Flowline_Attr.zip file.

Release Note 12/13/2006 – Problem with IncrFlowU in FlowlineattributesFlow Tables

In several of the HydroRegions there are incorrect values for the IncrflowU field. This problem exists when the UROM flow computations attempt to compensate for consumptive use by applying only a proportion of the unit runoff flow on intermittent streams. These incorrect IncrFlowU values can be corrected as follows:

If FCODE <> 46003, then:

In HydroRegion 10, the correct $\text{IncrFlowU} = \text{IncrFlowU} / 0.05$

In HydroRegion 11, the correct $\text{IncrFlowU} = \text{IncrFlowU} / 0.75$

In HydroRegion 13, the correct $\text{IncrFlowU} = \text{IncrFlowU} / 0.20$

In HydroRegion 14, the correct $\text{IncrFlowU} = \text{IncrFlowU} / 0.05$

In HydroRegion 15, the correct $\text{IncrFlowU} = \text{IncrFlowU} / 0.05$

In HydroRegion 16, the correct $\text{IncrFlowU} = \text{IncrFlowU} / 0.05$

In HydroRegion 17, the correct $\text{IncrFlowU} = \text{IncrFlowU} / 0.10$

In HydroRegion 18, the correct $\text{IncrFlowU} = \text{IncrFlowU} / 0.10$

This problem does not affect any other HydroRegions or any other fields in the FlowlineattributesFlow Table.

Data Release Note—9/26/2006 – Re-release of FAC, FDR and Elev grids

The grid zipfiles were not structured properly and consequently they did not uncompress into the correct directory structure. This has been corrected. There is no need to re-download data previously obtained. That data can be corrected by doing the following:

- After uncompressing all region 17 data, rename the grid folders by removing the “NHDPlus17Vss_cc_” from the beginning of the folder names.
- Move the renamed folders into the NHDPlus17 folder.
- Move any NHDPlus17Vss_cctxt files into the NHDPlus 17 folder.

More information about the data folder structure and naming conventions is provided in the user guide.

Data Release Note—6/25/2006 – Coastal Catchment

A coastal flowline (ComID 24534636) which is at the southern tip of a peninsula that extends down from Canada did not receive a catchment. The catchment for this coastal flowline could not be determined because the NED ends at the border with Canada.

Data Release Note—6/25/2006 – Data Source for Canada Catchments

Catchments in Canada for Region 17 were developed from the Atlas of Canada National Frameworks Hydrology, at the 1:1,000,000 scale. These data are available from <http://www.geogratis.cgdi.gc.ca>.

Data Release Notes – 6/25/2006 – Placement of Sinks

Nodata sinks were applied to the HydroDEM flow direction and flow accumulation grids at the outlet of isolated networks within closed 8-digit hydrologic subbasins. The closed basins are listed below:

17040215 - Medicine Lodge. Idaho
17040216 – Birch. Idaho
17040217 – Little Lost. Idaho
17040218 – Big Lost. Idaho
17120001 – Harney-Malheur Lakes. Oregon
17120005 – Summer Lake. Oregon
17120006 – Lake Abert. Oregon
17120007 – Warner Lakes. California, Nevada, Oregon.
17120008 – Guano. Nevada, Oregon
17120009 - Alvord Lake. Nevada, Oregon

Sinks were also applied at terminating reaches along the U.S./Canadian border where water was flowing into Canada from the U.S..

Data Release Notes – 6/25/2006 – Application of the Watershed Boundary Dataset

The Watershed Boundary Dataset (WBD) was used in the HydroDEM production process to insure NHDPlus Catchments conformed to these boundaries. Only data from states where the certified WBD existed was used. For Hydroregion 17, the WBD was applied in Utah and Wyoming only. For more information on WBD see the NHDPlus Metadata file.

Data Release Notes—6/25/2006 – Catchments

The catchment associated with the southernmost coastal flowline of HydroRegion 17 (comid 23949489) is included with the HydroRegion 18 data.

There is an unassigned hole within the catchment grids and coverage (0.0432 square kilometer). This hole is associated with the catchment with ComID 24037266 and was caused by an erroneously plotted stray arc from a neighboring HydroRegion's NHD. Other "nodata" holes in the catchments are created at the borders with either Canada, neighboring processing units, or the ocean. The latter "nodata" holes occur where bays have narrow outlets, less than about 60 meters across. These are considered legitimate and part of the rasterizing process.

Data Release Notes – 6/25/2006 – Drainage Area

There is a discrepancy of approximately 30,000 sq. km. between the gage and NHDPlus drainage areas for the Snake River at King Hill and gages downstream, in which the NHDPlus values are lower than the gage areas. This is due to the gage drainage areas reflecting total drainage area whereas the NHDPlus drainage areas are reflective of contributing area based on NHDPlus connectivity. A large area in the eastern Snake River Plain is connected to the Snake River only through ground water, but is considered part of the total drainage area for the gages. This discrepancy carries to the most downstream gage on the Columbia River. See also NHDPlus17V01_02_QAQC_Sinks.xls, which is available with the data, for additional information.

Data Release Notes – 6/25/2006 – Flow

The UROM attempts to compensate for consumptive use by applying only 10% of the HUC-level mean annual runoff on intermittent streams. The UROM flow estimates tend to do a good job of estimating mean annual flow up to approximately 100,000 cfs. The UROM flow estimates tend to be larger than the gage mean annual flows above a flow of 100,000 cfs. This tendency to over-estimate flow increases as the gage flows increase.

The Vogel-based flow estimates tend to do a good job of matching the gage flows up to the Vogel limit of approximately 30,000 cfs. See also NHDPlus17V01_02_QAQC_Sinks.xls, which is available with the data, for additional information.

Data Release Note – 6/25/2006 – Release V01_02

Region 17, Version 01_02, is released. This release corrects all of the issues documented in the previous release notes. Also, Region 17 used a provisional schema. This release puts region 17 data in the official NHDPlus schema version 01. See the NHDPlus User Guide for more information about the new NHDPlus versioning technique.

Data Release Note—2/2/2006

Region 17 does not yet contain elevation grids nor does it contain a headwaternodearea.dbf. These will be included in version 02 of the Region 17 data.

Data Release Note--1/05/2006

The international catchment for the Skagit River, in NW Washington, was inadvertently left out of the data set. This will be corrected in version 02 of the Region 17 data.

Data Release Note--12/09/2005

The NHDPlus flowlines coordinates are intended to be ordered in the downstream direction where flow is known. We have discovered that the coordinates for the NHD Flowlines in eight HUC8

areas in region 17 are ordered in the upstream direction. This will be corrected in version 02 of the Region 17 data. The HUC8s with this problem are: 17010101, 17010104, 17010105, 17010216, 17010302, 17020001, 17020003, and 17110005.

Data Release Note--11/18/2005

It has come to the attention of the NHDPlus development team that an unpublished bias correction factor is available for the regional regression equations by Vogel, Wilson, and Daly, 1999. In addition, the team has been able to obtain the original 2.5-minute (approx 4-km) resolution precipitation and temperature grids that were used in the above study. By using these grids we will be matching the data used in the original regression analysis, and because these grids are public domain, we will be able to release the temperature and precipitation catchment and flowline characteristics. (Currently these are only available to PRISM licensees.) The flow volume and velocity computations using the Vogel, Wilson, and Daly equations will be redone for Region 17, and the data will be re-released, as version 02, in the near future. All future releases of NHDPlus data will be processed using the 4-km grids and the appropriate bias correction factors.

Data Release Note--9/8/2005

The stream order attribute in NHDPlus17V01_NHD.zip is not correct and will be replaced in version 02.

Data Release Note--9/8/2005

The thinner attribute in NHDPlus17V01_NHD.zip is not completely correct and will be replaced in version 02.