

Drainage Area: MS, VPU: 06 - Release Notes

12/01/2018 – Updated and New Data

Time of Travel and Related Attributes: The new and updated data is included in new versions of the NHDPlusAttributes and EROMExtension components. Specifically,

EROM mean annual and mean monthly statistics have been re-computed with the following changes:

- Removal of upper and lower limits for reference gage regression adjustment,
- Correction of reference gage regression equation, and
- Reference gage regression included in all flow statistics.

PlusFlowlineLakeMorphology and PlusWaterbodyLakeMorphology tables have been updated based on the new EROM mean annual flows.

PlusFlowlineVAA mean annual time of travel (TOTMA) has been updated based on the new EROM mean annual flows. Path time (PathTime) attribute has been added and populated based on the updated TOTMA values.

12/19/2016 – Updated Components

The NHDSnapshot has been updated to correct a duplicate ComID problem in NHDFlowline.

05/10/2016 – Updated Components

The improved HUC12 downstream pointers from the February 2016 WBD Version were updated in the NHDPlus WBDSnapshot. When a correspondence between the two versions could be determined for both the HUC12 and the downstream HUC12, the downstream pointer was updated.

02/18/2016 – Updated Components

Several NHDFlowline features in the NHDSnapshot component were edited to eliminate errors when building a geometric network.

01/05/2016 – Updated Components

EROM Mean Annual and Mean Monthly flow estimates have been re-run to correct incremental flows to be the sum of the incremental flows upstream and on the flowline. EROM velocities were updated to provide velocity estimate only for flowing waters. EROM velocities are now set to -9998 (missing value) in all water bodies except swamp/marsh.

07/08/2015 – Updated Components

The WBDSnapshot was revised to correct the values in the Acres field. The NHDSnapshot and NHDPlusAttributes were revised to correct values in FType/FCode in a handful of features.

1/30/2015 – Revised Component

The VPUAttributeExtension has been updated to include accumulated mean annual and mean monthly runoff files.

1/21/2014 – New Data Release

The EROMExtension was enhanced to include mean monthly flow estimates. See NHDPlusV2 User Guide for additional information.

09/25/2013 – Replacement components

Three NHDPlusV2 components are replaced with new versions: NHDPlusBurnComponents, NHDPlusCatchments, and 06a_CatSeed. These replacements represent a complete renumbering of the GridCodes in VPU06. The previous GridCodes inadvertently duplicated some GridCodes in VPU04..

9/21/2012 – Temporary Attribute Cleanup

During NHDPlusV2 processing and subsequent QAQC, some temporary attributes were added. Some of these attributes were not deleted and were inadvertently included in the public release. These extraneous attributes do not affect the usability of the data, but they do violate the official data model and may cause issues with future NHDPlusV2 tools. Users are encouraged to download the new components. In this VPU, the replacement zip files are:

NHDPlusV21_MS_06_NHDPlusBurnComponents_05.7z

8/15/2012 New Release of VPUAttributeExtension

A problem was discovered in the catchment area values computed by ArcGIS Zonal Statistics which resulted in very small positive and negative values in the attribute MissDataA. A work-around was implemented and the results are released in NHDPlusV21_MS_06_VPUAttributeExtension_05.7z.

7/6/2012 Initial Release Notes

Non-spatial connections

VPU 06 has areas of karst terrain where surface water flows to a sink hole and travels underground. In some cases, the underground flow resurfaces. In the NHDPlusV2 NHDSnapshot, based on information from local sources, 14 isolated networks in karst terrain were non-spatially connected to another NHD network using the PlusFlow table. The locations of these non-spatially connected networks can be found using the Sink feature class (PurpCode = 2) in the NHDPlusBurnComponents folder.

Outlet of South Holston Lake

The NHD has two outlets flowlines coded as pipeline for South Holston Lake. Both flowlines have their Catchment properties set to “N” (no). The secondary path outlet consists of an artificial path flowline in the lake, and the pipeline; both Burn properties are set to “N”, while the main path pipeline’s Burn property is set to “Y” (yes).

Tennessee–Tombigbee Waterway

The Tennessee–Tombigbee Waterway (popularly known as the Tenn-Tom) is a 234 mile man-made, artificial waterway that extends from the Tennessee River in VPU 06 to the junction of the Black Warrior and Tombigbee Rivers in VPU 03W. This connection was intentionally omitted from NHDPlusV2. Users who would like to represent this connection may do so by using the NHDPlusV2 PlusARPointEvent and PlusFlowAR tables to create an inter-basin connection.

Enhanced Unit Runoff Method (EROM)

See Appendix A of the “NHDPlus V2 User Guide” for a detailed explanation of the EROM parameters.

EROM Flow and Velocity estimates are for Mean Annual values.

The time period for these estimates is 1971 to 2000; the runoff, temperature and precipitation grids are for this time period.

For gage adjustment and Reference Gage Regression, gages must meet the following criteria:

1. A minimum of 20 of the 30 years (1971 to 2000) of complete flow records.
2. NWIS reported drainage area versus NHDPlus drainage area, for the gage, must be within 0.2 (+/- 20%)

Upstream gage drainage area proportion is 0.5 (50%)

Excess Evapotranspiration default coefficients are 0.3 and 0.5.

Gage sequestration proportion is 0.2 (20%)