NHDPlus Release Notes for
Region 01
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.

Data Release Note – 7/16/2007 – NHD Component V01_02 Released
Extraneous fields were removed from the NHDFlowline attribute table.

Data Release Note – 9/1/2006 – Drainage Area
At Gage 01011000 NHDPlus under-estimates the drainage area in comparison to the Gage drainage area. At Gage 01029500, NHDPlus over-estimates the drainage area in comparison to the Gage drainage area. There are no obvious reasons for these outliers, and the downstream drainage areas for NHDPlus and the gages match up quite well. It is possible that NHDPlus is assigning drainage areas at upstream lakes differently than the gages. Other than these 2 outliers, NHDPlus drainage areas match gage drainage areas quite well.

Data Release Note – 9/1/2006 – Flow
The UROM flow estimates tend to be lower than the gage flows on the St. John River along the Canadian border. This is most likely due to the UROM not fully accounting for the flows into the St. John River coming in from Canada. The UROM flow estimate at gage 01172003 is larger than the gage flow. This discrepancy is because the gage is located below the flow diversion for a power plant at Holyoke, MA. There are two other outliers at gages 01040500 and 01080000 in which the NHDPlus flow estimates are much larger than the gage flow values. Both of these gages are located in lakes and the flows at these gages are most likely reflective of minor outflows from these lakes. Other than these outliers, both the UROM and the Vogel methods match the gage flows well.

Data Release Note – 9/1/2006 – Placement of Sinks
"Nodata" sinks were applied at network ends of rivers, streams, and artificial paths where drainage from the U.S. drains into Canada.

Data Release Note – 9/1/2006 – 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. Data was used only from states where the certified WBD existed at the time of production. For Hydroregion 1, the WBD was applied in Connecticut, Massachusetts, New Hampshire, and Vermont. For more information on WBD see the NHDPlus Metadata file.

Data Release Note – 9/1/2006 – International Catchments
Hydroregion 1 consists of contributing drainage area from Canada for the St. Francois River, Connecticut River, Upper St. John, and St. Croix River Basins. Existing watershed boundaries include delineations into Canada for these basins and were incorporated in the HydroDEM production process to assign catchment areas in Canada to the NHDPlus flowlines. The USGS National Elevation Dataset (NED), which also extends into Canada supplemented subwatershed delineations within the WBD units where such conditions were warranted

The source scale of the WBD data for the Canadian portion of the St. Francois River Basin from Canadian 1:50,000-scale topographic maps.

The source scale of the WBD data for the Canadian portion of the Connecticut River Basin from the U.S. Geological Survey 1:100,000-scale Sherbrooke quadrangle topographic map.

The source watershed data for the Canadian portion of the Upper St. John and St. Croix River Basins, from the State of Maine Office of GIS. Source scale from U.S. Geological Survey 1:250,000-scale topographic maps.

Note:
Although 30-meter NED data did extend into Canada for these basins, the watershed boundaries took precedence over the NED in Canada, even though the source scale for the watershed delineations were smaller than the assumed scale of 30-meter NED data (1:24,000). In fact, the scale of the source DEM data within the Canadian extent of NED is actually from 1:250,000-scale USGS DEMs, resampled to the 30-meter resolution.