NHDPlus Release Notes for
Region 14
Last Updated 8/2/2010

Data Release Note – 8/2/2010 – Flowline_Cat_Attr V01_03 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 – 5/13/2009 – CatchmentSP Compononent V01_02 Released
Correct record structure of attribute table.

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.

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

Release Note 06/05/2007 – The problem with IncrFlowU in FlowlineattributesFlow Tables has been corrected.
New data is available in the NHDPlus14V01_02_Cat_Flowline.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 IncrFlowU = IncrFlowU / 0.05
In HydroRegion 11, the correct IncrFlowU = IncrFlowU / 0.75
In HydroRegion 13, the correct IncrFlowU = IncrFlowU / 0.20
In HydroRegion 14, the correct IncrFlowU = IncrFlowU / 0.05
In HydroRegion 15, the correct IncrFlowU = IncrFlowU / 0.05
In HydroRegion 16, the correct IncrFlowU = IncrFlowU / 0.05
In HydroRegion 17, the correct IncrFlowU = IncrFlowU / 0.10
In HydroRegion 18, the correct IncrFlowU = IncrFlowU / 0.10

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

Data Release Note – 07/16/2006 – Zip File Construction Problem with Grids
It was determined that the elevation, flow direction and flow accumulation grid zip files were not constructed correctly. When the grids were unpacked they overwrote each other's info directory. The grids have been reposted as version V01_02.

Data Release Note – 06/15/2006 – Placement of Sinks
Nodata sinks were applied to the HydroDEM flow direction and flow accumulation grids at the outlet of isolated networks within the 8-digit hydrologic subbasin, 14040200, Great Divide closed basin in Wyoming. See NHDPlus14V01_01_QAQC_SINKS.xls which is posted with the NHDPlus data.

Data Release Note – 06/15/2006 – 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 14, the WBD was applied in Utah and Wyoming only. For more information on WBD see the NHDPlus Metadata file.

Data Release Note – 06/15/2006 – Drainage Area
There is a discrepancy of approximately 12,000 sq. km. between the gage and NHDPlus drainage areas for the Green River, in which the NHDPlus values are lower than the gage areas. This is most likely due to the Green River gage drainage areas reflecting total drainage area whereas the NHDPlus drainage areas are reflective of contributing area based on NHDPlus connectivity. This discrepancy carries to the most downstream gage on the Colorado River in Region 14. See NHDPlus14V01_01_QAQC_SINKS.xls which is posted with the NHDPlus data.

Data Release Note – 06/15/2006 – Flow

Data Release Note – 6/15/2006 – Slope and Velocity Errors	**ComID**	**LengthKM in Error**	**Corrected LengthKM**
After slope was computed and flow volume and	120299732	1.347	1.5
velocity was run, errors were found in the	120299639	6.318	7.282
LengthKM field of a small number of	120299722	1.454	1.73
NHDFlowlines. Because of the limited impact	120299733	3.375	4.353
and the estimated expense to correct the	120299630	2.955	4.247
problems, only the LenghtKM field was	120299633	1.155	1.699
corrected. Small errors still exist in slope and	120299729	2.23	3.747

velocity. The affected flowlines are shown in the table below.

120299721	1.766	3.071
120299731	0.837	1.787
120299632	0.729	1.815
120299628	1.924	5.023
120299637	0.313	1.001
120299636	1.426	4.561
120299724	1.302	4.201
120299782	0.729	2.795
120299634	0.675	2.945
120299680	0.325	2.127
120299726	0.136	1.998
120299725	0.237	3.603
120299723	0.124	3.487

The UROM attempts to compensate for consumptive use by applying only 5% of the HUC-level mean annual runoff on intermittent streams. The UROM flow estimates tend to be larger than the gage mean annual flows, especially for flow estimates above 1,000 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 7,000 cfs. See NHDPlus14V01_01_QAQC_SINKS.xls which is posted with the NHDPlus data.