NHDPlus Release Notes for
Region 16
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 – 10/17/2008 – NHD Component V01_02 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 elev_cm_unit_a and elev_cm_unit_b.

Release Note 06/05/2007 – The problem with IncrFlowU in FlowlineattributesFlow Tables has been fixed.
New data is available in the NHDPlus16V01_02_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 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 – 6/12/2006 – Catchments

Post-production, it was discovered that the catchment is missing for flowline with comid 7884982. This is a 2.3 km long canal/ditch. The area draining directly to this flowline is included in the catchments for neighboring flowlines.

Data Release Note – 6/12/2006 – Placement of Sinks
Nodata sinks were applied to the HydroDEM flow direction and flow accumulation grids at the outlet of isolated networks within Hydroregion 16. This arid region as a whole is considered a closed hydrologic system, and thus all 8-digit subbasins within the region were treated the same. The sinks are applied to isolated network ends if they met the criteria outlined in the NHDPlus Users Guide.

Data Release Note – 6/12/2006 – 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 16, the WBD was applied in Utah and Wyoming only. For more information on WBD see the NHDPlus Metadata file.

Data Release Note – 6/12/2006 – Drainage Area QA
NHDPlus drainage area estimates along the more downstream flowlines of the Humbolt, Walker, and Sevier Rivers are significantly less than the corresponding gage drainage area estimates. The gages on these rivers appear to provide total drainage area while the NHDPlus drainage areas estimate contributing area as based on the NHDPlus connectivity. Other than these cases, NHDPlus drainage area estimates tend to match the gage areas quite well.

Data Release Note – 6/12/2006 – Flow QA
The UROM attempts to compensate for consumptive use by applying only 5% of the HUC-level mean annual runoff on intermittent streams. The UROM uses drainage area as a primary explanatory variable for mean annual flow. There seems to be such a large amount of evapo-transpiration, use and groundwater effects within this basin that this drainage area-flow relationship breaks down, especially at flows greater than 1,000 cfs. Below 1,000 cfs both the UROM and Vogel flow estimates are more reliable but with enough variance that the flow estimates for both methods should be applied cautiously in this HydroRegion.