NHDPlus Release Notes for
Region 18
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 6/5/2007 – The problem with IncrFlowU in FlowlineattributesFlow Tables has been fixed.
New data is available in the NHDPlus18V01_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 – 6/20/2006 – Catchments
The flowline associated with the northernmost coastal catchment of HydroRegion 18 (comid 23949489) is included with the HydroRegion 17 data.

Data Release Note – 6/20/2006 – Drainage Area

For drainage area estimates greater than 10,000 sq. km. there are two issues. First, NHDPlus drainage area estimates are approximately 7,000 sq. km. greater than the gage drainage areas for the Klamath River below the Lost River. This discrepancy is because there is a diversion canal that connects the Lost River drainage area in NHDPlus but the Lost River drainage area is not included in these Klamath River gage drainage areas. Second, NHDPlus drainage areas tend to be less than the gage drainage areas in the Sacramento River Basin, including the Pit River tributary to the Sacramento River. This is most likely due to the Sacramento and Pit 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 Sacramento River. For drainage areas below 10,000 sq. km., NHDPlus and the gage areas tend to agree quite well, with some outliers due to issues as described in Step 6 of Appendix A in the NHDPlus User Guide.

Data Release Note – 6/20/2006 – Flow
The UROM attempts to compensate for consumptive use by applying only 10% of the HUC-level mean annual runoff on intermittent streams. For flow estimates greater than 5,000 cfs, the UROM overestimates mean annual flow on the Klamath River at the same gages described in the Drainage Area section. Also, the UROM underestimates mean annual flow on the gages in the Sacramento and Pit River Basins that correspond to the gages that show the drainage area underestimates at the same gages described in the Drainage Area section. However, at the two most downstream gages on the Sacramento River the UROM overestimates mean annual flow by approximately 2,000 cfs, which is a difference of less than 10%. Below 5,000 cfs both the UROM and Vogel method flow estimates do not show any particular bias as compared to the gage flows but there are significant variances between the gage and NHDPlus flows. Therefore, users should be cautious in using these NHDPlus flow estimates.

Data Release Note – 6/20/2006 – 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:

18090207 – Coyote-Cuddeback Lakes. California
18030012 – Tulare-Buena Vista Lakes. California
18090205 – Indian Wells-Searles Valleys. California
18090203 – Death Valley-Lower Amargosa. California, Nevada.
18090202 – Upper Amargosa. California, Nevada.
18090201 – Eureka-Saline Valleys. California, Nevada.
18090102 – Crowley Lake. California, Nevada.
18090101 – Mono Lake. California, Nevada.
18100100 – Southern Mojave. California.
18090206 – Antelope-Fremont Valleys.California
18090204 – Panamint Valley. California.
18090103 – Owens Lake. California.
18100200 – Salton Sea. California.
18090208 – Mojave. California.

Sinks were also applied at terminating reaches along the U.S./Mexican border where water flows into Mexico from the U.S.

Data Release Note – 6/20/2006 – Application of the Watershed Boundary Dataset
For Hydroregion 18, state certified versions of the Watershed Boundary Dataset (WBD) were not available and therefore not applied in the production of the HydroDEM. For more information on WBD see the NHDPlus Metadata file.