NHDPlus Release Notes for
Region 10L
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_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.

Release Note – 3/22/2008 – Catchment grid and shapefile
Catchment grid and shapefile, version 01_02, have been released with updated "prod_unit" field values. These values correctly reflect the fact that Hydro Region 10 was processed in 9 production units (a through i) rather than the 8 production units. Catchments previously given values of "c" are now correctly given values of "c" or "l".

Release Note 06/05/2007 – The problem with IncrFlowU in FlowlineattributesFlow Tables has been corrected.
New data is available in the NHDPlus10LV01_02_Cat_Flowline.zip file.

Release Note 12/13/2006 – Re-release of Region 10L.
Region 10L was re-released to correct some minor issues in the NHD component (V01_02) and to implement the NHDPlus versioning scheme in all components. The only data content changes occurred in the NHD component. All other components contain the same data as the original release.

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 other fields in the FlowlineattributesFlow Table.

Release Note 12/11/2006 – Incorrect Major Divergent Path on the South Platte River
In NHDPlus10L, at the divergence downstream of flowline 3557318, the wrong path is designated as the major path in the divergence. Consequently, all of the NHDPlus cumulative attributes are routed down the major path which ends in a network termination and does not return to the South Platte. This results in an under counting of all cumulative attributes beginning with flowline comid 3557304 and continuing downstream through part of hydrologic region 07 (starting at flowline comid 3624763 on the Mississippi River) and along the Mississippi River to the bottom of hydrologic region 08. In total, 49413 sq km of cumulative drainage area is lost beginning at flowline 3557318 in NHDPlus10L.

Release Note 12/08/2006 – Missing Catchments
Flowlines 910600005, 7301308, 7301310 did not receive catchments because they are small and were assigned to the wrong processing unit (10c instead of 10i). This occurred because the processing unit 10c was initially too large to be processed as a single processing unit and was split. These flowlines should have been reassigned to 10i but were not and thus did not receive catchments. They are short 164-240 meters long.

Release Note 11/08/2006 – Reaches without Measures – This problem was fixed in the V01_02 release of the NHD Component
All reaches in Region 10L now have measures.

Release Note 1/25/2006 – Source Elevation Data
Elevation Data (grid format), for all Hydro Regions except for Hydro Region 5 (the Ohio River Basin), were retrieved, July 2004, from the National Elevation Dataset (NED) maintained by the U.S. Geological Survey.

Release Note 1/25/2006 – International Catchments
International catchments for Region 10 were developed using the Atlas of Canada National Frameworks Hydrology, at the 1:1,000,000 scale. These data are available from http://www.geogratis.cgdi.gc.ca. The Drainage Network Skeleton (canadskel_l.shp) was used to create a geometric network and this was traced upstream, selecting the applicable lines. A relationship was established via attribute values to the corresponding catchments, and the catchment areas were merged together to define the drainage areas.

Additionally, the Prairie Farm Rehabilitation Administration (PFRA) Watershed Dataset was used. This dataset was mostly developed at 1:50,000 scale, and is available at

http://www.agr.gc.ca/pfra/gis/gwshed_e.htm. This data set was used to define the noncontributing drainage areas, which were subsequently removed from the catchment areas.

Release Note 1/25/2006 – Watershed Boundary Data (WBD)
Only certified WBD was included for use as a "wall" drainage enforcement factor in HydroDEM production. These data are tiled by U.S. State, therefore only selected states with full certification were used. The publication date for each state's WBD varies. The following are the states (and WBD publication dates) for those states that were certified at the time of catchment production, that have drainage to the Mississippi River.

Wyoming, 2002

Release Note 1/25/2006 – Application of sinks within the Mississippi River Basin, for production of flow-direction and flow-accumulation grids
Nodata "sinks" were applied at the terminus ends of three isolated networks in Hydro-region 10, subbasin 10060007 – Brush Lake closed basin. Montana, North Dakota.

Release Note 1/25/2006 – Headwater Node Catchment errors
Headwater node catchment areas were not calculated for some (typically very short) headwater flowlines. This is expected for very short headwater flowlines, however, it was discovered that a small percentage of headwater flowlines (about 0.1 percent) that should have received headwater catchments did not. The problem was corrected and fixed prior to the determination of the production of the headwater-node-areas files, but not before stream slopes and other flow characteristics were determined. In these cases a slope of zero was assigned and the flow characteristics were determined based on regression equations that assumed that the slope of the reach is unknown.