

NHDPlus Release Notes for Region 21 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 – 7/8/2008 – CAT, FDR and FAC Grids

Catchments and grids were produced using a Lambert projection with a central meridian of -66 degrees 30 minutes. In version 01_02, the catchments and grids were produced using the official Puerto Rico State projection, also a Lambert projection but with a central meridian of -66 degrees 26 minutes.

Data Release Note – 11/19/2008 – Drainage Area

The QA for Region 21, Puerto Rico and the Virgin Islands, is focused on the Puerto Rico mainland. In the NHDPlus21V01_01_QAQC_SINKS.xls, the primary tables and graphs are for the mainland. There is a separate sheet in the .xls file for the few gages not on the mainland that meet the criteria for inclusion in the QA. Gage 50142500 was removed from the QA analyses because it has a short period of record and a highly skewed flow distribution. The mean annual flow is 39,303 cfs, which is 80 times greater than any other gage mean annual flows.

Overall, the NHDPlus Drainage Areas match quite well with the Gage drainage areas. Most of the outliers have an NHDPlus computed drainage greater than the gage drainage areas.

- Gage 50038100 contains a large catchment with no Flowlines that is probably not all of the contributing area used for that gage.
- Gages 50144000, 50143930, 50043000 show a larger NHDPlus drainage area than the gage areas. Investigation of the network and catchments does not show any specific reasons for this.
- Gage 5005180 shows a gage drainage area greater than the NHDPlus drainage. This is most likely due to an isolated network in that drainage area.
- Gage 50121000 shows an NHDPlus drainage area much less that the gage area. This gage appears to be misplaced on a tributary stream rather than the mainstem.

Data Release Note – 11/19/2008 – Flow

There are no regression equations available for Region 21 flows so the MAFlowV and MAVeIV fields are all given values of -9998. The UROM used a different technique for developing catchment-level mean annual flows than has been used elsewhere. See Step

6 in Appendix A of the User's Guide for a more complete description of the methodology used in Puerto Rico. The NHDPlus UROM mean annual flow estimates are generally higher than the gage mean annual flows. This is most likely due to consumptive use that is not taken into account in the UROM; the UROM reflects "natural" runoff without consumptive use taken into account.