

Example Comparison of a Large River Assessment Unit

Open Waters Grid versus Large River Assessment Unit

Legend:

-  Monitoring location
-  Open water grid system (**Grid**)
-  WQ Assessment listing
-  Large River Assessment Unit (**LRAU**)

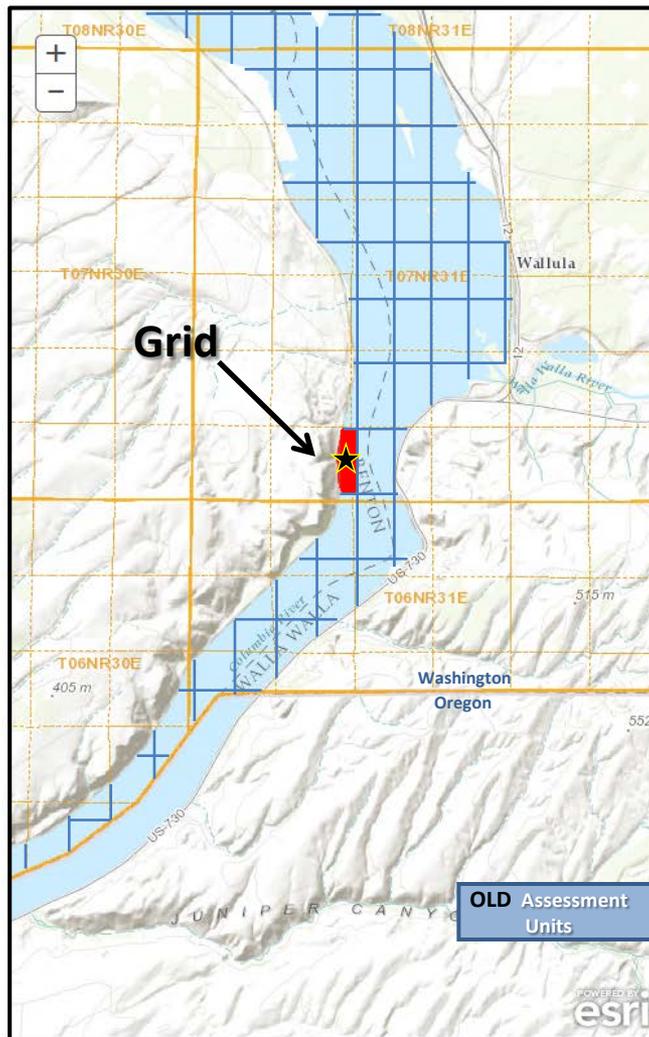
Discussion:

EPA guidance requires water quality assessments for streams to specify the lengths (i.e. segments) of streams that are assessed.

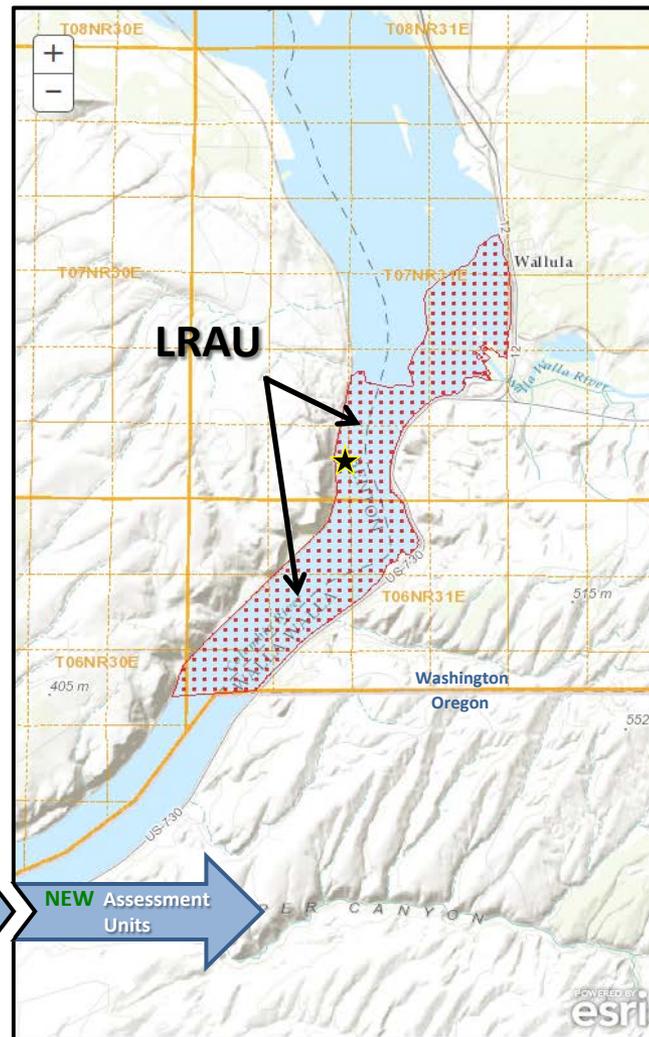
The temperature data from this monitoring point (★) are currently attributed to the area of a grid cell* (■). The grid cell system was developed for use in open waters such as large lakes and marine waterbodies.

During public comment of the 2012 WQ Assessment, the grid system was criticized for its lack of suitability to represent the directional flow characteristics of rivers. The WA Dept. of Ecology agreed, and redesigned the large river segment system to align with watersheds boundaries**. This system provides for a watershed delineated system in the Columbia and Snake rivers comparable to the NHD reach-based segments by setting a reach length that corresponds with adjacent contributing waters. Data from the monitoring point in this example are now attributed to the larger segment within this watershed defined system.

2012 EPA Approved WQ Assessment



Proposed Draft WQ Assessment



OLD Assessment Units

NEW Assessment Units

Approved Listing	Parameter	Medium Category	Waterbody Name	Assessment Unit ID	Lower Address	Upper Address
21542	Temperature	Water	COLUMBIA RIVER (LAKE WALLULA)	46118A9E5	n/a	n/a

Proposed Listing	Parameter	Medium Category	Waterbody Name	Assessment Unit ID	Lower Address	Upper Address
21542	Temperature	Water	COLUMBIA RIVER (LAKE WALLULA)	170701010201_01_02	n/a	n/a

* The Grid system was used for large rivers in WQ Assessments from 1998 to 2012. The proposed assessment uses the LRAU system for new listings and also converts former listings the LRAU extent.
 ** The delineation of LRAUs is based on the USGS 12 digit Hydrologic Unit Code (HUC) watershed boundaries that traverse the Columbia and Snake rivers.