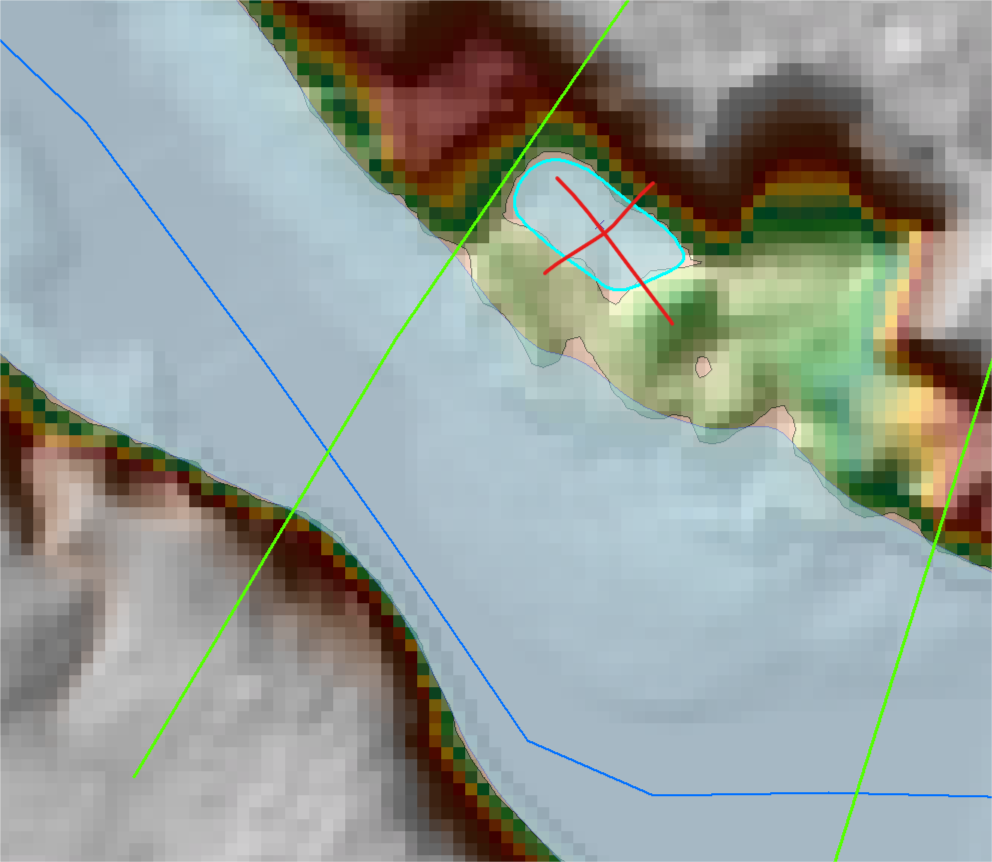
**WDNR Approximate Floodplain Mapping Preferences**

The Contractor shall map the approximate floodplains in accordance with all relevant “Guidelines and Specifications for Flood Hazard Mapping Partners” referenced in Section 1.2 of the Request for Bid document. Additionally, the WDNR preferences listed below should also be used.

**Mapping Extent:** Mapping should be clipped to the upstream and downstream study extents denoted by the cross sections in the hydraulic model, except in cases where the upstream most cross section ends in a lake. In these instances, the mapping should be extended upstream at the elevation of the uppermost cross section. Additionally, the mapping at the bounding XS’s is often rounded and should therefore have its vertices snapped to the XS lines.

**Floodplain Islands:** Floodplain islands less than 2,000 sq. feet or less than 100’ wide in their shortest dimension should be filled in to represent floodplain. The WDNR has created a toolbox in ArcMap that we can provide to assist in filling in the islands.

**Disconnected Floodplains:** Disconnected floodplains should be removed from the final mapping shapefile unless there is a potential hydraulic connection back to the main floodplain (see example below)



**Smoothing:** Floodplain boundaries should be smoothed. The WDNR does this by running the aggregate polygons tool twice using an aggregation distance of 20’ and Min. Area and Hole size of 2000’. The resulting polygon is then smoothed using the Smooth Polygon Tool in ArcMap, where the ‘PAEK’ Smoothing Algorithm is used with a tolerance of 20 meters. The WDNR has created a toolbox in ArcMap that we can provide that does this smoothing process (tool requires an Advanced ArGIS Desktop License).