

Multiple Points of Diversion in Different Sub Watersheds

Description: Identify whether active Points of Diversion (POD) are located in more than one HUC12 for a water right and assign a single POD to represent the location where water is diverted from the stream network for the entire water right.

Example: A large municipal water right has 15 points of diversion that span the length of an entire watershed. While technically any point of diversion could be drawing water, the point of diversion with the most flow available to it is most likely serve to be most conservative in a water availability analysis (most likely to show water available).

What: A list of water rights with multiple PODs, which HUC12 watersheds each POD lands in, and what predicted annual runoff occurs for the catchment each POD falls in.

Why: When determining allocations for curtailments, if any water is available for a water right to divert, they should not be curtailed. Based on current limitation of water rights data and reporting requirements, it is not possible to determine when and how much water is diverted at each POD, only the total amount for all POD's that compose the water right. Assuming all water is diverted at the most downstream point, or the point whose catchment has the most annual flow available to it, is least likely to result in a false curtailment.

How: Geospatial pre-processing of water rights data is needed to identify water rights that have multiple POD spanning more than one HUC12. Each POD is assigned a catchment, and the corresponding predicted annual flows. The POD with access to the most flow is assigned as the POD to represent all diversions for the entire water right. Please refer to the GIS POD Analysis Workflow (Part II) Standard Operating Procedures in the Standardized QAQC Demand Methodology for additional technical details on how to perform this analysis using ArcGIS.

Resolution: The single POD approach is the baseline, and is calculated for all water rights in the area of interest. If additional information is known, the QAQC analyst can distribute diversions across more than 1 POD (although it is not known how that could be included into current water availability analysis tools), or assign it to a separate POD, as desired.

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