Discussion Guide

**Subbasins**

**WRIA 12 Watershed Restoration and Enhancement**

**Committee Meeting**

June 12, 2019

# Purpose of Discussion

The purpose of this discussion guide is to:

1. Provide the Committee an understanding of considerations for subbasin delineation.
2. Prepare to settle on a specific subbasin delineation in a future (August or September) meeting.

# Background and Context

## Why do we need subbasins?

RCW 90.94.030(3)(b) says plans must include actions to offset new consumptive use impacts associated with permit-exempt domestic water use. RCW 90.94.030(3)(b) states “The highest priority recommendations must include replacing the quantity of consumptive water use during the same time as the impact and in the same basin or tributary.” In this case, a subbasin is the same as a “basin or tributary.”

Delineating subbasins early in the planning process will allow the HDR team to complete PE well projections and consumptive use estimates by subbasins. The results of their work will help the Committee find projects that can offset impacts within the same subbasin.

## General Considerations about Subbasins

* Areas of anticipated rural growth.
* Areas where little rural growth is expected.
* Surface hydrology and/or hydrogeology.
* Number of subbasins.
  + Too few subbasins reduces understanding of relationships between where pumping effects will be and where benefits of offset projects will occur.
  + Too many subbasins can make it unwieldly to evaluate all of the offset projects needed to achieve a net ecological benefit for the WRIA.
* Existing or concurrent planning efforts may have already delineated subbasins.
* Hydrogeological sub-basins (based on groundwater instead of surface water flows) can be more complex to delineate, since water in different aquifer levels can travel in different directions, and we do not have all the information on the hydrogeology or the resources to run groundwater models.
* Priority areas for salmon recovery.
* Known potential projects.

# Options for Committee Consideration

The technical workgroup has discussed using the Hydrologic Unit Codes (HUC) at the sub-watershed level (HUC 12). HUC 12 subbasins line up with other planning efforts in the area, and other planning groups are also using HUC 12 as a base for their subbasins.

General options for determining subbasins include:

* Delineate subbasins on existing HUC 12s.
* Lump HUC 12s together to create larger subbasins, where appropriate.
  + Will need to identify which subbasins to lump together.
* Use a base other than HUC 12s.

# Questions for Committee Discussion

* What questions do you have about the options discussed above?
* What do you think are the pros and cons of each subbasin option?
* Are there planning efforts that you are familiar with that might have sub-basin delineations already in place that would be adequate for our needs?
* Are you comfortable relying primarily on a hydrologic (water drainage) sub-basin delineation?
* Where are the areas of expected or anticipated rural growth?
* What additional information do you need to feel comfortable weighing in on an option?