# Introduction

The HDR Team is planning to use a number of methods to estimate consumptive use in the watershed. This approach will give a range of potential consumptive use estimates, and provide flexibility for the committee to include assumptions based on local knowledge or conditions. This approach will also give the committee the benefit of seeing how the different assumptions change the consumptive use estimates.

# General Approach

General proposed methods to estimate consumptive use from PE wells:

* Method based on Ecology guidance and recommended assumptions:
  + Indoor use:
    - 60 gallons per day per person.
    - 10% consumptive.
  + Outdoor use:
    - An average lawn watering area based on GIS or satellite imagery analysis.
    - Watering turf grass based on the Washington Irrigation Guide.
    - 75% irrigation efficiency.
    - 80% consumptive.
* Alternative method(s) based on other literature, if applicable.
* Method based on metered PUD or Water Purveyor Group A/B data
* Method based on parcel-scale irrigation areas.

Each method will calculate for each projected PE connection:

* Total water use.
* Indoor water use.
* Outdoor (seasonal) water use.
* Percentage of indoor and outdoor water use that is consumptive.

Each method may overlap in some aspects with the Ecology guidance and/ or other literature, especially when it comes to indoor use.

In addition, the HDR team would define the legal limit as a theoretical maximum, but would not present it as a method for an actual consumptive use estimate.

# Next Steps

The workgroup and committee will have opportunities to weigh in on and refine the assumptions used, especially for the alternative method, over the next month. The workgroup has already provided ideas for water purveyor rates, potential sources for alternative assumptions, and methods for assessing outdoor watering areas. The HDR team will present to the full committee on consumptive use at our September 11 meeting.

# Question for Committee:

* Does this approach seem reasonable to the committee?
* What concerns do you have about this approach?