



## List of Agreed Upon Management Questions & Indicators

### FLOW

1. Are stream flows adequate for native fish populations and other aquatic species?
  - Median average daily discharge
  - Annual minimum 7-d average flow
2. Do flows represent a natural hydrological pattern that reflects seasonal fluctuations, rate of fluctuations, peaks, etc.?
  - Deviation from normative hydrograph
  - Median average daily discharge
3. How is climate change affecting stream flow needed for populations of native fish and other aquatic species?
  - Deviation from normative hydrograph
  - Annual Snowpack

### MACROINVERTEBRATES

1. Do environmental conditions support diverse macroinvertebrate communities?
  - Observed/Expected (O/E)
  - EPT Richness
2. What impairments do macroinvertebrates communities indicate (e.g. sediment, nutrients, heavy metals, flow, temperature, etc.)?
  - Temperature Score, Biological Sediment Tolerance Index, Habitat Quality/Lack of Complexity, Nutrients – HBI, more specific index needed, Heavy Metals score, Flow score, Community Tolerance Quotient.
3. How is climate change affecting macroinvertebrate composition or abundance?
  - Observed/Expected (O/E)
  - EPT Richness

### STREAM TEMPERATURE

1. Where are cold water refugia and are they continuing to function?
  - Size and location of refugia
  - Downstream barriers
2. Does stream temperature support native fish and other aquatic species?
  - 7-day moving average of the daily max temperature
  - Total days with max temperature exceeding state standard
3. How is climate change affecting the stream temperature needed for populations of native fish and other aquatic species?
  - Change in stream temperature caused by climate change

### WATER QUALITY

1. Do water quality conditions support native fish, aquatic species, and other beneficial uses?
  - Contaminants and toxins that have EPA targets/benchmarks
  - % of sites with WQI scores meeting target
2. How is climate change affecting water quality?
  - 7-day moving average of the daily max temperature
  - Average seasonal DO concentration