

## 7. MONITORING AND PERFORMANCE

One of the key components of any plan is monitoring, both to determine baseline conditions from which to measure progress and to evaluate the need to change direction (if positive results are not occurring as anticipated). Several key pieces of monitoring data are already being collected by others. These include water quality monitoring for fecal coliform bacteria and temperature by Kitsap Health District, and precipitation data being collected by Barney Bernhard for the Kitsap Utility District. These sets of data are useful to understand the water quality trends in the watershed, and hydrological conditions that impact stream flows. Recommendations for monitoring programs are shown in Table 7-1. A more complete description of each monitoring program is included in Appendix C.

**Table 7-1. Recommended Monitoring Programs**

<b>Program</b>	<b>Project Identification</b>	<b>Frequency/Season</b>	<b>Brief Description</b>	<b>Potential Partners</b>
Spawning surveys for salmonids	Mon-1	Annual/Fall	Monitor number of salmon redds and species spawning in Illahee Creek	Suquamish Tribe, Illahee Community, Volunteer Fish Biologists
Physical channel conditions	Mon-2	Annual/Summer	Set up permanent channel cross sections in different reaches to monitor changes in channel geometry, including sedimentation and erosion	Suquamish Tribe, Illahee Community, Volunteer Geomorphologists
Aquatic habitat conditions	Mon-3	Bi-annually/Summer	Conduct bi-annual surveys of the same reach to evaluate number of pools, riffles, LWD, and bank erosion.	Suquamish Tribe, Illahee Community, Volunteer Ecologists
Stream flow	Mon-4	Storm Events	Measure stream flow (cfs) at the installed gauge to develop a rating curve (to correlate stage with flow) for Illahee Creek	Suquamish Tribe, Illahee Community, Volunteer Hydrologists
Sediment deposition at Illahee Community Dock	Mon-5	Annually	Measure depth of sediment deposited above cobble beach substrate at south and north ends of float	Port of Illahee