

Tuesday, July 3 - Storm Team and County Rainfall 0.65" (WSU), river at 1050 cfs and peaking

| Site Number | Site No. | Fecal coliform Result | Duplicate | Avg | Samish River loading (trillions per day) |
|---|----------|-----------------------|-----------|------|--|
| Samish River at Thomas Rd 0825 | 32 | 2120 | 1720 | 1920 | 49 |
| Bob Smith Creek at WDFW access (downstream) | BSCreek | 6300 | 7120 | 6710 | |
| Bob Smith Creek (Moody branch) at Bow Hill Rd (upstream) | BSup | 4800 | | | |
| Bob Smith Creek (Casino branch) at Bow Hill Rd (Upstream) | BSDarrk | 6000 | | | |

Wednesday, July 4 - Storm Team

No additional rainfall, river at 577 cfs and falling

| Site Number | Site No. | Fecal coliform Result | Duplicate | Avg | Samish River loading (trillions per day) |
|--------------------------------|----------|-----------------------|-----------|-----|--|
| Samish River at Thomas Rd 0825 | 32 | 420 | 500 | 460 | 6.5 |

Thursday, July 5 - County

No additional rainfall, river at 429 cfs and falling

| Site Number | Site No. | Fecal coliform Result | Duplicate | Avg | Samish River loading (trillions per day) |
|----------------------------------|----------|-----------------------|-----------|-----|--|
| Samish River at Hwy 9 | 11 | 130 | | | |
| Samish River at upper Prairie Rd | SAM3PR | Not sampled | | | |
| Samish River above Parsons Creek | SAMPAR | 33 | | | |
| Parsons Creek at mouth | PAR | 33 | | | |
| Samish River at Double Creek Ln | SAMDCL | Not sampled | | | |
| Skarrup Creek at Double Creek Ln | SKAR | 240 | | | |

| | | | | | |
|---------------------------------|---------|-------------|-----|-----|-----|
| Samish River at 1st Prairie Rd | SAM1PR | Not sampled | | | |
| Samish River at Grip Road | SAMGRIP | Not sampled | | | |
| Swede Creek at Grip Rd | 8 | 130 | | | |
| Samish River at F&S Grade Rd | SAMFS | 110 | | | |
| Weir Creek Prairie Rd | WCPR | Not sampled | | | |
| Friday Creek at Prairie Rd | 6 | 130 | | | |
| Samish River at Hwy 99 | SAMH99 | Not sampled | | | |
| Bob Smith Creek at Hwy 99 | BSCreek | 350 | | | |
| Thomas Creek at F&S Grade Rd | 4 | 540 | | | |
| Willard Creek at F&S | WILL | Not sampled | | | |
| Thomas Creek at Hwy 99 | 3 | 350 | | | |
| Samish River at Chuckanut Drive | SAMCD | Not sampled | | | |
| Samish River at Thomas Rd 1430 | 32A | 240 | 130 | 185 | 1.9 |
| Alice Bay Pump Station | 33 | 170 | | | |
| Edison Slough at School | 36 | 920 | | | |
| Edison Pump Station | 37 | 540 | | | |
| North Edison Pump Station | 38 | 280 | | | |
| Colony Creek | 39 | 130 | | | |

A few observations:

Reported rain amounts for 7/2 and 7/3 were higher at other stations in the basin – we have standardized on the WSU Mt Vernon station because of its reliability. Lowland amounts were over an inch in Bow and higher in the hills. The resultant river flow, over 1000 cfs, was a new record flow for the date and 16 times the median flow. The loading for that peak flow, 49 trillion bacteria per day, was just outside of the top ten loadings since the intensive Samish monitoring started in 2008. Because of lab holiday closure, the Storm Team volunteers analyzed samples taken by County staff. A full watershed sampling wasn't feasible for that system.

Recall that the closure criteria for Samish Bay shellfish harvest is 4.7 trillion bacteria per day, so the 7/3 sample exceeded that ten-fold, and the 7/4 sample also exceeded the criteria. Results from the 7/5 samples allowed the bay to be reopened on Saturday morning, one day early from the standard 5-day closure.

Bob Smith Creek has been a focus recently due to extremely high counts near the confluence with the Samish just west of Hwy 99. In previous samples, there has been a large difference between the upstream stations and the counts at the WDFW access near the confluence. For this event, however, the upstream counts were only slightly lower than the downstream counts, indicating that for this event, upstream sources were also evident.