Appendix K – WRIA 14 Streamflow Statistics

The following information was prepared by Jim Pacheco (Department of Ecology) and Erica Marbet (Squaxin Island Tribe) for the WRIA 14 Committee for the purposes of this watershed plan.
Jan. 19, 2021—J. Pacheco (Ecology) and E. Marbet (Squaxin) confirmed that Squaxin Island Tribe stream gaging station (RM 0.5) is close enough to WAC 173-514-030 control point for Cranberry Creek (RM 0.5) to allow for meaningful comparison to the instream flow rule.
DEER CREEK NEAR SHELTON, WA
Flow exceedance Probability Hydrograph
USGS 12075000, RM 0.8; Period of Record: 1949 - 1950

There is no current streamflow record.
This USGS streamflow gaging station is paid for by the Squaxin Island Tribe with matching funds from USGS. Jan. 19, 2021- J. Pacheco (Ecology) and E. Marbet (Squaxin) confirmed that the USGS station is close enough to WAC 173-514-030 control point for Goldsborough Creek to allow for meaningful comparison of this streamflow record to the instream flow rule. It appears that Ecology measured river mile from the 1st St bridge. WAC 173-514-030 sets the control point at RM 0.23. The USGS gaging station is 0.53 miles up from the 1st St bridge, which is 0.3 miles upstream of the control point.
Jan. 21, 2021: J. Pacheco (Ecology) and E. Marbet (Squaxin) confirmed that the historical USGS stream gaging station is at RM 2.85, while the WAC 173-514-030 control point for Kennedy Creek is at RM 0.06. This record awaits comparison to current Thurston County streamflow data.
MILL CREEK AT HWY 3
Flow exceedance Probability Hydrograph
RM 8.0; Period of Record: 2006 - 2018

Jan. 19, 2021- J. Pacheco (Ecology) and E. Marbet (Squaxin) confirmed that Squaxin Island Tribe stream gaging station (“RM 8.0”) is the same as the historical gaging station of USGS. We perceive that WAC 173-514-030 lists an incorrect river mile (RM 3.1) for the control point. It is most likely that Ecology used USGS data to generate the instream flow rule. Squaxin data may be compared to USGS data and the instream flow rule.

Lat 47.193244
Long -123.098900
JOHNS CREEK AT HWY 3
Flow exceedance Probability Hydrograph
Site 1 of 2, RM 0.4; Period of Record: 2006 - 2018

Johns Creek at Hwy. 3 is not a USGS gaging station nor Ecology control point.

Lat 47.247823
Long -123.045731
Jan. 19, 2021 - J. Pacheco (Ecology) and E. Marbet (Squaxin) confirmed that Squaxin Island Tribe stream gaging station (RM 0.3) is close enough to WAC 173-514-030 control point (RM 0.14) for Sherwood Creek to allow for meaningful comparison to the instream flow rule.
Jan. 19, 2021. J. Pacheco (Ecology) and E. Marbet (Squaxin) confirmed that the historical USGS gaging station on Skookum Creek was at Hwy. 108 (RM 2.5), but the Squaxin Island Tribe stream gaging station is at Hwy. 101 (RM 1.5). The WAC 173-514-030 control point is listed at RM 3.0, and we don't know why. Still, the Squaxin median daily flow values are close enough to historical USGS median daily flow to allow for meaningful comparison to the instream flow rule. This conclusion is reinforced by same-day flow measurements at Hwy 101 and Hwy 108 in 2017 that show that flow is similar at both sites.