

To: Brandi Lubliner, Department of Ecology  
From: Rick Haley and Michael See, Skagit County  
Date: 12/31/2015  
Re: C1500073 Skagit County RSMP Quarterly Report

## **October - December 2015**

### **Project Management for the period of October-December 2015**

No conference calls were scheduled for this period. Skagit County staff remained in frequent email contact with Ecology management and laboratory personnel.

Skagit County has submitted fourth quarter data and the EIM spreadsheet to the RSMP Coordinator.

Skagit County has not yet billed for the fourth quarter pending payroll processing.

### **Monitoring activities**

Four of the six Skagit RSMP streams continued to be dry or unsampleable in October. Low flow was encountered in the remaining two sites in October due to continuing drought conditions. By the November sampling dates, heavy fall rains had returned and flows were very high at each site. High water was again present for the December sampling dates.

October – Sites 15-WUGA, 20-OUGA, 44-OUGA and 45-WUGA were dry or unsampleable during the October sampling period. A flow meter was used for flow determinations at the sites that did have water.

November – All sites had extremely high flows due to recent heavy rains. The Neutral Buoyant Object method was used for flow determinations at all sites except 15-OUGA due to instrument malfunction.

December – All sites were sampled with medium-high flows. The Neutral Buoyant Object method was used for flow determinations at all sites due to ongoing instrument problems.

Field parameters are summarized in Table 1 on the next page.

Table 1. Field parameter data for Skagit County RSMP sites, Jan-Dec 2015

Skagit County RSMP sampling field data										
<b>15-WUGA Brickyard Creek</b>										
Date	Time	Temp @	DO (mg/L)	pH	pH2	Cond (uS/cm)	Pressure (in Hg)	Discharge (cfs)	Notes	
1/22/2015	900	6.1	9.51	6.90	6.78	106.8	29.75	5.80	4'-11" water surface to bridge	
2/18/2015	900	6.2	9.95	6.74	6.86	120.6	29.67	5.40	4" pvc pipe discharging from adjacent retention pond	
3/24/2015	900	9.2	9.65	7.51	7.75	74.1	29.74	11.70	4" pvc pipe discharging from adjacent retention pond	
4/20/2015	900	10.7	8.55	6.79	6.67	150.0	29.89	0.66		
5/14/2015	900	11.8	8.20	6.76	6.81	132.7	29.92	0.44	Water depth 9.5", 5'-3.5" from bottom of bridge to water surface	
6/18/2015									Dry - no water	
7/23/2015									Dry - no water	
8/12/2015									Dry - no water	
9/28/2015									Dry - no water	
10/15/2015									Dry - no water	
11/19/2015	830	6.9	9.22	6.86	6.79	71.2	30.29	30.50		
11/19/2015	830	6.8	9.29	6.76	6.72	71.4	30.29	27.70	Duplicate	
12/15/2015	830	5.9	8.73	7.24	7.22	84.2	30.33	8.80	By neutral buoyant object method	
<b>19-UGA Carpenter Creek</b>										
Date	Time	Temp @	DO (mg/L)	pH	pH2	Cond (uS/cm)	Pressure (in Hg)	Discharge (cfs)	Notes	
1/21/2015	1015	4.5	11.88	6.51	6.34	208.2	29.84	10.30		
2/19/2015	930	8.2	10.89	6.45	6.30	230.4	29.76	7.40		
2/19/2015	930	8.0	11.59	6.49	6.42	228.3	29.78	n/a	Duplicate	
3/25/2015	1130	9.4	11.16	6.83	6.85	216.6	29.71	10.60	Rebar destroyed by mowing	
4/16/2015	900	7.6	11.05	6.98	6.89	218.9	29.93	6.56		
5/13/2015	900	11.7	9.76	7.80	7.80	239.8	29.84	3.80		
6/16/2015	900	13.7	10.80	7.55	7.67	n/a	30.11	0.72	Could not calibrate for conductivity	
7/23/2015	800	14.1	9.09	7.67	7.71	469.9	29.66	0.20		
8/12/2015	830	14.2	10.18	7.58	7.61	502.0	29.96	0.10		
9/29/2015	930	9.7	10.74	7.38	7.30	374.3	29.97	0.80		
10/14/2015	830	10.9	9.32	6.56	6.55	274.5	30.29	1.20		
11/16/2015	900	7.8	10.96	7.46	7.44	194.5	30.10	65.00	By neutral buoyant object method	
12/14/2015	830	6.6	10.85	7.20	7.18	183.6	30.08	38.20	By neutral buoyant object method	
<b>20-UGA Willard Creek</b>										
Date	Time	Temp @	DO (mg/L)	pH	pH2	Cond (uS/cm)	Pressure (in Hg)	Discharge (cfs)	Notes	
1/22/2015	930	7.0	9.32	6.93	6.91	108.2	29.81	2.70	1.72'	
2/18/2015	1030	7.5	9.44	7.72	7.83	113.1	29.73	2.00	1.31'	
3/26/2015	1000	9.8	9.53	7.50	7.46	86.6	29.74	6.90	Rebar gone	
4/20/2015	1030	12.1	8.95	6.78	6.74	121.7	29.89	0.50	By neutral buoyant object method	
5/14/2015	1000	12.4	8.61	6.95	6.99	117.6	29.92	0.26		
6/18/2015									Dry - no water	
7/23/2015									Not sampleable - very shallow stagnant water	
8/12/2015									Not sampleable - very shallow stagnant water	
9/29/2015									Not sampleable - very shallow stagnant water	
10/15/2015									Not sampleable - very shallow stagnant water	
11/19/2015	1030	7.4	8.74	6.86	6.77	89.8	30.29	15.70		
12/15/2015	900	6.7	8.27	7.09	7.03	63.3	30.33	11.70	By neutral buoyant object method	
<b>27-UGA Thomas Creek</b>										
Date	Time	Temp @	DO (mg/L)	pH	pH2	Cond (uS/cm)	Pressure (in Hg)	Discharge (cfs)	Notes	
1/22/2015	1115	5.8	12.15	7.22	7.24	73.6	29.7	7.90	9'-5/8"	
2/18/2015	1200	6.5	12.14	6.80	6.65	74.2	29.57	7.40		
4/2/2015	1000	8.8	11.43	6.72	6.75	69.9	29.76	4.50		
4/27/2015	1100	10.2	10.81	7.42	7.48	73.9	30.26	1.93	New pH meter	
5/14/2015	1100	11.1	11.22	7.44	7.49	86.1	29.92	1.28	Water depth 1.5", top of rebar to water 12.5"	
6/25/2015	1200	14.2	9.70	7.49	7.49	95.5	29.65	0.09	First attempt on 6/18 - logging operation in process	
7/23/2015	1030	15.1	9.17	7.81	7.75	98.2	29.66	0.10		
8/12/2015	1000	16.0	9.52	7.55	7.49	101.0	29.96	0.10		
9/28/2015	1030	9.5	10.30	6.91	6.86	112.0	30.12	0.20		
10/15/2015	1000	9.2	10.15	6.91	6.83	119.0	30.29	0.50	Water exactly at bottom of rebar	
11/19/2015	1130	7.3	11.82	7.10	7.10	63.0	30.29	23.50		
12/15/2015	1000	6.2	11.93	7.36	7.32	65.2	30.33	6.20	By neutral buoyant object method	
<b>44-UGA Campbell Lake Creek</b>										
Date	Time	Temp @	DO (mg/L)	pH	pH2	Cond (uS/cm)	Pressure (in Hg)	Discharge (cfs)	Notes	
1/21/2015	1230	5.2	11.30	6.73	6.74	242.5	29.78	9.40		
2/19/2015	1430	9.7	9.75	6.62	6.61	232.9	29.73	8.10		
3/25/2015	1330	11.0	10.15	6.98	6.95	240.2	29.68	5.50		
4/16/2015	1200	12.1	9.75	7.00	6.96	239.9	29.88	3.92		
4/16/2015	1200	12.1	9.85	6.98	7.02	239.6	29.88	3.88	Duplicate	
5/13/2015	1230	16.0	8.96	7.85	7.86	226.0	29.84	2.40		
6/16/2015	1115	17.9	8.39	7.68	7.83	n/a	30.11	0.56	Could not calibrate for conductivity	
7/23/2015									Dry - no water	
8/12/2015									Dry - no water	
9/28/2015									Not sampleable - very low flow, nowhere to fill bottles	
10/14/2015									Not sampleable - very low flow, nowhere to fill bottles	
11/16/2015	1100	7.4	9.05	7.01	7.00	176.2	30.07	6.20	By neutral buoyant object method	
12/14/2015	1030	6.3	9.31	7.49	7.50	243.2	30.08	14.10	By neutral buoyant object method	
<b>45-WUGA Maddox Creek</b>										
Date	Time	Temp @	DO (mg/L)	pH	pH2	Cond (uS/cm)	Pressure (in Hg)	Discharge (cfs)	Notes	
2/19/2015	1045	8.3	11.16	6.75	6.63	162.3	29.78	2.60		
3/25/2015	1000	9.0	10.80	6.18	6.40	159.4	29.65	3.20		
4/16/2015	1000	8.2	11.86	6.99	6.96	188.5	29.87	0.83		
5/13/2015	1030	12.1	10.79	8.19	8.31	206.1	29.84	0.25		
6/16/2015									Dry - no water	
7/23/2015									Dry - no water	
8/12/2015									Dry - no water	
9/28/2015									Dry - no water	
10/14/2015									Dry - no water	
11/16/2015	930	8.1	11.46	7.74	7.76	162.2	30.10	12.50	By neutral buoyant object method	
12/14/2015	930	6.6	11.21	7.54	7.58	141.9	30.08	9.00	By neutral buoyant object method	