

Instructions: Bold fields must be completed.

**Station Summary**

Waterbody Name NORTH FORK CLAM RIVER		Waterbody ID Code 2656600	Sample ID (YYYYMMDD-CY-FD) 20181018-07-01
Sampling Location @ Sand Road x 40 m upstream			Database Key 168634566
SWIMS Station ID 10015236	SWIMS Station Name NORTH FORK CLAM RIVER AT SAND RD.		
Latitude 45.73962	Longitude -92.12573	Lat/Long Determination Method (circle) SWIMS SWDV <b>GPS</b>	Datum Used if using GPS WGS84 or NAD83
Basin (WMU) ST. CROIX	Watershed Name NORTH FORK CLAM RIVER	County BURNETT	

**Sample and Site Descriptors**

Sample Collector (Last Name, First) CRAIG ROESLER	Project Name NOR LONG-TERM TREND WADEABLE REFERENCE STREAM
--	---

**Sampling Device**

<input checked="" type="checkbox"/> D-Frame Kick Net	<input type="checkbox"/> Surber Sampler	<input type="checkbox"/> Eckman
<input type="checkbox"/> Ponar	<input type="checkbox"/> Artificial Substrate	<input type="checkbox"/> Hess Sampler <input type="checkbox"/> Other: _____

**Habitat Sampled**

<input checked="" type="checkbox"/> Riffle	<input type="checkbox"/> Run	<input type="checkbox"/> Pool
<input type="checkbox"/> Other	<input type="checkbox"/> Shoreline Composite	<input type="checkbox"/> Proportionally-Sampled Habitat
<input type="checkbox"/> Littoral Zone	<input type="checkbox"/> Profundal Zone	<input type="checkbox"/> Wetland

Total Sampling Time (min) 1 min	Estimated Area Sampled (m <sup>2</sup> ) 1 m <sup>2</sup>	Number of Samples in Composite 3-20 second Kicks	Replicate No. _____ of _____
------------------------------------	--	---	------------------------------

**Reason For Sampling**

<input type="checkbox"/> Least Impacted Reference	<input type="checkbox"/> Baseline	<input type="checkbox"/> Impact / Treatment Site
<input type="checkbox"/> Control Site	<input checked="" type="checkbox"/> Trend	<input type="checkbox"/> Other: _____

Water Temp. (C) 4.8	D.O. (mg/l) 12.6	D.O. (% sat.) 98.1	pH (su) 7.9	Conductivity (umhos/cm) 210	Transparency (cm) >120
------------------------	---------------------	-----------------------	----------------	--------------------------------	---------------------------

Water Color <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Stained	Estimated Stream Velocity (m/s) <input type="checkbox"/> Slow (< 0.15 m/s) <input checked="" type="checkbox"/> Moderate (0.15 m/s - 0.5 m/s) <input type="checkbox"/> Fast (> 0.5 m/s)
---	---

Measured Velocity circle units m/s or f/s	Average Stream Depth of reach (m) 0.4	Average Stream Width of reach (m) 5.0 m
---	--	--

**Composition of Substrate Sampled (Percent):**

Bedrock: _____	Boulders (basketball or larger): 10	Rubble (tennisball to basketball): 40	Gravel (ladybug to tennisball): 40
Sand: 10	Clay: _____	Silt/Muck: _____	Overhanging Vegetation: _____
Aquatic Macrophytes: _____	Leaf Snags: _____	Coarse Woody Debris: _____	Other (____): _____

Embeddedness of Substrate at Sample Site (%) 20%	Canopy Cover at Sample Site (%) 70%
--	-------------------------------------

PULL THERMISTOR ~150 ft VS of bridge; left bank; under horizontal ash tree with cut off end; ~6 ft from bank

**Stream and Watershed Descriptors**

N = Not a problem  
 U = Uncertain  
 PL = Present, Low Impact  
 PH = Present, High Impact

Factors that may be influencing Water Resource Integrity	Local	Water-shed	Factors that may be influencing Water Resource Integrity	Local	Water-shed
<b>Biological</b>			<b>Chemical</b>		
Algae: - Diatoms / Periphyton			Chlorine		
- Filamentous Algae			Dissolved Oxygen		
- Planktonic Algae			Nutrients (P, N...)		
Iron Bacteria			Toxics: - Inorganic (Metals)		
Macrophytes			- Organic (PCBs, pesticides...)		
Slimes			Other - Specify:		
Other - Specify:			<b>Sources of Stream Impacts</b>		
			Bank Erosion		
			Point Source - Specify:		
<b>Physical</b>			Pasturing of Livestock		
Bank Erosion			Runoff: - Barnyard		
Channelization: - Upstream			- Construction		
- Downstream			- Cropland		
Hydraulic Scour / Channel Incision			- Urban		
Impoundment: - Upstream			Septic Systems		
- Downstream			Tile Drainage - Organic Soils		
Low Flow			- Mineral Soils		
Sedimentation			Springs		
Sludge			Tributary(s)		
Thermal			Wetland		
Turbidity			Other - Specify:		
Other - Specify:					

Comments

Special Instructions for Laboratory

**For Lab Use Only**

Sample Sorter <i>Abby Adams</i>	Taxonomist <i>Dimick Jeffrey</i>	Estimated Percent of Sample Sorted <i>71</i>
Date Processed <i>10-13-19</i>	Specimens Saved <i>Subsample archived in ABC until Jan 2022</i>	

*AZ 602*

Taxa	Life Stage	Bench Tally	Count	Taxonomic Reference	Condition	Unique Taxon
<i>Baetis flavistriga</i> species complex	L	I	1	Kvb 2016		
Ephemerelellidae	L	I	1	"	dam	N
Ephemerelella	L	BBor III	110	"	imm	N
<i>E. invarra</i>	L	I	1	"		
<i>E. subvarra</i>	L	II	2	"		
<i>Tetolanopsis deficiens</i>	L	X IIII	14	"		
Heptageniidae	L	I	1	"	dam	N
Leucoccuta	L	8	30	"		
<i>Maccaffertium</i>	L	X	10	"	imm	N
<i>M. modestum</i>	L	8-1	36	"		
<i>M. vicarium</i>	L	- IIII	9	"		
Zenoblebiidae	L	I	1	"	dam	N
<i>Paraleptophlebia</i>	L	80-III	70	"	dam/imm	N
<i>P. mollis</i>	L	I	5	"		
<i>Paracania angulata</i>	L	0 III	23	Hils 1974		
<i>Acrocnemis lycorias</i>	L	I	1	"		
<i>Paragnetina media</i>	L	III	3	Hils 1995		
<i>Isoperla</i>	L	- II	7	"	imm	N
<i>I. signata</i>	L	X-III	20	Hils 1982		
<i>Taeniopteryx</i>	L	II	2	Hils 1995	imm	
<i>Brachycentrus americanus</i>	L	I	1	Hils 1985		
<i>Mocasinema rusticum</i>	L	L	1	"		
<i>Glossosoma intermedium</i>	L	III	3	Wym Mar 2000		
<i>Protophila</i>	L	III	5	Hils 1995		
<i>Ceratopsyche</i>	L	- I	6	"	imm	N
<i>C. glossonae</i>	L	-	5	Schm Hils 1986		
<i>C. sparna</i>	L	8 IIII 44	43	"		
<i>C. walkeri</i>	L	I	1	"		
<i>Hydropsyche betteni</i>	L	II	2	"		
<i>Leucotrichia pictipes</i>	L	- III	8	Hils 1995		
<i>Lepidostoma</i>	L	80-III	68	"		
<i>Neophylax</i>	L	II	2	"	imm	
<i>Helichus striatus</i>	A	I	1	Hils Schm 1992		
<i>Oligoneurus</i>	L	X- II	17	"	imm	N
<i>O. fastiditus</i>	L, 2	A, 1	3	"		
<i>O. trivittatus</i>	L, 20	A, 1	21	"		
<i>Atherix variegata</i>	L	0-1	26	Hils 1995		
<i>Nemerochroma</i>	L	II	2	Court Merr 2008		

