

Date: 31 July 2018

Time: Arrived: _____ Departed: _____ Collectors: Scott, Deb, Lydia

Stream: Wind Cave outlet Location Description: same as ever

Coordinates: N _____ W - _____ Datum: _____

Elevation: _____ ft Site name on GPS: _____

Water quality (Recorded with a YSI Pro Plus Multitprobe)

Parameter	Value	Units
Water temperature	<u>3.0</u>	°C
Barometric pressure	<u>560</u>	mmHg
DO	<u>100</u>	% saturation
DO	<u>9.9</u>	mg/L
Specific conductivity (SPC)	<u>154</u>	µS/cm
Conductivity	<u>89.3</u>	µS/cm
pH	<u>8.3</u>	
ORP		mV
Air temp		°C

Last calibrated: 30 Jul DO: day 4

Photos taken: Site ☒ Temp Probe ☒

Weather: Sunny, warm

Substrate type: boulders / cobbles

Number of Surbers collected: 3

Aspect: N

Slope: steep

Biofilm rank: Little Medium Green

Pfankuck Index

	Excellent	Good	Fair	Poor	Score
Angularity	Lots of edges (1)	Some edges, some round (2)	Rounded edges (3)	All round (4)	<u>1</u>
Brightness (Dull = biofilm)	Most surfaces dull (1)	Mostly dull, <35% bright (2)	50/50 dull & bright (3)	Mostly bright, >65% (4)	<u>3</u>
Scour	<5% evidence of scour (6)	5-30% of bed scoured (12)	30-50% of bed scoured (18)	>50% of bed scoured (24)	<u>6</u>
Consolidation of substrate	Lots of sizes, tightly packed (2)	Moderately packed, some size overlap (4)	Mostly loose, not much overlap (6)	Totally loose, easily moved (8)	<u>4</u>
Aquatic Veg	Abundant veg, moss in swift water (1)	Common veg or algae, lots in pools (2)	Spotty, in backwater or seasonal algae (3)	Perennial types, very scarce or absent (4)	<u>1</u>

Temp logger number: 20724665 Coordinates: UTM: N _____ W - _____

Description of logger location: Same lower pool as previous, ~ 20 m below where people cross stream

logger removed #: 10767834 → LOGGER WAS OUT OF WATER

Suspended Solids:

Filter number	<u>4</u>	<u>5</u>	<u>6</u>
Volume filtered (mL)	<u>600</u>	<u>600</u>	<u>700</u>

orig max (g)

.035

.035

.035

(GFF filters)

Nutrient samples collected: 1 } "nuts" DOC

DOC collected: 1

Chl a collected: 3

Algae collected: 3

Teton Stoneflies 2018

WYNDD-Tronstad 307-766-3115

Date: 31 July 2018

Stream Profile: (@ cave mouth)
(left edge) L

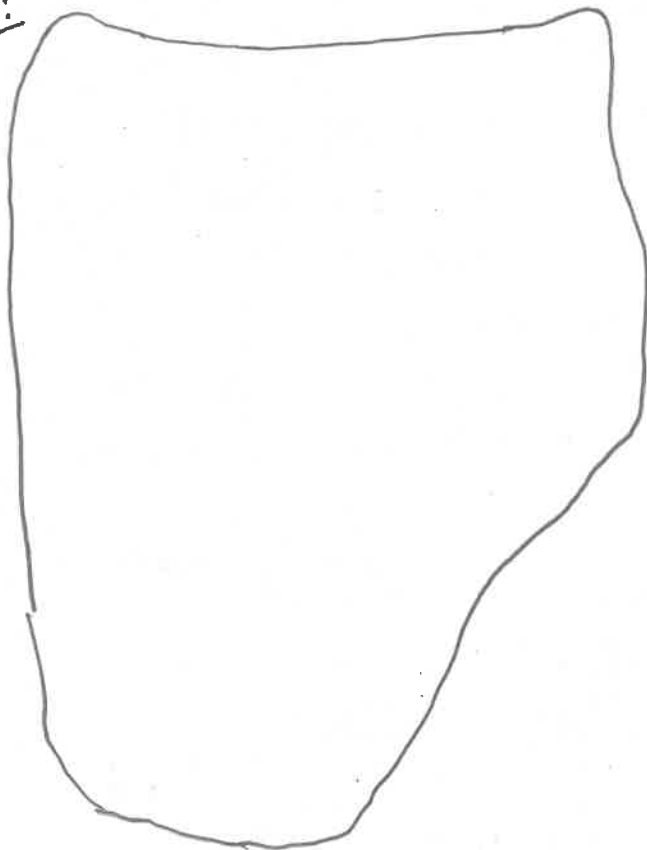
looking down stream R

(right edge)

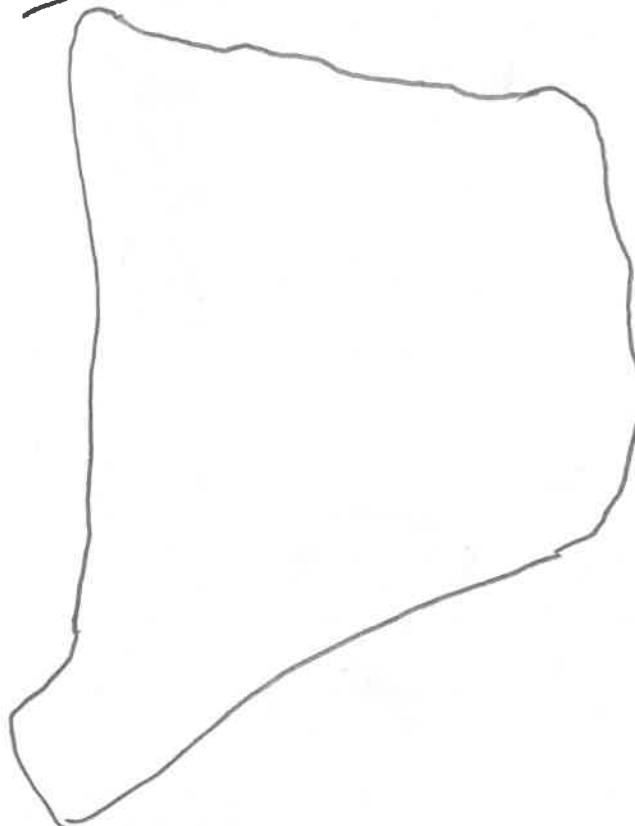
Distance (cm)	0	50	100	150	200	225			
Depth (cm)	0	3	3	4	3	0			

Notes (continue on back): (traces for ch1a in Taylor's notebook)

#1:



#2:



#3:



Teton Stoneflies 2018
WYNDD-Tronstad 307-766-3115

Date: 30 July 2018

Time: Arrived: ~NDON Departed: ~2:00 Collectors: Deb, Scott, Lydia, Taylor

Stream: N. Fork Teton Creek Location Description: long-term snowmelt site

Coordinates: N (same as ever...) W - Datum:

Elevation: (") ft Site name on GPS: .

Water quality (Recorded with a YSI Pro Plus Multiprobe)

Parameter	Value	Units
Water temperature	<u>9.2</u>	°C
Barometric pressure	<u>541</u>	mmHg
DO	<u>106</u>	% saturation
DO	<u>8.7</u>	mg/L
Specific conductivity (SPC)	<u>8.3</u>	µS/cm
Conductivity	<u>5.8</u>	µS/cm
pH	<u>6.9</u>	
ORP		mV
Air temp		°C

Last calibrated: (day of) DO: (day of)

Photos taken: Site ☒ Temp Probe ☒

Weather: Sunny, calm, ~23°C

Substrate type: cobblestones / some fines

Number of Surbers collected: 3

Aspect:

Slope:

Biofilm rank: Little Medium Green

Pfankuck Index

	Excellent	Good	Fair	Poor	Score
Angularity	Lots of edges (1)	Some edges, some round (2)	Rounded edges (3)	All round (4)	<u>2</u>
Brightness (Dull = biofilm)	Most surfaces dull (1)	Mostly dull, <35% bright (2)	50/50 dull & bright (3)	Mostly bright, >65% (4)	<u>1</u>
Scour	<5% evidence of scour (6)	5-30% of bed scoured (12)	30-50% of bed scoured (18)	>50% of bed scoured (24)	<u>6</u>
Consolidation of substrate	Lots of sizes, tightly packed (2)	Moderately packed, some size overlap (4)	Mostly loose, not much overlap (6)	Totally loose, easily moved (8)	<u>2</u>
Aquatic Veg	Abundant veg, moss in swift water (1)	Common veg or algae, lots in pools (2)	Spotty, in backwater or seasonal algae (3)	Perennial types, very scarce or absent (4)	<u>2</u>

Temp logger number: 20224649 Coordinates: UTM's: N W -

Description of logger location: Same as always / d/s of big boulder @ u/s end of sample

→ Took out #: 20174693

Suspended Solids:

Filter number	1	2	3
Volume filtered (mL)	<u>700</u>	<u>600</u>	<u>600</u>

filter mass(g) .035 .035 .034

Nutrient samples collected: 1 } nuts/DOC

DOC collected: 1

Chl a collected: 3

Algae collected: 3

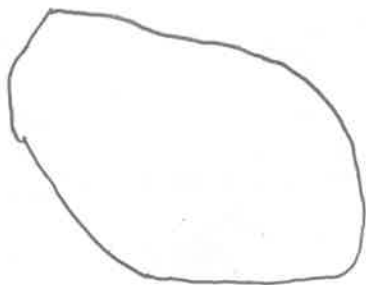
Stream Profile: (left edge) R. bank *looking down stream* (right edge)

Distance (cm)	0	25	50						
Depth (cm)	11	14	13						

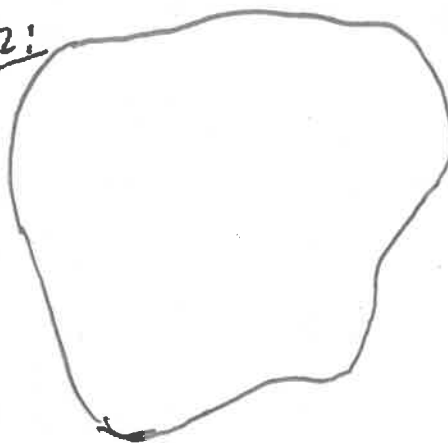
Notes (continue on back):

(Tracings for chla in Scott's Notebook)

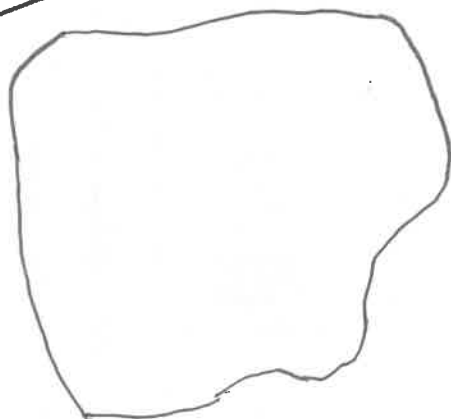
#1:



#2:



#3:



Date: 2 Aug 2018

Time: Arrived: 1:00pm Departed: 4:30

Collectors: Lusha + Lydia

Stream: Delta Lake Inlet

Location Description: above lake where boulders end

Coordinates: N 43.73330

W - 110.77650

Datum: NAD83

Elevation: 2691 ft

Site name on GPS: Delta Lake

Water quality (Recorded with a YSI Pro Plus Multprobe)

Parameter	Value	Units
Water temperature	<u>2.6</u>	°C
Barometric pressure	<u>550.9</u>	mmHg
DO	<u>17.9</u>	% saturation
DO	<u>17.7</u>	mg/L
Specific conductivity (SPC)	<u>7.5</u>	µS/cm
Conductivity	<u>4.3</u>	µS/cm
pH	<u>7.42</u>	
ORP	<u>36.3</u>	mV
Air temp	<u>~75°F</u>	<u>x</u>

Last calibrated: 7/18 DO: 8/2

Photos taken: Site Temp Probe

Weather: Sunny, little rain last night

Substrate type: Cobble

Number of Surbers collected: 3

Aspect: —

Slope: —

Biofilm rank: Little Medium Green

Pfankuck Index

	Excellent	Good	Fair	Poor	Score
Angularity	Lots of edges (1)	Some edges, some round (2)	Rounded edges (3)	All round (4)	<u>2</u>
Brightness (Dull = biofilm)	Most surfaces dull (1)	Mostly dull, <35% bright (2)	50/50 dull & bright (3)	Mostly bright, >65% (4)	<u>4</u>
Scour	<5% evidence of scour (6)	5-30% of bed scoured (12)	30-50% of bed scoured (18)	>50% of bed scoured (24)	<u>6</u>
Consolidation of substrate	Lots of sizes, tightly packed (2)	Moderately packed, some size overlap (4)	Mostly loose, not much overlap (6)	Totally loose, easily moved (8)	<u>5</u>
Aquatic Veg	Abundant veg, moss in swift water (1)	Common veg or algae, lots in pools (2)	Spotty, in backwater or seasonal algae (3)	Perennial types, very scarce or absent (4)	<u>1</u>

moss on many rocks in Surber

moss on edges of stream

Temp logger number: 10972590 Coordinates: UTM's: N 43.73330 W 110.77650

Description of logger location: In pool where stream changes from boulder field (steep) to level.

Suspended Solids: Delta #1

Nutrient samples collected: ✓

Filter number	<u>Delta #1</u>	<u>Delta #2</u>	<u>Delta #3</u>
Volume filtered (mL)	<u>8 x 60 mL</u>	<u>8 x 60 mL</u>	<u>8 x 60 mL</u>

DOC collected: ✓

Chl a collected: ✓

Algae collected: ✓

Mass (g) 0.03407 0.03441 0.03424

→ Could not retrieve logger, water too deep. Pick up 2 loggers next year placing 2nd logger

Date: 2 Aug 18

Stream Profile: (left edge)

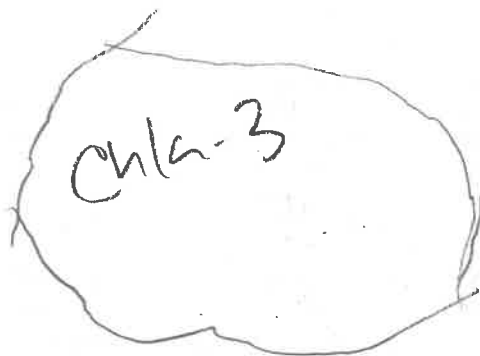
looking down stream

(right edge)

Distance (cm)	50	100	150	190	230	270	310	350	375
Depth (cm)	13	10	16	16	23	22	14	10	14

↳ taken below pool where datalogger was placed

Notes (continue on back):



Stream seems higher this year. Some logs in middle of stream appear to be placed there by high water. Water cloudy with glacier flour. Last year was a high snowpack year, but not as high as the year before. Only saw midges in Surber samples. Found 1 Newmanid in ~ 30 minutes of searching

Teton Stoneflies 2018
WYNDD-Tronstad 307-766-3115

Date: 2 Aug 2018

Time: Arrived: ~ 2:30 Departed: ~ 3:00 Collectors: Deb, Scott, Taylor

Stream: Middle Teton Location Description: long-term site

Coordinates: N _____ W - _____ Datum: _____

Elevation: _____ ft Site name on GPS: MTG (deb)

Water quality (Recorded with a YSI Pro Plus Multprobe)

Parameter	Value	Units
Water temperature	<u>3.5</u>	°C
Barometric pressure	<u>535</u>	mmHg
DO	<u>102</u>	% saturation
DO	<u>9.5</u>	mg/L
Specific conductivity (SPC)	<u>3.7</u>	µS/cm
Conductivity	<u>2.2</u>	µS/cm
pH	<u>7.4</u>	
ORP	<u>n/a</u>	mV
Air temp		°C

Last calibrated: today DO: today
 Photos taken: Site ☒ Temp Probe ☒
 Weather: partly cloudy, ~55°F
 Substrate type: cobbles, loose
 Number of Surbers collected: 3
 Aspect: South
 Slope: steep
 Biofilm rank: Little Medium Green

Pfankuck Index

	Excellent	Good	Fair	Poor	Score
Angularity	Lots of edges (1)	Some edges, some round (2)	Rounded edges (3)	All round (4)	<u>2</u>
Brightness (Dull = biofilm)	Most surfaces dull (1)	Mostly dull, <35% bright (2)	50/50 dull & bright (3)	Mostly bright, >65% (4)	<u>4</u>
Scour	<5% evidence of scour (6)	5-30% of bed scoured (12)	30-50% of bed scoured (18)	>50% of bed scoured (24)	<u>24</u>
Consolidation of substrate	Lots of sizes, tightly packed (2)	Moderately packed, some size overlap (4)	Mostly loose, not much overlap (6)	Totally loose, easily moved (8)	<u>6</u>
Aquatic Veg	Abundant veg, moss in swift water (1)	Common veg or algae, lots in pools (2)	Spotty, in backwater or seasonal algae (3)	Perennial types, very scarce or absent (4)	<u>3</u>

Temp logger number: (Scott has) 10972588 Coordinates: UTM: N _____ W - _____

Description of logger location: Same as past years, behind a big boulder

of logger removed: 20155967

Suspended Solids:

Filter number	<u>7</u>	<u>8</u>	<u>9</u>
Volume filtered (mL)	<u>450</u>	<u>400</u>	<u>500</u>

orig mass: .035 .035 .035
(g)

Nutrient samples collected: 1 } DOC / nubs
 DOC collected: 1
 Chl a collected: N=3 (onice right away in the "Lodnia color")
 Algae collected: N=3

Date: 2 Aug 2018

Stream Profile: (left edge)

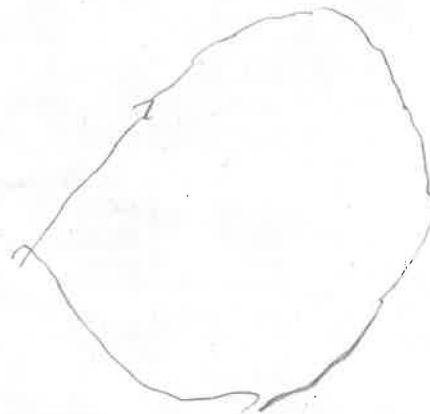
looking down stream

(right edge) ↓

Distance (cm)	0	100	200	300	400	500	600	700	780
Depth (cm)	0	4	2	10	5	15	7	7	5

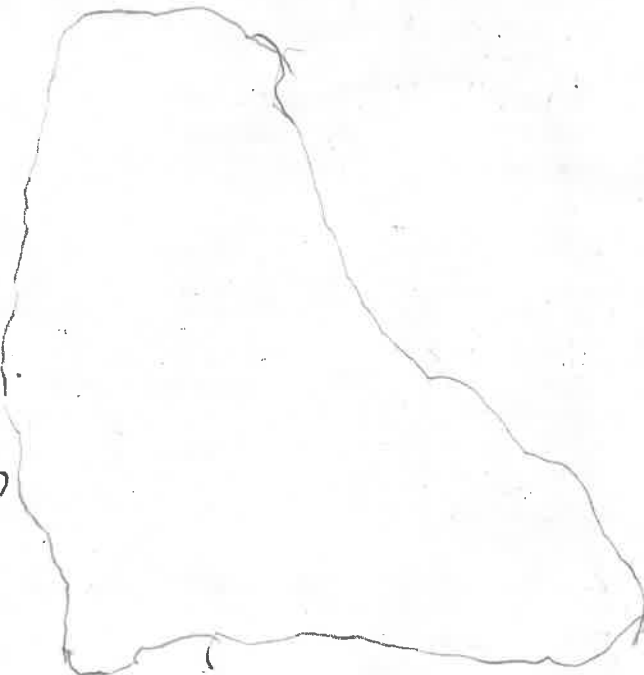
Notes (continue on back):

chla #12



chla
#2

chla
#3



Teton Stoneflies 2018
WYNDD-Tronstad 307-766-3115

Date: 3 Aug 2018

Time: Arrived: 5:10pm Departed: 8:45 Collectors: LT + SH

Stream: Grizzly Bear Creek Location Description: Below Paintbrush Divide

Coordinates: N 43.79677 W - 110.80704 Datum: NAD83

Elevation: 2950 m Site name on GPS: Grizzly

Water quality (Recorded with a YSI Pro Plus Multprobe)

Parameter	Value	Units
Water temperature	<u>4.8</u>	°C
Barometric pressure	<u>534.3</u>	mmHg
DO	<u>109</u>	% saturation
DO	<u>9.8</u>	mg/L
Specific conductivity (SPC)	<u>13.6</u>	µS/cm
Conductivity	<u>8.4</u>	µS/cm
pH	<u>7.97</u>	
ORP	<u>262.0</u>	mV
Air temp	<u>160 °F</u>	°C

Last calibrated: 8/3 DO: 8/3

Photos taken: Site ☒ Temp Probe same as 2017

Weather: Overcast, windy

Substrate type: large gravel, some small cobble

Number of Surbers collected: 3

Aspect: —

Slope: —

Biofilm rank: Little Medium Green

Pfankuck Index

	Excellent	Good	Fair	Poor	Score
Angularity	Lots of edges (1)	Some edges, some round (2)	Rounded edges (3)	All round (4)	<u>1</u>
Brightness (Dull = biofilm)	Most surfaces dull (1)	Mostly dull, <35% bright (2)	50/50 dull & bright (3)	Mostly bright, >65% (4)	<u>4</u>
Scour	<5% evidence of scour (6)	5-30% of bed scoured (12)	30-50% of bed scoured (18)	>50% of bed scoured (24)	<u>6</u>
Consolidation of substrate	Lots of sizes, tightly packed (2)	Moderately packed, some size overlap (4)	Mostly loose, not much overlap (6)	Totally loose, easily moved (8)	<u>4</u>
Aquatic Veg	Abundant veg, moss in swift water (1)	Common veg or algae, lots in pools (2)	Spotty, in backwater or seasonal algae (3)	Perennial types, very scarce or absent (4)	<u>3</u>

some moss in middle of stream

Temp logger number: 20174692 Coordinates: UTM's: N 43.79771 W - 110.80724

Description of logger location: Downstream, not far before stream drops elevation
Removal = 20155361

Suspended Solids:

Filter number	<u>Griz 1</u>	<u>Griz 2</u>	<u>Griz 3</u>
Volume filtered (mL)	<u>600</u>	<u>600</u>	<u>600</u>

Filter mass (g) 0.03442 0.03444 0.03447

stream very shallow + wide

Nutrient samples collected: ☒

DOC collected: ☒

Chl a collected: ☒

Algae collected: ☒

Stream Profile: (left edge)

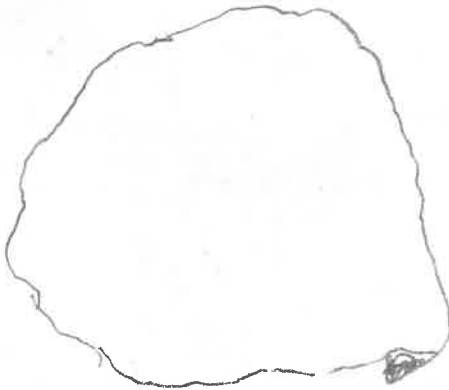
looking down stream

(right edge)

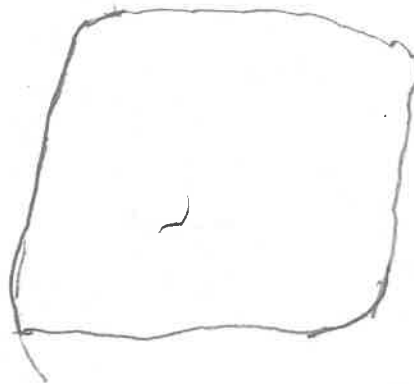
Distance (cm)	0	25	50	75	100	125	150	175	200
Depth (cm)	3	2	2.5	4	6	9	5	2	4

Notes (continue on back):

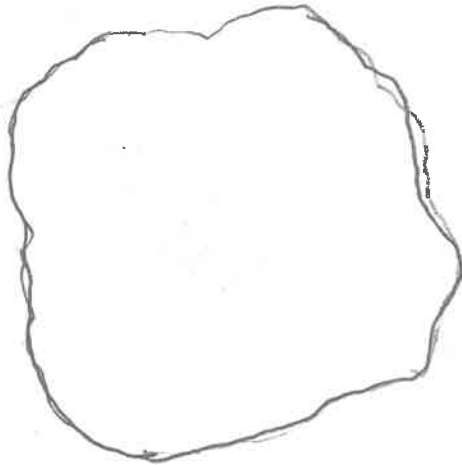
chl. a #1:



chl. a #2:



chl. a #3:



lots of blackflies!

Teton Stoneflies 2018
WYNDD-Tronstad 307-766-3115

Date: 4 Aug 2018

Time: Arrived: 10:15 Departed: _____ Collectors: AT & SH

Stream: Paintbrush Rock Glacier Location Description: Below trail after junction to Holly Lda

Coordinates: N 43.78539 W - 110.79337 Datum: NAD83

Elevation: 2802 ft Site name on GPS: Paintbrush RG Glacier

Water quality (Recorded with a YSI Pro Plus Multprobe)

Parameter	Value	Units
Water temperature	<u>6.1</u>	°C
Barometric pressure	<u>546.7</u>	mmHg
DO	<u>149</u>	% saturation
DO	<u>13.3</u>	mg/L
Specific conductivity (SPC)	<u>27.6</u>	µS/cm
Conductivity	<u>17.7</u>	µS/cm
pH	<u>7.54</u>	
ORP	<u>112.7</u>	mV
Air temp	<u>~ 70 °F</u>	<u>X</u>

Last calibrated: 8/3 DO: 8/4

Photos taken: Site ☒ Temp Probe from 2017

Weather: Sunny, calm, clear sky

Substrate type: Cobble

Number of Surbers collected: 3

Aspect: —

Slope: —

Biofilm rank: Little Medium Green

Pfankuck Index

	Excellent	Good	Fair	Poor	Score
Angularity	Lots of edges (1)	Some edges, some round (2)	Rounded edges (3)	All round (4)	<u>1</u>
Brightness (Dull = biofilm)	Most surfaces dull (1)	Mostly dull, <35% bright (2)	50/50 dull & bright (3)	Mostly bright, >65% (4)	<u>3</u>
Scour	<5% evidence of scour (6)	5-30% of bed scoured (12)	30-50% of bed scoured (18)	>50% of bed scoured (24)	<u>12</u>
Consolidation of substrate	Lots of sizes, tightly packed (2)	Moderately packed, some size overlap (4)	Mostly loose, not much overlap (6)	Totally loose, easily moved (8)	<u>4</u>
Aquatic Veg	Abundant veg, moss in swift water (1)	Common veg or algae, lots in pools (2)	Spotty, in backwater or seasonal algae (3)	Perennial types, very scarce or absent (4)	<u>B</u>

Temp logger number: 20155864 Coordinates: UTM's: N 43.78539 W - 110.79337

Description of logger location: Same as 2017, in pool in grassy area

2016 Logger retrieved → 20174694
2017 Logger retrieved → 20174694

Suspended Solids:

Filter number	Point #1	Point #2	Point #3
Volume filtered (mL)	<u>600</u>	<u>600</u>	<u>600</u>

Filter Mass (g) 0.03438 0.03483 0.03469

Nutrient samples collected: ☒

DOC collected: ☒

Chl a collected: ☒

Algae collected: ☒

Not correct!
Temp logger 2016: 0516559 4040000
2017: 0516614 4040004

~~Adria collected in green water not for 1:1~~

Stream Profile: (left edge)

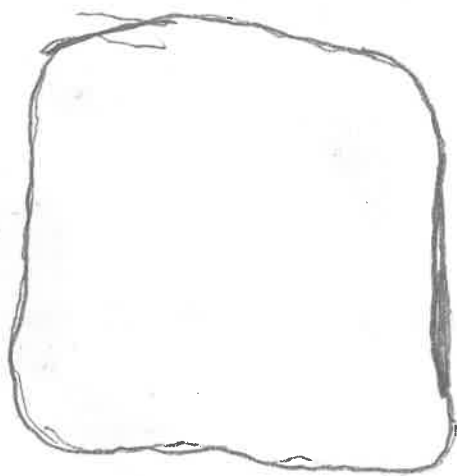
looking down stream

(right edge)

Distance (cm)	0	50	100	150	200	235			
Depth (cm)	4.5	3	3	3	4	4			

Notes (continue on back):

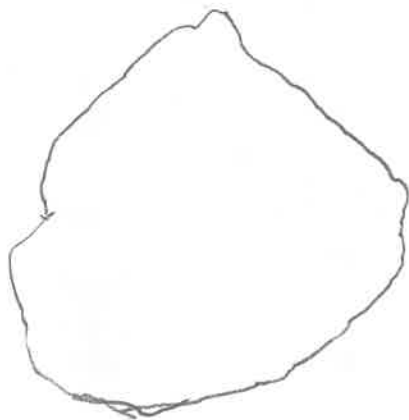
chl. a #1:



chl. a #2:



chl. a #3:



Found both 2017 + 2016
loggers! Scott could not
find any sediments after
~15-30 minutes of looking.
Water ~~probably~~ from multiple
sources, rock glacier, snowmelt
+ other glacier inputs above.

Teton Stoneflies 2018
WYNDD-Tronstad 307-766-3115

Date: 4 Aug 2018

Time: Arrived: 18:00 Departed: 19:45 Collectors: Deb, Taylor

Stream: S. Fork Teton Creek Location Description: snowmelt in AK Basin

Coordinates: N _____ W - _____ Datum: _____

Elevation: _____ ft Site name on GPS: _____

Water quality (Recorded with a YSI Pro Plus Multitprobe)

Parameter	Value	Units
Water temperature	<u>12.3</u>	°C
Barometric pressure	<u>531.6</u>	mmHg
DO	<u>101</u>	% saturation
DO	<u>7.5</u>	mg/L
Specific conductivity (SPC)	<u>550 54.5</u>	µS/cm
Conductivity	<u>41.5</u>	µS/cm
pH	<u>7.9</u>	
ORP		mV
Air temp		°C

Last calibrated: 8/3 DO: now

Photos taken: Site ☒ Temp Probe ☒

Weather: Sunny, breezy, cool

Substrate type: _____

Number of Surbers collected: 3

Aspect: _____

Slope: _____

Biofilm rank: Little Medium Green

Pfankuck Index

	Excellent	Good	Fair	Poor	Score
Angularity	Lots of edges (1)	Some edges, some round (2)	Rounded edges (3)	All round (4)	<u>2</u>
Brightness (Dull = biofilm)	Most surfaces dull (1)	Mostly dull, <35% bright (2)	50/50 dull & bright (3)	Mostly bright, >65% (4)	<u>3</u>
Scour	<5% evidence of scour (6)	5-30% of bed scoured (12)	30-50% of bed scoured (18)	>50% of bed scoured (24)	<u>6</u>
Consolidation of substrate	Lots of sizes, tightly packed (2)	Moderately packed, some size overlap (4)	Mostly loose, not much overlap (6)	Totally loose, easily moved (8)	<u>4</u>
Aquatic Veg	Abundant veg, moss in swift water (1)	Common veg or algae, lots in pools (2)	Spotty, in backwater or seasonal algae (3)	Perennial types, very scarce or absent (4)	<u>3</u>

Temp logger number: new: 20155865 Coordinates: UTM's: N _____ W - _____

Description of logger location: deep little plunge pool just d/s of nice sitting places
old logger #1 20174695 for processing samples (River)

Suspended Solids:

Filter number	<u>16</u>	<u>17</u>	<u>18</u>
Volume filtered (mL)	<u>500</u>	<u>500</u>	<u>500</u>

dry mass: .034 .034 .034
(g)

Nutrient samples collected: 1

DOC collected: 1

Chl a collected: N=3

Algae collected: N=3

(formalin)

"DOC/ nuts"

Date: 4 Aug 2018

Stream Profile: (left edge)

looking down stream

(right edge)

Distance (cm)	0	50	100	120	140				
Depth (cm)	4	16	12	9	3				

Notes (continue on back):

chl a #1

chl a #2

chl a #3

Teton Stoneflies 2018
WYNDD-Tronstad 307-766-3115

Date: 4 Aug 2018

Time: Arrived: 13:30 Departed: 15:00 Collectors: Deb / Taylor

Stream: S. Cascade icy seep Location Description: 20 m of open surface flow just u/s of any (2015) sample site

Coordinates: N _____ W - _____ Datum: _____

Elevation: _____ ft Site name on GPS: SCS CRG (deb)

Water quality (Recorded with a YSI Pro Plus Multitprobe)

Parameter	Value	Units
Water temperature	<u>0.1</u>	°C
Barometric pressure	<u>524.1</u>	mmHg
DO	<u>98 %</u>	% saturation
DO	<u>9.9</u>	mg/L
Specific conductivity (SPC)	<u>87</u>	µS/cm
Conductivity	<u>44.5</u>	µS/cm
pH	<u>8.65</u>	
ORP	<u>na</u>	mV
Air temp		°C

Last calibrated: 8/3 DO: 8/3

Photos taken: Site ☒ Temp Probe _____

Weather: Sunny / windy

Substrate type: cobbles

Number of Surbers collected: 3 - Note *

Aspect: _____

Slope: _____

Biofilm rank: Little Medium Green low on bags

Pfankuck Index

	Excellent	Good	Fair	Poor	Score
Angularity	Lots of edges (1)	Some edges, some round (2)	Rounded edges (3)	All round (4)	<u>1</u>
Brightness (Dull = biofilm)	Most surfaces dull (1)	Mostly dull, <35% bright (2)	50/50 dull & bright (3)	Mostly bright, >65% (4)	<u>4</u>
Scour	<5% evidence of scour (6)	5-30% of bed scoured (12)	30-50% of bed scoured (18)	>50% of bed scoured (24)	<u>6</u>
Consolidation of substrate	Lots of sizes, tightly packed (2)	Moderately packed, some size-overlap (4)	Mostly loose, not much overlap (6)	Totally loose, easily moved (8)	<u>4</u>
Aquatic Veg	Abundant veg, moss in swift water (1)	Common veg or algae, lots in pools (2)	Spotty, in backwater or seasonal algae (3)	Perennial types, very scarce or absent (4)	<u>14</u>

Temp logger number: 20174697 Coordinates: UTM: N (just u/s of original site - 2015) W - _____

Description of logger location: wedged in the angle of an in-stream boulder w/ right-angle cut. Just u/s of several pix of Taylor pointing from various angles

Suspended Solids:

Filter number	<u>13</u>	<u>14</u>	<u>15</u>
Volume filtered (mL)	<u>400</u>	<u>300</u>	<u>400</u>

avg mass (g) | .035 .034 .035

Nutrient samples collected: 1 } "DOC / nit3"

DOC collected: 1

Chl a collected: N=3

Algae collected: N=3

(formalin)

Date: 4 Aug '18

Stream Profile: (left edge)

looking down stream

(right edge)

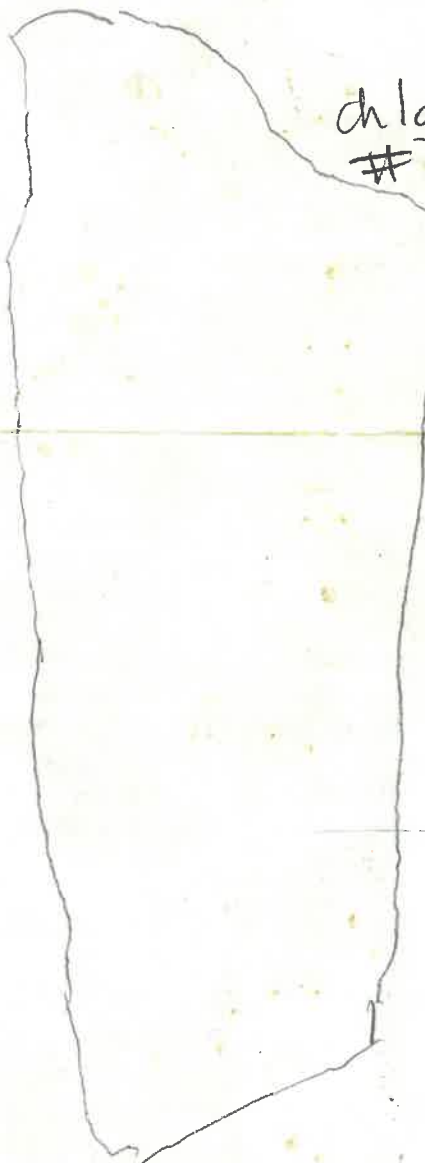
Distance (cm)	0	50	80	100	150				
Depth (cm)	0	6	10	6	3				

Notes (continue on back):

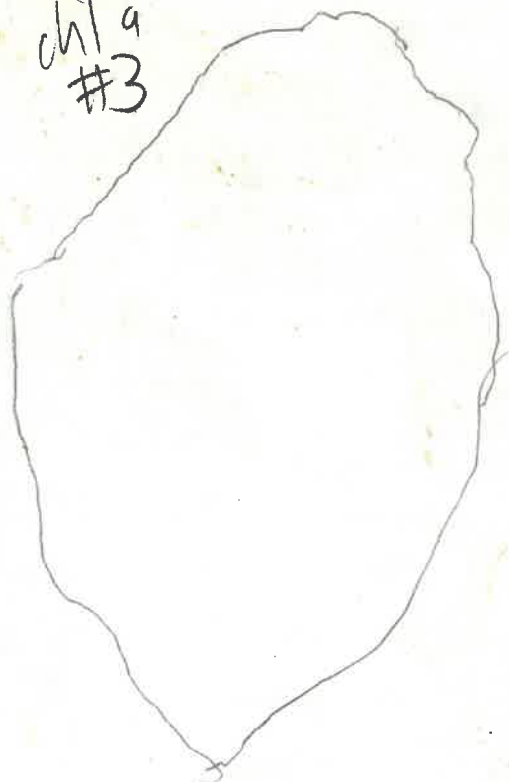
chla #12



chla #2



chla #3



Teton Stoneflies 2018
WYNDD-Tronstad 307-766-3115

Date: 3 Aug 2018
(Note: Did all Biol "stuff" on 3 Aug. / phys stuff on 5 Aug)

Time: Arrived: 6:30 pm Departed: 8:00 pm Collectors: Deb + Taylor

Stream: AK Basin S. dry seep Location Description: The "original"!

Coordinates: N _____ W - _____ Datum: _____

Elevation: _____ ft Site name on GPS: _____

Water quality (Recorded with a YSI Pro Plus Multprobe)

Parameter	Value	Units
Water temperature	<u>1.8</u>	°C
Barometric pressure	<u>540.2</u>	mmHg
DO	<u>100 %</u>	% saturation
DO	<u>9.9</u>	mg/L
Specific conductivity (SPC)	<u>210</u>	µS/cm
Conductivity	<u>116</u>	µS/cm
pH	<u>7.9</u>	
ORP	<u>219</u>	mV
Air temp	<u>~15°C</u>	°C

Last calibrated: this AM DO: this AM

Photos taken: Site ☒ Temp Probe _____

Weather: windy, partly cloudy

Substrate type: boulder / cobble / gravel

Number of Surbers collected: 3

Aspect: N

Slope: _____

Biofilm rank: Little ☒ Medium ☐ Green ☐

Pfankuck Index

	Excellent	Good	Fair	Poor	Score
Angularity	Lots of edges (1)	Some edges, some round (2)	Rounded edges (3)	All round (4)	<u>1</u>
Brightness (Dull = biofilm)	Most surfaces dull (1)	Mostly dull, <35% bright (2)	50/50 dull & bright (3)	Mostly bright, >65% (4)	<u>3</u>
Scour	<5% evidence of scour (6)	5-30% of bed scoured (12)	30-50% of bed scoured (18)	>50% of bed scoured (24)	<u>6</u>
Consolidation of substrate	Lots of sizes, tightly packed (2)	Moderately packed, some size overlap (4)	Mostly loose, not much overlap (6)	Totally loose, easily moved (8)	<u>4</u>
Aquatic Veg	Abundant veg, moss in swift water (1)	Common veg or algae, lots in pools (2)	Spotty, in backwater or seasonal algae (3)	Perennial types, very scarce or absent (4)	<u>2</u>

(log on 5 Aug) NBW: Placed @ ~9:45 NB ad weather
Temp logger number: 20155863 Coordinates: UTM's: N _____ W - _____

Description of logger location: Same @ ~3 m d/s of emergence of surface flow
old logger pulled: 20155966 (rock was broken in 1/2!)

Suspended Solids:

Filter number	10	11	12
Volume filtered (mL)	<u>600</u>	<u>700</u>	<u>700</u>

dry mass (g) .035 .035 .035

Nutrient samples collected: ☒ } N=2

DOC collected: ☒

Chl a collected: N=3

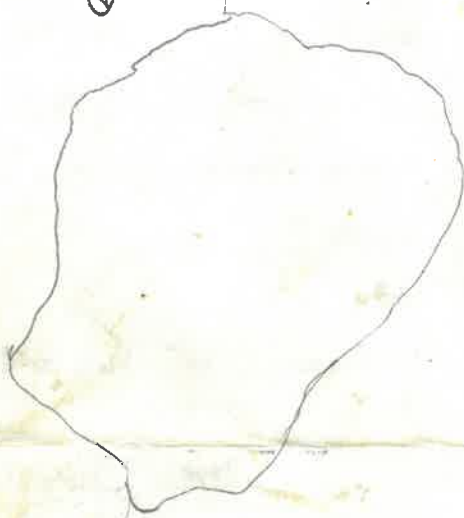
Algae collected: N=3

Stream Profile: (left edge) *looking down stream* (right edge)

Distance (cm)	0	50	100	150	180				
Depth (cm)	3	5	7	5	4				

Notes (continue on back):

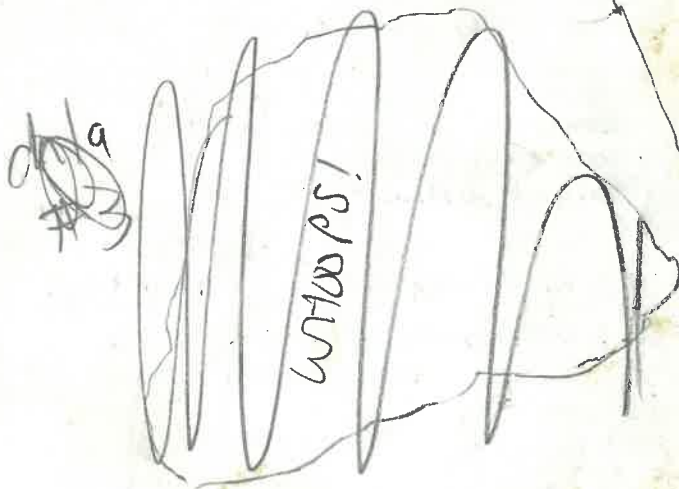
chla #1



chla #2



chla #3



Teton Stoneflies 2018
WYNDD-Tronstad 307-766-3115

Date: 6 Aug 2018

Time: Arrived: 11:00 am Departed: _____

Collectors: LT, SA, Taylor Price, Coupa (WPR)

Stream: Skillet Glacier

Location Description: Below glacier

Coordinates: N 43.83954

W - 110.75659

Datum: NAD83

Elevation: 2721 am

Site name on GPS: Skillet Glacier

Water quality (Recorded with a YSI Pro Plus Multiprobe)

Parameter	Value	Units
Water temperature	<u>8.5</u>	°C
Barometric pressure	<u>555.1</u>	mmHg
DO	<u>131</u>	% saturation
DO	<u>11.2</u>	mg/L
Specific conductivity (SPC)	<u>4.5</u>	µS/cm
Conductivity	<u>3.1</u>	µS/cm
pH	<u>6.87</u>	
ORP	<u>118.4</u>	mV
Air temp	<u>~70</u>	°C

Last calibrated: 8/05 DO: 8/6

Photos taken: Site ☒ Temp Probe ☒

Weather: Sunny, clear, light breeze

Substrate type: Cobble, boulders

Number of Surbers collected: 3

Aspect: —

Slope: —

Biofilm rank: Little Medium Green

Pfankuck Index

	Excellent	Good	Fair	Poor	Score
Angularity	Lots of edges (1)	Some edges, some round (2)	Rounded edges (3)	All round (4)	<u>2</u>
Brightness (Dull = biofilm)	Most surfaces dull (1)	Mostly dull, <35% bright (2)	50/50 dull & bright (3)	Mostly bright, >65% (4)	<u>3</u>
Scour	<5% evidence of scour (6)	5-30% of bed scoured (12)	30-50% of bed scoured (18)	>50% of bed scoured (24)	<u>24</u>
Consolidation of substrate	Lots of sizes, tightly packed (2)	Moderately packed, some size overlap (4)	Mostly loose, not much overlap (6)	Totally loose, easily moved (8)	<u>4</u>
Aquatic Veg	Abundant veg, moss in swift water (1)	Common veg or algae, lots in pools (2)	Spotty, in backwater or seasonal algae (3)	Perennial types, very scarce or absent (4)	<u>3</u>

lightly paired

Temp logger number: 20416499 Coordinates: UTM's: N 43.83950 W - 110.75649

Description of logger location: Above last year's site

Logger retrieved: 201559680

Suspended Solids:

Filter number	Skillet 1	Skillet 2	Skillet 3
Volume filtered (mL)	<u>600</u>	<u>600</u>	<u>600</u>

Filter mass (g) 0.03380 0.03401 0.03424

Nutrient samples collected: ☒

DOC collected: ☒

Chl a collected: ☒

Algae collected: ☒

Date: _____

Stream Profile: (left edge)

looking down stream

(right edge)

Distance (cm)									
Depth (cm)									

Notes (continue on back):



Moved log +
site upstream from
last year. Took 2 hours
to collect 20 *Pedicia*
Substrate tightly packed
so difficult to collect
surbers. Lots of
fat *Rhyacophila* in
stream.

