Teton Stoneflies WYNDD-Trons	ad 307-766-	3115			Date:_		6 Au	82020	
Time: Arrived:_	11:15	Depa	arted: ~ 3	_	Collectors	oxlisha s	Shannan Taulor,	Deb,	Sarah, Miley,
Stream: Win	d Cavi	2		Loc	ation Desc	Julia ription:	Shannon Tanker, Scott, Keren	,	
Coordinates: N	 		W	7: - <u></u>			Datum:		
Elevation:		ft	Site	name	e on GPS:_				
Water quality (R	ecorded with	a YSI I	Pro Plus Mulitpro	obe)			01	18	1-
Parameter		Value			its	Last ca	librated: 8/1	DO: 0	16
Water temperatu	Water temperature 3.0		0.0	°C			,		
Barometric press	ure	555	5,2	mn	ıНg		taken: Site_\(\square \)		
DO		8	4.0	% 5	saturation	Weathe	r: Sunny N	orelzn	\
DO			1.32	mg	/L	Substra	te type: <u>Bedio (</u>	k, col	oble, builders
Specific conduct	ivity (SPC)		53.8	μS/	'cm		ers collected:		
Conductivity			89.1	μS/	'cm				
pH			3.53				m rank: Little Medium Green		
ORP			7,5	mV			es collected: No		
Air temp				°C		Slar	re 25°	0	
Pfankuck Index									
	Excelle		Good		Fa	ir	Poor	Score	Notes
Angularity	Lots of edg	ges (1)	Some edges, so round (2)	me	Rounded	edges (3)	All round (4)	1	
Brightness (Dull = biofilm)	Most surfacture dull (1)	ces	Mostly dull, <3 bright (2)	35% 50/50 dull & bright (3)			Mostly bright, >65% (4)	1	
Scour	<5% evides	nce of	5-30% of bed scoured (12)		30-50% o scoured (>50% of bed	12	
Consolidation	Lets of size	•c	Moderately	-	Mostly lo		scoured (24) Totally loose,	10,	
of substrate	tightly pacl	,	packed, somes overlap (4)	ize	much eve		easily moved (8)	6	
Aquatic Veg	Abundant v	- I	Common veg or	r	Spotty, in		Perennial types,		
	moss in sw water (1)	ift	algae, lots in po	ols	backwater		very scarce or		
Deployed Temp 1		er: <u>20</u>		ordin	seasonal a		absent (4)		
Retrieved Temp	logger numb	er: <u>No</u>	found		No	otes:			
Description of log	ger location	: <u>log</u>	ighted in	USL	ral 200	below	mathy a	EVE	
Photo numbers of	temp logger	placem	ent:						
Suspended Solids	:						Nutrient samples co	ollected:_	17-LT 27
Filter number			2		3		DOC collected:		
Volume filtered ((mL)	1000			1000		Chl a collected:	1	
			1000					/ 20	Cl
							Algae collected:	Bu	Shannon

WYNDD-Tronstad 307-766-3115

Date: 6 Ay 2020

adest

Stream Profile: \ (left edge)

looking down stream

(right edge)

Distance (cm)	0	75	120	186			
Depth (cm)	5	2.5	1	0			
Time (sec)	q	7	8	0			

5 vd

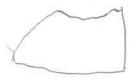
5-10

3 Rock tracings (chlorophyll a):

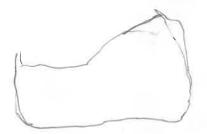
#1

2

#3







Addria adult on care wall. The whole team is here today to train. Could not find temp logger despite a 18t of searching. I Swiper collected in care much in mass. Other below mouth of core. Karen is collecting samples for field web (isotopes + gut contents). Taylor is collecting microbae samples. Shannan is collecting Diatoms.

Julian Olsen Mikes Castillon 2020

Teton Stoneflies 2018	
WYNDD-Tronstad 307-766-3115	

Time: Arrived:_	1:40	Dep	parted: 4:14		Collectors	:Scott, o	ilia, Lusha, Kar	en, S	rah + Mito
Stream: 60							selan Muse		
Coordinates: N_		J	V						
Elevation:		f	t Site	name	on GPS:_				
Water quality (Re	ecorded	l with a YSI	Pro Plus Mulitor	robe)			7:	4	73. /
Parameter		Value		Un	its	Last ca	librated: 3/1	DO: 5	Ď/Q
Water temperatur	re ·		ILIM	°C					_
Barometric press	ure	<u></u>	536.0	(-/.()		Photos taken: Site Temp Probe			
DO		-	78.3	% s	saturation	Weather: Sunny Weath			
DO			8.08	mg	/L	Substra	te type: Color	gard	sand
Specific conducti	ivity (S	PC)	14.5	μS/	'cm	3 Surb	ers collected:	3×	
Conductivity		1	1,4	μS/	'cm	Diofilm	rank: Little M	edium	Gran
pΗ			8,28						Green
ORP		- 1	38.8	mV		Microb	es collected: N		
Air temp				°C					
Pfankuck Index)
		xcellent	Good		Fa		Poor	Score	Notes
Angularity	Lots o	of edges (1)	Some edges, s round (2)	ome	Rounded	edges (3)	All round (4)	2	
Brightness	Most	surfaces	Mostly dull, <	35%	50/50 dul	1 &	Mostly bright,	2	
(Dull = biofilm)	dull (1		bright (2)		bright (3)	Y	>65% (4)	2	
Scour	1	evidence of	5-30% of bed		30-50% o		>50% of bed		
	scour	` '	scoured (12)		scoured (scoured (24)	6	
Consolidation of substrate		bizes, packed (2)	Moderately packed, some overlap (4)	siz e	Mostly lo		Totally loose, easily moved (8)	6	
Aquatic Veg		lant veg, in swift (1)	Common veg of algae, lots in p		Spotty, in backwater seasonal a	r or	Perennial types, very scarce or absent (4)	3	moss gravn
Deployed Temp	logger r	number:20	155864 C	oordin	nates: UTM	s: N	W -		
Retrieved Temp		_							
Description of log							d rodes		
Photo numbers of		100	34 /4	2/		1	1		
									-7
Suspended Solids	:						Nutrient samples co	ollected:	dx
Filter number			2		3		DOC collected:		
Volume filtered	(mL)	800	800)	800)	Chl a collected:	<u> </u>	3x
							Algae collected:	/	3x

Date:_

Date:			

Stream Profile:	(left edg	ge)		*looki	ng down strean	n*		(right	t edge)
Distance (cm)	56	80	62	73	different	spot	alay	teich	**
Depth (cm)	6.5	10	4		1,				
Time (sec)	9.76	13.39	12.39						
3 Rock tracings	s (chlorophy	Dist	tance_	6.8			Ball I middl su use	floated le of S	down Years Volocity
-	41			#2			#3		3

Notes: Some of stream highly braided. Recorded flow in reach where they all join Conly one channel).

Scott scrubed rocks, dots of fine organic matter in stream + a lot of sand in stream.

Snowfield smaller than previous years and flow appears, lewer. Granite geology, this year has been dry and warm.

Teton Stoneflies WYNDD-Tronst	2018 ad 307-	766-3115				Date:_	s Aug Scott, Sarch, k	DO)
Time: Arrived:	9:30	De _l	oarted:		Collectors O	usha, S	scott, Sarah, k	loven,	Milen + Julia
Stream: Pair							er our comp		-
Coordinates: N_				W			Datum:_		
Elevation:		f	t Site	name	on GPS:				
Water quality (Re	ecorded						ibrated:	8	1/2
Parameter		Valu	e	Un	its	Last cal	ibrated:	DO:	1+
Water temperatur		(6.2	°C			taken: Site		
Barometric press	ure		48.5		шу		r: Sunny Cal		/
DO .	_		76.8					J-/	
DO	' ' (GT		9.46	mg		Substrat	te type: Faulder	Color	2
Specific conducti	ivity (SI		2,3	μS/		3 Surbe	ers collected:	K	-
Conductivity			20.8	μS/		Biofilm	rank Little M	edium	Green
ORP			8,46	mV		Microbe	es collected: No		
Air temp			8.2	°C					
Tim temp									
Pfankuck Index									
	Ex	cellent	Good		Fair		Poor	Score	Notes
Angularity	Lots o	f edges (1)	Some edges, s			ges (3)	All round (4)	2	
Brightness	1	surfaces	Mostly dull, <	<35%	50/50 dull &	Ż	Mostly bright,	2	Probably SNOW
(Dull = biofilm)	dull (1		bright (2)		bright (3)		>65% (4)		COOLOG #11 10 and
Scour		vidence of (6)	5-30% of bed scoured (12)		30-50% of b scoured (18)		>50% of bed scoured (24)	12	
Consolidation		f size s,	Moderately		Mostly loose		Totally loose,	1	
of substrate	tightly	packed (2)	packed, s ome overlap (4)	size	much overla	ıp (6)	easily moved (8)	6	
Aquatic Veg	Abunc	lant veg,	Common veg	or	Spotty, in		Perennial types,		moss on
	moss i	n swift	algae, lots in p	pools	backwater of		very scarce or	×	edge + in
	water	(1)	(2)	-	seasonal alg	ae (3)	absent (4)		man channel
Deployed Temp	logger n	number: 🔐	155865 c	oordir	nates: UTMs:]	N	W -		
Retrieved Temp)	Note	s: Ry	t where we	left	H
Description of lo	gger loc	ation:	green spot	bel	an Castad	4+6	iant balder,	upstra	nn of Square
Photo numbers of			0						· ·
	-								/
Suspended Solids	s:					-	Nutrient samples c	ollected:	
Filter number		1	2		3		DOC collected:		
Volume filtered	(mL)	1600	1400)	1400		Chl a collected:	3×	

Date:_____

(right edge) *looking down stream* (left edge) Stream Profile: istance Distance (cm) 108 108 188 acros Depth (cm) 16.12 Time (sec) Distance yds several times because of nerrow Channel 3 Rock tracings (chlorophyll a): #3

entering stream too. Stream goe's undergrand (rock) above where we sample, but is exposed on ridge. Jots of moss + grass graving in streambed. We're windering if stream has become intermittent, Little bio film in stream. Only blockflies + midges in Sibers, Lots of Hydranus feetidus in stream 4 than a remember tand i Lednia above Cascade ready to than a remember tand i Lednia above Cascade ready to

Teton Stoneflies WYNDD-Tronst	1005 566	3115			Date:		8 Aug	<u> </u>
Time: Arrived:	3pm	Depa	arted: 4:30	_	Collectors Augus	, Scott, Koren	Julia, 1	Miley + Snah
Stream: Ale C	rusher Co	c mt	SI, John	Loca	ation Description 🗓	selas Aralanon f	eld of	tal
Coordinates: N_	43.70	136	W	/\	0.77840	Datum:	MAD	23
Elevation: 2	537	ft	Site 1	name	on GPS: Gushe	^		
Water quality (Re	ecorded with	a YSI I	Pro Plus Mulitoro	obe)			_	
Parameter		Value	10 1 100 1/10/10/10	Un	its Last ca	librated:	DO: 8	/2 .
Water temperatur	re		1.7	°C				
Barometric press	65.3	mm	шід	taken: Site		be 200		
DO		5	71.9	% s	saturation Weath	er: Sunny bre	ezn	
DO		10	5.49	mg/	/L Substra	ite type: Chole ,	Baul	<u>ders</u>
Specific conducti	ivity (SPC)	1	28.3	μS/	'cm	ers collected:	×	
Conductivity			7.3	μS/	'cm		1'	
pН		1	7,44		Biofilm	rank: Little M	edium 	Green
ORP			3.6			es collected:		
Air temp		_		°C-	·	slope - 23	30	
Pfankuck Index								
I Idilitadik Alidoji						30,		
Traincox maga	Excelle	ent	Good		Fair	Poor	Score	Notes
Angularity	Excelle Lots of edg		Good Some edges, so round (2)	me	Fair Rounded edges (3)	Poor All round (4)	Score	Notes
Angularity Brightness	Lots of edg Most surface	ges (1)	Some edges, so round (2) Mostly dull, <3		Rounded edges (3) 50/50 dull &	All round (4) Mostly bright,	2	Notes
Angularity Brightness (Dull = biofilm)	Lots of edg Most surfactual (1)	ges (1)	Some edges, so round (2) Mostly dull, <3 bright (2)		Rounded edges (3) 50/50 dull & bright (3)	All round (4) Mostly bright, >65% (4)	2	Notes
Angularity Brightness	Lots of edg Most surface	ges (1)	Some edges, so round (2) Mostly dull, <3		Rounded edges (3) 50/50 dull &	All round (4) Mostly bright,	2	Notes
Angularity Brightness (Dull = biofilm) Scour Consolidation	Most surfadull (1) <5% eviders scour (6) Lots of size	ges (1) ces nce of	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of bed scoured (12) Moderately	5%	Rounded edges (3) 50/50 dull & bright (3) 30-50% of bed scoured (18) Mostly loose, not	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24) Totally loose,	2	Notes
Angularity Brightness (Dull = biofilm) Scour	Most surfadull (1) <5% eviderscour (6)	ges (1) ces nce of	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of bed scoured (12)	5%	Rounded edges (3) 50/50 dull & bright (3) 30-50% of bed scoured (18)	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24)	2	Notes
Angularity Brightness (Dull = biofilm) Scour Consolidation	Most surfactual (1) <5% evider scour (6) Lots of size tightly pack	ges (1) ces nce of es, xed (2)	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of bed scoured (12) Moderately packed, some soverlap (4) Common veg or	5% ize	Rounded edges (3) 50/50 dull & bright (3) 30-50% of bed scoured (18) Mostly loose, not much overlap (6) Spotty, in	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24) Totally loose, easily moved (8) Perennial types,	2	Notes
Angularity Brightness (Dull = biofilm) Scour Consolidation of substrate	Most surfadull (1) <5% eviders scour (6) Lots of size tightly pace	ges (1) ces nce of es, xed (2)	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of bed scoured (12) Moderately packed, some soverlap (4)	5% ize	Rounded edges (3) 50/50 dull & bright (3) 30-50% of bed scoured (18) Mostly loose, not much overlap (6)	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24) Totally loose, easily moved (8)	2	Notes
Angularity Brightness (Dull = biofilm) Scour Consolidation of substrate Aquatic Veg	Most surfactual (1) <5% evidence scour (6) Lots of Size tightly pack Abundant ymoss in sw water (1)	ges (1) ces nce of es, ced (2) reg, ift	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of bed scoured (12) Moderately packed, some soverlap (4) Common veg of algae, lots in po (2)	ize	Rounded edges (3) 50/50 dull & bright (3) 30-50% of bed scoured (18) Mostly loose, not much overlap (6) Spotty, in backwater or	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24) Totally loose, easily moved (8) Perennial types, very scarce or absent (4)	2 2 24 4	
Angularity Brightness (Dull = biofilm) Scour Consolidation of substrate Aquatic Veg	Most surfactual (1) <5% evides scour (6) Lots of size tightly pack Abundant values in swater (1)	ges (1) ces nce of es, ked (2) reg, ift	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of bed scoured (12) Moderately packed, some soverlap (4) Common veg of algae, lots in po (2)	ize r pols	Rounded edges (3) 50/50 dull & bright (3) 30-50% of bed scoured (18) Mostly loose, not much overlap (6) Spotty, in backwater or seasonal algae (3)	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24) Totally loose, easily moved (8) Perennial types, very scarce or absent (4) W-	2 2 24 4	846
Angularity Brightness (Dull = biofilm) Scour Consolidation of substrate Aquatic Veg Deployed Temp	Most surfactual (1) <5% evidence scour (6) Lots of Size tightly pack Abundant ymoss in sw water (1) logger numb	ges (1) ces nce of es, ced (2) ceg, ift er:	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of bed scoured (12) Moderately packed, some soverlap (4) Common veg of algae, lots in po (2)	ize r pols	Rounded edges (3) 50/50 dull & bright (3) 30-50% of bed scoured (18) Mostly loose, not much overlap (6) Spotty, in backwater or seasonal algae (3) ates: UTMs: N 43.	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24) Totally loose, easily moved (8) Perennial types, very scarce or absent (4) W-	2 24 4 10.773	846 ranch_
Angularity Brightness (Dull = biofilm) Scour Consolidation of substrate Aquatic Veg Deployed Temp	Most surfactual (1) <5% evides scour (6) Lots of size tightly pack Abundant y moss in sw water (1) logger numb	ges (1) ces nce of es, ked (2) reg, ift er: 00	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of bed scoured (12) Moderately packed, some soverlap (4) Common veg of algae, lots in po (2)	ize r pols	Rounded edges (3) 50/50 dull & bright (3) 30-50% of bed scoured (18) Mostly loose, not much overlap (6) Spotty, in backwater or seasonal algae (3) ates: UTMs: N 43.	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24) Totally loose, easily moved (8) Perennial types, very scarce or absent (4) PGGG W	2 24 4 10.773	846 ranch_
Angularity Brightness (Dull = biofilm) Scour Consolidation of substrate Aquatic Veg Deployed Temp Retrieved Temp Description of log Photo numbers of	Most surfactual (1) <5% evides scour (6) Lots of size tightly pack Abundant values in swater (1) logger numb logger numb gger location temp logger	ges (1) ces nce of es, ked (2) reg, ift er: 00	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of bed scoured (12) Moderately packed, some soverlap (4) Common veg of algae, lots in po (2)	ize r pols	Rounded edges (3) 50/50 dull & bright (3) 30-50% of bed scoured (18) Mostly loose, not much overlap (6) Spotty, in backwater or seasonal algae (3) ates: UTMs: N_43,	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24) Totally loose, easily moved (8) Perennial types, very scarce or absent (4) PGG W ACCOMMON MARKET AND ACCOMMON MARKET A	2 24 4 4 110.773	846 ranch
Angularity Brightness (Dull = biofilm) Scour Consolidation of substrate Aquatic Veg Deployed Temp Retrieved Temp Description of log Photo numbers of Suspended Solids	Most surfactual (1) <5% evides scour (6) Lots of size tightly pack Abundant values in swater (1) logger numb logger numb gger location temp logger	ges (1) ces nce of es, ked (2) reg, ift er: 00	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of bed scoured (12) Moderately packed, some soverlap (4) Common veg of algae, lots in po (2)	ize r pols	Rounded edges (3) 50/50 dull & bright (3) 30-50% of bed scoured (18) Mostly loose, not much overlap (6) Spotty, in backwater or seasonal algae (3) ates: UTMs: N 43.	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24) Totally loose, easily moved (8) Perennial types, very scarce or absent (4) W- Mostly bright, >65% (4) W-	2 24 4 4 110.773	846 ranch
Angularity Brightness (Dull = biofilm) Scour Consolidation of substrate Aquatic Veg Deployed Temp Retrieved Temp Description of log Photo numbers of Suspended Solids Filter number	Most surfactual (1) <5% evidence scour (6) Lots of size tightly pack Abundant was in swater (1) logger numb logger numb ger location temp logger	ges (1) ces nce of es, ked (2) reg, ift er: 00	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of bed scoured (12) Moderately packed, some soverlap (4) Common veg of algae, lots in po (2)	ize r pols	Rounded edges (3) 50/50 dull & bright (3) 30-50% of bed scoured (18) Mostly loose, not much overlap (6) Spotty, in backwater or seasonal algae (3) ates: UTMs: N_93.	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24) Totally loose, easily moved (8) Perennial types, very scarce or absent (4) PGG W ACCOMMON MARKET AND ACCOMMON MARKET A	2 24 4 4 110.773	846 ranch
Angularity Brightness (Dull = biofilm) Scour Consolidation of substrate Aquatic Veg Deployed Temp Retrieved Temp Description of log Photo numbers of Suspended Solids	Most surfactual (1) <5% evides scour (6) Lots of size tightly pack Abundant values in swater (1) logger numb logger numb ger location temp logger	ges (1) ces nce of es, ked (2) reg, ift er: 00	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of bed scoured (12) Moderately packed, some soverlap (4) Common veg of algae, lots in po (2)	ize r pols	Rounded edges (3) 50/50 dull & bright (3) 30-50% of bed scoured (18) Mostly loose, not much overlap (6) Spotty, in backwater or seasonal algae (3) ates: UTMs: N 43.	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24) Totally loose, easily moved (8) Perennial types, very scarce or absent (4) W- Mostly bright, >65% (4) W-	2 24 4 4 110.773	846 ranch

Teton Stoneflies 2018	
WYNDD-Tronstad 307-766-3115	í

Date:			
1.7		 	

Stream Profile: (left edge)	*looking down stream*	(right edge)
Distance (cm)	7 gd wide	ii .
Depth (cm) 16 cm	Y .	
Time (sec)	2.5	
, , , ,	7.9 yds	
3 Rock tracings (chlorophyll a):		
0	2	3
		K
V	\	
1126		
OUSINE		AN ON
	2000	Merca
	Show I	3
) -	/
Notes: Lake 1 wate	to cross creek so	here!
CL. T.	to one court so	take Tevas!
Step. Ned	NO CHOSS CHEET	Josephas . a
the cold	moasino we impo	
Strong and v	ecorded time to flow o	lawn. Only 1
on with		9
Channel Vany	steep.	
•		

WYNDD-Tronst							0		10
Time: Arrived: 1	1:15	Depa	arted: 1/15		Collectors	:Lushe, S	cot, Karen M	ikey J	ulia + Mad.
Stream: De	eta do	Ko-	Inlet	Loca	ation Desc	ription:			
Coordinates: N_			w	·			Datum:_		
Elevation:		ft	Site	name	on GPS:				
Water quality (Re									7. 4
Parameter Parameter		Value		-	its	Last cal	librated: 8/1	DO: 7	9/9
Water temperatur	re	2	3	°C	:	: D1	librated: 8/1 taken: Site		
Barometric pressure 551. O				mn	ıНg				
DO			2.4	% s	saturation	Weathe	r: Sunny, Cas	lm	
DO			, 26	mg	/L	Substra	te type: 600	le	<u>.</u>
Specific conducti	vity (SPC)		8.	μS/	'cm		ers collected:		
Conductivity	0 19		4.6	μS/	'em				- C
pH			1.43				Biofilm rank Little Medium Green		
ORP			3.0	mV	7	Microb	robes collected: Nove 17° Slape		
Air temp		°C			7° Slap	2_			
DC 1 1 1 1		11					(:4	
Pfankuck Index	Excell	ent	Good		F	ir	Poor	Score	Notes
Angularity	Lots of edg		Some edges, so round (2)	ome		edges (3)	All round (4)	3	110003
Brightness	Most surfa	ces	Mostly dull, <3	35%	50/50 dul		Mostly bright,	4	
(Dull = biofilm) Scour	dull (1) <5% evide	nce of	bright (2) 5-30% of bed		bright (3)		>65% (4) >50% of bed	3 4	
	scour (6)		scoured (12)		scoured (18)	scoured (24)	18	
Consolidation of substrate	Lots of size		Moderately packed, some s overlap (4)	ize	Mostly lo		Totally loose, easily moved (8)	8	7 42
Aquatic Veg	Abundant moss in sw		Common veg o		Spotty, in	r or	Perennial types, very scarce or	2	-1
Deployed Temp	water (1)	ar. 202	201649 Co	ordir	seasonal		absent (4)		
				orull			vv	L '1	
Retrieved Temp						-0	en was pushed a	ut of g	plums paul
Description of lo	gger location	: Mare	d to belan) A	olung prod	to oth	renside of	STICEN	~ b/w les +
Photo numbers of	temp logge	r placen	nent:		S-20			,	
								11	20
Suspended Solids	:						Nutrient samples co	ollected:	_0XX_
Filter number	>		2		3		DOC collected:		
Volume filtered	(mL)	30	300		200)	Chl a collected:	3x	

Teton Stoneflies 2018

Teton Stonefli WYNDD-Tron		6-3115			D	Date:			
013/5×13 9	8		511	n' .	0.	It midd	le		
Stream Profile:	(left edg	ge)	midd	U *look	ing down st	ream*		(right ed	ige)
Distance (cm)	32,5	24,5	23	14	11	7	8	don	
Benth (CIT)	IU	04	27	49	157.	71	20	WIO P.	1

3,83 6.42 7.2 10.53 7.45

3 Rock tracings (chlorophyll a):

5.7 yd distance (reach)

Time (sec)

Notes: New NPS logar installed flow? Ask Simone, Franch Ledria, targe Megarcys, Rhyacophila + Mayflies Midges very abundant. Stream appears more Scalled in Places this year. NPS waked on trail to Delta, Seems like less moss in main channel, but moss abundant on margins.

Teton Stoneflies WYNDD-Tronst	ad 307-766-	3115				Date:_	VO Aus	3 20	26 Ristau
Time: Arrived:_	11',00 an	∆ Deparent	arted: 1:07		Collectors	disha.	Scott Karen,	Madi	Mickey , Juli
Stream: Class					ation Desc		elas Middl	e Te	tan site
Coordinates: N		556	w	- -	110.70	1607	Datum:_	NAD	83
Elevation: 28	347	A	Site 1	name	on GPS:_	Clard	wail Dans	<u></u>	
Water quality (R	ecorded with						ibrated: 8/9		3/10
Parameter		Value		Un		Last cal	librated: 79	DO:	110
Water temperatur	re	1	5.0	°C		701	1 600	т ъ	robe Scott
Barometric press	ure	· 5'	11,7		ıHg	1	r: Su Mu	Temp Pi	obe <u>to</u> u
DO		7	7.7	% s	saturation		1	DILET	<u>. </u>
		}	0.46			Substra	te type: Cool	l, 20	1101
Specific conduct	ivity (SPC)	5	5.4		cm	3 Surbe	ers collected:	×	<u>-</u> :
Conductivity		ć	2.7	μS/	cm ,	Biofilm	rank Little M	edium	Green ·
ORP		. 1-	1.0	mV		Microbe	es collected:	_	
Air temp	7	1	+ / \	°C	-	•	10-		. =
Pfankuck Index				<u> </u>					
I Idilitadii Iliddii				_					
	Excelle	ent	s (1) Some edges, some		Fa	ir	Poor	Score	Notes
Angularity	Lots of edg		Some edges, so	me	Rounded	edges (3)	Poor All round (4)	Score	Notes
Brightness	Lots of edg Most surface	ges (1)	Some edges, so round (2) Mostly dull, <3		Rounded 50/50 dul	edges (3)	All round (4) Mostly bright,	Score 2	Notes
	Lots of edg Most surface dull (1) <5% eviden	ges (1)	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of bed		50/50 dul bright (3) 30-50% o	edges (3) 1 & of bed	All round (4) Mostly bright, >65% (4) >50% of bed	2 4	Notes
Brightness (Dull = biofilm) Scour	Most surfacture (1) 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ges (1) ces nce of	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of bed scoured (12)		80000000000000000000000000000000000000	edges (3) 1 & of bed 18)	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24)	Score 2 4 24	Notes
Brightness (Dull = biofilm)	Lots of edg Most surface dull (1) <5% eviden	ges (1) ces nce of	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of bed scoured (12) Moderately packed, some-s	35%	50/50 dul bright (3) 30-50% o	edges (3) 1 & of bed 18) oose,	All round (4) Mostly bright, >65% (4) >50% of bed	2 4	Notes
Brightness (Dull = biofilm) Scour Consolidation	Most surface dull (1) <5% evider scour (6)	ges (1) ces nce of es, ked (2)	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of bed scoured (12) Moderately	ize	Solution Rounded 50/50 dul bright (3) 30-50% of scoured (Mostly lo	edges (3) 1 & of bed 18) ose, and rlap (6)	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24) Totally loose,	2 4	
Brightness (Dull = biofilm) Scour Consolidation of substrate	Most surface dull (1) <5% evidents scour (6) Lets of size tightly pace	ges (1) ces nce of es, ked (2)	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of bed scoured (12) Moderately packed, some so overlap (4)	ize	Rounded 50/50 dul bright (3) 30-50% o scoured (Mostly lo much ove Spotty, in backwate	edges (3) 1 & of bed 18) oose, and orlap (6)	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24) Totally loose, easily moved (8)	2 4	Moss graving
Brightness (Dull = biofilm) Scour Consolidation of substrate	Most surfactual (1) <5% evider scour (6) Lets of size tightly pack	ges (1) ces nce of es, ked (2)	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of bed scoured (12) Moderately packed, some so overlap (4) Common veg o	ize	Rounded 50/50 dul bright (3) 30-50% o scoured (Mostly lo much ove	edges (3) 1 & of bed 18) oose, and orlap (6)	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24) Totally loose, easily moved (8) Perennial types,	2 4	
Brightness (Dull = biofilm) Scour Consolidation of substrate Aquatic Veg	Most surface dull (1) <5% evides scour (6) Lets of size tightly pace Abundant values in swater (1)	ges (1) ces nce of es, ked (2) veg, ift	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of bed scoured (12) Moderately packed, some soverlap (4) Common veg of algae, lots in potential (2)	ize or ools	Rounded 50/50 dul bright (3) 30-50% of scoured (Mostly lo much over Spotty, in backwate seasonal a	edges (3) 1 & of bed 18) oose, and orlap (6) r or algae (3)	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24) Totally loose, easily moved (8) Perennial types, very scarce or	24 24 4	Moss graving in sharel water
Brightness (Dull = biofilm) Scour Consolidation of substrate Aquatic Veg Deployed Temp	Most surface dull (1) <5% evides scour (6) Lets of size tightly pace Abundant values in swater (1) logger numb	ges (1) ces nce of es, ked (2) veg, ift er:	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of bed scoured (12) Moderately packed, some soverlap (4) Common veg of algae, lots in po (2)	ize or ools	Rounded 50/50 dul bright (3) 30-50% of scoured (Mostly lo much over Spotty, in backwate seasonal a	edges (3) 1 & of bed 18) oose, and orlap (6) r or algae (3)	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24) Totally loose, easily moved (8) Perennial types, very scarce or absent (4)	24 24 4	Moss graving in sharel water
Brightness (Dull = biofilm) Scour Consolidation of substrate Aquatic Veg Deployed Temp Retrieved Temp	Most surfactual (1) <5% evidence scour (6) Lets of size tightly pack Abundant values in swater (1) logger numb	ges (1) ces nce of es, ked (2) veg, ift er: \0	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of bed scoured (12) Moderately packed, some soverlap (4) Common veg of algae, lots in position (2)	ize or pols	Rounded 50/50 dul bright (3) 30-50% o scoured (Mostly lo much ove Spotty, in backwate seasonal a	edges (3) 1 & of bed 18) oose, and orlap (6) r or algae (3) s: N	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24) Totally loose, easily moved (8) Perennial types, very scarce or absent (4) W -	24 24 4	Moss graving in sharel water
Brightness (Dull = biofilm) Scour Consolidation of substrate Aquatic Veg Deployed Temp Retrieved Temp Description of log	Most surface dull (1) <5% evides scour (6) Lets of size tightly pace Abundant values in swater (1) logger numb	ges (1) ces nce of es, ked (2) veg, ift er: \0	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of bed scoured (12) Moderately packed, some so verslap (4) Common veg of algae, lots in po (2)	ize or pols	Rounded 50/50 dul bright (3) 30-50% o scoured (Mostly lo much ove Spotty, in backwate seasonal a	edges (3) 1 & of bed 18) oose, and orlap (6) r or algae (3) s: N	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24) Totally loose, easily moved (8) Perennial types, very scarce or absent (4)	24 24 4	Moss graving in sharel water
Brightness (Dull = biofilm) Scour Consolidation of substrate Aquatic Veg Deployed Temp Retrieved Temp Description of log Photo numbers of	Most surface dull (1) <5% evides scour (6) Lets of size tightly pace Abundant values in swater (1) logger numb logger numb ger location f temp logger	ges (1) ces nce of es, ked (2) veg, ift er: \0	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of bed scoured (12) Moderately packed, some so verslap (4) Common veg of algae, lots in po (2)	ize or pols	Rounded 50/50 dul bright (3) 30-50% o scoured (Mostly lo much ove Spotty, in backwate seasonal a	edges (3) 1 & of bed 18) oose, and orlap (6) r or algae (3) s: N	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24) Totally loose, easily moved (8) Perennial types, very scarce or absent (4) W -	24 24 4 4	Moss graving in shwel water
Brightness (Dull = biofilm) Scour Consolidation of substrate Aquatic Veg Deployed Temp Retrieved Temp Description of log Photo numbers of	Most surface dull (1) <5% evides scour (6) Lets of size tightly pace Abundant values in swater (1) logger numb logger numb ger location f temp logger	ges (1) ces nce of es, ked (2) veg, ift er: \0	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of bed scoured (12) Moderately packed, some so verslap (4) Common veg of algae, lots in po (2)	ize or pols	Rounded 50/50 dul bright (3) 30-50% o scoured (Mostly lo much ove Spotty, in backwate seasonal a	edges (3) 1 & of bed 18) oose, and orlap (6) r or algae (3) s: N	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24) Totally loose, easily moved (8) Perennial types, very scarce or absent (4) W -	24 24 4 4	Moss graving in shwel water
Brightness (Dull = biofilm) Scour Consolidation of substrate Aquatic Veg Deployed Temp Retrieved Temp Description of log Photo numbers of	Most surface dull (1) <5% evides scour (6) Lets of size tightly pace Abundant values in swater (1) logger numb logger numb ger location f temp logger	ges (1) ces nce of es, ked (2) veg, ift er: \0	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of bed scoured (12) Moderately packed, some so verslap (4) Common veg of algae, lots in po (2)	ize or pols	Rounded 50/50 dul bright (3) 30-50% o scoured (Mostly lo much ove Spotty, in backwate seasonal a	edges (3) 1 & of bed 18) oose, and orlap (6) r or algae (3) s: N	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24) Totally loose, easily moved (8) Perennial types, very scarce or absent (4) W -	24 24 4 4	Moss graving in shwel water
Brightness (Dull = biofilm) Scour Consolidation of substrate Aquatic Veg Deployed Temp Retrieved Temp Description of log Photo numbers of	Most surface dull (1) <5% evides scour (6) Lets of size tightly pace Abundant values in swater (1) logger numb logger numb ger location f temp logger	ges (1) ces nce of es, ked (2) veg, ift er: \0	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of bed scoured (12) Moderately packed, some so verslap (4) Common veg of algae, lots in po (2)	ize or pols	Rounded 50/50 dul bright (3) 30-50% o scoured (Mostly lo much ove Spotty, in backwate seasonal a	edges (3) 1 & of bed 18) oose, and orlap (6) r or algae (3) s: N	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24) Totally loose, easily moved (8) Perennial types, very scarce or absent (4) W-	24 4 4 4	Moss graving in shwel water

Teton	Stoneflies	2018	
WYNI	DD-Tronsta	ad 307-766-31	15

Date:	
-	

Total	Areem	width =	6.9	yd
		. 0		· ·

Stream Profile:

(left edge)

looking down stream

(right edge)

Distance (cm)	6	lef	7	Lib	W,		
Depth (cm)	4.5	6	35	1	C		
Time (sec)	12.24	7.43	6.74	5,36	77		

Reach = 6,6 yds

3 Rock tracings (chlorophyll a):







Notes:
The area we sampled last year by the gight boulder
is still snow covered (although last year that was the only
spot that was open) this year, stream is open above
gight boulder, very little algae on rocks, perhaps melted
out recently, dednia here. Heren is doing a full wak up

Time: Arrived:	1:30	Dep	arted:	<u>n_</u>	Collectors	Lush	Scott,	Rick	^
Stream: M	delle	Tos			ation Desc	Λ			<u> </u>
Coordinates: N			W	7			Datum:		
Elevation:		ft	Site	name	on GPS:_				
Water quality (R	ecorded with	a YSI l	Pro Plus Mulitar	ohe)			21	<	7 /
Parameter		Value		Un	its	Last ca	librated: 3/9	DO: (1/10
Water temperatu	re	3,		°C			_		
Barometric press	sure		3615	mn	nHg			Temp Pr	obe
DO			6.7.	% s	saturațion	Weathe	r: Sunny li	Slot	Dreze
DO			5.06	mg	/L	Substra	te type: Cabble	1,00	ulder
Specific conduct	ivity (SPC)	- 7	3,6	μS/	'cm	2 Surb	ers collected:	2 ~	
Conductivity			2. [μS/	'cm			2/	€
pН			8.16			Biofilm	rank. Little M	edium	Green
ORP			42.6	mV	7	Microb	es collected:		
Air temp				°C	Ì				
Pfankuck Index				-11					
Trankuck muck	Excelle	ent	Good		F	nir	Poor	Score	Notes
Angularity	Lots of edg		Some edges, so round (2)	ome		edges (3)	All round (4)	3	11000
Brightness	Most surface	ces	Mostly dull, <3	35%	50/50 dull &		Mostly bright,		
(Dull = biofilm)	dull (1)		bright (2)		bright (3)		>65% (4)	4	
Scour	<5% evide	nce of	5-30% of bed		30-50% c		>50% of bed	24	
Compalidation	scour (6)		scoured (12)		scoured (scoured (24)	α 1	
Consolidation of substrate	Lots of size tightly pack	•	Moderately packed, some soverlap (4)	iz e	Mostly lo		Totally loose, easily moved (8)	6	
Aquatic Veg	Abundant v		Common veg o		Spotty, in	L	Perennial types,	,	Moss in
	moss in sw	ift	algae, lots in po	ools	backwate		very scarce or	/ /	Stream
	water (1)	1	(2)		seasonal a		absent (4)		
Deployed Temp									
Retrieved Temp	logger numb	er: <u>20</u>	571721		No	otes: <u>Ris</u>	jut where v	ve l	eft it
Description of log	gger location	:_ C	They ba	ide	n face	is	closest to	Stream	^
Photo numbers of	f témp logger	r placem	ient:						
0				•			Nutrient samples co	ollected.	2x
Suspended Solids Filter number	:								01
			2				DOC collected:		
Volume filtered	(mL)	OI	600)	600	(c	Chl a collected:	3×	
							Algae collected:	3×	

Teton Stoneflies 2018

WYNDD-Tronstad 307-766-3115

Teton	Stoneflies	2018
WYNI	DD-Tronsta	d 307-766-3115

Date:	

9.6	yds	wide
and the	L.	

Stream Profile:

(left edge)

looking down str	ream
-------------------	-------

(right edge)

Distance (cm)	4.7	6.8	9.2	9,2			
Depth (cm)	5.75	5,90	5.0	10.5			
Time (sec)	5.74	5.43	2.83	2.67			



3 Rock tracings (chlorophyll a):

left middle Ris Reach 70 yds

(chlorophyll a):

Roach = 6,0 5,5 = 5,2 yds







Notes: RTZhy TSS

MT#1: 800ml (Glue) Lots of moss in streen channel,

MT#2: 600 ml dittle algae visible, Good flaw.

MT#3:

Estimated flow using flowers. Nice

Teton Stoneflie WYNDD-Trons		766-3	3115	ř.			Date:_	1. Aug. Scott, Jul	303	05
Time: Arrived:_	11:45	5	Dep	arted: \ \ \ \ \ \ \ 9		Collectors	Lush	Scott Tul	ia Ka	ren+Mikeu
Stream: St	illet		Gla	cier	Loc	ation Desc	ription:	below Skillet	6 kci	er J
Coordinates: N				V	V			Datum:		
Elevation:			ft	Site	nam	e on GPS:_				
Water quality (R	ecorded	with			obe)			8/2		Z1.,
Parameter			Value			its	Last ca	librated: 8/9	DO:_	711.
Water temperatu	re		~ 8	0.0	°C			taken: Site		
Barometric press	sure		55	51.6	mn	nHg			A	
DO			81	٢.	%	saturation Weath		r: Sunny,	caln	1
DO	6		9.	67	mg	g/L Substra		te type: Coloble's	Ba	ilder
Specific conduct	ivity (SF	PC)	3	16	μS	S/cm		ers collected:	Zv	
Conductivity			2	U.	μS	ıS/cm 3 Surb		•	-/-	
pH			8.86				Biofilm	rank: Little M	edium	Green
ORP				9.8	mV	7 -	Microb	es collected:		
Air temp					°C					
Pfankuck Index										
Plankuck index	Fv	celle	nt	Good		Fa		Descri	G	DT.4
Angularity	Lots of			Some edges, so	nme	Rounded		Poor All round (4)	Score	Notes
			(-)	round (2)		resunded	eages (5)	7 III Touna (4)	2	
Brightness	Most s		es	Mostly dull	35%	50/50 dul	1 &	Mostly bright,	2	N. N.
(Dull = biofilm)	dull (1			bright (2)		bright (3)		>65% (4)		
Scour	<5% e		ce of	5-30% of bed		30-50% 0		>50% of bed	54	
Consolidation	Lots of		· · · · · · · · · · · · · · · · · · ·	scoured (12) Moderately		scoured () Mostly lo		scoured (24) Totally loose,	27	
of substrate	tightly		•	packed, some s overlap (4)	size	much ove		easily moved (8)	4	
Aquatic Veg	Abund moss in water (ı swi	<i>-</i>	Common veg of algae, lots in per		Spotty, in backwater	r or	Perennial types, very scarce or	2	No moss, lots of also
	,		0	(2)		seasonal a		absent (4)		, ,
Deployed Temp 1	logger m	umbe	r: <u>0</u> 04	416499 Co	ordin	ates: UTM	s: N			
Retrieved Temp	logger n	umbe	er: 20	1475521	-	No	otes: MA	red from a	rigin	al location
Description of log	gger loca	tion:	Belo	w large 1	Dan	lder o	n n	ath side of	strec	^
Photo numbers of	temp lo	gger	placem	ent: Scott						
								Mutriant camples	-11-o4-d-	2
Suspended Solids	:							Nutrient samples co	эпесіва:	<u> </u>
Filter number			1	2		3		DOC collected:		•
Volume filtered ((mL)	10	00	(000)		1017		Chl a collected:	3~	

Teton	Stoneflies	2018	
WYN	DD-Tronsta	ad 307	-7.66-3115

width = 96 Inches

Stream Profile:

(left edge)

looking down stream

(right edge)

Distance (cm)	57.	40	21	0			6
Depth (cm)	6.2	5,5	4,5				
Time (sec)	5.7	8,57	7.7				

Reach = 6.7 yds

3 Rock tracings (chlorophyll a):

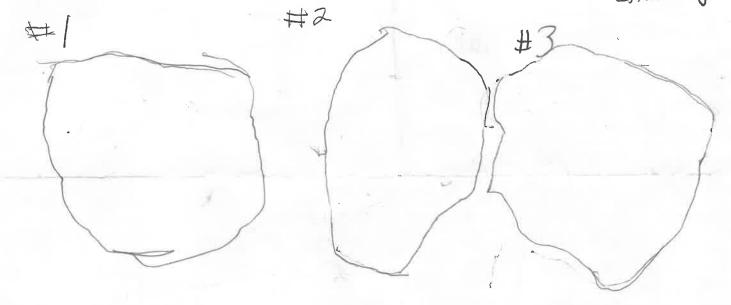


Motes: No snow around site today. Dempurative losser had moved and stream channel appeared to shift south. Good flow. Blackfies, Lednia, Rhyacophila in stroum + lds of midges. Used Markey flowers for flow and that waked great. Use spot that was a single channel.

Teton Stoneflie WYNDD-Trons	stad 307-766	3115		1	4		9 Aujust.		
Time: Arrived:	12:45 Del5 pm	\ Dep	parted: 3100p	M	Collectors	s: Deb	Lydia, Taylo	r Sho	anndh
Stream: S,	Cascada	ica	Seep	Loc	cation Desc	rintion.	top of South	Case	ade Cours
Coordinates: N	r			.,	Lation Desc	ription	~70-m	reach	wear some
Cool dinates. N			\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	W	-	-+	Datum:		- 300
Elevation:		f	Site	nam	e on GPS:_	- August		(50	tern sitel
	Recorded with	ı a YSI	Pro Plus Mulitpi	robe)	4 5 7	9			
Parameter		Value		_	nits	Last ca	librated: Yesterla	DO:	today (AM
Water temperati		C	7.3	°C	14		taken: Site /		
Barometric pres	sure		525	mr	nHg			Υ .	
DO	u .		105	%	saturation	Weathe	er: Sunny br	ce zy	4 5
DO			10.5	mg	g/L	Substra	er: Sunny brate type: \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	tone	cobbles, som
Specific conduct	tivity (SPC)		108'	μS	/cm	2 Caral	one collected.	/	sand stone
Conductivity		,	57	μS	/cm	3 Surb	ers collected:	V	- (tax to
pН			8.4-			Biofilm	rank: Little M	edium	Green Shannan
ORP		Tores	na	mV	7	Microb	es collected:		
Air temp			Ma	°C				Lydi	a)
						*			
Pfankuck Index	D . 12	-		*					
Angularity	Lots of edg		Some edges, so	ome	Rounded Rounded		Poor All round (4)	Score	Notes
			round (2)		Itounava	euges (5)	7 m round (4)		
Brightness (Dull = biofilm)	Most surface dull (1)	es	Mostly dull, <3 bright (2)	35%	50/50 dul bright (3)		Mostly bright,	Ц	2
Scour	<5% evider	nce of	5-30% of bed		30-50% o		>65% (4) >50% of bed	1	
Consolidation	scour (6)		scoured (12)		scoured (scoured (24)	6	
Consolidation of substrate	Lots of size tightly pack	•	Moderately packed, some s	size	Mostly lo		Totally loose, easily moved (8)		6
A 42 T7			overlap (4)	1				4	1111
Aquatic Veg	Abundant v moss in swi		Common veg of algae, lots in po		Spotty, in backwater		Perennial types, very scarce or	i A	SNOW likey
	water (1)		(2)	JOID	seasonal a	06"	absent (4)	4	only recount
Deployed Temp	logger numbe	100	772 590 Ca	andin	ates: UTMs	T NT	-	Y	exposedstra
2019 Retrieved Temp	#120	1741	097 (60		ntes	15	W	4	to Mu
Retrieved Temp	logger numb	er:	126		No	tes:			
Description of log	gger location:	EX	act same a	s T	2018-	NIN	e wids sile	2001	st bedrock
Photo numbers of	f temp logger	nlacem	ent no loh	Me	dying	hut 1	Pix from	On	cropping ON
					, , ,	Q 40,	70.87		MOE! FIJA
Suspended Solids	s: (Lush	do asked for	114	ভে)]	Nutrient samples co	ollected:	N=3
Filter number			7	-0	3		DOC collected:	<u> </u>	1=3
Volume filtered	(mL) q	00	(200		600		Chl a collected:	-	V=3
- 1	(t11+	T. I.J.	notween	1	0.00	74.	7 2 1 1 p	. r	
	Oracle	800-	1000 mL-50 c	SAIM	otd)		Algae collected:	N.	3

Stream Profile:	(left ed	lge)		*look	ring down str	(R)	(right edge)	
Distance (cm)	Ø	20	40	60	80	100	130	
Depth (cm)	Ø	Ч	10	7	3	5	Ø	
Time (sec)							-	

8 Mean reach length for relocity 8 motors > 18.5 sec (did 28) take any.



Notes:

O We tried but were not able to un-bury the datalogger from 2016 (@5000 ce). There is a photo...
We did get the logger from 2018.

(but all 3 Smired!)

WYNDD-Trons						Date:	10 Hug	1020	
Time: Arrived:	12:45	m Dej	parted: 2:45	Mg	Collector	s: Deb	Same olice	aylor.	Shannon
Stream: S. F	ork Tets	V (LG	ek -snown	elt	cation Desc	cription.	Same allin	DREC A	HC Rach
Coordinates: N			×						. 0 20310
Elevation:			•	1	F	,	Datun	1:	-
					e on GPS:	g and			3
Water quality (P	Recorded wi	ith a YSI Value				7	alibrated: 2 days	-h	53
Water temperatu	ıre			°C	nits	Last ca	llibrated:	_ DO:	Warned
Barometric press			3,9 534		mHg	Photos	taken: Site	Temp P	robe
DO		+	105		saturation	Weath	er: Sunny 1	and the	cele warm
DO				_	g/L ^	1			
Specific conduct	ivity (SPC)		7.6 59		/cm;		ate type: Ig gas	4,705	3.60
Conductivity			47		/cm	3 Surb	ers collected:	/	-
pН			7.8	1,		Biofilm	rank: Little	Medium	Green
ORP			nla	mV	7	Microb	es collected:	\sim	
Air temp		-	10.5	°C	1	4	(1	ysia)	
Pfankuck Index					A				
Trankuck index	Excel	lent	Good		Fa	ir	Poor	Carre	NT.
Angularity	Lots of ec		Some edges, s	ome	Rounded		All round (4)	Score	Motes Cmore lace
Brightness	Most surf	aces	round (2) Mostly dull, <	35%	50/50 dul	1.&	Mostly bright,		(15, ha)
(Dull = biofilm)	dull (1)		bright (2)	00,0	bright (3)		>65% (4)	2	
Scour	<5% evid	ence of	5-30% of bed		30-50% o		>50% of bed	10	could be
Consolidation	scour (6) Lots of size	700	scoured (12) Moderately		scoured (scoured (24)	12	could e 25%
of substrate	tightly pac	•	packed, some soverlap (4)	size	Mostly lo much ove	,	Totally loose, easily moved (8)	5	in-between.
Aquatic Veg	Abundant	-	Common veg	or	Spotty, in		Perennial types,		_
e .	moss in sw water (1)	vift	algae, lots in po	ools	backwater seasonal a	1	very scarce or absent (4)	3	
Deployed Temp 1	Ogger mimi	ner: 1 a 6		ondi-					1
Deployed Temp l	la casa	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	11/24 C	ordin	ates. O Tivis	. IV	W -	Ч	1 40
Retrieved Temp	logger num	ber: 📐 (21/25/1		No	ites: ON	2 of the "hi	alected	allow Estate
Description of log	ger location	n: Sar	ne ol': dis	8	arge o	oulder	1	very	easy to see-
Photo numbers of	temp logge	r placem	ent:		1512m 6	light, j	us of mal	N	chs on top away, so wa easy to see- but No apparent issues
							sample	site	issues
Suspended Solids:							Nutrient samples of	collected:_	N=3
Filter number	9	1	2		3]	DOC collected:	N=3	(tolydia)
Volume filtered (mL)	150	150		150		Chl a collected:	N=3	}
* See notes	<u>All</u>	filter	2 ly foil (rack I. W	cod duri	ng he last	Algae collected:	N=3	Go Shannon
				_		_		10	

(40 Shannish)

Stream Profile:	(left ed	ge)		*look	ing down str	eam*	R	(right	edge)
Distance (cm)	Ø	20	50	80	100	120	142	3	
Depth (cm)	(1)	10	12	9	6	5	3		
Time (sec)						×-			
Stream	reach	1 length	. mecsu	ed spe	ed of '	sall 5	JM->		
3 Rock tracings (1 2		1	BAM-	7359	sec sec
41	No.	+	12	X	7	#3	-		
41	×.	7		<i>f</i>	, /	-			
			-4			1			
)						\
				;	•) [
/									
					/				
					5)			

Notes: We need to work out the filter breakage issue!

We switched to backup asked follow and used the smaller syringe, checked by me each refill. Stopped when filter had obvious seston on it but filter was still hanging in.

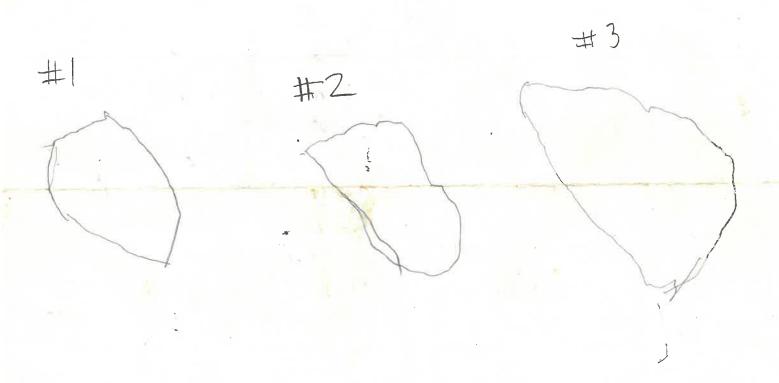
We also Collected a few bugs from a hearby 169 seep. Flows 14to Ethody
We also Collected a few bugs from a hearby 169 seep. Flows 14to Ethody
Stream 2150 sample
Reach.

WINDD HOL	es 2018 (stad 307-7	2020 66-3115			Q. 39	Date	= 7 Aug 20	120	
Time: Arrived;	1:40 F	M De	parted: 4:15	pm	Collector	s: Deb	Taylor, Sha	an on	Lydia
Stream: N	orth F	ork Tet	m Creek	Lo	cation Desc	ription:	SNowmelt o	Deam.	upar lal
Coordinates: N	ı(Sameo	(i) w	V		•	SNowmelt o	: 10	Sw ENOW ye
Elevation:	*1	1	d Site	nam	ne on GPS:_		ij.		Maria .
Water quality (1	Recorded v		Pro Plus Mulitpre	obe)			this m	persu un	
Parameter Water temperate	1rio	Valu		_	nits	Last ca	alibrated: NO	DO:	now
		1	2.5	°C		1			15
Barometric pres	sure	53	3 le	mı	mHg	1	taken: Site		۲.
DO		of kin	114	%	saturation	Weath	er: partly clo	udy, b	reezy
DO		- 1	8.6	mg	g/L		ate type: small		
Specific conduc	tivity (SPC	(2)	9.8	μS	/cm			/	3 1 nd CO 201
Conductivity		1.4	7.5	μS	/cm	3 Surb	ers collected:	V	-:
pН		1/4	7.31			Biofilm	rank: Little	Iedium	Green
ORP (T	uglar)		232	mV	T. E.	Microb	es collected: \N	S-12	Aia -
Air temp		18 11 11	14 2 9/1	°C	# 4		es collected: Ne	14 h	Linfilm
San Allan Langua	1 4 /		197		100		MERCIN	ANI No.	510 1. 11.
			- Or Committee - Law - Law -	PART /C	1000				
Pfankuck Index				+	- 154	The same	The state of		
		ellent	Good	N. C.	Fa	-	Poor	Score	Notes
Pfankuck Index Angularity	Exc Lots of e		Some edges, sor	me	Fa Rounded	-	Poor All round (4)	Score	Notes (Same
Angularity Brightness	Lots of e	edges (1)			Rounded	edges (3)	All round (4)	1	(same
Angularity Brightness (Dull = biofilm)	Lots of 6 Most sur dull (1)	edges (1)	Some edges, sor round (2) Mostly dull, <35 bright (2)			edges (3)	All round (4) Mostly bright,	Score 1	(same as i+ ever
Angularity Brightness	Most sur dull (1) <5% evid	faces dence of	Some edges, sor round (2) Mostly dull, <35 bright (2) 5-30% of bed		50/50 dull bright (3) 30-50% of	& & f bed	All round (4) Mostly bright, >65% (4) >50% of bed	1 2	(same as ;+ ever
Angularity Brightness (Dull = biofilm) Scour	Most sur dull (1) <5% evid scour (6)	faces dence of	Some edges, sor round (2) Mostly dull, <35 bright (2) 5-30% of bed scoured (12)		50/50 dull bright (3) 30-50% of scoured (1)	& & f bed 8)	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24)	1 2	(same as ;+ ever
Angularity Brightness (Dull = biofilm) Scour Consolidation \ of substrate	Most sur dull (1) <5% evic scour (6) Lots of s tightly pa	faces dence of izes, acked (2)	Some edges, sor round (2) Mostly dull, <35 bright (2) 5-30% of bed	5%	50/50 dull bright (3) 30-50% of	& & & & & & & & & & & & & & & & & & &	All round (4) Mostly bright, >65% (4) >50% of bed	1 2	(same as it ever was,
Angularity Brightness (Dull = biofilm) Scour Consolidation	Most sur dull (1) <5% evices cour (6) Lots of stightly pa	faces dence of izes, acked (2)	Some edges, sor round (2) Mostly dull, <35 bright (2) 5-30% of bed scoured (12) Moderately packed, some siz overlap (4) Common veg or	5% ze	Spotty, in	& & & & & & & & & & & & & & & & & & &	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24) Totally loose,	1 2 6 7	(same as ;+ ever
Angularity Brightness (Dull = biofilm) Scour Consolidation \ of substrate	Most sur dull (1) <5% evic scour (6) Lots of s tightly pa	faces dence of izes, acked (2)	Some edges, sor round (2) Mostly dull, <35 bright (2) 5-30% of bed scoured (12) Moderately packed, some siz overlap (4)	5% ze	Spotty, in backwater	edges (3) & f bed 8) ose, not clap (6)	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24) Totally loose, easily moved (8) Perennial types, very scarce or	1 2 6	(same as it ever was,
Angularity Brightness (Dull = biofilm) Scour Consolidation of substrate Aquatic Veg	Most sur dull (1) <5% evidence (6) Lots of stightly particular moss in swater (1)	faces dence of izes, acked (2) t veg, wift	Some edges, sor round (2) Mostly dull, <35 bright (2) 5-30% of bed scoured (12) Moderately packed, some siz overlap (4) Common veg or algae, lots in pool (2)	5% ze	Spotty, in backwater seasonal al	& f bed 8) ose, not clap (6) or gae (3)	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24) Totally loose, easily moved (8) Perennial types,	1 2 6 7	(same as it ever was,
Angularity Brightness (Dull = biofilm) Scour Consolidation of substrate Aquatic Veg Deployed Temp 1	Most sur dull (1) <5% evices cour (6) Lots of stightly particular moss in swater (1)	faces dence of dence of dence of dence (2) dence (2) dence (2)	Some edges, sor round (2) Mostly dull, <34 bright (2) 5-30% of bed scoured (12) Moderately packed, some siz overlap (4) Common veg or algae, lots in poor	ze ols	Spotty, in backwater seasonal al	edges (3) & f bed 8) ose, not clap (6) or gae (3) : N	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24) Totally loose, easily moved (8) Perennial types, very scarce or absent (4)	1 2 6 7	(same as it ever was,
Angularity Brightness (Dull = biofilm) Scour Consolidation of substrate Aquatic Veg Deployed Temp 1 Retrieved Temp 1	Most sur dull (1) <5% evidence scour (6) Lots of stightly partial trightly	faces dence of izes, icked (2) t veg, wift aber: 207	Some edges, sor round (2) Mostly dull, <35 bright (2) 5-30% of bed scoured (12) Moderately packed, some siz overlap (4) Common veg or algae, lots in poor (2)	ze ols	Rounded of 50/50 dull bright (3) 30-50% of scoured (1 Mostly loc much over Spotty, in backwater seasonal all ates: UTMs	edges (3) & f bed 8) ose, not clap (6) or gae (3) : N	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24) Totally loose, easily moved (8) Perennial types, very scarce or absent (4) W-	1 2 6 2 2	(same as it ever was, it seems!
Angularity Brightness (Dull = biofilm) Scour Consolidation of substrate Aquatic Veg Deployed Temp 1 Retrieved Temp 1	Most sur dull (1) <5% evis scour (6) Lots of s tightly pa Abundan moss in s water (1) ogger num ogger num	faces faces dence of fizes, facked (2) t veg, wift faces fac	Some edges, sor round (2) Mostly dull, <35 bright (2) 5-30% of bed scoured (12) Moderately packed, some siz overlap (4) Common veg or algae, lots in poor (2) 1405 Coor (2)	ze ols	Rounded of 50/50 dull bright (3) 30-50% of scoured (1 Mostly loc much over Spotty, in backwater seasonal all ates: UTMs	edges (3) & f bed 8) ose, not clap (6) or gae (3) : N	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24) Totally loose, easily moved (8) Perennial types, very scarce or absent (4)	1 2 6 2 2	(same as it ever was, it seems!
Angularity Brightness (Dull = biofilm) Scour Consolidation of substrate Aquatic Veg Deployed Temp 1 Retrieved Temp 1 Description of log	Most sur dull (1) <5% evidence scour (6) Lots of stightly part and the second stightly part and the sec	faces faces dence of fizes, facked (2) t veg, wift faces fac	Some edges, sor round (2) Mostly dull, <35 bright (2) 5-30% of bed scoured (12) Moderately packed, some siz overlap (4) Common veg or algae, lots in poor (2) 1405 Coor (2)	ze ols	Spotty, in backwater seasonal al	edges (3) & f bed 8) ose, not clap (6) or lgae (3) : N	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24) Totally loose, easily moved (8) Perennial types, very scarce or absent (4) W- W- Many Services (2) Many Services (4)	1 2 6 2 2 gwt	(same as it ever was, it seems!
Angularity Brightness (Dull = biofilm) Scour Consolidation of substrate Aquatic Veg Deployed Temp land the substrate of	Most sur dull (1) <5% evidence scour (6) Lots of stightly part and the second stightly part and the sec	faces faces dence of fizes, facked (2) t veg, wift faces fac	Some edges, sor round (2) Mostly dull, <35 bright (2) 5-30% of bed scoured (12) Moderately packed, some siz overlap (4) Common veg or algae, lots in poor (2) 1405 Coor (2)	ze ols	Spotty, in backwater seasonal al	edges (3) & f bed 8) ose, not clap (6) or gae (3) : N	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24) Totally loose, easily moved (8) Perennial types, very scarce or absent (4) W-	1 2 6 2 2 gwh	(same as it ever was, it seems!

Date: 7 Aug 2020

(left edge	e)		(R) *looki	ng down st	ream*		(righ	t edge)
Ø	16	42	SS					
10	11	13	15					
	p 10		1 11 1.12	11 12 66	11 112 66	11 112 55	- 11 112 55	(left cuge)

3 Rock tracings (chlorophyll a):



Notes: filters were breaking during felterny wlange syringe -was
mostly the ones that were in the
foil envelopes. Some had cracks before
even starting to filter. We used backups
that lushe provided. Not sue well have
ehough for next 3 sites, but Fingers
crossed?

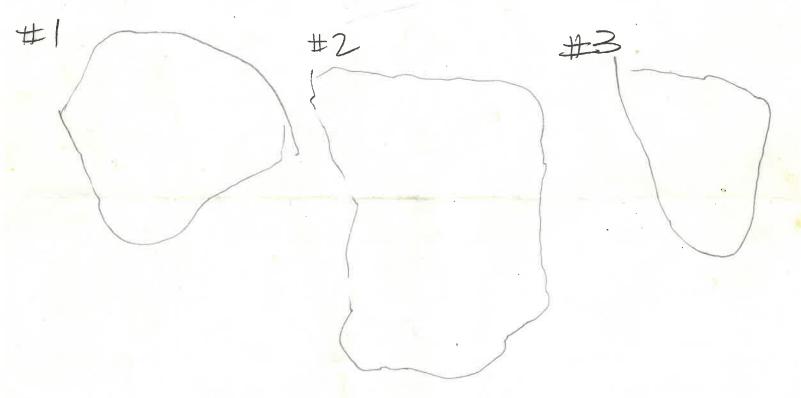
Teton Stoneflies 2018 QOQO WYNDD-Tronstad 307-766-3115 Date: 10 Aug. 2020

Coordinates: N_	41			W			Datum:_		11.
Elevation:		ft	Site	e name	on GPS:_				
Water quality (Re	ecorded with	a VÇI I	Pro Plue Mulite	rohe)	um des	d.584Ce			
Parameter	ccorded with	Value		Uni	its	Last cal	ibrated: ago	DO: ΛΛ	W
Water temperatur	re	1	9	°C			•		
Barometric press	ure	-	42	mm	Hg		aken: Site		
DO		3	110	% s	aturation	Weather	r: Sunny	alm	
DO	Ą		10.9	mg/	L	Substrat	e type: an war	Flime	stone
Specific conducti	ivity (SPC)		226	μS/	cm	3 Surba	ers collected: N=	3/	cobbled
Conductivity			127 .	μS/	cm		rank: Little	A	01 (200)
pН		1	7.84						Green
ORP			nla	mV		Microbe	es collected:	clyd	ia)
Air temp			20	°C	=				
						4			
Pfankuck Index	Excell	a-m4	Good		Fa	i.	Poor	Score	Notes
Angularity	Lots of edg		Some edges, round (2)	some	Rounded		All round (4)	Score	/ Total
Brightness	Most surfa	ces	Mostly dull,	<35%	50/50 dul	1 &	Mostly bright,	2	Loke
(Dull = biofilm)	dull (1)		bright (2)	7	bright (3)		>65% (4)	4	Looks
Scour	<5% evide scour (6)	nce of	5-30% of bed scoured (12)		30-50% o scoured (>50% of bed scoured (24)	6	Samo
Consolidation of substrate	Lots of size		Moderately packed, some overlap (4)	1 Pi	Mostly lo	ose, not	Totally loose, easily moved (8)	2-4	"alway
Aquatic Veg	Abundant moss in sw		Common veg	•	Spotty, in backwate		Perennial types, very scarce or	7	
5-01-0	water (1)	1	(2)		seasonal a		absent (4)		
Deployed Temp	logger numb	er: 10	767834	Coordin	ates: UTM	s: N	W -		
_			2 1				All 900d!	Super	stable.
- Total Tomp	- PPO HUIII			11.1	1-7.	2 6	1d 7	041	1 6. 01
Description of lo	gger location	1:	aine 9 w	2.140	1-LM	00 500	ice blum 2	cubica	Donle
Photo numbers o						-			
		-	V 2	3			NT	-11 1 1/	1-3
1	s:	7 8	_				Nutrient samples co		
Suspended Solid			7		2		DOC collected:	11=5	Cto Ly
	2		-						
Suspended Solid	(mL) ((000	1000		1000	1.	Chl a collected:	n=3	

Stream Profile:	LE(left ed	ge)		*looki	ng down str	eam*	RE	(right edge)	
Distance (cm)	0,0	25.0	50.0	64.0	80.0	100.0	116	4	
Depth (cm)	5.0	4.0	7.0	7.0	6.0	6.0	7.0		
Time (sec)									

stream reach length for velocity (see Notes)

3 Rock tracings (chlorophyll a):



velocity of flow: otes: 3.4 m = 7,75 sec

7.0m = 20,0 Sec

3 20 20