	eton Stoneflies 3016 7 YNDD-Tronstad 307-766-3115 ime: Arrived: \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\					Date:	18 July	201	19
Time: Arrived:	12:00	Depa	rted: 2		Collectors:	AT. S	SH + =	IP.	
Stream:	adake	In	lot	Loca	tion Descr	iption: Y	selan Total	n B	lader
Coordinates: N_	43.7	33	29_w	//	0.7	7585	Datum:_	NAO	83
Elevation:	08	ft	Site n	ame	on GPS:	Delta	dake Ir	ld.	
Water quality (Re	corded with	a YSI P	ro Plus Mulitprol	be)	Scott's		7/		
Parameter		Value		Un		Last cali	brated: T27	DO:	1/22
Water temperatu	re	1 - 2	\mathcal{A}	°C				-	
Barometric press	sure	5	53.1	mmHg		mHg Photos taken: Site V Temp Probe			
DO	X T.			% s	saturation	Weather	- ZUMY		
DO \\.88				mg	/L	Substrate	type: Cob	le	
	Specific conductivity (SPC)				'cm	3 Surbei	rs collected:		
Conductivity			4.8	μS/	'cm			dium	Green
pH							5		Green
ORP		-		mV	, and	Microbes collected:			
Air temp		1	70	°C		Furni	=		
Pfankuck Index							, -		
	Excelle	ent	Good		Fa	ir	Poor	Score	Notes
Angularity	Lots of edg	ges (1)	Some edges, so round (2)	me	Rounded		All round (4)	2	Tiotes
Brightness (Dull = biofilm)	Most surfacture dull (1)	ces	Mostly dull, <3 bright (2)	5%	50/50 dul bright (3)		Mostly bright, >65% (4)	2	
Scour	<5% evider	nce of	5-30% of bed		30-50% of bed		>50% (4)	0	Ripping stream
	scour (6)	(charmed (12)		scoured (18)			6	1 4 0
			scoured (12)				scoured (24)	(6)	Out not be much
Consolidation	Lots of size	-	Moderately		Mostly lo	ose, not	Totally loose,	(b)	out not ho much evidence of scarr
of substrate	tightly pack	xed (2)	Moderately packed, some si overlap (4)		Mostly lo much ove	ose, not rlap (6)		6	Out not much
	tightly pack Abundant v	reg,	Moderately packed, some si overlap (4) Common veg or	r'	Mostly lo much ove	ose, not rlap (6)	Totally loose, easily moved (8) Perennial types,	6	Out not much
of substrate	Abundant v	reg,	Moderately packed, some si overlap (4) Common veg or algae, lots in po	r'	Mostly lo much ove Spotty, in backwater	ose, not rlap (6)	Totally loose, easily moved (8) Perennial types, very scarce or	6	Out not much
of substrate Aquatic Veg Deployed Temp lo	Abundant v moss in swi water (1)	reg, ift :: <u>2005</u>	Moderately packed, some singular overlap (4) Common veg of algae, lots in po (2) 7172 Coordinate ago (1) 5969/109	r'ools	Mostly lo much ove Spotty, in backwater seasonal attes: UTMs:	ose, not rlap (6) r or algae (3) N es: Placed	Perennial types, very scarce or absent (4)	6 1 notes	Out not much
of substrate Aquatic Veg Deployed Temp lo Retrieved Temp lo Description of logs	Abundant v moss in swi water (1) ogger number ogger number ger location:	reg, ift :: <u>805</u> (2) Teg, ift	Moderately packed, some singular (4) Common veg of algae, lots in po (2) 71725 Coor (2) 71726 Coor (2) 71727 Coor (2)	r'ools	Mostly lo much ove Spotty, in backwater seasonal attes: UTMs:	ose, not rlap (6) r or algae (3) N es: Placed	Perennial types, very scarce or absent (4)	6 1 notes	But not 1 much evidence of Scarr
of substrate Aquatic Veg Deployed Temp lo	Abundant v moss in swi water (1) ogger number ogger number og er location:	reg, ift	Moderately packed, some single overlap (4) Common veg of algae, lots in po (2) 71725 Coor (2) 71726 Coor (2)	ripols	Mostly lo much ove Spotty, in backwater seasonal attes: UTMs:	ose, not rlap (6) r or algae (3) N es: Placed	Perennial types, very scarce or absent (4)	post n	ant not much evidence of scarr
of substrate Aquatic Veg Deployed Temp lo Retrieved Temp lo Description of logs	Abundant v moss in swi water (1) ogger number ogger number og er location:	reg, ift :: <u>805</u> (2) Teg, ift	Moderately packed, some singular (4) Common veg of algae, lots in po (2) 7172 Coor (2) 7173 Coor (3) 7174 Coor (4) 7174 Coor (4) 7174 Coor (4) 7174 Coor (4)	ripols	Mostly lo much ove Spotty, in backwater seasonal attes: UTMs:	ose, not rlap (6) r or	Totally loose, easily moved (8) Perennial types, very scarce or absent (4) 2 65 Coold W-	post n	ant not much evidence of scarr
of substrate Aquatic Veg Deployed Temp lo Retrieved Temp lo Description of logg Temp logger photo	Abundant v moss in swi water (1) ogger number ogger number og per location: number:	reg, ift :: 005 (2 y r: 2015	Moderately packed, some single overlap (4) Common veg of algae, lots in position (2) 71725 Coor (2) 71725 Co	ripols	Mostly lo much ove Spotty, in backwater seasonal attes: UTMs:	ose, not rlap (6) r or algae (3) N es: Pland N	Totally loose, easily moved (8) Perennial types, very scarce or absent (4) AS Coold W- utrient samples col OC collected:	post n	ant not much evidence of scarr
of substrate Aquatic Veg Deployed Temp lo Retrieved Temp lo Description of logg Temp logger photo Suspended Solids:	Abundant v moss in swi water (1) ogger number ogger number og er location: number:	reg, ift 2005 Fand Tand	Moderately packed, some single overlap (4) Common veg of algae, lots in po (2) 71725 Coor (2) 71725 Coor (3) 71726 Coor (4) 2 loggues 1 times! Delta 2	ripols	Mostly lo much ove Spotty, in backwater seasonal attes: UTMs:	ose, not rlap (6) r or algae (3) N es: Placed N D	Totally loose, easily moved (8) Perennial types, very scarce or absent (4) LA COOLD Utrient samples coll OC collected: hl a collected:	post n	ant not much evidence of scarr
of substrate Aquatic Veg Deployed Temp lo Retrieved Temp lo Description of logg Temp logger photo Suspended Solids: Filter number	Abundant v moss in swi water (1) ogger number ogger number ogger location: number: number: Delt (mL) Gomt	reg, ift 2005 Fand Tand	Moderately packed, some single overlap (4) Common veg of algae, lots in po (2) 71725 Coor (2) 59(9)/109 2 lossus 1 times! Delta 2	r ools	Mostly lo much ove Spotty, in backwater seasonal attes: UTMs:	ose, not rlap (6) r or algae (3) N es: Placed N D C A	Totally loose, easily moved (8) Perennial types, very scarce or absent (4) AS Coold W- utrient samples col OC collected:	post n	ant not much evidence of scarr

, j				enmpression					ght edge)
Distance (cm)									
Depth (cm)									
ebble Coun	its	e:	- embe	deled	mn	1 = millin	ever		
31mm	h@	76	145	75	68	46	87	101e	84
48°	71	46e	57	165 e	110	145e	61	36	105
69	102	900	43	136	136	44	80	60e	62
75	60e	95	52	95e	122	120e	68	77	158
57	46	46	80	96	72 e	3 ae	119	102	910
	<i>k.</i>	- A							
8		20	75	de	1 5	0	pelol	de	
		04					1		
3 Rock traci	ngs (chlorop	phyll a):		Delta	2		Del	lta 3	;
									_
(Soll	W **	1				//			
(20))			0	xa	11		2	
			- /	1 Des	¥2	11 1		elta	e '
			11		A J	1) (2	* 2	>
2									/
			/						1
			A			1)			1
						1/	1		
					/				
				1	S)				
Notes:	Longes	> nan	rale						
O		,,							

Data

Teton Stoneflies 2018
WYNDD-Tronstad 307-766-3115

Date: 29 July 19

Time: Arrived:	2:15 PM	Depar	rted: 2:30	_ (Collectors:	5H/T	P/LT/OF		
Stream:		\						Nyan	
Coordinates: N_	0 1	665	573 w		110.0	9559	Oatum:	VAD8:	3
Elevation:	861	ft	Site n	ame	on GPS:_	Wind	Cove		
Water quality (Re	corded with	a VSI Pı	ro Plus Mulitarol	he)	Dobis				,
Parameter	Cordod With	Value	o i lus munipio	Un		T act coli	brated: 7/29	DO: 7	29
Water temperatu	re	2	8	°C		Last Cali	braied.	DO	
Barometric press	sure	0.7	58,6	mn	nHg	Photos taken: Site Temp Probe			
DO		1 4	00.0	% 8	6 saturation Weathe		Party abusty	Some 1	ani cool
DO	00),5	mg	/L	Substrate	type: Cobble /	ndvach	
Specific conduct	Specific conductivity (SPC)		49	μS/	'cm	1	4		
Conductivity	1		36	μS/	'cm		rs collected:	LI_	
pН			1.35			Biofilm r	ank: Little Med	dium G	reen
ORP	-	~		mV	Б.	1	collected: $\sqrt{7}$	P	
Air temp		15	55	°C		Ergos	eol VTP		
Pfankuck Index					•	2.3			
Flankuck index	Excelle	ent	Good		E.	air	Poor	Score	Madaa
Angularity	Lots of edg		Some edges, so	me		edges (3)	All round (4)	2	Notes
Brightness	Most surfac	200	round (2) Mostly dull, <3	50/	% 50/50 dull &		Manatha 1, 1, 1, 1, 4		
(Dull = biofilm)	dull (1)	es	bright (2)	370	bright (3)		Mostly bright, >65% (4)	2	
Scour	<5% evider	nce of	5-30% of bed		30-50%		>50% (4)		
	scour (6)	-	scoured (12)		scoured (scoured (24)	6	
Consolidation	Lots of size		Moderately		Mostly lo	ose, not	Totally loose,		
of substrate	tightly pack	ted (2)	packed, some soverlap (4)	ize	much ove	erlap (6)	easily moved (8)	4	
Aquatic Veg	Abundant v	· .	Common veg o	r	Spotty, in	1	Perennial types,		-
	moss in swi water (1)	ift	algae, lots in po	ols	backwate seasonal		very scarce or absent (4)	1	
	-	150		- 10					
Deployed Temp lo	gger number	:005	TITOLO Coor	dina	tes: UTMs	: N Same	W	Same	
Retrieved Temp lo	ogger number	r: 20	224665		Not	tes:			
Description of logg	ger location:	SAV	we as pass	+ y	eus;	~50 m	downstream	of ape	nily
Γemp logger photo								1	1 =
Suspended Solids:						N	utrient samples col	lected:	_
Filter number		vind 1		12	(17) WI	nd? D	OC collected:	/ LT	_
Volume filtered		150	0		750	C.	hl a collected:		
filter mass	,	-				A	lgae collected:	LT	_
PITEL WYS	. 1	3300	0.033	U	0.0	370			

Date: 7/29/19

Stream Profile:

(left edge)

looking down stream

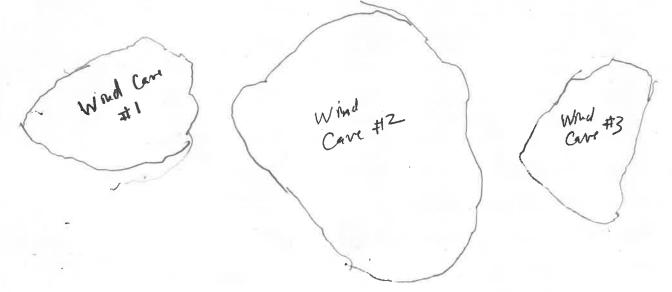
(right edge)

Distance			6		
(cm)					
Depth (cm)	,	•			*

Pebble Counts in num) - measured by DF; B = bedrock; @= embedded

				/ -					
75	250	47	51	68	B.	В	120	73	40
360€	147	1200	18	45	114	В	150 e	B	62
28	160	135	85	99	230	340	38	20	40
90	32	25	92	270	160	B	220	50	105
B	1700	3	3	88	2700	57	122	64	B
B	B	B	В	B	B	B	B	B	В
В	В	B	B	B	B	В	B	B	80
62	70	2800	146	52°	72	74	90	24	35
29	20	378	115	57	138	85	74	34	315
170	1750	230€	50	175	95	160	88	65	105

3 Rock tracings (chlorophyll a):



Teton Stoneflies WYNDD-Tronsta		115				Date:	30 July	2019	
Time: Arrived:	Spm	Depa	urted: 6:20).	Collectors:	LT	+ SA		
Stream: 613	1	strac	2				selan Paintt	mich di	vide
Coordinates: N_	43.7	976	<u>23 </u>		10,8	0713	Datum:_	NAOB	3
Elevation: 9(ell	ft	Site n	ame	on GPS:	G(122	4		
Water quality (Re	corded with	a YSI P	ro Plus Mulitpro	be)	Scott's		7/	2/	,
Parameter		Value	2	Un	its	Last cali	ibrated: 7/27	DO: /	30
Water temperatu	ire	4	8.7	°C	i comme				
Barometric press	sure	5	36.4	mn	ıНg	Photos to	aken: Site	Cemp Prob	
DO		1-	81.0	% :	saturation	Weather	: Sunny, bi	wan	
DO		C	1.33	mg	/L	Substrate	e type: Cobble	2,00	avel
Specific conduct	ivity (SPC)	1	2.0	μS	'cm		rs collected:	1-	
Conductivity	1		8.3	μS	'cm				
рН		1				Biofilm	rank: Little Me	dium G	reen
ORP				щV		Microbe	s collected: $\sqrt{5 l_1}$	<u></u>	
Air temp		~	65	°C	F	Ergost	ferol: 154		
Pfankuck Index									
Ptanklick Indev			*		411				77
T TAILED THUCK	Eveelle	mt	Cood		E.				
	Excelle Lots of edg		Good Some edges, so	me	Fa Rounded		Poor	Score	Notes
Angularity	Lots of edg	ges (1)	Some edges, so round (2)		Rounded	edges (3)	All round (4)	Score	Notes
Angularity Brightness	Lots of edg Most surface	ges (1)	Some edges, so round (2) Mostly dull, <3	35%	Rounded 50/50 dul	edges (3)	All round (4) Mostly bright,		Notes
Angularity	Lots of edg	ces (1)	Some edges, so round (2) Mostly dull, <3 bright (2)		Rounded 50/50 dul bright (3)	edges (3)	All round (4) Mostly bright, >65% (4)		Notes
Angularity Brightness (Dull = biofilm) Scour	Most surface dull (1) <5% evident scour (6)	ces (1)	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of bed scoured (12)	35%	Rounded 50/50 dul	edges (3) 1 & of bed	All round (4) Mostly bright,		Notes
Angularity Brightness (Dull = biofilm) Scour Consolidation	Most surface dull (1) <5% evident scour (6) Lots of size	ces (1)	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of hed scoured (12) Moderately	35%	Solution Rounded 50/50 dull bright (3) 30-50% coured (Mostly lo	edges (3) 1 & of bed 18) ose, not	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24) Totally loose,	2 4	Notes
Angularity Brightness (Dull = biofilm) Scour	Most surface dull (1) <5% evident scour (6)	ces (1)	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of bed scoured (12)	35%	80000000000000000000000000000000000000	edges (3) 1 & of bed 18) ose, not	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24)	2 4	Notes
Angularity Brightness (Dull = biofilm) Scour Consolidation	Most surface dull (1) <5% evider scour (6) Lots of size tightly pack	ces (1) ces nce of cs, red (2)	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of bed scoured (12) Moderately packed, some soverlap (4) Common veg of	ize	Rounded 50/50 dul bright (3) 30-50% o scoured (Mostly lo much ove	edges (3) 1 & of bed 18) ose, not orlap (6)	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24) Totally loose, easily moved (8) Perennial types,	2 4 12	Notes
Angularity Brightness (Dull = biofilm) Scour Consolidation of substrate	Most surface dull (1) <5% evident scour (6) Lots of size tightly pack Abundant values in swi	ces (1) ces nce of cs, red (2)	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of hed scoured (12) Moderately packed, some soverlap (4) Common veg of algae, lots in possible some source and some source of the source	ize	Rounded 50/50 dul bright (3) 30-50% o scoured (Mostly lo much ove	edges (3) 1 & of bed 18) ose, not orlap (6)	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24) Totally loose, easily moved (8) Perennial types, very scarce or	2 4 12	Notes
Angularity Brightness (Dull = biofilm) Scour Consolidation of substrate Aquatic Veg	Most surface dull (1) <5% evident scour (6) Lots of size tightly pack Abundant versus in swit water (1)	ces (1) ces nce of ced (2) reg, ift	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of hed scoured (12) Moderately packed, some s overlap (4) Common veg o algae, lots in po (2)	ize	Rounded 50/50 dul bright (3) 30-50% o scoured (Mostly lo much ove Spotty, in backwater seasonal	edges (3) I & of bed 18) ose, not orlap (6) yor algae (3)	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24) Totally loose, easily moved (8) Perennial types,	2 4 12	Notes
Angularity Brightness (Dull = biofilm) Scour Consolidation of substrate	Most surface dull (1) <5% evident scour (6) Lots of size tightly pack Abundant versus in swit water (1)	ces (1) ces nce of ced (2) reg, ift	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of hed scoured (12) Moderately packed, some soverlap (4) Common veg of algae, lots in possible some source and some source of the source	ize	Rounded 50/50 dul bright (3) 30-50% o scoured (Mostly lo much ove Spotty, in backwater seasonal	edges (3) I & of bed 18) ose, not orlap (6) yor algae (3)	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24) Totally loose, easily moved (8) Perennial types, very scarce or	2 4 12	Notes
Angularity Brightness (Dull = biofilm) Scour Consolidation of substrate Aquatic Veg	Most surface dull (1) <5% evident scour (6) Lots of size tightly pack Abundant was in swith water (1)	ces (1) ces nce of ced (2) reg, ift	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of hed scoured (12) Moderately packed, some s overlap (4) Common veg o algae, lots in po (2)	ize	Rounded 50/50 dul bright (3) 30-50% o scoured (Mostly lo much ove Spotty, in backwater seasonal	edges (3) I & of bed 18) ose, not erlap (6) 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)	2 4 12	Notes
Angularity Brightness (Dull = biofilm) Scour Consolidation of substrate Aquatic Veg Deployed Temp lo	Most surface dull (1) <5% evident scour (6) Lots of size tightly pack Abundant values in switch water (1) ogger number ogger number	ces (1) ces ces ced (2) ceg, ift c: 20	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of hed scoured (12) Moderately packed, some s overlap (4) Common veg o algae, lots in po (2)	ize r pools	Rounded 50/50 dul bright (3) 30-50% of scoured (Mostly lo much over Spotty in backwater seasonal extes: UTMs:	edges (3) I & of bed 18) ose, not or algae (3) N es:	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 4 12	Notes
Angularity Brightness (Dull = biofilm) Scour Consolidation of substrate Aquatic Veg Deployed Temp lo	Most surface dull (1) <5% evident scour (6) Lots of size tightly pack Abundant versus in swit water (1) ogger number og ger	ces (1) ces ces ced (2) ceg, ift c: 20	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of hed scoured (12) Moderately packed, some soverlap (4) Common veg of algae, lots in po (2)	ize r pools	Rounded 50/50 dul bright (3) 30-50% of scoured (Mostly lo much over Spotty, in backwater seasonal of the	edges (3) I & of bed 18) ose, not orlap (6) yor algae (3) N es:	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 4 12 2 3	Notes
Angularity Brightness (Dull = biofilm) Scour Consolidation of substrate Aquatic Veg Deployed Temp lo Retrieved Temp lo	Most surface dull (1) <5% evident scour (6) Lots of size tightly pack tightly pack tightly pack water (1) ogger number ogger number ogger number og number:	ces (1) ces ces ced (2) ceg, ift c: 20	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of hed scoured (12) Moderately packed, some soverlap (4) Common veg of algae, lots in portage. (2)	ize r pools	Rounded 50/50 dul bright (3) 30-50% of scoured (Mostly lo much over Spotty, in backwater seasonal of the	edges (3) 1 & of bed 18) ose, not erlap (6) or algae (3) N es:	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 4 12 2 3	

3

606 average Chl a collected: \/ LT/SH

Algae collected:_

Volume filtered (mL)

Teton Stoneflies 2018	
WYNDD-Tronstad 307-766	5-3115

Date: 7/30/19

Stream Profile:	(left edge)	*10	(right e	edge)	
Distance (cm)		Sup in	2019		
Depth (cm)					
Pebble Counts	e= em	bedded	(mm)		
25 11 42 4 55 9	38 31 160 70 35 35 88 00 15	28 @ 10 36 49 66 135 125 45 99 32	280 64 370 65 43 59 56 58	85° 28 3	30 30 30 37
					7
more sne alome sh	izzly O in sn re Than in			Grizely	

Notes:
Tetonica
Rheed logges at Lednia Pand (10767834) + Brusha (10767841)
Theed logges at Lednia Pand (10767834) C 12:30 pm 30 only 19

Teton Stoneflies WYNDD-Tronsta		115	,			Date:_	31 July &	2019		
Time: Arrived:	8:30 an	Depa	arted: 10:00	4M	Collectors:	dT	+ SH			
Stream: Paint	arush R	5		Loca	tion Descr	iption:	bauth of Ho	ly la	co Pani	
Coordinates: N_	43,78	353	w w	\	10.7	9335	Datum:	AAD8	3 Can	
Elevation:	52	ft	Site n	ame	on GPS:	ainthru	ish RG logg	4		
Water quality (Re	corded with	a YSI P	ro Plus Mulitpro	be)	SH prob	e	71	7	,	
Parameter		Value		Un		Last cali	brated: 7/27	DO: 7/	21	
Water temperatu				°C		1				
Barometric press				mn	nHg	Photos taken: Site Temp Probe				
DO					saturation	Weather	Mosty Sui	nny		
DO			9.84	mg	/L		e type: Cobble		ldons	
Specific conduct	ivity (SPC)		30.4	μS	/cm		rs collected:	L		
Conductivity			17.9	μS/cı		3 Surbe	rs collected:	5476		
pН					•	Biofilm rank: Little Medium Green			Green	
ORP				mV	Ţ)I	Microbe	s collected:	SH		
Air temp			~600 (1)	T	°F					
Pfankuck Index										
	Excelle	ent	Good		Fs	uir	Poor	Score	Notes	
Angularity	Lots of edg	es (1)	Some edges, so round (2)	me	Rounded		All round (4)	/	140168	
Brightness	Most surfac	es	Mostly dull <3	50%	50/50 dul	1 &	Mostly bright,			
(Dull = biofilm)	dull (1)		bright (2)	270	bright (3)		>65% (4)	2		
Scour	<5% evider	ice of	5-30% of bed		30-50% o		>50% of bed			
	scour (6)		scoured (12)		scoured (scoured (24)	12		
Consolidation	Lots of size	6	Scoured (12)		Mostled (18)		T-4-11 1	/ - \		

Consolidation of substrate	Lots of sizes, tightly packed (2)	Moderately packed, some size overlap (4)	Mostly loose, not much overlap (6)	easily moved (8)		
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)	1	moss on mossins
Deployed Temp lo	ogger number: 201	175520Coordina	ites: UTMs: N <u>43</u> ,	78536 W-1	10,79	335 600
Retrieved Temp le	ogger number: 20	153864	Notes:	issing end cap	р	
Description of log	ger location: In 8	locg Ilamo				
	number: Ricoh	0		Nutrient samples col	llected:	✓ LT
	P Lusha ashed	filters #		OOC collected:	11.	
Filter number	Painthrush	1 98 2	20 T	Chl a collected: V		_
Volume filtered	(mL) (00)	600	/ 4/)			
filter mass	mean -		7	Algae collected:	L1/	317

Date: 7/31/19

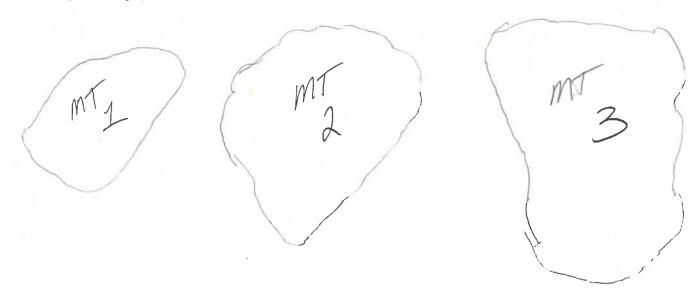
WYNDD-Tronstad 307-766-3115 *looking down stream* (right edge) Stream Profile: (left edge) Distance 20119 In (cm) Depth (cm) e = embedded Cmm Pebble Counts 125 325 1040 25 50 210° 47 42 40 50 30 3 Rock tracings (chlorophyll a): Pantbrush Pant brush paint brush

(1) Moss an most rocks scrubbed for Surbers. Didn't notice too many inverts. Sittle stuff accumulated on sestan fifter Top rocks losse, but rocks under next membedded

Teton Stoneflies WYNDD-Tronst		115				Date:	1 Aug à	2019	
Time: Arrived:	11:30	Depa	arted: /: 50		Collectors	dT	+ SH	†	
Stream: Mi	de Teta	<u> </u>	Stream	Loca	tion Descr	ription: <u>A</u>	DOVE GAINE	+ Ma	dows
Coordinates: N_	43.7	212	9 w	- 1	10.70	1476	Datum:	NADO	83
^	435	ft			on GPS:				
Water quality (Re	corded with			be)	54 451		7/	a	
Parameter		Value			uits	Last cali	brated: 7/27	DO:	
Water temperatu			4.0	°C		Photog te	aken: Site	Toman D	1/
Barometric press	sure		537.5	mn	nHg			1 emp Pro	be
DO			82.9	%	saturation	Weather	: Sunny		
DO			10.87	mg	;/L	Substrate	e type:	Rould	ler
Specific conduct	ivity (SPC)		4.1	μS	/cm			/	
Conductivity			2.5	μS	/cm	3 Surbei	rs collected:	<u></u> S	#+ 1
pН	_					Biofilm 1	rank: Little Me	edium	Green
ORP				mV	7	Microbes	s collected:		
Air temp			165	°E	0 F				
Pfankuck Index	Excelle		Cood	-				T =	
Angularity	Lots of edg		Some edges, so	me	Fair ne Rounded edge		Poor All round (4)	Score	Notes
			round (2)				7 III Touliu (4)	2	
Brightness (Dull = biofilm)	Most surface dull (1)	ces	Mostly dull, <3 bright (2)				Mostly bright,	4	
Scour		nce of	5-30% of bed		bright (3) 30-50% c		>65% (4)/ >50% of bed		
	scour (6)		scoured (12)		scoured (18)	scoured (24)	21	
Consolidation of substrate	Lots of size tightly pack	,	Moderately packed, some s	i70	Mostly lo	2· / \	Totally loose,	8	
	and pack	(2)	overlap (4)	12.0	much ove	1140 (0)	easily moved (8)	6	
Aquatic Veg	Abundant v	-	Common veg o		Spotty, in		Perennial types,	LT.	Very Steep
	moss in swi water (1)	π	algae, lots in po	ools	backwate seasonal		very scarce or absent (4)	\$	14
Deployed Temp lo		2NC		. 1'				7	new + there
9				raina	ies: UIMs:	: N	W		
Retrieved Temp lo	ogger number	: 10°	172588		Not	tes:			
Description of logg	ger location:	500	off took her	J p	w roton	/ phone	- no change	e in le	action though
Temp logger photo	number:	_		>1		N	utrient samples co	llected.	
Suspended Solids:	dush	85	ashed filter	" 4			•		
Filter number	MT	- 1	MT 2		MT 3	D	OC collected:	V/	
Volume filtered)()	600		600	C	hl a collected:	V	
alter mass	me	(N -	500		0.00	A	lgae collected:	V	
ditto.	1100)				

							,		
Stream Prof	ile: (left	edge)		*loo	king down s	tream*		(rigi	ht edge)
Distance (cm)			Mot	j	A 0	2019	7		
Depth (cm))		. 7		·				
Pebble Cour	nts (mi	m)	e=	emb	edded				
105	34	46	310	130	50°	28	200	120	15
8	6	Ne	76	890	60	290°	105	82	75
75	75	8	30	54 e	140	68e	245	120°	49
45	2300	60	55	15	55	120	65	150	32
45	7	87	40	125	1190	440	65	90	60
		adirmusifi anni and diregnes, material and supplementation of the su		with his control of the control of t	- ama and control of the filless of the control of	engletegenheise vor er en van 1925 fan de 1911 fanden 144. e		Auto.	
	*								
,					and the second of the second o				1
10	-								1

3 Rock tracings (chlorophyll a):



Notes: 31° angle (measured w/ clinometar) Scott estimate flow is ~ 30% more than previous years

Teton Stoneflies WYNDD-Tronsta		115			:	Date:	Aug 2019	<u> </u>	
Time: Arrived:	2:00pm	Depart	ed: 3:00 pt	us (Collectors:	2.	+81		Climber's
Stream: Claud	Veil D	line (Creek I	Loca	tion Descr	iption: A	bare Garne	t med	adows Let
Coordinates: N_	43, 725	160	W -	11	0,796	00	Datum:_	NAO8	13
Elevation:		ft	Site na	ame	on GPS:_(Dandus	ul Dane	Stream	_
Water quality (Re	corded with	a YSI Pro Value	Plus Mulitprob	be) Un		Î. r 19	brated: 7/27	B. 8	/,
Water temperatu	re	Value	2	°C	113	Last can	brated: 72 T	DO:	
Barometric pressure		d	10 -	mn	ıHg	Photos ta	aken: Site 🗸 🛚	Temp Prob	ne /
3		50	12,7			XX7 .1	011 (1 . 1	
	DO 91		,7		saturation		Yartly (Laudy	
	DO		.13	mg	/L	Substrate	type: Sauld	us + C	abbli
Specific conductivity (SPC)		6.	7	μS/	'cm	3 Surbe	rs collected:	I	+5H
Conductivity		3	,9	μS/	'cm	D: CI			
pH						Bionim			reen
ORP			mV			Microbes	s collected: NF	<u> </u>	
Air temp			60 0		5				
Pfankuck Index									
Pfankuck Index	Excelle	ent	Good		F	air	Poor	Score	Notes
Pfankuck Index Angularity	Excelle Lots of edg	ges (1)	Good Some edges, so round (2)	ome		air edges (3)	Poor All round (4)	Score /	Notes
		ges (1)	Some edges, so			edges (3)			Notes
Angularity Brightness	Most surfacedull (1) <5% eviden	ges (1) ces nce of	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of bed		50/50 du bright (3) 30-50% (edges (3)	All round (4) Mostly bright, >65% (4) >50% of bed	1	Notes
Angularity Brightness (Dull = biofilm) Scour	Most surfactual (1) <5% evident scour (6)	ces nce of	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of bed scoured (12)		Solved Rounded 50/50 du bright (3 30-50% c scoured (5 s	edges (3)	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24)	1	Notes
Angularity Brightness (Dull = biofilm)	Most surfacedull (1) <5% eviden	ges (1) ces nce of es, ked (2)	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of bed	5%	50/50 du bright (3) 30-50% (edges (3)	All round (4) Mostly bright, >65% (4) >50% of bed	1	Notes
Angularity Brightness (Dull = biofilm) Scour Consolidation	Most surfactull (1) <5% evidence scour (6) Lots of size tightly pack Abundant values in sweetens	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 si overlap (4) Common veg or algae, lots in po	ize	Spotty, w	edges (3) Il & of hed 18) oese not erlap (6)	All round (4) Mostly bright, >65% (4) >50% of bed scoured (24) Totally loose, easily moved (8) Perennial types, very scarce or	1 4 18	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, ked (2) veg, ift	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of bed scoured (12) Moderately packed, some si overlap (4) Common veg or algae, lots in po (2)	ize	Spotty, is backwate seasonal	edges (3) Il & of hed 18) oess not erlap (6) 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)	1 4 18 6 3	. Egg
Angularity Brightness (Dull = biofilm) Scour Consolidation of substrate	Most surfactual (1) <5% evidence scour (6) Lots of size tightly pack Abundant ymoss in sw. water (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 si overlap (4) Common veg or algae, lots in po (2)	ize	Spotty, is backwate seasonal	edges (3) Il & of hed 18) oess not erlap (6) 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)	1 4 18 6 3	. Egg
Angularity Brightness (Dull = biofilm) Scour Consolidation of substrate Aquatic Veg	Most surfactull (1) <5% evidence scour (6) Lots of size tightly pack Abundant values in sway water (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 si overlap (4) Common veg or algae, lots in po (2)	ize r ools	Spotty, we backwate seasonal	edges (3) ll & of bed 18) oese, not erlap (6) 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) W -	1 4 18 6 3	. Egg
Angularity Brightness (Dull = biofilm) Scour Consolidation of substrate Aquatic Veg Deployed Temp lo	Most surfactual (1) <5% evidence scour (6) Lots of size tightly pack Abundant values in swater (1) ogger number	ges (1) ces nce of es, ked (2) veg, ift r: 201	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of bed scoured (12) Moderately packed, some si overlap (4) Common veg or algae, lots in po (2) 7462 Coor	ize r pols	Rounded 50/50 du bright (3) 30-50% o scoured (Mostly le much ove Spotty, w backwate seasonal tes: UTMs	edges (3) Il & of hed 18) or algae (3) : N tes:	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 4 18 6 3	. Egg
Angularity Brightness (Dull = biofilm) Scour Consolidation of substrate Aquatic Veg Deployed Temp lo	Most surfactual (1) <5% evides scour (6) Lots of size tightly pack Abundant values in swater (1) ogger number ogger number og ger location: number:	ges (1) ces nce of es, ked (2) veg, ift r: 201	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of bed scoured (12) Moderately packed, some si overlap (4) Common veg or algae, lots in po (2) 74692 Coor	ize r pols	Rounded 50/50 du bright (3) 30-50% o scoured (Mostly le much ove Spotty, w backwate seasonal tes: UTMs	edges (3) Il & of bed 18) oese not erlar (6) or algae (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 4 18 6 3	
Angularity Brightness (Dull = biofilm) Scour Consolidation of substrate Aquatic Veg Deployed Temp lo Retrieved Temp lo	Most surfactual (1) <5% evidence scour (6) Lots of size tightly pack Abundant values in swater (1) ogger number ogger number ogger number: onumber:	ges (1) ces nce of es, ked (2) veg, ift r: 201	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of bed scoured (12) Moderately packed, some si overlap (4) Common veg or algae, lots in po (2) 74692 Coor	ize r pols	Rounded 50/50 du bright (3) 30-50% o scoured (Mostly le much ove Spotty, w backwate seasonal tes: UTMs	edges (3) Il & of bed 18) or algae (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- Uck	1/4/18/6/23	
Angularity Brightness (Dull = biofilm) Scour Consolidation of substrate Aquatic Veg Deployed Temp lo Retrieved Temp lo Description of logg Temp logger photo	Most surfactual (1) <5% evidence scour (6) Lots of size tightly pack Abundant values in swater (1) ogger number ogger number ogger number: onumber:	ges (1) ces nce of es, ked (2) veg, ift r: 201	Some edges, so round (2) Mostly dull, <3 bright (2) 5-30% of bed scoured (12) Moderately packed, some si overlap (4) Common veg or algae, lots in po (2) 7462 Coor	ize r pols	Rounded 50/50 du bright (3) 30-50% o scoured (Mostly le much ove Spotty, w backwate seasonal tes: UTMs	edges (3) Il & of hed 18) or algae (3) : N tes:	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-	1/4 1/8 6/3	

mean filte meight

Algae collected:

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

Date:	
Daic.	

Stream Profile:	(left edge)	*looking down	stream*	(right edge)		
Distance (cm)						
Depth (cm)						
Pebble Counts						
	/					
		a l				
/						

3 Rock tracings (chlorophyll a):

Just allithe section of the stream is out of the snow. The remainder is under snow. Thinking this is a surface glacker fed stream.

Lednia here! Observed by flipping rocks.

Found to in a few minutes

Pfankuck Index Excellent Good Fair Poor Score Indicated	ream: HK	Sasm 1 CI	y See	P (5)	Loca	tion Descr	ription:	"The origina	1"-5y	AKBas
Water quality (Recorded with a YSI Pro Plus Mulitprobe) Parameter Water temperature	oordinates: N_			W				Datum:_		
Parameter Value Units Last calibrated: 7 30 Do: 7	evation:		ft	Site n	ame	on GPS:_				
Barometric pressure Barometric pressure DO QQ Moderately bright (2) Consolidation of substrate Same degree, and of substrate Consolidation of substrate Aquatic Veg Aquatic Veg Aquatic Veg Aquatic Veg Aquatic Veg Barometric pressure SY1, 7 mmHg Photos taken: Site Temp Probe Weather: Dath clow by Scatters Weather: Dath clow by Substrate type: Substrate type: Substrate type: 3 Surbers collected: Microbes collected: Microbes collected: Microbes collected: Mostly bright Scatter Modium Green Microbes collected: Mostly bright Some edges, some Rounded edges (3) All round (4) Scatter Mostly bright Some edges, some Rounded edges (3) All round (4) Scatter Mostly bright Some edges, some Rounded edges (3) All round (4) Scatter Mostly bright Some edges, some Rounded edges (3) All round (4) Scatter Mostly bright Some edges, some Rounded edges (3) All round (4) Scatter Mostly bright Some edges, some round (2) Mostly bright Sowered (18) Scoured (18)	ater quality (Re	corded with	a YSI P	ro Plus Mulitpro	be)					
Barometric pressure Barometric pressure DO QQ Moderately bright (2) Consolidation of substrate Substrate type: Substr			Value				Last cali	brated: 7 30	DO:	7/30
DO 99 Weather: path cloud 50 Scatters DO 99 mg/L Substrate type: 56 le pel 6 Substrate type: 60 Subs	Vater temperatur	•		1.6	.ºC					
DO Specific conductivity (SPC) Specific conductivity (SPC) Specific conductivity DO Specific conductivity DO Specific conductivity DO Substrate type:	Barometric pressure		5	741.7	mn	nHg			1	
Specific conductivity (SPC) Specific conductivity (SPC) Conductivity Do b	DO		(79	%:	saturation	Weather	: partly clou	dy 50	attered.
Specific conductivity (SPC) 92 µS/cm Biofilm rank: Little Medium Green ORP A Microbes collected: Microbes collect	DO		0	i a	mg	:/L	-	,	- 1	
Conductivity pH 8.05 ORP Air temp Augularity Lots of edges (1) Some edges, some round (2) Soure (24)			-				1		1 /	
Biofilm rank: Little Medium Green Microbes collected: Microbes col	1 80	(51 0)	1 1	1		and the same of th	3 Surbe	rs collected:	/ (De6) il
Air temp Excellent Good Fair Poor Score In the second Poor Poor Score In the second Poor Poor Score In the second Poor P					μδ	cm	Biofilm	rank: Little Ma	dina	Green 4
Air temp Excellent Good Fair Poor Score Indicated I	C. D. LV	1	8	.05			1		1	
Air temp Excellent Good Fair Poor Score Indicated I	ORP		Λ	a	mV	7,	Microbes	collected:	(toyle	25)
Excellent Good Fair Poor Score In Angularity Lots of edges (1) Some edges, some round (2) Rounded edges (3) All round (4) In Score In	ir temp				°C		7			
Round (2) Roun									Score	Notes
Most surfaces dull (1) bright (2) bright (3) >65% (4) 3 Scour (5% evidence of scour (6) scoured (12) scoured (18) scoured (24) Consolidation of substrate Lots of sizes, tightly packed (2) packed, some size overlap (4) Aquatic Veg Abundant veg, moss in swift water (1) (2) scoured (18) Spotty, in backwater or seasonal algae (3) absent (4) Coordinates: UTMs: N Coordinates	ingularity	Lots of edg	es (1)		ome	Rounded	eages (3)	All round (4)		Snow Co
Scour Scou	-		ces	Mostly dull, <3	35%				2	(W10.
Scour (6) Consolidation Lots of sizes, tightly packed (2) Aquatic Veg Abundant veg, moss in swift water (1) Common veg or water (1) Common veg or seasonal algae (3) Coordinates: UTMs: N Scoured (18) Mostly loose, not much overlap (6) Spotty, in backwater or seasonal algae (3) Perennial types, very scarce or absent (4) Coordinates: UTMs: N Coordinates: UTMs: N Notes:									_	/ d1
Consolidation of substrate Lots of sizes, tightly packed (2) Aquatic Veg Abundant veg, moss in swift water (1) Exployed Temp logger number: Advantage of substrate Mostly loose, not much overlap (6) Spotty, in backwater or seasonal algae (3) Spotty, in backwater or seasonal algae (3) Coordinates: UTMs: N Mostly loose, not much overlap (6) Spotty, in backwater or seasonal algae (3) Notes:	cour		ice of	1					60	Son
tightly packed (2) packed, some size overlap (4) Aquatic Veg Abundant veg, moss in swift water (1) Perennial types, very scarce or seasonal algae (3) Approximate tightly packed (2) packed, some size overlap (6) easily moved (8) Perennial types, very scarce or seasonal algae (3) Notes:	onsolidation		s,							
moss in swift water (1) algae, lots in pools backwater or very scarce or absent (4) algae (3) absent (4) as sume this is lossed 20571724 as summer this lossed 20571724 as summer this is lossed 20571724 as summer this los					ize				2	, , , , , , , , , , , , , , , , , , ,
eployed Temp logger number: 2055863 Notes: seasonal algae (3) absent (4) Coordinates: UTMs: N Victorial logger number: 2055863 Notes:	quatic Veg		٠.			A				
eployed Temp logger number: 2055863 Notes:			IIT	80.00	ols				2	
etrieved Temp logger number: 2015 58 63 Notes: W- W- W- Verrieurd les			17	(-)	his					- La
		gger number	1	Coor	rdina	tes: UTMs:	: N	W	Softial !	of lane
(0.0671777) D. R. Jacon - 1.10.00	ployed Temp lo	1	4 4	155863				,		
escription of logger location: 1205 11 123 1 1605 109 Ser Way 5 bull 120 Sam		gger number	r: <u>20</u>	1 200			1	Α		
escription of logger location: 20571723 This logger always bueld IN Sams emp logger photo number: Debtok Debtok	trieved Temp lo	-	$\frac{20}{20}$)	This	logger.	always buel	(/ 1) ?	sam
Nutrient samples collected:	trieved Temp lo	er location:	20	0571723)	This	logger,	always fuel	(N S)	nall

Algae collected: _____

Volume filtered (mL)

looking down stream (right edge) Stream Profile: (left edge) Distance (cm) Depth (cm) e= embedded mm=minuters Pebble Counts 215e 172e 165e 180e 120e (n)

. 45

3 Rock tracings (chlorophyll a) Y Note: Show Pack at the mouth of this fock glacier and 15 not normally what we see. Drimelting into smean!

200e

280e

160e

) Chia tacings are on extra Sheet!

Taylor was doing these for her 1st tome, and we also

Notes:

forgot to # the sant vials. However: the rep w lowest vo lune is #3 is

Teton Stoneflies WYNDD-Tronst	s 2018 tad 307-766-3115		Date: 30 July 2019							
Stream Profile:	(left edge)	Date: 30 July 2019 (extra Sheet used for *looking down stream* Ala tracings)								
Distance (cm)										
Depth (cm)										
Pebble Counts					16					
0										
					>	a				
	1		. 2							
						12.12				
			7							
	- (4		•			7 7				
					4.7-	7 45 4				
					Tong	MANAGER AND				
			. 4			R War				
Rock tracings (chlorophyll a):	uscare uck #12	for Alask	a Balin	Pork	ep DA				
lotes:										
Zvials	were not	labelled 3			ial not	- full				

Teton Stoneflies 2018 WYNDD-Tronstad 307-766-3115 Collectors: Time: Arrived: Departed: AK BUSH TRY SPEP Location Description: W - Datum: Coordinates: N Site name on GPS: Elevation: Water quality (Recorded with a YSI Pro Plus Mulitprobe) Units Last calibrated: DO: Value Parameter °C Water temperature Photos taken: Site____ Temp Probe____ Barometric pressure mmHg Weather: % saturation DO mg/L DO Substrate type: µS/cm Specific conductivity (SPC) 3 Surbers collected: μS/cm Conductivity Green Biofilm rank: Little Medium pH Microbes collected: mV ORP °C Air temp Pfankuck Index Fair Poor Score Notes **Excellent** Good Rounded edges (3) All round (4) Lots of edges (1) Some edges, some Angularity round (2) 50/50 dull & Mostly bright, Mostly dull, <35% Most surfaces **Brightness** >65% (4) bright (2) bright (3) (Dull = biofilm) dull (1) 5-30% of bed 30-50% of bed >50% of bed <5% evidence of Scour scoured (18) scoured (24) scoured (12) scour (6) Totally loose, Moderately Mostly loose, not Lots of sizes, Consolidation easily moved (8) much overlap (6) packed, some size of substrate tightly packed (2) overlap (4) Perennial types, Common veg or Spotty, in Abundant veg, Aquatic Veg backwater or very scarce or moss in swift algae, lots in pools seasonal algae (3) absent (4) water (1) (2) Deployed Temp logger number: Coordinates: UTMs: N W -Retrieved Temp logger number: ______Notes: _____ Description of logger location: Temp logger photo number: Nutrient samples collected:____ Suspended Solids: DOC collected: Filter number Chl a collected:

Algae collected:

Volume filtered (mL)

Date: 31 July 2019 **Teton Stoneflies 2018** WYNDD-Tronstad 307-766-3115 Time: Arrived: 1:00 Am Departed: 12:20 pm Collectors: Taylor + Deb stream Site name on GPS: SCASC RQ Elevation: _ft length Water quality (Recorded with a YSI Pro Plus Mulitprobe) Last calibrated: 7 30 DO: 9/31 **Parameter** Value Units NOT Water temperature °C: 0.0 Photos taken: Site ____ Temp Probe n/a Barometric pressure 526.2 mmHg Weather: Sunny then cloudy -DO % saturation 100 DO mg/L16.1 Substrate type: Cabble | pebble Specific conductivity (SPC) μS/cm 3 Surbers collected: 42.4 Conductivity uS/cm Biofilm rank: Little Medium Green pН 8,85 ORP Microbes collected: mV(Taylor) Air temp °C pleasant i Pfankuck Index **Excellent** Good Fair Poor Score Notes Angularity Some edges, some Lots of edges (1) Rounded edges (3) All round (4) round (2) **Brightness** Most surfaces Mostly dull, <35% 50/50 dull & Mostly bright, (Dull = biofilm) dull (1) bright (2) bright (3) >65% (4) Scour <5% evidence of 5-30% of bed 30-50% of bed >50% of bed 12 scour (6) scoured (12) scoured (18) scoured (24) Consolidation Lots of sizes, Moderately Mostly loose, not Totally loose, of substrate tightly packed (2) packed, some size much overlap (6) easily moved (8) 4 overlap (4) Aquatic Veg Abundant veg. Common veg or Spotty, in Perennial types, moss in swift algae, lots in pools backwater or very scarce or water (1) seasonal algae (3) absent (4) Deployed Temp logger number: _____ Coordinates: UTMs: N_____ We are is a source 10 me is @ sonce and other ~ 100 Retrieved Temp logger number: ______ Notes: in als near the Description of logger location: Chreatly surice Temp logger photo number: Nutrient samples collected:____

34.9mg 35.1 35.0

Aubs #5:1

Suspended Solids:

Filter number

Volume filtered (mL)

Algae collected:

Extrafiller

Lorgothetilker M20: Filter Weight, 34, 7mg

rossed

DOC collected:

Chl a collected:

ream Pro	file: (lef	t edge)		*100	king down	stream*	100	ght edge)	
Distance (cm)	9			·		1 6			
Depth (cm	1)				1	10.00 mg			
ebble Cou	nts // w	1=milli	neter.	PERM	bedded	W1.	only of	ud 80 6	t back a
56	22	65	25	132	10	3	100e	105	24
40	1106	1100	165	16	76	65	70	42	1200
36	65	25	49	2	115	23	52	90	74
59	15	110e	52	110 .	179	130e	140e	90	230
95	35	19	75	20	157	53	52	140	40
	l l	-			-				
							2		
				H BEST					
4								is.	
Rock trac	ings (chlore	ophyll a):		1					THE SHAPE
7	_ <			1:		7			TH
		B		1		- 1			1
Rock:	till			10		3	V A		1
				Roc	1#5	?		RO	CK #3
					100	(
							18/		
			-				1 , 1		

	Stream: S. F. Coordinates: N_	ork Tet	Dopa Dn ()	reek + four year	Loca	tion Descr	ription:	or + Deb	am)	N K Basin
1		(300)			Sa	on GPS:_		Datum:		
Y 1	Water quality (Re	corded with				**	7	0 10		2 /01
3			Value		Un °C	its	Last cali	brated: 7 3b	DO:	7 31
3	Water temperatu		10	1.7			Photos ta	iken: Site 🖊	Temn Pro	hek
7	Barometric press	ure	5	34.8	mir	ıНg				
3	DO			99	% s	saturation	Weather	cloudy but	caln	1
,	DO			7.8	mg	/L	0.1	, Calabla	[].	0.0.0
787	Specific conduct:	ivity (SPC)			100	'cm	Jaostiate	rs collected:	אוא	12: Surbers
{	Conductivity	(01 0)		2.2			3 Surber	s collected:	eac	khave I ec
Carry Carry			38	3.0	μδ/	cm	100	ank: Little Me	•	Stanelly. Green
١	pH		7	7			John Talk. Education		dium	Green
	ORP				mV		Microbes	s collected:		
	Air temp				°C			Ctaylo	or)	
20]	Pfankuck Index Angularity	Excelle Lots of edg		Good Some edges, so round (2)	ome		air l edges (3)	Poor All round (4)	Score 2	Notes
6	Brightness (Dull = biofilm)	Most surface dull (1)	ces	Mostly dull, <	Mostly dull, <35% 50/5 bright (2) bright 5-30% of bed 30-		11 &	Mostly bright, >65% (4)	Ÿ.	See left 51 de.
	Scour	<5% evider	nce of				of bed (18)	>50% of bed scoured (24)	12	340
	Consolidation of substrate	Lots of size tightly pack		Moderately packed, some overlap (4)	lerately Mostly lo			Totally loose, easily moved (8)	4	
	Aquatic Veg	Abundant v moss in sw: water (1)	ift	Common veg of algae, lots in p	ools	Spotty, in backwater or seasonal algae (3)		Perennial types, very scarce or absent (4)	3	
I	Deployed Temp lo Retrieved Temp lo Description of logg	ogger number ogger number ger location:	:: 20 r: 2 mid-	475519coc 015586	ordina **	tes: UTMs	s: N	W- retrieved to even hiked up ale" blow wol	ns the	n promptly to see that the comments of the com
7	Temp logger photo Suspended Solids:	number:	457	S					llected:	Colore
S				25		211	T D	OC collected:		
2	Filter number	Lyn.		(A) III					4	
2	Filter number Volume filtered	(mI)	1	750		27	2 C	hl a collected:		

Date: 31 July

Stream Prof	ile: (left	edge)	1	*loc	king down	stream*		(right edge)		
Distance (cm)						2				
Depth (cm)	7								
Pebble Cour	nts mr	n = m.1	linetu	y e	= Cen/	reddy)			
370e	31	230€		68	112	130e	85e	290e	17	
19	68	100	21	155e	63	70	87	60	113	
230	220e	75e	180 €	55e	360€	105	30	2208	59	
40	18	a		3500	35	89	48	160	120	
4300	Sand	69	80e	60	3.8	120	70	62	245e	
140	55	7	42	q	130	300e	114	28	6	
43	5	1400	30	23	90e	2	160	(0)	70	
190	68	110e	132	24	96	140e	50	44	110	
80	300e	18	43	33	30	24	42	67	120	
70	150	95	88	56	140e	44	70	29	21	
	ings (chlorop	ohyll a):		chla 2		1 -				
Mal	1	1		4						
				2			}	ch	l a (3	

Teton Stonefl WYNDD-Tron	Teton Stoneflies 2018 WYNDD-Tronstad 307-766-3115				>	Date	2 Aug o	2019		
Time: Arrived:	10:00an	<u> </u>	arted: 12:15	>	Collector	s: A	SA +T	P		
Stream:	illed G	acie	C Stroom	Lo	cation Des	crintian:	Man Par	R.	The last	
Coordinates: N	143.8	395	2 W	7 -	110.7	5-60s		amos	22 La	
Elevation: 8	914	ft					Datum Glacie	_ NHIU	5	
Water quality (I	Recorded with	a VSI I	Pro Plus Mulitpro			- une	Gace			
1 at ameter		Value	e		nits	7 -	7/2-	7	/-	
Water tempera	Water temperature		72 %			_ Last-ca	librated: 7/27	_ DO:	2	
Barometric pre	ssure	<	55,5		mHg	Photos	taken: Site	Temp Pro	obe V	
DO .		_	19 a	1%	saturation	Weathe	r: Sunny, A		45.11	
DO			0 (0	-		4	0/1		an rain	
Specific conduc	ctivity (SPC)		9.63	_	g/L b/cm	Substra	te type: <u>Baub</u>	hers,	colder sh	
Conductivity	-		34		/cm	3 Surbe	ers collected:	- II	75H	
pН				-		Biofilm	lm rank: Little Medium Green			
ORP	ORP		mV		7	Microbes collected:			Jreen	
Air temp	(. (·@ (.			s corrected:					
Pfankuck Index		(23		+	dedn	ia YRS	2		
Angularity	Exceller		Good		Fair		Poor Score			
	Lots of edge	s(1)	Some edges, so round (2)	me	Rounded edges (3)		All round (4)	1	Notes	
Brightness	Most surface	s	Mostly dull, <3.	5%	50/50 dul	<i>&</i>	Mostl-DD14	d		
(Dull = biofilm) Scour	dull (1)		bright (2)		bright (3)		Mostly bright, >65% (4)	4		
Scour	<5% evidence scour (6)		5-30% of bed		30-50% o		>50% of bed	11/		
Consolidation	Lots of sizes,		scoured (12) Moderately	-	scoured (1		scoured (24)	24		
of substrate	tightly packe		packed, some size	ze	Mostly loo	ose, not	Totally loose,	1		
Aquatic Veg	A1 1		overlap (4)	(4)		Tap (0)	easily moved (8)	161		
Aquatic veg	Abundant veg moss in swift	· .	Common veg or		Spotty, in		Perennial types,			
	water (1)	- 1	algae, lots in poc (2)	- 1	backwater seasonal al	or	very scarce or absent (4)	191		
Deployed Temp log	gger number:	204	7552 Coord							
Retrieved Temp lo	-	-24	16499	шац		,	3952 W-11	0.756	57	
			nuy		Note	s: Tan	do			
Description of logge		xt to	D bailder in	st	ran b	eles a	smaller gre	·	vil.	
emp logger photo	number:	previa	15			3.7				
uspended Solids: (Wha's	ashed				Nu	trient samples coll	ected: V	dr	
Filter number	Skiller			T	Cu 17-1	DC	OC collected:	/ /x	_	
Volume filtered (n	nL) (000)		SKILLET 2	- 1	600	Chi	a collected:	3x		
Filter mass	Mear				>	Alg	ae collected:/	34		
		-			/	•				

Teton Stoneflies 2018	
WYNDD-Tronstad 307-766-311:	5

Date:	P 1
own stream*	(right edge)

Stream Profile	e: (left e	edge)		*looking down stream*					(right edge)	
Distance (cm)			nat	IN	20	019			1	
Depth (cm)			100							
Pebble Count	s Cm	m	e=	embe	edded					
100	29	19	305	a00 =	95	68	31	23	20	
25	9	63	1448	420°	250	45	9	29	4406	
155	78	52	7	20	4	4	95	92	730	
5-8	155	128	240	640	25	100	230	80°	75	
120	(00	210		30°	63	30	235€	180	32	
700	020	01.0					-		·	
							S. S. Salanda and S.			
							The state of the s			
		and the second second					and the state of t			

3 Rock tracings (chlorophyll a):







Notes: Snawbank beside our site this year water mylet be higher (flaw) than previous years (Queet weather for sampling (2.5 hrs to hike here)

Nutrient samples collected: \

Chl a collected:

DOC collected:

Algae collected:

Temp logger photo number:

Volume filtered (mL)

orig mass: 34.6mg
(w)o burning!

Suspended Solids:

Filter number

dels #5 D>

22

750

23

Date: 2 Ang 2019

Stream Profile:	ream Profile: (left edge)			*looking down stream*				(right edge)		
Distance (cm)			e 0, 1	1				1		
Depth (cm)	W 1 200 11		:	ra Pr		8 .				
Pebble Counts (mm) Baxis e=embedded										
120 2	00 50	190e	3100	142	62	2.10	87	52		
340e 1	5 198	920	330e	76	123	88e	220	78		
75 23	30 112	81e	11 De	200e	97	140e	125e	230e		
110 2	3 106	Yle	00	47	silt	49	73	190e		
130 3	5 4 A	17	18	29	250e	210	100e	270e		
400 e 7	2 90e	511+	SIL	52	49	31	121	230 €		
56 4		103	360€	1400	1320	140€	200 e	5117		
108 51	17 95	114	78	430e	Sand	240e	270e	121		
				-						
3 Rock tracings (c	chlorophyll a):	(2)-	1		(ch	la	7			
1)1		0			6		5			
	1	-/		3.	1		3)7			
		-					1			
			0,							
		1								
7					-	\ .				
	12	1		F		4	ŀ			
								/.		
			7			1				
					ed.					
Notes:										