Field Notes and Field Collection Forms

East Waterway Operable Unit

Fish and Crab Data Report Appendices 2010

Port of Seattle

4 07.31.08	07.31.08
Mussei prescence is more	took photo & piling w/ rope
abundant traveling N along	avered of mussels.
piling	less the mussels in pilings as
Mussels on pilings at the way	you come out of sup (around bend)
mostly towards waterway side	and then pilings more abundant
	no on pilings ontside slip
Area 6 - no pilings ontside	Again - more musseles on
of slip area - no ouroused	waterway side
prescence Isubstrate you mussels	,
took picture og Avea 6 gorng	Mussel shells present on black
into slip	pite boat dock crates notice
lots of sea starms along Ava 6 Inside slip	from birds feeding?
	Mussels on pilings along T-30
At end of slip - & mussels on condrete	similar to T-25
pilings, Just barracles	1858 abundant about "2 way
Took 2 photos under clock	up along the pier going N
w/ mussel- less pilinip	but still present
On areo sute piling - some pilings	Took photo of piling at end of
~ mussels on dock and at	Took photo of piling at end of T-30 dock - small mussels
shp 27	
less abundant that 7-25	2
dode pilings, but high numbers	
J J	

607.31.08	67.31.08 7
Pilings between Old Aren 2/ ang	More Mussels @ 5 end of area
Area 3 with lots of mussels	T-18 dock on both concrete
in creosote piling -	pilings + black bunipers hanging
larger sized	in the prater
Pilings entside Area 3 is	then is more barnacle
abundant of mussles extending	dominated.
Into Area 2	i jin jin
	barge on dock @ Stend of Dier (T-18)
845 Jook picture og Avea 2.	
	D.M. Camera - UI @ Send of 7-18
Mussels on pilings in	King lad any here a multiple of the
Coast Guard Area	City and a Fold
Took photos of clam oren	timited number of mussels@ very south end of T-18 lots of starkish present@ Send.
@ Beach Area 2	iors of similar in went to send.
	Outside Area 12 pilings w/ pew mussels on it.
0915 - Buck down waterway on	manula on it
W slop -	maneto
W side - T-18 pilings with musselps	Barrages Tugs Barge in way blar
above loir water line	Baixages Tuge Barge in way blar Area 11 + Area 12
dock	
less mussels as you head	Took photo of pilings w/ Starfish im autside bridge
The mussel S along pier labort	starfish im autside bridge
half way down?)	on N side
Wate mostly barnacles - too k pictures	

07.31.08		07.31.08 9
945 Arrivé back @ Arca 9- took photos g pilings w/mussels	1028	Stopped @ FTrea 2 to take
took photos of pilings w/ mussels		photos @ low hde -
		all gravel area to water line
On upstream side og bridge		
on Eside of waterway - no	F1 00	On apstream side of bridge, imited
obvious presence of mussels		pilings w/ mussels (took photos.
and substrate habfat		<i>y</i>
	· · · · · · · · · · · · · · · · · · ·	Buck to Sedge of E.W.
Headed back tops downstream		to meet other crew t
under pilings w/ due Gonlet (EPA)		head buck to gove
and Glen Chulkelshoot) to help	·	
with every beached boat.		
	1/05	
Decided to leave Coat. Picked up		09
Deborah to new EN@ In the	•	1.3
		dellor
Took photos of lack of beach ane		2 0 010
Took photos og lack og beach anë at Avea 7 ontside og slip.	â	pro pull
	· .	
Noted prescence of galleotts in sulfur odon in Sup 27 Sup 27		
Sulfur odo in Sup 27 Super		
		2
	-	

	07.31.08
945 Arrive back @ Arrea 9-	1028 Stopped @ Firea 2 to take
took photos of pilings w/ mussels	photos @ low hde -
	ail gravel area to water line
On upstream side og bridge	
on Eside of waterway - no obvious presence of mussels	1100 On apphream side of pridge, limited
obvious prescence of mussels	1100 On apstream side of Bridge, Imited pilings w/ mussels (took photos.
and substrate hab fat	
	Buck to Sedge of E.W.
Headed back tops downstream	to meet other crew t
under pilings w/ due Bonlet (EPA)	head buck to gove
and Glen CMulkelshoot) to help	
with every beached boat.	
	1/05
Decided to leave Weat. Picked up	.08
Deborah to view EN@ In the	
	day or."
Took photos of lack of beach and	10
Took photos og lack og beach anë at Aver 7 ontside og slip.	and punc
Noted prescence of sileotts in	
Noted prescence of guilleotts in sulfur odor in Sup 27 Sup 27	
	2

2 8/11/08 0930 Arrive O Board gleonla make an a temps to collect fish from souble of The w gettle bridge. med doe Goulet - EPA Elik Parker Jeff Christiansen ERSS Alore strickland 10:56-Suited up. Board Sofery merery - 2 Planuing 11:14 Submerged - surveyed to S. 10:05 pull suchon - survey possible lane 11:47 Surface - very little manue life - No fish. Cocadans. locarion - WIA-212234.6, 1267346.7 (5.00) · Setting up first fransect on E shore Max depoth 21-212626.3, 1267434.2 (wend) at Bridge > Clarified up Eric That the 15 12:00 travsit to N. submerged @ location depth limit is the assumed (mit of WZA Sover Usibility & That all meas shallower 13815 - Dien surfaced - 1 20 cm brown rocksish Than 15, That offer Potential well only located during dive but escaped. habiber should also be surveyed. - Rip-Rhy observed to 230 depth. P Deeper Septh bottom was grovel in silt. Visidility 1-2600t. > Debenized That fortuner on pridge value w. Seattle bridge constitute a 13:19 Divers grapanel to re-subrenze. herand to divers & That divers 13:28 - Divers u- detered water should avoid swimming in This B:40 - Fish bagged by divers. location. 19 ft. depth. > Tinks, during The course of the week, Cocation Spilings N of ledder 10 pilings

4 8/11/08 5 stet. Q EW 08- Scutty W2A-BR-01 N: 213123.089 Location of capture = or Prevoous - Length = 193.mm, 150 g W: 1267785.286 - held in bichet - divers are Varied reburning to waterway to sample using a spean. 3 cochersty collections in addit > Cols of Coconstripe shromp us the rockfish to This were a fempled but The high escaped. W2-Survey Cocalions - Doe Carlet & Mats Luran (ne) agread W2 D. 212944, 716 That use of speaks is necessary for Collection. 1267779.066 W2 N - 213357.168 1267791.436 > Deconned thistip spean with 1512- Pivers ever water at location Alcarox - brown shudge legt on spean Paper towel after 3 cleanings up liquinox W 3 & Payler tone 1559 - Divers surfaced - Rochfish caught 1428 > kept & processed orig, wal fish 14:25 W3-5.213920 617 1267798.721 2 EWOS-SCUBA N/3 - BR-D3 - divers serviced to book W3-N 2141344.581 Cengoli - 228 1267804.399 Socard pist collected from - Vizibility 61t we - 200 a Same Area Coonstripe string - rockfish less about chord (ocation ; Nudiblauchs Then w 2 EW 08- Scuba W2A-BR-02 · 2 not fishes 213047.410 1267788.607 length 225 mm · 2 Sailfin sculping Surve prickel baches high an Slope - fish was speared 10 pilings in from

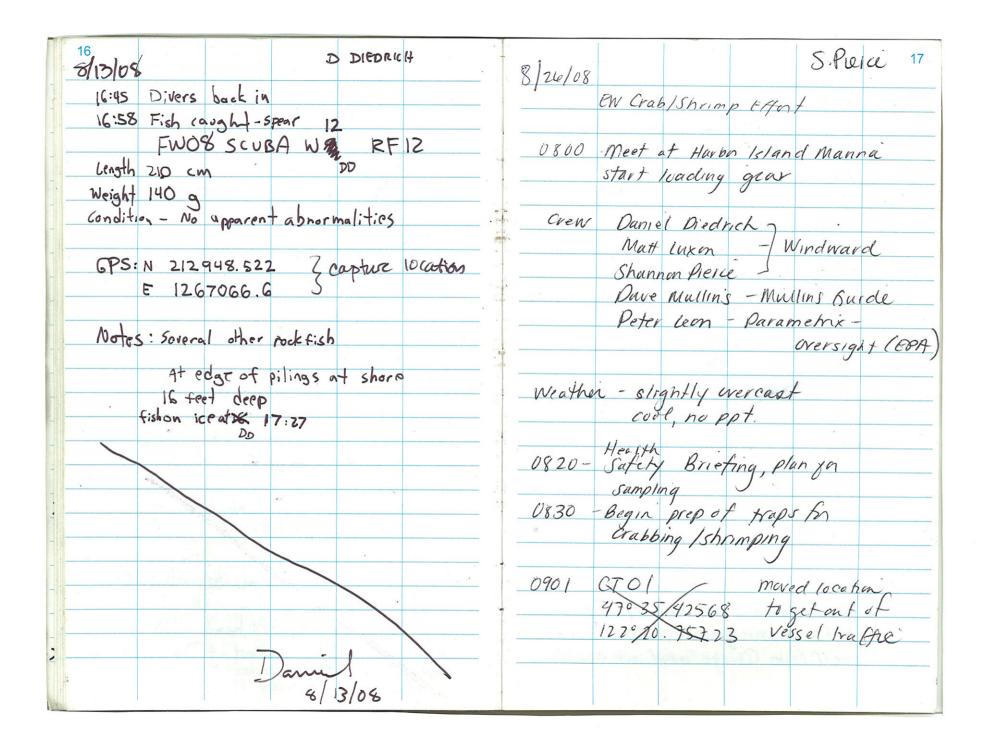
6 Slu ob 7 8/11/08 bish cargled C 25' depth 10 zilings in pour edge of Rilings bish cargled up wet - NO spean used. W4- Location S- 216174,139 end of transact 1267821.370 N-215773,982 16:35 - dropped anchon at site w14. end y timed (267831.73) 1733 return to slip 36 hypop action 16151 - divers extered water as site we - Jack Penny Paul -Josh trave ported to ARI, End of Day in middle of tuninal 30 (253)-307-4021 · George Blomberg -V 728-3174 Jeny-99 S. 599 exit to 133rd. lirough metersection 17:00 fish caught - 9 - days - spear 11 pilings in EW 08-SCUBA - W4 - BR04 length 298 mm weigh 413g · Location - 215909.676 of capture 125709.672

9 8/12/08 8/12/08 W5-S- 2(8565.630 (267 195,785 Arrive at Jack Peny Park 0900 ish collection location - 218841. 496 coud Ice chest on boad. Crew - Matt Luxon, Joe Coulet (EPA) (267 (88, 724 RSS> Erik Packer, Don Peterson, Aune strickland 1201 - relocated to Cocation W/6 Diver Gen Diver ON T 18 directly across from Newlog First site is T18 North and of waterway 730 W5-11:01 water depth = 15 10 pilwigo back 12:37 Livers entered water at WS is capture time Roch figh captured & Processed 12:44 - Fish wetted - speared. Divers refirmed - 11:08 leigth 298mm 12:46 - depth 2161. and capture location. 4300 Length - 310 mm weight - 990 g " EWOS- SCUBA WS-RFOS Red Roch cielo 2 constripe shring 5 EW08-SCUBA W6-RF6 observed a site. fish not speared. - steeper grade to Rip-Pap - Crabs observed -NO other species observed due to low uss. Rech fish abundance was about 1/20 ft A during capture act. 2. ty -1300 +10031 -10 W7 Ausibility 10-15st. but only whin Rip rup. (silt cloud from diver I pilinge in pom - taking location data for collection activity East edge - fight collection Cocartin 5 218971.466 (ocartion W5N 21267196.209

11 10 x/12/08 8/12/08 Catch location 7 Piliego in from 300 - traveil do W7 E edge of Pilitigs. M.Com & Doc Garlet 1312 - Anchor of 127 on T18 directly (541 Jopped, at Jack Percy - 6000+ across from slip 27 N. end. times: Heal to Harbon Island Marina (600-rejoined The board at Hunbor Isle Mannang - rest 13to - Divers submerged at W7 1630 Divers entered water at = RR crabs, singlower ster. Location w9 - E. bank South of 13:57 fish sighted (brown Rockposh) spokene St. bridge. 14:17 Divers returned to boat with fish 6 fish - Ewor-Scubanter RF87 speared 14:17 Divers returned to boat with fish 14:17 Divers returned to boat with fish 14:17 Divers returned to boat with fish 320 - Scubanter RF87 320 - 7ish related was v& pilings in RF8 W/9N. 215351,002 1267213.765 128- Josh collection location 214202,188 1422- Anchon at W8 or T30 across from 1267097.453 slip slop 27 a couple hundred of S. W7 fish collection Cocarload 1446 - Divers entered The water @ W8 215416.275 Returned up fish C 1518 1267108.773 1510 - Dfish captured @ 2266. - speared Little habitar well Usidge Mostly grevel of occass jourd Lebis EWO8-SCUBAW8-RF8 \$7 Length - 28 Sour weight - 370g

12 08/13/08 13 D DIEDRICH 8/12/08 8/13/08 07:50 Pick up supplies at Windward arive For Daniel leave on board > Sample Plocens.wy year > Ra.w gear, PFD odo meter 033 Weather: Sunny 65 - 70° f Slight intermittant breeze 5mph => at opice ceane . QAPP . Fish Permit - Phone 08:44 Susie McGroddy calls; Slip 27 - Notebook is ok to sample, possibly coast Guard 1702 - fish (Rochpish sighted) - Not captured Divers are swimming throughout channel 09:15 Arrive at Jack Perry Park south of spokue st. bridge & under bridge 09:30 Call Most for details on GPS neoting place Fish was acaded up the bottom 10:04 On boat from Jack Perry Park to south side of west warterway of the gangway on w. S. de of channel WW staff: Daniel Diedrich Heep of ut. Seattle 10:16 Safety chat Near bridge Spokane st just south 1730 return do thankon Island Manina. J. Gover 10:25 Matt calls - "tate not of method -I Matt WKON superited boat. END of Day - Soundles transported to ARI by M. Lucon 11:00 Divers in - AREA W9 middle of channel, none seen, noved toward west Shore along dock Saw several dungoness crab, sculpin, starfish 11:27 Saw small one, will try to net live for measuring 11:34 Divers notice current 11:49 Divers near middle, SPE , nove to east bank caught

05/12/08	D DIEDRICH	08/13/08		D DIEORICO	4 15
1:58		13:14	Brat to site	WII slip 27	
Rodafish Ewos Scully W9	RF9				· ·
Longth: 24.5 cm	S 10-1 - 1	14:15	Divers in		
wt. 231 gram			Jude out of air,	switch to snorkel a	t top
Notes - found in rippap	near bottom at 11:49	15:13	(aught RockEish	FW 08 SCUBA	WI RE!
GPS: W9 fish collecti	on location		gth: 230 mm		
N- 211693.443	US ft	We	ight: 195 g	(00-15	
E- 1267112.707	us ft	Con	dition - only re	cent lass damage	
fish on ice at 12:2			10 pilings back	DD	8
Gught with spear			12 ft deep		×
	e e la stra d'anna de la stra de			" N' Matson' cont	tainer
12:22 boat to near co			Caught with spea	r	
Eric calls coast gue	ard		es:		
SUSIE -			GPS: N 21493	Ching Colors Resident Colors and Colors and Colors and Colors	
12:51 SUSIE- GEORGE AT PORT F			E 1268	227.728	
12:58 Boat anchors at ive Coast Guard	st North of Wiz near	fi	ish on ice at 15:	24	
13:11 Divers in water und	er pilings near WR	e	mpty of life, f	En crabs, a few of	hers rockfish
13.º36 possible sighting in	net, to surface sight confirm		n the habitat a	sot away	
Quelty RockFish: EWOS SC	UDA WIZ RF 10	ļ	1		m DP
LENGTH: 229 cm		15:38	Arrive at pilin	gs at slip north.f	W12
WG6H7: 230 g Notes: GPS: N 219397.7 Notes: GPS: E 1267922. fish on ice at 13: 48	Few crabs	15:49	Divers in	() IC-	
Notes: GPS. E 1267922.	9 pilings deep	(e.h.)	Sight rockfish	to boat 16:32	·
Caught with hook on end	d 14 feet of water depth tool in rocky bettern, debris	<u> </u>	LOST FISH - +1:pp Swam off	ped out of Daniels	hands,



18 0.8.	26.08 S. Pierce	08.26.	08	S. Pierce 19
0901	ETOI / did not	0937	CT03	
	47°35.42568 Vedeplay		47°35.12449	20 20
	1220 20- 75723 (this location)		122020.65322	
0908	5701	0940	5703	
	Same coords @ CTOj		Same coords @ CT03	
0918	\$702	0946	СТОЧ	
	47°35.30820		47 35-06876	-
	122020.58418	·	122°20,53578	
0924	стог 5	0948	ST04	- * .
, ,	Same coords @ STO2		Same coords @ Stuy	
0920	Communication w/ George @	0958	\$705	а. С
	the part of Seattle regarding		47°34.71220	
	access + actury partiday's		122°20.4603	
	Sampling			
		1000	CT05	
			same coords is stos	
0930	Communication with Susie - we don't		•	
-	have access permission of Stip 36 .	1008	STOG	
	but we can go into Shp 27 if		47034.81663	
	weißform George what we are doing		122°20, 75302	

20 08.2	6.08 ·	era	08.26	.08		-	S. Pu	r q 2'
0.0	su t		Wea:	ther-sur	nnu cad	m		
1010	CTOG				,			
	same coords as STOG		1039	CT 10		· 2		
				47°34.	30675			
1015	STO7	1		122:20	69632			
	47°34.63861							
	122°20.75846		1037	STIO				
				same cou	ords@ (TIO	9	
1019	©TO7							
,	same cards @ STO7		1047	CTII	•	300		
				47034	. 22936	10		90°
1024	ST08			12202	0.7296	6		
	47034.61335			1. ³⁶				
	122°20. 58684		1053	5711				
				same	coords (O CTII		
1025	CTOS						- The s	in the second
	same coords @ STOS	· · ·						
			1056	ST12				
1033	CT 09			.47 .34.	19154			
- 	47034.30996			122=20	19202 7	6460		
	122°20,74607					di ka kata		
				No vem	aining ci	rab/shun	np pots.	
1033	ST 09		1110			or lunch	break	
	same coords QCT 09		-	P.Leon		5.8.1-		
-		2		1.				

22 08-26-08	S. Peri	082608 S Pierce 23
1100 left msg. w/ Paul Wil	liams that	Communication w/ paul to
to let us know it hell		meet @ Dan Sayers Park ~ 2pm
us at ipm pa netrie		
		1301 Pull up CTOI and STOI
1200 left msg w/ Paul Willia	ms to	Øitems in STOL
meet us at Dan Sayers	Parke Rather	CT01
than H. Island Manna		Processed 1 dungenous
		8 red rock
1205 Leave Harbor Island Manna	540	
Head to E. Waterway to	recon.	1328 Pull up CTOL and STO2
mussels.		Processed 20 red rock
	<u> </u>	
Mussel Recon - Mussel		Back to HI for more coolers.
shell (g) 24		1420 Pulled up CT11
Length (cm) weight CF	iesh) (g)	Processed 2 red rock
· 9.5 MAY 2.3	X	livere concerned about reaching
2 4.8 8.5 2.4		permit before getting upstream.
3 37 5.2 1.8		1422 Heset Trap
4.2 1.7		Back to E. Waterway
5 <u>4.8</u> <u>9.2</u> <u>3.29</u>		
6. 3.4 × 3.1 1.5g		1440 Picked up Puul Williams
7 4.8 7.4 3.3		at Dan Sayers Park
8 4.9 6.5 2.3		
9 4.2 5.2 2.2 1) 710 10 10		
10 3.4 3.7 1.5	x=2.2 12009991	
11 3.9 5.4 2.5	N 1 1	

24 08.2	ie.08			S.PI	erce		08.24.08	8			S.Pie	ra ²
145.4	Pulled	ир СТО	09 t 0	STUU9			1538	ST007	Pulle	d		
		- 2 rea			*kept					releas	ed	
		decided			Fred rock	I				×		
		ause of				1		redeploy	ed ST	007 ST	017	
		because i				,		47034.			N. C.	
		rabs fro						122020				
		0	1									-
	Dath a	nsultate	m w/	Paul, de	eided		1538	UT007	pulle	d		
	to Pull	CTOID	and s	T010						rocease	d	1
		en selec			est					price		
· · · · · · · · · · · · · · · · · · ·		make							0			
14		ralang				Ì	1552	CT003	+ STO	03 57	1003 rec	leplaye.
)	3			The second	4	CT003 ST003	$3 = \beta$	Sorgan	sms	ame location
1508	Pulled	CT010 1	8701	0				CT003=	proces	red 3	red vock	
	STOI	0 = Ø	organi	sms	1.51			. ¹⁰ 1	1			
		= proc			rock		1558	CT004 +	+ STO	04 pull	ed	
							· · · · · · · · · · · · · · · · · · ·	redepi	loyed	5004		
1529	Pulled	CT 050	+ STON	10- 5x			-	ST004 =				
	STO	401 = q	organ	isms	1 - 1 - 1			CT004=	proce	ased	1 red ro	de
1532		loy ST.			X		1. A.	67	/		1.1.1.2.4	3-
		° 47°					1617	CTOIL +	STOI	pulle	d	
1	122	20.50	154				nine.	reclepte			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	*
ť		in a st						2		•		8 - ¹
	1.1	- 100 -					1620 - j	propped st	nurrow	at Han	borIsla	d
	1			1 1				Marina				
		* *		1. A. A.								

26 68.2	6.08			5.	Pierce							27
1625		- Pacific	stagl	1000 Serl	8:21 71 50m	4	(217	Retire	red st	8)
1637 -	leque	Harbon is	land a	lanina -	40107		1720		D CT.			
	/			N3 OF		*	- 20	100 111100				/
				2 deploy		0			9		/	
		pots.	/	0		1					- /	
		1				1 5					1	
1647	deploye	t sty t	KI3	- Podras	buoy no						/	
C.	11 /1	5.39114		Submen						/	- -	
		25953		1	pa							
		of water			~							
		0 · · · · ·	y									
1653	denlove	l ST 13	14	8. 		r	1		/	d.		
12		5,2725	1	1								
1	-	.58701				*			1			- 1
									/			
1655	dimme of	Raul C	strum	Sailan	~			/				-
	angena	100000	01075	Carports	-							
1701	Rulled	The Cost	sí	Pot in Place		1	and and a second se					-
		, , ,	salap	for a fue		-						· · · ·
1708	Deploye	l ST 15					/					
	47" 34.	1 1	NATE			1						- 6
		75945				1	- /	-				
						1		7				
			1				1				and the second	
Sha	nom C.	11 206	077	1298								
Ona	and a	11 206	579-0	873							and the second	

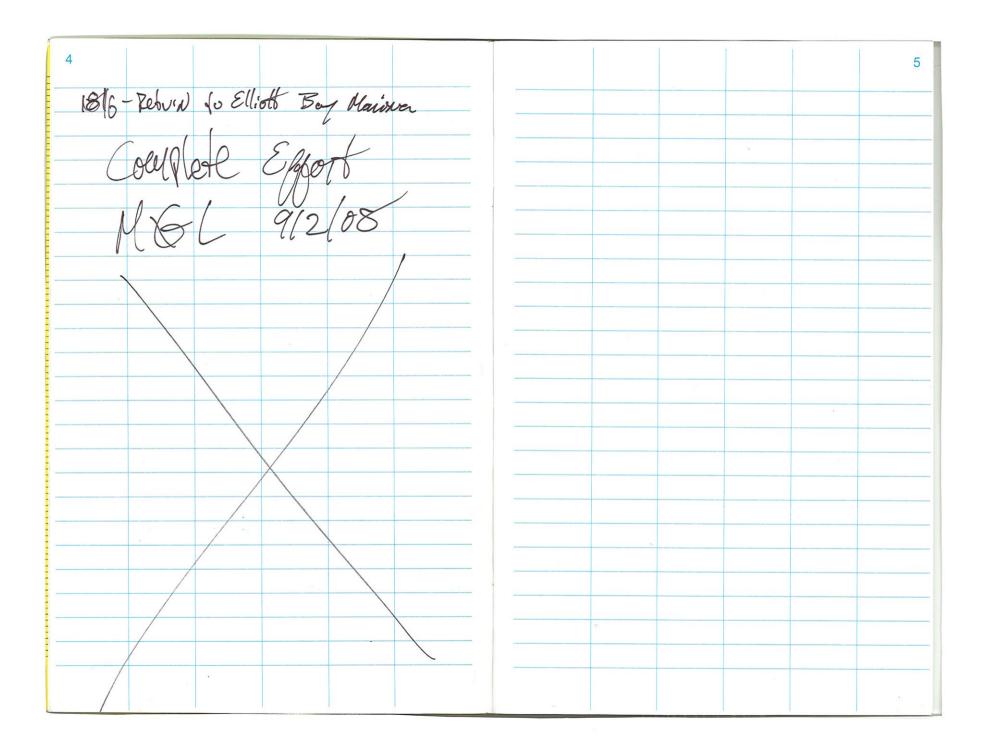
28° 08.27.08 S. Pierce	08.27.08	S-Pierci 29
	0803 Heool samplin	g-under bridge
East Waterway Sampling - Mussels +	47.34.23624	/
Shrimp Retrival	122°20.73872	
	n=8	9
0700 - meet at Hauber Island	Took 3 pictures	g sampling location
Mavina - load gear		
	0816 HCOO2 sampling	- at old pier
Crew - Daniel Diednoch Windward)	470 34 35720	that was
Thai Do, Shannon Pieras		tom dawn
Peter Leon - Parametrix		sampling locations
Dave Mullins - Mulling Quide	n=90	
Weather - Dark clouds wind		N. CONTRACTOR
cool, no ppt.	. 0828 HCOO3 sampling -	at T-25
, <i>, , , , , , , , , , , , , , , , , , </i>	470 34.45151	
0750 - Leave H. Island Marina	1220 20. 584 77	
Begin mussel sampling	, 25	. 7
	0840 HCOO4 sampling -	directly across from
Plan to sample 2 composites		n=100 T-25
per Area + one at Ship 27	122° 20.7552	
0750 Call to Susie to get George	0851 Heors sampling-	directly across from Sty 27
from the Port's number		n = 100
George Blomberg	122° 20.757/1	
Purt of Scattle		a serve
(204)728-3194		·Fe

30 08.27.08	5 Preva	08.27.0	S. Pierce	31
0908 Houle sampling - in	Sup 27	1007	Heoll sampling - up dansheam	
47 34. 72897 72			end of T-18 - underpi	er
1220 20.43669			47°35.32892	
			122°20.75818	
0919 #HEOO7 sampling	-along t-30	Co	ordinates taken just autside of Pier	i
47 34.88542	n=100			
1220-122-20.590		Б	nished mussel sampling - Locked	
			begin so pot retrieval of shrimp.	
0931 HCUOS sampling - alo	ng T-18 in		0 P	
~ Aren 4				
47035.04055	n=100	1020	Retneved STOT3	
122° 20. 75859	•		parganisms.	
Sampled area where me	ussels were			
larger - further up fr		1031	Retrieved STO14	
targetted ble mussile			& organismis	
underneath T-18				
		1034	Refrieved STED 3	
0945 HCOO9 Sampling - an	d the days stream		I reduce starp	
4703511787 01			I rock fish - released	
122020.58799			0	
and the second	a part a	1041	Refrieved STOIS	
09 54 HCOIO Sampling - Dar	Sayers Park		Øcrganismis	
47.35 30940	N=100		2	
122020.57926				
57926				/

32 08.27.08	S. Pierce	08.27	-08			S PL	erce ³³
1042 Remeved STOOG							
1 rock fish - releas	ed	÷					
1047 Remeved STOF STO. Ø organisms	17						
1056 Represed STOR							
caught on shaq + wra	pped avound piling						
9 shrimp plocessed 5 Red vode released		2 		-			
1107 Remeved STOOS STOI Islender-released	<i>6</i>	•	4	DIEL	130		
1114 Retrieved STOOY		×		5 / 4	2000 - 100 -		
3 red rodes - released 1 rode fish - released			d				
	· · · · · · · · · · · · · · · · · · ·	<u></u>	20				
Alega 1115 Head upstream to donbi Area # for pots.			N				
1124 End of Sampling - back	at	0		55- 1-	anané "		
Harber Island Manu			7	A Star Street	<u>de 28.00</u>	EN GE	
		/	YST		0.20		
				N. N.			

4	d To						35
0-24.0	7.00						
9900	Amire at Juck Penny Access PK.					-	
	Coew: Thai Do						
	Eric Pauller				е. ж		
	Margaret Christophere						
	Bobby Hicks (Nisquarly)						
	Weather: overcast - ptly cloudy						
Gut							
905	Divers get Sorie op. 110p - prices and		12 - E				
600	gears. Go over sampling plan and H15.						
930	Arrive in Stip 36. Continue setting up	-					
1935	Petty Officer Thompson meets us and						
	circle us to the off location.	·					
0950		U					
1600	1 Brown Rollefish caught; "45ft. from deck.					9	
	33.5 cm (x) 1268990 Zestimeted						
	33.5 cm (X) 1268990 Zestimeted 565 g. (Y) 218971 net caught						
	1D- Eq -08-58013-BR-13, no abromulities						
1010	Head ball to J. Penny Park to drop						
010	off. sample to Cheisa.						
1020	Anne at J-P. Pavik.						
1020	Q1 1 1 1 1 1 T			~			
1030	Release custody to Chelsen. End of						
	rockfish sampling - continue werk						
	on geoduct sampting (see alam laybout)						
~		-	7				
	10-24.05 T.B			- Aller		100	

2 9-2-08 3 9-2-08 0400 - meet at Ellioff Buy Marina - End lunch 1215 crew - M. Luxon, Chelsen Corenz, Jenny Brenny. start End 34.632 34.987 Low hissauger, Joe Goblet - EPA 1226 - End travel 004 20.683 20.662 Jeff stew - Uing Conty (30) - Retrieve TODOS Charlie Eabon - Boat Captain, Tom Putt alm n 1330 - TROOS brought on board something big is in it. - log 0920 - Health & Sayety areating start 34.953 35.073 1415 1460 = Processing TROOS 20 621 20.605 0940 - Motor from E.B. Manina to EW 1020 ML TROOL Lots of Voud in wet. share ton 1032 - Reprieve TROOP 1991 - Refrieve TRoop start End End Ton. 34.969 20.665 34.558 20.654 34.720 End 35.423 20.594 stat 20.603 35.021 Retrieve TROOZ 1059 1513-Retrieve TROOF 20.651 20.651 Start sad 34.513 39.767 20.640 20. 630 1114 H2Tmu Retrieve TROO3 1570 - Reprieval of TROOS start 1603 - 20.752 - Trank hong up 2-6000 - replaced trank up Charlies frank 35,227 39.976 20.755 1139 1712-retrizval of TROOP 34.160 20.767 35.227 34.131 charlies wet has a given liver 20.735 20. 769 1140 preah for lovel 1729 - retrieval of TROID start 734.175 1740 - Nebura to Elliot Bay Marson 34. 175 End 34.132 20. 771



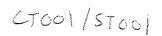


· CTOO/STOOL

Project Name	: EW RI/FS – F	ish and crab s	sampling	Project #: 08-	08-09-41			
Species samp	led:			Field crew init	ials: ML	(P		
Comments:	10	lungenn	is evalu	S STO1 = 0		<u>v.</u>		
	8 re	d rock	is eval	CTUI				
						Tare =	400 1	
COLLECTION DATE	COLLECTION TIME	LOCATION ID	COLLECTION METHOD	SPECIMEN ID #	LENGTH (mm)	WEIGHT (g)	Gender	Comments
08-2608	1301	LT001	trap	EN-08-CTOCI-DC-CI	160	800q	F	
		ļ		EW-US-CTOOI-RR-01	110	620-7	1-	· · ·
ļ				FW-08-CTOOI-RR-02	120	700 - T	F	
		<u> </u>		EW-08-CTOUL-RR-03	120	720-T	F	
				EW-03-CTOUL-RR-04	13.2	770-T	F	
		5 	<u> </u>	EW-08-CT001-RK-05-	130	340	E	
чбарана (1996) 				EW-09-CTU01-RR-06	120	250	Ē	
				EW-OR-CTOOI-KR-07	131	330	F	
<u> </u>	<u> </u>	V.		EW-0X-CTODI-RR-08	135	340	F	

				5 				
-								





Project Name: EW RI/FS – Fish and crab sampling	Project #: 08-08-09-41
Field crew initials: ML, SP	
Comments: CTOI / STOI - NO Specements @ STOI	

	COLLECTION TIME	LOCATION ID	COLLECTION METHOD	Species	LENGTH RANGE (mm)	TOTAL WEIGHT (g ww)	COUNT	Comments
08-26-08	1201	CTOOÍ	tra p	Solaster (subflaved)			2	The veleased
08.2608	1307	CTOOL	i £	Picnapodia (Sea star)			/	released
08-26.08	1301	CTUCI	4	Pungenous Coals	790		1	Kept
08-26.08 08-26-08	1301	CTUC/	4	Solaster (sunflaved) Picnapidia (sea star) Pungenous coal- Rid Rock Ciab	790		8	Kept
				<u>.</u>			2 	



CTOO2/STOO2

Page 1-2

Project Name: EW RI/FS – Fish and crab sampling	Project #: 08-08-09-41	
Species sampled: 57002 red rack (3)	Field crew initials: $ML SP$	
Comments: 1828 CTU02 vod veck (17)		

COLLECTION DATE	COLLECTION TIME	LOCATION ID	COLLECTION METHOD	SPECIMEN ID #	Length (mm)	WEIGHT (g)	Gender	Comments
08 26 08	1328	57002	trap	ZW-08-57002-RR-01	106	160	M	
)		57002		EW-US-STOUZ-RR-02	110	190	j=	
		57002		EW-08-ST002-RR-03	115	680 -T	M	
		CTOOZ		EW-08-67002-RR-01	164	700	M	
		CTOU2		EW-08-CT002-RR-02	148	452	M	
		CTUOL		EW-08-CTUCZ - RR-03	153	520	M	
		CTOOL		EW-US-CTOUL RR-04	138	420	iЦ	
		CTOUL		EN-08-CTOO2 RR-05	142	520	MA	
4 V L		CTCO2		EN-08-CTOUZ RR-04	156	600	M	
		CT007		EN-OK-CTOUZ RK-07	153	570	M	
		LT002		EW-UX-CTUDZ RR-08	157	620	M	
		LTOUZ		EW-DR-CTOUR RR-09	157	500	ĸĂ	
		C7002		EW-08-CTOUZ RR-10	147	460	M	
	an a	CTOUL		EW-08-CTOOZ RR-11		530	M	
-		LTOOL		EW-08-CT002 RR-12	129	310	12	
		3002		EW-08- CTOUZ RR-13	149	570	M	
V	\forall	craz_		EW-05- CTOOL RR-04	+ e	410	M	·



Page 2-2

Project Name: EW RI/FS – Fish and crab sampling	Project #: 08-08-09-41
Species sampled: KAVA RA OC	Field crew initials: MillsP
Comments:	

COLLECTION DATE	COLLECTION TIME	LOCATION ID	COLLECTION METHOD	SPECIMEN ID #	Length (mm)	Weight (g)	Gender	Comments
08.20.08	1328	CT002	trap	EW-08-CT002-RR-15	136	400	M	
	1328	C7002	<u> </u>	EW-08-CTOUR RR-16	141	470	M	
	1328	CTOO2		EW-03-CTOUR RR-16 EW-08-CTOUR-PR-17	172	260	M	
					5			
						ļ		
~								

·

LT002/STU02



Project Name: EW RI/FS – Fish and crab sampling	Project #: 08-08-09-41	
Field crew initials: SP. ML		
Comments: (7002/57007		

COLLECTION DATE	COLLECTION TIME	LOCATION ID	COLLECTION METHOD	Species	LENGTH RANGE (mm)	TOTAL WEIGHT (g ww)	COUNT	COMMENTS
08.24.08	1328	STORE	stoo2 mp	Sclaster (see star) Red Ruck Red Ruck			1	released
05 24.08	1325	ST002	trap	Red Rock	>90		3	Lept
08-2408	1328	CT00 2	trap	Red Rick	790		i7-	Kent
			-					Ê.
				1999-1991 - Marine Marine Marine Marine Andrew Marine Marine Marine Science Space (1990) - 1991 - 199				
					:			
			-					
				· · · · · · · · · · · · · · · · · · ·				



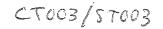
CT003/ST003

Project Name: EW RI/FS – Fish and crab sampling	Project #: 08-08-09-41
Species sampled: Kid Kock (3)	Field crew initials: ML, SP
Comments:	

COLLECTION DATE	COLLECTION TIME	LOCATION ID	COLLECTION METHOD	SPECIMEN ID #	LENGTH (mm)	WEIGHT (g)	Gender	Comments
ale the					335-2-			
68.26.08	1552	CT003	trap	EW-08-CTOC3-RR-01	135	400	M	
	1552	/	ĺ	EW-08-CT003-RR-02	141	460	M	
	1552	L J	V	EW-05-CT003-KR-03	148	530	M	
		1						
•••••••••••••••••••••••••••••••••••••••								

		\$*************************************	\$*************************************					
-								
		,			1			****





Project Name: EW RI/FS – Fish and crab sampling

Project #: 08-08-09-41

Field crew initials: ML, SP

Comments:

COLLECTION TIME	LOCATION ID	COLLECTION METHOD	Species	LENGTH RANGE (mm)	TOTAL WEIGHT (g ww)	COUNT	COMMENTS
1552	QCT003	trap	ired rock	>90		3	Kept
1034	5003	trap	rockfish	790		1	relaced
· · · ·							3
						9 99 (1964) (1974) (1974) (1974) (1974) (1974)	
	Time 15352	TIME ID 1552 QCT003	TIME ID METHOD 1552 actors trap	TIME ID METHOD SPECIES 1552 QCTOU3 trap red rock	TIME ID METHOD SPECIES (mm)	TIME ID METHOD SPECIES (mm) (g ww)	TIME ID METHOD SPECIES (mm) (g ww)



CTOOH STUOY

Project Name: EW RI/FS – Fish and crab sampling	Project #: 08-08-09-41				
Species sampled: Red Rock (n=1)	Field crew initials: $M_{L,S}\rho$				
Comments:					

COLLECTION DATE	COLLECTION TIME	LOCATION ID	COLLECTION METHOD	SPECIMEN ID #	LENGTH (mm)	WEIGHT (g)	Gender	COMMENTS
08.26.08	7554	C7004	brap	EW-08-CT004-RR-01	143	410	M	missing daw
			U				1	J
		1.						
-								
								·



Ctooy/STOOY

Project Name: EW RI/FS – Fish and crab sampling

Project #: 08-08-09-41

Field crew initials: ML, SP

Comments:

COLLECTION DATE	COLLECTION TIME	LOCATION ID	COLLECTION METHOD	Species	LENGTH RANGE (mm)	TOTAL WEIGHT (g ww)	COUNT	Comments
08.24.0	8 1558	CTOOY	hap	red rock	790		@/	lept-missing class
08-27-08		STOOY	trap	red rock	7 90		43	released
08.27.01	1114	57004	tráp	red rick rock fish	>90		1	lcept-missing claw released released
					······			
	A44							
							1	

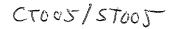


CT005/5T005

Project Name: EW RI/FS – Fish and crab sampling	Project #: 08-08-09-41
Species sampled: Red Rock (le kupt)	Field crew initials: ML, SP
Comments:	

COLLECTION DATE	COLLECTION TIME	LOCATION ID	COLLECTION METHOD	SPECIMEN ID #	Length (mm)	WEIGHT (g)	Gender	COMMENTS
08-26-08	1529	CTOOS	trap	EN-08- CT005- RR-01	150	520	M	
	1	1	1	EN-05-CTOO5-RR-02	152	520	M	
				EN-08-CT005- RR-03	154	570	M	
				EW-08-CT005- RR-04	133	390	N	
		ļ	ļ	BW-08-CTOOS-RR-05	156	530	M	
		4		EN-08-CT005-RR-06	125	300	M	
m	HATL	ustbase r	Prabal	Energy Grober Ochar	ea	UXOL	in	unn
			a"					
							1	***************************************
								
								·





Project Name: EW RI/FS – Fish and crab sampling

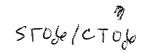
Project #: 08-08-09-41

Field crew initials: ML, SP

Comments:

COLLECTION DATE	COLLECTION TIME	LOCATION ID	COLLECTION METHOD	SPECIES	LENGTH RANGE (mm)	TOTAL WEIGHT (g ww)	COUNT	COMMENTS	
08.26.08 08.26.08	1529	CTOOS	trap	red rock	790		1	released	
68.24.08	1529	CT005 ST005	& trap	red rock slender	790		6	tent	
08 27.08	1107		trap	slender	96		1	missing claw-	he
		57016							
									4
									¢





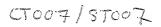
Project Name: EW RI/FS – Fish and crab sampling

Project #: 08-08-09-41

Field crew initials: ML, SP

Comments:

COLLECTION DATE	COLLECTION TIME	LOCATION ID	COLLECTION METHOD	Species	LENGTH RANGE (mm)	TOTAL WEIGHT (g ww)	COUNT	Comments
08.26.08	1705	STON	trap	red rede	790		7	released
08.27.08	1042	57004	trap	rock fish	790		1	released
			**************************************	·				
l								





Project Name: EW RI/FS – Fish and crab sampling	Project #: 08-09-41	
Species sampled: red rock (n=6)	Field crew initials: $\leq P_{ML}$	· · · · · · · · · · · · · · · · · · ·
Comments: $dungenous(n=i)$		

COLLECTION DATE	COLLECTION TIME	LOCATION ID	COLLECTION METHOD	SPECIMEN ID #	LENGTH (mm)	WEIGHT (g)	Gender	COMMENTS
08.26.08	1538	CTU07	trap	EN-08-CT007-DC-01	133	390	F	
	1		1	EW-08-0007-RR-01	147	490	M	
			ļ	EN-08-CT007- RR-02	134	410	M	
			<u> </u>	EW-08-CT007- KR-03	141	460	Kr	
				EW-08-CTOOF RR-04	142	415	M	
				EW-08-CT007 - RR-65	146	495	M	
J.	J	.J		EW-08-CT007-RR-06	146	480	M	
							v.	
								·
					n Andre han in his Gold a ', gi (Mari) ann an Igeanna ann ga			αι το δε τη τη την στη Αγγαλιατία του του Πουργαρία του του Αυγούστου του του του του του του του του του
~								
						1		·

.



STOO7/CTUOZ

Project Name: EW RI/FS – Fish and crab sampling	Project #: 08-08-09-41	
Field crew initials: a SP, ML		
Comments: SP, ML		

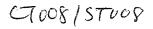
COLLECTION DATE	COLLECTION TIME	LOCATION ID	COLLECTION METHOD	SPECIES	LENGTH RANGE (mm)	TOTAL WEIGHT (g ww)	COUNT	Comments
08.26.08	15-38	ST007	Nap	Red Rock	490		1	released
	1538	CTOOT	/	Slender	790		1	smooshed
	1538			b red rack	790		6	kept
ļ(1538	L_/	/	1 dungenous	790		1	kept
<u> </u>	1538		W	1 red rode	790		1	released
				1 				
		·						
							ļ	
ļ						~		

STUO8/CTOO8



Project Name: EW RI/FS – Fish and crab sampling				Project#: 08	3-08-09-41				
Species samp	pled: <u>mt_ob</u> Field crew initials: <u>ML</u> , <u>pp</u>								
Comments:		dungen	imis Crab	N					
		Shrim	p (n=0	7)					
Collection Date		LOCATION ID	COLLECTION METHOD	SPECIMEN ID #	Length (mm)	WEIGHT (g)	Gender	Comments	
5/26/08	17 20	CTOS	TRAP	ENOS LTON -DUI	161	420	F		
8/26/05	17 20	CTOS	TRAP	ENOS CTOS - DC Z	136	390	Μ		
08.27.08	1056	STOP	trap	EW08-ST008-8R-01	-	64	د <u>سم</u>	9 shrimp total	-nete aisc
			-			total		} }	- record
									mmussi
									shrimp Gilecho borm
									-borm
							1		
								1	
									www
-									

٠





Project Name: EW RI/FS – Fish and crab sampling

Project #: 08-08-09-41

Field crew initials: ML, DD, SP

COLLECTION DATE	COLLECTION TIME	LOCATION ID	COLLECTION METHOD	Species	LENGTH RANGE (mm)	TOTAL WEIGHT (g ww)	COUNT	Comments
08.26.08	1719	STUU8	trap	Slender crab			1	released
08.26.08	1719	STOUS		red rock	790		3	released.
08.26.08	1719	STOOR		staghon sulpin	7150		1	released
08.24.08	1720	CTOOS	¥	rockfish	790		3	released
08.27.08	1056	STU08		red rock	790		5	released
08.27.08		57008	¥	coonstripe shrimp	•		9	kept
08.26.08	1720	CTV08	trap	dungenins cras	>90	-	2	kept
			6					
			****	·				
								、
l								





Project Name: EW	RI/FS Fish and crab sampling	Project #: 08-08-09-41
Species sampled:	Red Rick Burger	Field crew initials: ML, SP
Comments:	(n=7) '	

COLLECTION DATE	COLLECTION TIME	LOCATION ID	COLLECTION METHOD	SPECIMEN ID #	Length (mm)	WEIGHT (g)	Gender	COMMENTS
i/ A	1A-	Aug-	trappo	EUGH-BAUCA-KRITA	100	Aug	<u> </u>	<u>Leleward</u>
<u> </u>	/ V.4	stofq-	446	and solat the the	-04	7460	44	- Heteratased
08.280.08	<u>1454 × </u>	CT009	trup	EW-08-CT009-RR-01	116	240	F	
ļ.	1	ļ		EW-08-CTUC9-RR-02	120	250	M	
		ļ	<u> </u>	OW-08-CT009 - RR-03	123	280	p	
		ļ	<u> </u>	EW-08-CT009 - RR-04	116	240	j'range	
				EW-08-CT009- RR-05	120	2.50	M	
				EW-08-CT009-RK-06	122	220	jan	2
	V	V	V	EW-08-CT009 RE-07	113	215	F	
				- -				
				r				
-								
			ļ					
			1					



ST009/CT009

Project Name: EW RI/FS – Fish and crab sampling

Project #: 08-08-09-41

Field crew initials: SP, ML

COLLECTION DATE	COLLECTION TIME	LOCATION ID	COLLECTION METHOD	SPECIES	LENGTH RANGE (mm)	TOTAL WEIGHT (g ww)	COUNT	Comments
08.24.08	1454	STO09	trup	stender	×90		1	released
08.26.05		STOU9	trap	red rock	160	170	\$ 2	Female - released
08.26.08		57009	trap	red rock	109	190	4	Female -released
68.26.08	1454	CT009	trap	red rock	790		$\overline{\mathcal{F}}$	Processed
08.26.08	1454	CT009	trap	red rock	790		4	released
				1				
								······································
								-
				1				
						44 49 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		



STO10 / CTO10

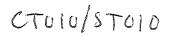
Project #: 08-08-09-41

Species sampled: red rock (n = b)Comments: Field crew initials: Sf

COLLECTION DATE	COLLECTION TIME	LOCATION ID	COLLECTION METHOD	SPECIMEN ID #	Length (mm)	WEIGHT (g)	Gender	Comments
7508 08.26.	81508	CTOIÚ	trap.	EW-08-CT010-RR-01	125	291	F	
08.24.08				EW-08-CT010- RR-02	195	190	<i>i</i> =	
08.26.08		1		EW-08-CT010-RR-C3	125	250	Franc	
08.26-08		· /		EN-US-CTOID-RR-CY	141	410	M	
08.24.08				EW-08-CT010-KR-05	144	440	RA	
08.26.08	V	4		EEW-08-CT010-RR-06	122	270	P	
						l		
							·	**************************************
	Avenue de contras de contras en la secona y contras en la secona y contras en la secona y contras en la secona							
-								
					1			
		1			1			

.





Project Name: EW RI/FS	- Fish and crab sampling

Project #: 08-08-09-41

Field crew initials: ML, SP

COLLECTION DATE	COLLECTION TIME	LOCATION ID	COLLECTION METHOD	Species	LENGTH RANGE (mm)	TOTAL WEIGHT (g ww)	COUNT	Comments
08.26.08	1508	CT010	trap	red rock	790		6	kept

				······				
-15-40-461								



Project Name: EW RI/FS – Fish and crab sampling	Project #: 08-08-09-41	
Species sampled: Red Rock (2)	Field crew initials: ML, SP	
Comments:		

COLLECTION DATE	COLLECTION TIME	LOCATION ID	COLLECTION METHOD	SPECIMEN ID #	LENGTH (mm)	WEIGHT (g)	Gender	COMMENTS
08.26.03 68.26.08	14 20	CTUU	trap	EW-08-CTOIL-RR-01	136	360	M	
68.26.08	1420	CTO/I	V.	EW-08-CTO11-RR-01 EW-08-CTO11-RR-02	157	330	NA	
			<u> </u>					
				·				
Bear Policies White which is at the which is the balance station and is a structure								
-								
								·
			<u> </u>		[

.



CTOU

NON-TARGET SPECIES TALLY FORM

Project Name: EW RI/FS – Fish and crab sampling

Project #: 08-08-09-41

Field crew initials: ML, SP

COLLECTION DATE	COLLECTION TIME	LOCATION ID	COLLECTION METHOD	SPECIES	LENGTH RANGE (mm)	TOTAL WEIGHT (g.ww)	COUNT	COMMENTS
08.26.03	14:20	CTOII	map	Soluster			7	released
08.26.08	1420	CTOU	irap	Rad Ruck	790		2	kept Veleased Veleased Veleased
/		CTOII	trap	red rock	790		1	released
		STOIL	1	Ped Rock Sunflower Star	7900		1	Veleased
V	ď	STOII	V	Surflower Star			1	released
		CTON	prop	r.				
			ď		·			



Project Name: EW RI/FS – Fish and crab sampling

Project #: 08-08-09-41

Field crew initials: ML, SP

COLLECTION DATE	COLLECTION TIME	LOCATION ID	COLLECTION METHOD	Species	LENGTH RANGE (mm)	TOTAL WEIGHT (g ww)	COUNT	Comments
08.26.08	1625	STOIZ	trap	Pacific Staghun Sculpin	7150mm		1	rejeazed
			<i>y</i>	Sculpin				· · · · · · · · · · · · · · · · · · ·
								-

				· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·	
	······							



MUSSEL/SHRIMP COLLECTION FORM

Project Name: EW RI/FS – Fish and crab sampling

Project #: 08-08-09-41

-

Field crew initials: SP, TD

				- see field	Instebook				
COLLECTION DATE	COLLECTION TIME	LOCATION ID	x	Y Y	SPECIMEN ID #	SPECIES	No. of Individuals	TOTAL WEIGHT (g ww)	COMMENTS
68.27.08	1056	ST008	Ŭ.		EW-08-STOOP-SR-01	Coonshipe shrimp	9	64	
05.27.08	0840	HCOOY			EW-08- HC004-MS-01		100	904	
05.27.08	0954	HCOIO			EW-08-HCOIO-MS-0]	1	100	618	
1	0803	HCOOJ			BW-08-He001-MS-0]	1	89	840	
	0816	HC002			EW-08-HC002-MS-0)		93	772	
	0828	HC003			EW-08-HC003-MS-01		91	760	
	0851	HICOOS .			8N-08-HC005-MS-01		10ĵ	1294	
	0908	HC006			EN-03- HCOOG-MS-01		101 -	1434	
	0919	HC007			EW-08-HC007-MS-0)		100	1308	
	093j	HC008 -			EW-08-HC008-MS-01		100	850	
	0945	HCOC9			EW-08-HCOOG-MS-6]		joo	750	
<u> </u>	1007	Heojo			EW-08-HCO11 -MS-0]	V	100 -	978	
Viewennen gereiten eine eine eine eine eine eine eine									



Project Name: EW RI/FS – Fish and crab sampling	Project #: 08-08-09-41
Species sampled: Red Rock and Dungeness Crab	
Comments:	Field crew initials: MGL, CL, JB

COLLECTION DATE	COLLECTION TIME	LOCATION ID	COLLECTION METHOD	SPECIMEN ID #	LENGTH (mm)	WEIGHT (g)	GENDER	Comments
9/2/2008	10:32	EW	TR-001	EW-08-TROOI-RR-01	128	2.74	?	lance star and the
	10:59	EW	TROOL	EW-08-TR002-DC-01	157	508	male	bornacles on shell
	12:26	EW	TR004	EW-08-TR004-DC-02	127	T	female	
1	16:13	EW	TROOS	EW-08-TR008-DC-03	158	470	female	
			·					
							-	
			·····					
·····								

· · · · .



Project Name: EW RI/FS – Fish and crab sampling	Project #: 08-08-09-41
Species complete ()	
Comments:	Field crew initials: MGL, CL, JB

COLLECTION DATE	COLLECTION TIME	LOCATION ID	COLLECTION METHOD	SPECIMEN ID #	LENGTH (mm)	WEIGHT (g)	Gender	Comments
9/2/2008	12:26	εw	TROO4	EW-08-TR004-SR-01	()			
	14:41		TR006	EW-08-TROOG-SR-02		9	6 coon	stripe shrimp
	15:13		TROO7	EW-08-712007-512-03		6	4 snn	mp (coonstripe)
	16:13			CW-08-71-008-52-04		16	5 coon	stripe shrimp
	17:29		TROID	EW-08-TRO10-SR-05		128	1 couns	the shrimp
						0	1 000	stripe shrimp
								······
								·
			· · · · · · · · · · · · · · · · · · ·					
	· · · · · · · · · · · · · · · · · · ·							
	1	<u>l</u>						



Project Name: EW RI/FS – Fish and crab sampling	Project #: 08-08-09-41
Species sampled: Shiner Surfperch	
Comments:	Field crew initials: ML, CL, JB

	COLLECTION TIME	LOCATION ID	COLLECTION METHOD	SPECIMEN ID #	LENGTH (mm)	WEIGHT (g)	GENDER	COMMENTS
9/2/2008	10:32	EW	TROOL	EW-08-TROO1-55-01	110	20	M	
				-62	123	26	M	
				-03	117	22	M	
				- 04	120	28	Μ	prolapsed cloaca
				-05	111	22	Μ	1
			<u> </u>	-06	130	26	F	
				-07	129	32	F	
	<u> </u>			-08	105	14	F SPL	juvenile
				-09	108	12	X	u
	INCO			-10	109	[4	XO	" prolapsed clo
	10:59		72002	EW-08-TR-002-55-11	120	24	M	pro. closca
				-12	109	(0	Μ	
				-13	110	16	Μ	pro. closca
	12:26		TOOL	-14	/18	22	F	
	16.60		TR004	EW-08-TRO09-55-15	117	18	M	
				-16	121	24	m	
	<u> </u>	١	•	-17	131	34	m	



Project Name: EW RI/FS – Fish and crabs	sampling

Project #: 08-08-09-41

Species sampled: Shiner Surfperch

Comments:

COLLECTION DATE	COLLECTION TIME	LOCATION ID	COLLECTION METHOD	SPECIMEN ID #		LENGTH (mm)	WEIGHT (g)	GENDER	COMMENTS
9/2/2008	12:26	εw	TR004	EW-08-TR	504 - 55 - 18	110	16	M	
					- 19	116	20	m	prolapsed cloaca
					-20	102	12	m	
					-21	113	18	M	
				-	-22	125	28	m	
				ļ	-23	115	16	m	prolapsed closes
-/					-24	112	14	m	prolapsed closea pro. close.
					-25	121	24	M	
					-26	112	_(4	m	
					-27	120	24	m	pro. clasca
					-28	100	10	F	
					-29	104	14	F	pro. Cloaca
					-30	113	16	F	
					-31	120	12	=	
					-32	105	14	F	······
					- 33	104	12	F	pro. cloaca
			1		-34	-107-5P	22	F	



Project Name: EW RI/FS – Fish and crab sampling	

Project #: 08-08-09-41

Species sampled: Shiner surfpurch Comments:

COLLECTION DATE	COLLECTION TIME	LOCATION ID	COLLECTION METHOD	Specimen ID# EW-08-TP-005-58-35		LENGTH (mm)	WEIGHT (g)	GENDER	Сом	IENTS
9/2/2008	13:02	εw	TROOS			114		m		
			<u> </u>		-36	100	10	m	Pro. cloze	a
					-37	101	10	M	`i.	1 (
	1				- 38	110	16	F	Prolapsed	cloaca
	[1:4]		TROOG	8W-08-1	1006-55-39	97	12	M	[*	11
				ļ	-40	122	22	m	16	17
					-41	131	26	m	e f	11
					-42	109	12	m	<i>s</i> t	11
					-43	110	16	m	it	11
					-44	116	20	m	I C	ł1
					-45	116	22	m	12	1
					-16	115	14	FFF	11	11
					- 47	125	24	#	ş t	/t
					- 48	105	16	F	Ц	11
					-49	110	18	F	§r.	"!
		k			-50	112	14	F	£1	1
					-51	IID	10	F	([]/



Project N	lame: EW	RI/FS-	Fish and	d crab	sampling

Project #: 08-08-09-41

Species sampled: Shiner Sufpurch

Comments:

COLLECTION DATE	COLLECTION TIME	LOCATION ID	COLLECTION METHOD	SPECIMEN ID #	LENGTH (mm)	WEIGHT (g)	Gender	COMMENTS
9/2/2608	15:13	εw	TR007	SW-08-TROUT-53-52	(16	M	
			<u> </u>	-53	105	14	n	
				-54	119	20	m	
				-55	108	16	M	
				-56		20	F	prolapsed cloaca
				-57	123	28	F	
				-58	11.3	18	F	
	16:13		= 24 - 2	-59	112	20	F	pro. cloaca
	16.12		TROO8	EW-08-TR008-35-60	(05	60	M	
				-61	109	10	M	
				-62	105	_/4	m	
				-63		14	M	
				-64	106	-16	M	
				-65	116	22	Μ	
				-66	117	22	F	
				-67	167	18	F	
	<u>i</u> i	~	1	-68	114	20	F	



Project Name: EW RI/FS – Fish and crab sampling	Project #: 08-08-09-41
Species sampled: Shiner Surfperch	Field crew initials: MGC, CL, JB
Comments:	moduind

		LOCATION ID	COLLECTION METHOD	SPECIMEN ID #		LENGTH (mm)	WEIGHT (g)	GENDER	Comments
9/2/2008	16:13	εw	TROOS	EW-08-TP	W-08-TP-008-55-69		16 F	······	
					-70	105	18	=	
					-71	_113_	20	F	pro. cloacer
					-72	106	18	F	1[1]
					-73	1/4	20	F	\${ E !
					-74	133-67	20	F	
					-75	108	18	F	
					- 76	104	16	F	
					-77	111	20	F	
					-78	132	34	F	
					-79	104	16	F	
					-80	108	20	F	
	·								·
			ii	······					
	· · · ·								
		l							



Project Name: EW RI/FS – Fish and crab sampling

Project #: 08-08-09-41

Species sampled: English sole Comments:

COLLECTION DATE	COLLECTION TIME	LOCATION ID	COLLECTION METHOD	SPECIMEN ID # EW-08-772001-28-01		LENGTH	WEIGHT	Gender	Commente
9/2/2008	10:32	εω	TROOI			(mm)	(g)		COMMENTS
			1	000 00	1	225	96	M	
			 		-02	247	120	M	
					-03	226	108	M	
					-04	236	102	M	
					-05	233	104	M	red bumps (parasite
				/	-06	240	106	Μ	
				<u> </u>	-07	204	74	Μ	
					-78	229	114	M	red bumps (parasites
					-09	242	104	M	parasites
					-10	250	134	Μ	it If
++					-11	210	68	Μ	({ * ?
					-12	220	102	Μ	
					-13	249	140	Μ	parasifes
					4	271	170	F	ht 11
					-15	215	178	F	10 11
	10:59		-2000	Cola	-16	250	148	F	W D
	10.01	1	TP202	2W-08-1	2002-25-17	202	72	M	parasites



Project Name: EW RI/FS – Fish and crab sampling

Project #: 08-08-09-41

Species sampled: English Sole Comments:

COLLECTION DATE	COLLECTION TIME	LOCATION ID	COLLECTION METHOD	SPECIMEN ID #	LENGTH (mm)	Weight (g)	GENDER	COMMENTS
9/2/2008	10:59	EW	TR002	EW-08-TROOZ-ES-18	201	79	M	
	10.01			-19	211	86	F	parasites
	12:26		TR004	EW-08-TP2004-28-20	235	1/4	M	FUTUSTICS
				- 21	204	78	Μ	
				-22	207	82	Μ	parasites
				- 23	233	122	Μ	
				-24	285	188	M	
				-25	205	72	Μ	
				-26	248	138		parasites
				-27	308	252	M	ł
				-28	222	96	M	
				-29	273	176	M	parasites
				- 30	202	70	M	
				-31	221	82	M	u h
				-32 -33	230	106	M	
				-34	230 225	168 140	M	



Project Name: EW RI/FS – Fish and crab sampling	Project #: 08-08-09-41
Species sampled: English sole	Field crew initials: MGL, CL, JB
Comments:	MGU, CL, JB

COLLECTION DATE	COLLECTION TIME	LOCATION ID	COLLECTION METHOD	SPECIMEN ID #	LENGTH (mm)	WEIGHT (g)	GENDER	Comments
9/2/2008	12:26	12:26 EW		EW-08-TRC04-ES-35		90	M	
				-36	200	72	M	
				-37	225	96	Μ	prolapsed cleace
				-38	· · · · · · · · · · · · · · · · · · ·	366	F	prolapsed cloaca prolapsed cloaca
				-39		78	F	1
				-40		102	F	parasites
				-41	298	238	F	parasites
				-42	259	164	F	11 11
				-43	235	128	<u>F</u>	parasites
	12:02		COUE		236	124	F	
	13:02		TROOS	EW-08-TR005-ES-45	260	80	M	
				-16	227	92	M	parasites
				-47	208	78	M	
				-48	195	54	M	······
				-49	211	84	M	parasites
					204	78	M	1
1		Y		-51	202	72	M	

 $(1,1)_{1 \in \mathbb{N}}$



Project Name: EW RI/FS – Fish and crab sampling	Project #: 08-08-09-41
Species sampled: English ≤	Field crew initials: MGL, CL, JB
Comments:	THEC, CL, JIS

COLLECTION DATE	COLLECTION TIME	LOCATION ID	COLLECTION METHOD	SPECIMEN ID #	LENGTH (mm)	WEIGHT (g)	Gender	Comments
9/2/2008	13:02	EW	TROUS	SW-08-TROOS-ES-52		116	M	
				-53		144	F	parasites, prolapsed claa parasites
	14:41		T2006	EW-08-TR-006-ES-54	280	208	M	Francis
				-55	235	116	M	parasites
				-56	266	168	Μ	
				-57	248	108	Μ	-
			l	-58	217	88	Μ	
				-59	208	88	Μ	parasites
				-60	200	78	М	parasites
				-61	259	140	М	w P
				-62	215	76	Μ	u li
				-63	221	(00	Μ	(t f)
				-64	233	104	М	V Ir
			i		259	154	Μ	ξτ / C
				-66	236	100	Μ	11]1
				-61	216	96	Μ	11 11
<u> </u>			<u> </u>	-68	216	86	M	st (1

.



Project Name: EW RI/FS – Fish and crab sampling	Project #: 08-08-09-41
Species sampled: English sole	Field crew initials: MGL, CL, JB
Comments:	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

	COLLECTION TIME	LOCATION ID	COLLECTION METHOD		SPECIMEN ID #	LENGTH (mm)	WEIGHT (g)	GENDER	Comments
9/2/2008	14:41	EW	TP-006	EW-08-	TP-006-ES - 69	214	92	M	parasites
					-70	214	90	M	11 11
					-71	218	84	M	
					- 72	201	68	Μ	
					-73	201	70	Μ	
				[-74	220	104	M	parasites
					-75	235	114	M	14 11
					-76	250	132	M	ti la
					-77	252	144	M	ti 11
					- 78	233	102	Μ	L(11
					-79	216	92	Μ	Re parasites in En
					- 80	203	74	Μ	parasiks
					-81	220	94	M	<i>ie jl</i>
					-82	200	76	Μ	li 11
					-83	210	76	Μ	11 /1
					-84	236	102	Μ	
	1)	1	-85	240	22	M	parasites



Project Name: EW RI/FS – Fish and crab sampling	Project #: 08-08-09-41
Species sampled: English sole	Field crew initials: MGL, CL, JB
Comments:	INGL, CL, JB

COLLECTION DATE	COLLECTION TIME	LOCATION ID	COLLECTION METHOD	SPECIMEN ID #		LENGTH (mm)	WEIGHT (g)	Gender	Comments
9/2/2008	14:41 EW TR		TROOG	EW-08-TR006-ES-	W-08-TROOG-ES-86		92	M	prolapsed cloaca
					-87	205	78	M	Tropan checa
					-88	243	112	M	
				1 1	-89	208	86	Μ	parasites
					-90	210	86	Μ	11 /1
					-91	227	(00	Μ	u ", prol. cloa
					-92	209	86	Μ	parasites
					-93	216	86	M	
					-94	215	100	M	parasifes
					-95		10	M	(r /1
					-96	200	66	M	10 11
					-97	214	88	M	14 [1
					-98	226	102	M	
			:		-99	246	138	F	
					.100	209	20	F	
						209	82		parasites
	1	l			102	246	134	P	



Project Name: EW RI/FS – Fish and crab sampling	Project #: 08-08-09-41
Species sampled: Graduate a La	
Comments:	Field crew initials: MGL, CL, JB

COLLECTION DATE	COLLECTION TIME	LOCATION ID	COLLECTION METHOD	S	PECIMEN ID #	LENGTH (mm)	WEIGHT (g)	GENDER	COMMENTS
9/2/2008	14:41	EW	TR006	EW-08-T	R006-ES-103	285	212	F	parasite, lesian on t
					-104	226	104	F	Parasites
					-105	226	108	F	11 11
					-106	197	62	F	
					-107	212	94	F	pairosites, pro. closca
					-108	239	114	F	parasites
					-109	208	94	F	1(11
	15:13			~	-110	205	74	F	se 11
			12007	2W-08-T	2007-25-111	280	208	Μ	1¢ It
					-112	355	420	F	u jr
					-113	348	376	F	
					-[[4	313	252	F	
					- 115	342	318	F	
					-116	285	226	F	



Project Name and Number: EW H/FS - Fish and Crab Sampling 08-08-09-41 Material to be Sampled: F-Bh and Shellfish Measurement Parameter: NIA Standard Procedure for Field Collection & Laboratory Analysis (cite reference): "Brown rockfish collection will take place in August 2008" (QAPP, Section 2.3.3) Reason for Change in Field Procedure or Analysis Variation: It was requested. that a rockfish sample be taken from Slip 36 (u.s.' coast buard) after August collection had been conducted. Variation from Field or Analytical Procedure: One rockfish was collected in October. Special Equipment, Materials or Personnel Required: NA Initiator's Name: Date: 10-24-08 Project Manager: Date: QA Manager: Date:



EW RI/FS-Fish and craib sumpling 08-08-09-41 Project Name and Number: Fish and shellfish Material to be Sampled: Measurement Parameter: NA Standard Procedure for Field Collection & Laboratory Analysis (cite reference): "The next five characters of the ID will identify the method and effort number: SB representing SCUBA ... " and "the next two characters will identify the individual species type : brown rockfish (BR) ... " (QAPPP, Section 3.3.6) Reason for Change in Field Procedure or Analysis Variation: Sample labeling error. Variation from Field or Analytical Procedure: Sample 1Ds for brown rockfish were identified with "SCUBA" instead of "SB" and eight samples were identified with "RF" instead of "BR" on the sample labels, field Logbook, and Coc forms. Sample IDs were corrector after delivery to ARI. NA Special Equipment, Materials or Personnel Required: Initiator's Name: Date: Date: Project Manager: QA Manager: Date:



Project Name and Number: EW RI/PS - Fish and Crab Sampling 0808-09-41 Material to be Sampled: Fish and shellfish Measurement Parameter: N/A-Standard Procedure for Field Collection & Laboratory Analysis (cite reference): The number of specimens permitted by WDFW for musiels was 140 and for shiner surfperch was 60. (QAPP, Section 3.2.3, Table 3-5) Reason for Change in Field Procedure or Analysis Variation: The WDFW permit was changed after the QAPP went final to account for higher numbers of shiner surfperch and mussels that were noted in the field. The numbers permitted increased to 1100 for mussels and 25 for uniner surfperch. Variation from Field or Analytical Procedure: The number of mussels collected was 1075 and the number of shiner surfperch collected was 80 Special Equipment, Materials or Personnel Required: NA Initiator's Name: Date: Project Manager: Date: QA Manager: Date:



EWEI/FS - Fish and Crab Sampling 08-08-09-41 Project Name and Number: Material to be Sampled: Fish & Shellfish Measurement Parameter: NA Standard Procedure for Field Collection & Laboratory Analysis (cite reference): The target length for brown rockfish is ≥200mm (QAPP, Section 3.2.3, Table 3-5) Reason for Change in Field Procedure or Analysis Variation: This rockfish was used because it was killed during capture and could not be released. Variation from Field or Analytical Procedure: One workfish retained for chemical analysis had a length of 193 mm. Special Equipment, Materials or Personnel Required: N/A Initiator's Name: Date: 8-13-08 Project Manager: Date: QA Manager: Date:



EW PU/FS - Fish and Crab Sampling DB-08-09-41 Project Name and Number: Material to be Sampled: Fish and shollfish Measurement Parameter: NA Standard Procedure for Field Collection & Laboratory Analysis (cite reference): Target length for English sole is 2200mm (QAPP, Section 3.2.3, Table 3-5) Reason for Change in Field Procedure or Analysis Variation: English sole Thing specimens specimens were assigned to composite samples to maximize size and gender diversity, per the "Proposed Fish and Cras Tissue Compositing Schemes" Memorandum submitted to and approved by EPA on behalf of Ehb, Oct. 28, 2008. Variation from Field or Analytical Procedure: Two English Sole retained for chemical analysis had lengths of 195 and 197 mm. These fish were included in the whole body composite samples EW-08-ES-WB-comp5 and EW-08-ES-WB-comp10, respectively. Special Equipment, Materials or Personnel Required: NA Initiator's Name: 9-2-08 Date: Project Manager: Date: QA Manager: Date:



EW RI/PS Fish and crab sampling 08-08-09-41 Project Name and Number: For and shellfish Material to be Sampled: NA Measurement Parameter: Standard Procedure for Field Collection & Laboratory Analysis (cite reference): Trawl samples will be collected throughout all accessible areas of the EW. (QAPP, Section 2.3.1) Reason for Change in Field Procedure or Analysis Variation: Field arersight Variation from Field or Analytical Procedure: Trawls EW-09 and EW-10 extended beyond the Et site boundary based on trawl coordinates collected in the field. No target speciment were kept from twoog and only I counstripe shrimp was kept from TUI-10 Special Equipment, Materials or Personnel Required: N/A Initiator's Name: Date: 9-2-08 Project Manager! Date: Date: QA Manager: