

APPENDICES A AND B

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Appendix A. Taxonomy Data Tables

NOTE: According to the taxonomists who sorted the samples, the Lower Duwamish Waterway (LDW) samples were “typical” with a mix of adults and juveniles. Some of the organisms were only identified to genus because they were too small (juveniles); this information was to some extent noted in the identification process and included in this appendix. In general, samples sieved on a 1 or 2 mm sieve (van Veen and frame samples) predominantly consisted of adult organisms because juveniles (small ones) were not retained in the sieving process.

Table A-1. Abundances of benthic invertebrates in composite core samples (0.012 m² total area) collected at intertidal locations

TAXON	ITIS NUMBER ^a	B1a	B2a	B3a	B4a	B5a	B6a	B7a	B8a	B9a	B10a	BCA-1	BCA-3
POLYCHAETA													
<i>Capitella capitata</i> complex	67415	1	102	436	40	18	25	32	25	13	32	67	22
<i>Eteone californica</i>	65259			4			1			3			3
<i>Eteone</i> sp.	65258		1	1	1								
<i>Hobsonia florida</i>	67755		24	15	14		6	67	190	104	79	38	9
<i>Manayunkia aestuarina</i>	68171		237	60	118	1	19	3	10	44	31	138	35
<i>Neanthes limnicola</i>	65893					17	5	2	3	3	7	4	7
<i>Platynereis bicanaliculata</i>	65948		3	1									
<i>Podarkeopsis glabra</i>	65534											1	
<i>Polydora cornuta</i>	204501	5	49	17		6	3	9	51	26	12		1
<i>Pseudopolydora kempii</i>	66927	53	15	16	6	10	7		2	26	7	1	2
<i>Pygospio elegans</i>	66917	331	110	438	292	2	43	363	407	119	3	314	654
CRUSTACEA													
Cirripedia													
<i>Balanus</i> sp.	89600							2					
Amphipoda-Gammaridae													
<i>Americorophium salmonis</i>	656745	53	200	130	70		8	22	270	130	36	254	33
<i>Americorophium spinicorne</i>	656746	1	8	18	8		1	89	143	15	137	75	85
<i>Ampithoe valida</i>	93424				6								
<i>Ampithoe</i> sp.	93409		74	4	14							18	
Corophiidae	93584	17	97	47	65		1	36	82	47	28	82	24
<i>Eogammarus confervicolus</i>	656666		41	22	12			88	142	2	3	17	
<i>Grandidierella japonica</i>	93643		255	62	15			48	105	2		27	2
<i>Monocorophium acherusicum</i>	656756			3									
<i>Monocorophium insidiosum</i>	656759	6	103	9	13	1		1	1			26	
Isopoda													
<i>Gnorimosphaeroma insulare</i>	92298							19	4		1		
<i>Gnorimosphaeroma oregonense</i>	544557		1										

Table A-1, cont.

TAXON	ITIS NUMBER ^a	B1a	B2a	B3a	B4a	B5a	B6a	B7a	B8a	B9a	B10a	BCA-1	BCA-3
Cumacea													
<i>Cumella vulgaris</i>	90966		22	16	1	1	1	3	17	9		6	
<i>Nippoleucon hinumensis</i>	no number		165		4				10	6	5		
Tanaidacea													
<i>Sinelobus stanfordi</i>	91451		15	14	5		1	2	15	2	6	145	7
Copepoda													
<i>Coullana canadensis</i>	no number							1	1		84		
<i>Eurytemora americana</i>	85864				6								
<i>Harpacticus</i> spp.	86330	1		4	1					4			
<i>Huntemannia jadensis</i>	87579	2	1	2						1	30		1
<i>Leimia vaga</i>	87588									2			
<i>Nitokra</i> sp. A	572709										2		
<i>Parathalestris</i> sp.	88399			1									
<i>Tisbe</i> sp.	86445									1			
Decapoda													
<i>Crangon</i> sp.	97107									3			
INSECTA													
Empididae	135830		1										
Collembolla	99237	1			2					1			
Chironomidae	127917				1							1	
Acarina	82754		2					1				1	
MOLLUSCA													
Bivalvia													
<i>Bivalvia</i> sp. juv.	79118			1									
<i>Macoma balthica</i>	567846			1			1					1	
<i>Macoma nasuta</i>	81050		1										
<i>Macoma</i> sp. juv.	81033		3										
Gastropoda													
Aeolodiacea	no number		1				1						

Table A-1, cont.

TAXON	ITIS NUMBER ^a	B1a	B2a	B3a	B4a	B5a	B6a	B7a	B8a	B9a	B10a	BCA-1	BCA-3
MISCELLANEOUS													
Invertebrate sp. unidentified	no number						2						
Nematoda	59490	26	5		8	1	14	2	6	1	60	15	15
Oligochaeta	68422	84	386	113	361	3	37	242	198	141	224	167	186
Cnidaria													
<i>Euphysa</i> sp.	48975		8										
Nynantheae spp.	no number		17									2	
Platyhelminthes													
Rhabdozoela sp.	no number		1				1		10		5		
Total number		581	1,948	1,435	1,063	60	177	1,032	1,692	705	792	1,400	1,086

^a ITIS stands for the Integrated Taxonomic Information System. It is authoritative taxonomic information on plants, animals, fungi, and microbes of North America and the world. They are a partnership of U.S., Canadian, and Mexican agencies (ITS-North America); other organizations; and taxonomic specialists. ITIS is also a partner of Species 2000 and the Global Biodiversity Information Facility (GBIF).

Table A-2. Abundances of benthic invertebrates in composite transect frame samples (0.5 m² total area) collected at intertidal locations

TAXON	ITIS NUMBER ^a	B1a	B2a	B3a	B4a	B5a	B6a	B7a	B8a	B9a	B10a	BCA-1	BCA-3
POLYCHAETA													
<i>Abarenicola pacifica</i>	67503		5	2	1								
<i>Barantolla nr americana</i>	no number											4	
<i>Capitella capitata</i> complex	67415			2			2						
<i>Eteone californica</i>	65259		21	17	9	2	1	3	1	5		17	2
<i>Glycera nana</i>	204455			1								1	
<i>Glycinde polygnatha</i>	66133						2					3	
<i>Hobsonia florida</i>	67755		5	8	3		38	5	19	83	36	2	11
<i>Manayunkia aestuarina</i>	68171						1						
<i>Mediomastus</i> sp.	67438											1	
<i>Neanthes limnicola</i>	65893	2		2		32	27	1	22	9	14	1	13
<i>Polydora cornuta</i>	204501		8	17			1	1	3	3	5		
<i>Pseudopolydora kemp</i>	66927	3	1	1	1		2			3	1		
<i>Pygospio elegans</i>	66917				1		8					1	
CRUSTACEA													
Amphipoda-Gammaridae													
<i>Americorophium salmonis</i>	656745	11	103	129	102		4	3	49	46	15	60	6
<i>Americorophium spinicorne</i>	656746	4	5	24	25			24	81	27	70	26	115
<i>Ampithoe valida</i>	93424		17	14					1	1		10	
<i>Ampithoe lacertosa</i>	93426		6	2									
<i>Ampithoe</i> sp.	93409		6										
Corophiidae	93584		1	3	3			1					
<i>Eogammarus confervicolus</i>	656666			10	9			7	22	7	2	4	2
<i>Grandidierella japonica</i>	93643		1	2	1				1	1			
<i>Monocorophium insidiosum</i>	656759	3	18		3							8	
Tanaidacea													
<i>Sinelobus stanfordi</i>	91451			10								3	1
Decapoda													

Table A-2, cont.

TAXON	ITIS NUMBER ^a	B1a	B2a	B3a	B4a	B5a	B6a	B7a	B8a	B9a	B10a	BCA-1	BCA-3
<i>Crangon franciscorum</i>	97114									5			
INSECTA													
Empididae	135830				1								
Chironomidae	127917				1								
MOLLUSCA													
Bivalvia													
<i>Macoma balthica</i>	567846		10	12	8	4	7	4	6	10	1	12	1
<i>Macoma nasuta</i>	81050		8										
<i>Mya arenaria</i>	81692			1								1	
MISCELLANEOUS													
Oligochaeta	68422					1	2						
Cnidaria													
Nynantheae spp.	no number			1									
Nemertea													
<i>Paranemertes peregrina</i>	57505			1									
Total number		23	215	259	168	39	95	49	205	200	144	154	151

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Table A-3. Abundances of benthic invertebrates in composite van Veen grab samples (0.3 m² total area) collected at subtidal locations

TAXON	ITIS NUMBER ^a	B1b	B2b	B3b	B4b	B5b	B6b	B7b	B8b ^b	B9b	B10b ^b	BCA-2	BCA-4	BCA-5	BCA-6 ^b
POLYCHAETA															
<i>Abarenicola pacifica</i>	67503								6	2				1	
<i>Ampharete cf crassiseta</i>	no number	2													
<i>Ampharete labrops</i>	67742		4	6	2		2	4				1	5		
Ampharetidae (juvenile)	67718							1							
<i>Aphelochaeta cf glandaria</i>	no number			351	10	2	1837	358				394	669	4	
<i>Aphelochaeta sp.</i>	no number			95			40					45	17		
<i>Aricidea lopezi</i>	66753			1	1							3	1		
<i>Armandia brevis</i>	67345	5	2	27	32	43	5	3	3	1		12	14	8	
<i>Artacama coniferi</i>	67986		2	1	2		1	2				3	1		
<i>Asabellides sibirica</i>	67785	6	1												
Autolytinae	no number		1					1					1		
<i>Barantolla nr americana</i>	no number				3	1							2		
<i>Capitella capitata</i> complex	67415	1	3	19	4	469	9	1	137	300	64	9	102	30	
<i>Caulleliella pacifica</i>	no number	17											103		
<i>Mesochaetopterus taylori</i>	67112		1												
<i>Chaetozone acuta</i>	no number	19										1			
<i>Chaetozone nr setosa</i>	67157												6		
<i>Chaetozone sp. N1</i>	no number			78			165					9			
<i>Chaetozone sp.</i>	67156		2			4	4	12					2		
Cirratulidae	67116			15			29	83				26	28		
<i>Cirratulus sp. juvenile</i>	67117			3			1								
<i>Cossura pygodactylata</i>	67212		2	20		9	45	16				41	23	1	
<i>Dipolydora caulleryi</i>	no number		1	11	1		1						1	3	
<i>Dipolydora quadrilobata</i>	no number			5	1	4	4			2					
<i>Dipolydora socialis</i>	no number		1	2	3		4					1	14		
<i>Dipolydora sp.</i>	no number							1							

Table A-3, cont.

TAXON	ITIS NUMBER ^a	B1b	B2b	B3b	B4b	B5b	B6b	B7b	B8b ^b	B9b	B10b ^b	BCA-2	BCA-4	BCA-5	BCA-6 ^b
<i>Dorvillea (Schistomeringos) annulata</i>	66521			1		2		1							
<i>Eteone californica</i>	65259			1			9	7	24	8	41	10	5		
<i>Eteone spilotus</i>	65277					2	2						4	1	
<i>Eteone</i> sp.	65258	6	11		3	11	1		20	19			22	1	1
<i>Euchone incolor</i>	68095		7	1									1		
<i>Euchone limnicola</i>	68105	2	4	18		7	93	95				5	53	2	
Euclymeninae	no number												3	1	
<i>Eumida longicornuta</i>	204407	2	1				2	5					3		
<i>Eupolymnia heterobranchia</i>	67907												1		
<i>Exogone lourei</i>	65724	19											11		
<i>Gattyana treadwelli</i>	64485			1											
<i>Glycera americana</i>	66106	5	2	4	2	1	2	1							
<i>Glycera nana</i>	204455		3		2	1	2		1				14		
<i>Glycinde armigera</i>	66131	3			1										
<i>Glycinde polygnatha</i>	66133	1	7	4	15	17	3	6	4	1		1	11		
<i>Harmothoe imbricata</i>	64513	7		2											
<i>Harmothoe</i> sp.	64502	3		1											
<i>Heteromastus filibranchus</i>	no number			9	52	2	13					7	55	1	
<i>Heteromastus</i> sp.	67419		11				5						1		
<i>Hobsonia florida</i>	67755					2			298	384	68				653
<i>Lanassa venusta</i>	67993	1	3					12					15		
<i>Leitoscoloplos pugettensis</i>	66654	8	14	1				6					2	1	
Lumbrineridae	66335													1	
<i>Lumbrineris californiensis</i>	66374	142	23	18									6		
<i>Malmgreniella macginitiei</i>	no number	2	1	3	2							5		1	
<i>Malmgreniella</i> sp.	64739			3			1								
<i>Manayunkia aestuarina</i>	68171									3	2				
<i>Mediomastus</i> sp.	67438	50		1	3	176	4	1					3	12	
<i>Monticellina secunda</i>	no number	72	4	23		2	12	14				4	38	11	
<i>Monticellina serratiseta</i>	no number			126		3	46	12				18	34	3	

Table A-3, cont.

TAXON	ITIS NUMBER ^a	B1b	B2b	B3b	B4b	B5b	B6b	B7b	B8b ^b	B9b	B10b ^b	BCA-2	BCA-4	BCA-5	BCA-6 ^b
<i>Monticellina</i> sp.	no number			1											
<i>Neanthes limnicola</i>	65893			1					7	3	6				229
<i>Neosabellaria cementarium</i>	no number	1													
<i>Nephtys cornuta</i>	66015		6	3	3	2	12	3				6	7		
<i>Nephtys ferruginea</i>	66024	2	12	1	9		1	2					14		
<i>Nereis procerca</i>	65910		2	1										1	
<i>Nereis vexillosa</i>	65911													1	
<i>Notomastus hemipodus</i>	67431		2		1	7							3		
<i>Notomastus</i> sp.	67423	2											3		
Onuphidae juv	66157	4													
<i>Ophelina acuminata</i>	67391		1										1		
<i>Ophiodromus pugettensis</i>	65516				8	1		1		1			1		
<i>Paleanotus bellis</i>	65150	2					1								
<i>Paraprionospio pinnata</i>	66937		4									10	7		
<i>Pectinaria californiensis</i>	67712		2		1							1	3		
<i>Pectinaria granulata</i>	67711	1						1							
<i>Pholoe minuta</i>	65074			7	12	5	1	1					3		
<i>Pholoe</i> sp. N1	65073		2									4			
<i>Pholoides asperus</i>	no number			1											
<i>Phyllochaetopterus prolifica</i>	67101	1													
<i>Phyllodoce groenlandica</i>	65233												1		
<i>Phyllodoce hartmanae</i>	65361		5		3	1	2	7					8		
<i>Phyllodoce longipes</i>	65251	5	1		1	1							1		
<i>Phyllodoce</i> sp.	65359			1											
<i>Phylo felix</i>	66613												2		
<i>Platynereis bicanaliculata</i>	65948	6	1	31								7		1	
<i>Pista</i> nr <i>brevibranchiata</i>	67950	1													
<i>Podarkeopsis glabra</i>	65534	4	1				5					2		2	
<i>Polycirrus</i> sp.	67959	2		1	4			2					10	3	
<i>Polycirrus</i> sp. I - sensu Banse 1980	no number		1	2	7		6	7				4			

Table A-3, cont.

TAXON	ITIS NUMBER ^a	B1b	B2b	B3b	B4b	B5b	B6b	B7b	B8b ^b	B9b	B10b ^b	BCA-2	BCA-4	BCA-5	BCA-6 ^b
<i>Polydora cornuta</i>	204501			9	5	233	10	6	607	367	29	1		27	2
<i>Praxillella gracilis</i>	67569				5								1		
<i>Prionospio lighti</i>	66858	7		1		3		2		2			3	4	
<i>Prionospio multibranchiata</i>	67028	5		3									2		
<i>Prionospio steenstrupi</i>	66845	74	69	49	9	3	20	8				2	45		
<i>Protodorvillea gracilis</i>	66494	23													
<i>Pseudopolydora kempfi</i>	66927			6	8	190	10	6	31	21	20			4	131
<i>Pygospio elegans</i>	66917			1		8			54	146	161				8
<i>Rhodine bitorquata</i>	67579		1												
<i>Scoletoma luti</i>	no number	4	145	212	397	65	709	480	2	2		214	89	4	
<i>Scoloplos acmeceps</i>	66608	6	3										4		
<i>Scoloplos sp.</i>	66594			1											
<i>Sphaerodoropsis sphaerulifer</i>	66075		2	3	5	1	4						4		
<i>Spio filicornis</i>	66865			1											
<i>Spiochaetopterus pottsi</i>	no number	1			1										
<i>Spiophanes berkeleyorum</i>	66901			2	2	1	1	1					5		
<i>Sthenelais berkeleyi</i>	65083												1		
<i>Streblosoma bairdi</i>	68030		1					1							
<i>Tenonia priops</i>	64727												1		
Terebellidae	67899	1			1								5		
<i>Terebellides sp.</i>	68068				1										
<i>Terebellides californica</i>	68071							2							
<i>Typosyllis cornuta</i>	65691				1								1		
<i>Typosyllis heterochaeta</i>	no number	1													
<i>Typosyllis hyperioni</i>	no number	2													
CRUSTACEA															
Cirripedia															
<i>Balanus sp.</i>	89600	4	17				1	1				3			
Ostracoda															
Cylindroleberididae	84224		7										3		
<i>Euphilomedes carcharodonta</i>	84376	181	182	19	59	3	3	1				10	94	1	

Table A-3, cont.

TAXON	ITIS NUMBER ^a	B1b	B2b	B3b	B4b	B5b	B6b	B7b	B8b ^b	B9b	B10b ^b	BCA-2	BCA-4	BCA-5	BCA-6 ^b
<i>Euphilomedes producta</i>	84378	1	1	3											
Amphipoda-Gammaridea															
<i>Americhelidium rectipalmum</i>	657122	15													
<i>Americhelidium shoemakeri</i>	no number												14		
<i>Americorophium salmonis</i>	656745					164	1		2152	713	1416	11			2264
<i>Americorophium spinicorne</i>	656746					15	1	1	1576	234	2192	12			1168
<i>Ampithoe valida</i>	93424					1		2				1			
<i>Anisogammarus pugettensis</i>	93753						1		120	55				1	
<i>Aoroides</i> sp.	206418												2	8	
<i>Aoroides inermis</i>	93448		2				3						10		
<i>Byblis millsii</i>	93370	1	1												
Corophiidae	93584	1		3		5		1	8	16	24				32
<i>Desdimelita desdichada</i>	657042							1							
<i>Dyopedos</i> sp.	656582						2					1			
<i>Eochelidium</i> sp.	no number	1	6	6			6	7				3	15	1	
<i>Eogammarus confervicolus</i>	656666					1			752	17	176				248
<i>Grandidierella japonica</i>	93643			3	1	57	4	2	728	326	216				8
<i>Hippomedon coecus</i>	94304	1													
<i>Melita</i> sp.	93806											1			
<i>Monocorophium acherusicum</i>	656756		1	1	4	31	7	4	8	10					
<i>Monocorophium insidiosum</i>	656759			17	1	31			8	14				1	
<i>Orchomene decipiens</i>	no number	3													
Parapleustinae	no number		1										1		
<i>Perampithoe</i> sp.	no number	2													
<i>Photis</i> sp.	94061	1													
<i>Photis brevipes</i>	94062						2	5							
<i>Protomedeia prudens</i>	no number		4												
<i>Westwoodilla caecula</i>	94573	1	1										3		
Isopoda															
<i>Gnorimosphaeroma insulare</i>	92298								8	1					
<i>Idotea</i> sp.	92588													1	
<i>Munnogonium</i> sp.	93062						1								
<i>Pleurogonium rubicundum</i>	93057												2		

Table A-3, cont.

TAXON	ITIS NUMBER ^a	B1b	B2b	B3b	B4b	B5b	B6b	B7b	B8b ^b	B9b	B10b ^b	BCA-2	BCA-4	BCA-5	BCA-6 ^b
Cumacea															
<i>Cumella vulgaris</i>	90966			3					8	4	8				
<i>Diastylis santamariensis</i>	no number	2	8		1		1	3					16		
<i>Eudorella pacifica</i>	90801		19	10	3								16		
<i>Lamprops quadriplicata</i>	90752							1							
<i>Nippoleucon hinumensis</i>	no number			6		3		1	8	85	8	2			128
Tanaidacea															
<i>Leptocheilia dubia</i>	92029			50											
Copepoda															
<i>Amphiascopsis cinctus</i>	87769			2											
Cyclopoida	88530				1										
Decapoda															
<i>Cancer gracilis</i>	98676	3	3		1		1					1			
Caridea	96106	1													
<i>Crangon</i> sp.	97107						2	2				3		4	
<i>Crangon alaskensis</i>	97207		1				4	1				4	3		
<i>Crangon franciscorum</i>	97114					3			3	3					4
<i>Elassochirus</i> sp.	97836	1													
<i>Eualus</i> sp.	96801	5													
<i>Lophopanopeus bellus</i>	98750	1													
<i>Mesocrangon munitella</i>	97233	1													
<i>Neotrypaea</i> sp.	552823	1	1	1	1										
<i>Pinnixa</i> sp.	98993		1	3	8			1							
<i>Pinnixa schmitti</i>	98997				3										
<i>Pagurus caurinus</i>	97783	4													
<i>Spirontocaris prionata</i>	no number	1													
INSECTA															
Chironomidae	127917													1	
MOLLUSCA															
Bivalvia															
<i>Axinopsida serricata</i>	80500	5	536	87	362	20	141	103		1		3	507	8	
<i>Bivalvia</i> sp. juv.	79118							3							
<i>Cardiomya pectinata</i>	82016												1		

Table A-3, cont.

TAXON	ITIS NUMBER ^a	B1b	B2b	B3b	B4b	B5b	B6b	B7b	B8b ^b	B9b	B10b ^b	BCA-2	BCA-4	BCA-5	BCA-6 ^b
<i>Chlamys hastata</i>	79613	2													
<i>Clinocardium nuttallii</i>	80873	7	8		25	5	6	7				9	21	2	
<i>Clinocardium</i> sp. juv.	80866			1											
<i>Compsomyax subdiaphana</i>	81450		2												
<i>Semele rubropicta</i>	81292	1													
<i>Ennucula tenuis</i>	567536				3		1					1	4		
<i>Hiatella arctica</i>	81765	28													
<i>Lucinoma annulatum</i>	80398		3		3								2		
<i>Lyonsia californica</i>	81920	27	19	4	32	4	11	37				5	70	2	
<i>Macoma balthica</i>	567846					10				13					
<i>Macoma carlottensis</i>	81048	1	38	3	19		5	4				2	16		
<i>Macoma elimata</i>	81036		1										2		
<i>Macoma golikovi</i>	no number	4			12								3		
<i>Macoma inquinata</i>	81051			4		2	3								
<i>Macoma nasuta</i>	81050		6	3	9	34	7	13	15	5		1		1	
<i>Macoma</i> sp. juv.	81033	2	48	2	35	14	5					41	24	3	
<i>Macoma yoldiformis</i>	81047	2	9	2	2			1					5	1	
<i>Modiolus modiolus</i>	79501	2													
<i>Mya arenaria</i>	81692	6											10		
<i>Mytilus</i> sp.	79452	1		1			3			1		3	2	1	
<i>Nutricola lordi</i>	567984	2	44	12	88	18	28	87		2		2	63	1	
<i>Pandora filosa</i>	81891		1					1					3		
<i>Parvilucina tenuisculpta</i>	80387	12	189	8	63	8	1					2	149	5	
<i>Pododesmus macrochisma</i>	79792	16		1			1								
<i>Protothaca staminea</i>	81464	2	9	1			1	1					1		
<i>Rochefortia tumida</i>	568258	3	10	73	107	14	5	5					25	11	
<i>Saxidomus gigantea</i>	568268	22	12	2			2						24		
<i>Simomactra falcata</i>	no number	29	1				1	2					2		
<i>Solamen columbianum</i>	568287			1	1		1								
<i>Solen sicarius</i>	81016	8	11				3	14					22	1	
<i>Tellina modesta</i>	81086			2		2	2	1		1					
<i>Thyasira flexuosa</i>	80512			1	1										

Table A-3, cont.

TAXON	ITIS NUMBER ^a	B1b	B2b	B3b	B4b	B5b	B6b	B7b	B8b ^b	B9b	B10b ^b	BCA-2	BCA-4	BCA-5	BCA-6 ^b
Gastropoda															
Aeoliacea sp.	no number	1													
<i>Alvania compacta</i>	70806	8	9	28	58		2					13	123	3	
<i>Astyris gausapata</i>	567253		6		4								14		
<i>Polygireulima rutila</i>	568118												1		
<i>Cylichna attonsa</i>	76162							1							
<i>Kurtzia arteaga</i>	75147	3	1												
<i>Lacuna vincta</i>	70381	1													
<i>Melanochlamys diomedea</i>	76212			1				1							
<i>Nassarius mendicus</i>	74104	1													
Nudibranchia unid.	78156	1													
<i>Odostomia</i> sp.	75447		4	11	2			1							
<i>Olivella baetica</i>	74229	1													
<i>Onchidella</i> sp.	78761		1												
<i>Turbonilla</i> sp.	75676			6	2		2	1					6		
MISCELLANEOUS															
Nematoda	59490			104		78	1			1		2		3	
Oligochaeta	68422			2		124			311	42	193		1	26	191
Cnidaria															
<i>Hydrallmania distans</i>	50050	P													
<i>Ptilosarcus gurneyi</i>	52424		6										22		
Nynantheae spp.	no number		1		1										
<i>Edwardsia sipunculoides</i>	52490	1	1		1		1	1					6		
Platyhelminthes															
Polycladida spp.	54073	2			1										
Leptoplanidae sp.	54115	1													
Nemertea															
<i>Paleonemertea</i> spp.	57414	4				1									
Lineidae spp.	57443	2			1	2							1		
<i>Carinoma mutabilis</i>	57430		1											2	
<i>Tubulanus cingulatus</i>	204250		1										1		
<i>Tubulanus pellucidus/ polymorphus</i>	no number						1	1							

Table A-3, cont.

TAXON	ITIS NUMBER ^a	B1b	B2b	B3b	B4b	B5b	B6b	B7b	B8b ^b	B9b	B10b ^b	BCA-2	BCA-4	BCA-5	BCA-6 ^b
<i>Paranemertes californica</i>	57507		2			1									
Priapulida															
<i>Priapulus caudatus</i>	155156		1		2		3								
Sipuncula															
<i>Thysanocardia nigra</i>	154685				1								3		
Entoprocta															
<i>Barentsia benedeni</i>	156746	P													
Bryozoa															
<i>Alcyonidium</i> sp.	155559	P	P										P	P	
Bugulidae sp.	156048	P													
<i>Celleporella hyalina</i>	201547	P													
Echinodermata															
<i>Amphipholis squamata</i>	157676	3													
<i>Dendrochirotida</i> spp.	158142	2													
<i>Pentamera lissoplaca</i>	158224	2													
<i>Pentamera trachyplaca</i>	158231	2													
<i>Pentamera populifera</i>	158226												1		
<i>Amphiodia</i> sp.	157647		2		11			1							
<i>Ophiurida</i> sp.p.	157384			1	7							2	1		
<i>Pentamera</i> sp.	no number			1											
<i>Amphiodia (Amphisgina) urtica</i>	157651				3										
Total number		977	1,611	1,678	1,562	1,930	3,412	1,492	6,899	2,806	4,624	984	2,811	217	5,067

P - present (colonial organisms)

^a ITIS stands for the Integrated Taxonomic Information System. It is authoritative taxonomic information on plants, animals, fungi, and microbes of North America and the world. They are a partnership of U.S., Canadian, and Mexican agencies (ITS-North America); other organizations; and taxonomic specialists. ITIS is also a partner of Species 2000 and the Global Biodiversity Information Facility (GBIF).

^b Because of large numbers of crustaceans in locations B8b, B10b, and BCA-6, these areas were subsampled after larger organisms were removed and 1/8 of the samples identified

Table A-4. Abundances of benthic invertebrates in composite core samples (0.0072 m² total area) collected at subtidal locations

TAXON	ITIS NUMBER ^a	B1B	B2B	B3B	B4B	B5B	B6B	B7B	B8B	B9B	B10B	BCA-2	BCA-4	BCA-5	BCA-6
POLYCHAETA															
Ampharetidae (juvenile)	67718												1		
<i>Aphelochaeta cf glandaria</i>	no number			16								12			
<i>Aricidea lopezi</i>	66753						1								
<i>Armandia brevis</i>	67345				2	4	1	1		2		2			
<i>Capitella capitata</i> complex	67415				7	55			6	11	7	2	10		
<i>Caulleriella pacifica</i>	no number	5													
<i>Cossura pygodactylata</i>	67212		5	6	11	7	26	1				20	3		
<i>Dorvillea (Schistomeringos) annulata</i>	66521				1										
<i>Eteone californica</i>	65259														1
<i>Eteone</i> sp.	65258	2				1						1			
<i>Euchone incolor</i>	68095						2	2					2		
<i>Euchone limnicola</i>	68105		17		6	3	10	4				3	2		
<i>Exogone lourei</i>	65724	2													
<i>Exogone molesta</i>	65725			2									4		
<i>Glycinde polygnatha</i>	66133				1	1									
<i>Heteromastus filibranchus</i>	no number				4										
<i>Hobsonia florida</i>	67755								7	17		1			35
<i>Lumbrineris californiensis</i>	66374	3	1												
<i>Manayunkia aestuarina</i>	68171								1	4					3
<i>Mediomastus</i> sp.	67438	2			1	21									
<i>Micropodarke dubia</i>	65496	1		1											
<i>Monticellina secunda</i>	no number	4	2	21	1	1	99	10				13	22		
<i>Neanthes limnicola</i>	65893										1				2
<i>Nephtys cornuta</i>	66015		3				1					3	2		
<i>Paraprionospio pinnata</i>	66937						1								
<i>Pholoe minuta</i>	65074			1									1		
<i>Pholoe</i> sp. N1	65073						1								

Table A-4, cont.

TAXON	ITIS NUMBER ^a	B1B	B2B	B3B	B4B	B5B	B6B	B7B	B8B	B9B	B10B	BCA-2	BCA-4	BCA-5	BCA-6
<i>Phyllodoce hartmanae</i>	65361		1												
<i>Polycirrus</i> sp.	67959		2		1										
<i>Polydora cornuta</i>	204501			2	8	17	1		23	13	2				1
<i>Prionospio lighti</i>	66858	1			1	2							1		
<i>Prionospio steenstrupi</i>	66845	4	7	2	3	1	1	2				1			
<i>Protodorvillea gracilis</i>	66494	2													
<i>Pseudopolydora kempfi</i>	66927				3	15		1	3		4				6
<i>Pygospio elegans</i>	66917								24	9	2				2
<i>Scoletoma luti</i>	no number		11	2	15	1	14	2				1	2		
<i>Scoloplos acmeceps</i>	66608	1	1			1							1		
<i>Sphaerodoropsis sphaerulifer</i>	66075				2										
<i>Sphaerosyllis ranunculus</i>	no number							1							
<i>Streblosoma bairdi</i>	68030		1	1											
Terebellidae	67899						1						1		
CRUSTACEA															
Ostracoda															
Cylindroleberididae	84215		1										1		
<i>Euphilomedes carcharodonta</i>	84376	1	7												
Amphipoda-Gammaridea															
<i>Americhelidium rectipalmum</i>	657122	1													
<i>Americhelidium variabilum</i>	657125		1												
<i>Americorophium salmonis</i>	656745	2				22			49	10	40	2			87
<i>Americorophium spinicorne</i>	656746					1			13		25				11
Corophiidae	93584									1	9				6
<i>Eochelidium</i> sp.	no number	1	2					1							
<i>Eogammarus confervicolus</i>	656666								8		6				3
<i>Grandierella japonica</i>	93643					7			20	1	6				
<i>Monocorophium insidiosum</i>	656759					1									
<i>Photis</i> sp.	94061		1												
Cumacea															
<i>Cumella vulgaris</i>	90966								6	12	2				3

Table A-4, cont.

TAXON	ITIS NUMBER ^a	B1B	B2B	B3B	B4B	B5B	B6B	B7B	B8B	B9B	B10B	BCA-2	BCA-4	BCA-5	BCA-6
<i>Eudorella pacifica</i>	90801		7	2	1								3		
<i>Nippoleucon hinumensis</i>	no number					1			1	12	7				15
Leuconidae	90778												1		
Copepoda															
<i>Coullana canadensis</i>	no number								13	5	1				48
<i>Eurytemora americana</i>	85864			1											
INSECTA															
<i>Collembolla</i>	99237						1								
MOLLUSCA															
Bivalvia															
<i>Axinopsida serricata</i>	80500		36		12	1									
<i>Clinocardium nuttallii</i>	80873	1			1										
<i>Ennucula tenuis</i>	567536		1												
<i>Lyonsia californica</i>	81920		1		2		1	1							
<i>Macoma carlottensis</i>	81048		1												
<i>Macoma nasuta</i>	81050				1	2									
<i>Macoma</i> sp. juv.	81033	1	8		10		1					3	1		
<i>Nutricula lordi</i>	567984		2		2		1	2					1		
<i>Parvilucina tenuisculpta</i>	80387		13		1								1		
<i>Pododesmus macrochisma</i>	79792	2													
<i>Rochefortia tumida</i>	568258		1		1			1							
Gastropoda															
<i>Alvania compacta</i>	70806	1						1							

Table A-4, cont.

TAXON	ITIS NUMBER ^a	B1B	B2B	B3B	B4B	B5B	B6B	B7B	B8B	B9B	B10B	BCA-2	BCA-4	BCA-5	BCA-6
MISCELLANEOUS															
Nematoda	59490		1	3	1	3	1	3	2		1	2		1	47
Oligochaeta	68422	2				53			85	24	35		1		234
Platyhelminthes															
<i>Rhabdocoela</i> sp.	no number									7					30
Total number		39	134	60	99	221	164	33	261	128	148	66	61	1	534

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Appendix B. Quality Assurance/Quality Control Data

<i>Table B-1.</i>	<i>Voucher collections</i>	<i>1</i>
<i>Table B-2.</i>	<i>Verification of voucher collections</i>	<i>8</i>

Table B-1. Voucher collections

Annelida Vouchers		
TAXON	STATION	NUMBER OF SPECIMENS
<i>Abarenicola pacifica</i>	B2a F	4
<i>Ampharete cf crassiseta</i>	B1b VV	2
<i>Ampharete labrops</i>	B2b VV	1
Ampharetidae (juvenile)	BCA4 C	1
<i>Aphelochaeta cf glandaria</i>	B7b	1
<i>Aphelochaeta</i> sp.	B3b VV	3
<i>Aricidea lopezi</i>	BCA2 VV	1
<i>Armandia brevis</i>	BCA2 C	1
<i>Artacama coniferi</i>	B2b VV	2
<i>Asabellides sibirica</i>	B2b VV	1
Autolytinae	B2b VV	1
<i>Barantolla nr americana</i>	BCA F	1
<i>Capitella capitata</i> complex	B6a C	3
<i>Cauteriella pacifica</i>	B1b C	1
<i>Mesochaetopterus taylori</i>	B2b VV	1
<i>Chaetozone acuta</i>	B1b VV	4
<i>Chaetozone nr setosa</i>	BCA4 VV	2
<i>Chaetozone</i> sp. N1	B3b VV	4
<i>Chaetozone</i> sp.	B2b VV	1
Cirratulidae	B7b	2
<i>Cirratulus</i> sp. juvenile	B3b VV	2
<i>Cossura pygodactylata</i>	BCA4 C	1
<i>Dipolydora caulleryi</i>	B2b VV	1
<i>Dipolydora quadrilobata</i>	B4b VV	1
<i>Dipolydora socialis</i>	B2b VV	1
<i>Dipolydora</i> sp.	B7b	1
<i>Dorvillea (Schistomeringos) annulata</i>	B4b C	1
<i>Eteone californica</i>	B6b VV	1
<i>Eteone spilotus</i>	BCA5 VV	1
<i>Euchone incolor</i>	BCA4 C	1
<i>Euchone limnicola</i>	B1b VV	1
Euclymeninae	BCA4 VV	2
<i>Eumida longicornuta</i>	B1b VV	1
<i>Eupolymnia heterobranchia</i>	BCA4 VV	1
<i>Exogone lourei</i>	B1b C	1
<i>Exogone molesta</i>	BCA4 C	2
<i>Gattyana treadwelli</i>	B3b VV	1
<i>Glycera americana</i>	B2b VV	1
<i>Glycera nana</i>	B3a F	1
<i>Glycinde armigera</i>	B1b VV	1
<i>Glycinde polygnatha</i>	B4b C	1

Table B-1, cont.

Annelida Vouchers		
TAXON	STATION	NUMBER OF SPECIMENS
<i>Harmothoe imbricata</i>	B1b VV	1
<i>Heteromastus filobranchus</i>	B4b C	1
<i>Heteromastus</i> sp.	B2b VV	1
<i>Hobsonia florida</i>	B6a C	1
<i>Lanassa venusta</i>	B2b VV	1
<i>Leitoscoloplos pugettensis</i>	B1b VV	1
<i>Lumbrineris californiensis</i>	B1b C	1
<i>Malmgreniella macginitiei</i>	B2b VV	1
<i>Manayunkia aestuarina</i>	B6a C	3
<i>Mediomastus</i> sp.	B1b C	1
<i>Micropodarke dubia</i>	B1b C	1
<i>Monticellina serratiseta</i>	BCA5 VV	1
<i>Monticellina</i> sp.	B3b VV	1
<i>Neanthes limnicola</i>	B3b VV	1
<i>Neosabellaria cementarium</i>	B1b VV	1
<i>Nephtys cornuta</i>	BCA4 C	1
<i>Nephtys ferruginea</i>	B2b VV	1
<i>Nereis procera</i>	B2b VV	1
<i>Nereis vexillosa</i>	BCA5 VV	1
<i>Notomastus hemipodus</i>	B2b VV	1
Oligochaeta	B6a C	2
Onuphidae juv	B1b VV	4
<i>Ophelina acuminata</i>	B2b VV	1
<i>Ophiodromus pugettensis</i>	B7b VV	1
<i>Paleanotus bellis</i>	B1b VV	1
<i>Paraprionospio pinnata</i>	B2b VV	1
<i>Pectinaria californiensis</i>	B2b VV	1
<i>Pectinaria granulata</i>	B1b VV	1
<i>Pholoe minuta</i>	BCA4 C	1
<i>Pholoe</i> sp. N1	B6b C	1
<i>Pholoides asperus</i>	B3b VV	1
<i>Phyllochaetopterus prolifica</i>	B1b VV	1
<i>Phyllodoce groenlandica</i>	BCA4 VV	1
<i>Phyllodoce hartmanae</i>	B2b C	1
<i>Phyllodoce longipes</i>	B1b VV	2
<i>Phylo felix</i>	BCA4 VV	1
<i>Platynereis bicanaliculata</i>	B2a C	1
<i>Pista</i> nr <i>brevibranchiata</i>	B1b VV	1
<i>Podarkeopsis glabrus</i>	B1b C	1
<i>Polycirrus</i> sp.	B2b C	1
<i>Polycirrus</i> sp. I – sensu Banse 1980	B2b VV	1
<i>Polydora cornuta</i>	B6a C	1
<i>Praxillella gracilis</i>	B4b VV	1

Table B-1, cont.

Annelida Vouchers		
TAXON	STATION	NUMBER OF SPECIMENS
<i>Prionospio lighti</i>	BCA4 C	1
<i>Prionospio multibranchiata</i>	B1b VV	1
<i>Prionospio steenstrupi</i>	B1b C	1
<i>Protodorvillea gracilis</i>	B1b C	1
<i>Pseudopolydora kempfi</i>	B6a C	2
<i>Pygospio elegans</i>	B6a C	2
<i>Rhodine bitorquata</i>	B2b VV	1
<i>Scoletoma luti</i>	BCA4 C	1
<i>Scoloplos acmeceps</i>	BCA4 C	1
<i>Scoloplos</i> sp.	B3b VV	1
<i>Sphaerodoropsis sphaerulifer</i>	B4b C	1
<i>Sphaerosyllis ranunculus</i>	B7b C	1
<i>Spio filicornis</i>	B3b VV	1
<i>Spiochaetopterus pottsi</i>	B1b VV	1
<i>Spiophanes berkeleyorum</i>	B7b	1
<i>Sthenelais berkeleyi</i>	BCA4 VV	1
<i>Streblosoma bairdi</i>	B2b C	1
<i>Tenonia priops</i>	BCA4 VV	1
Terebellidae	BCA2 C	1
<i>Terebellides</i> sp.	B4b VV	1
<i>Terebellides californica</i>	B7b	1
<i>Typosyllis cornuta</i>	B4b VV	1
<i>Typosyllis heterochaeta</i>	B1b VV	1
<i>Typosyllis hyperioni</i>	B1b VV	1

Crustacea Vouchers			
VIAL NUMBER	TAXON	STATION	NUMBER OF SPECIMENS
1	<i>Americhelidium rectipalmum</i>	B1b VV	3
33	<i>Americhelidium shoemakeri</i>	BCA4 VV	3
52	<i>Americhelidium variabilum</i>	B2b Core	1
18	<i>Americorophium salmonis</i>	BCA5 VV	2
19	<i>Americorophium spinicorne</i>	BCA5 VV	2
54	<i>Amphiascopsis cinctus</i>	B3b VV	1
45	<i>Ampithoe lacertosa</i>	B21 Frame	1
22	<i>Ampithoe valida</i>	BCA5 VV	2
17	<i>Anisogammarus pugettensis</i>	BCA5 VV	1
25	<i>Aoroides inermis</i>	BCA5 VV	2
37	<i>Balanus</i> sp.	BCA2 VV	2
8	<i>Byblis millsii</i>	B1b VV	1
11	<i>Cancer gracilis</i>	B1b VV	1
24	Chironomidae	BCA5 VV	2
46	Collembola	B4a Core	1

Table B-1, cont.

Crustacea Vouchers			
VIAL NUMBER	TAXON	STATION	NUMBER OF SPECIMENS
49	<i>Coullana canadensis</i>	B8b Core	3
28	<i>Crangon alaskensis</i>	BCA4 VV	1
43	<i>Crangon franciscorum</i>	B8b VV	1
27	<i>Crangon</i> sp.	BCA5 VV	1
44	<i>Cumella vulgaris</i>	B8b VV	3
31	Cylindroleberididae	BCA4 VV	1
60	<i>Dedimelita desdichada</i>	B7b VV	1
7	<i>Diastylis santamariensis</i>	B1b VV	1
36	<i>Dyopedos</i> sp.	B6bVV	2
9	<i>Elassochirus</i> sp.	B1b VV	1
59	Empididae	B2a Core	1
2	<i>Eochelidium</i> sp.	B1b VV	1
16	<i>Eogammarus confervicolus</i>	BCA5 VV	1
14	<i>Eualus</i> sp.	B1b VV	1
29	<i>Eudorella pacifica</i>	BCA4 VV	3
30	<i>Euphilomedes carcharodonta</i>	BCA4 VV	3
41	<i>Euphilomedes producta</i>	B2b VV	1
63	<i>Eurytemora americana</i>	B3b core	1
38	<i>Gnorimosphaeroma insulare</i>	BCA2 VV	2
58	<i>Gnorimosphaeroma oregonense</i>	B2a Core	1
21	<i>Grandidierella japonica</i>	BCA5 VV	2
47	<i>Harpacticus</i> sp.	B4a Core	1
5	<i>Hippomedon coecus</i>	B1b VV	1
50	<i>Huntemannia jadensis</i>	B10a Core	3
26	<i>Idotea</i> sp.	BCA5 VV	1
62	<i>Lamprops quadriplicata</i>	B7b VV	1
65	<i>Leimia vaga</i>	B9a core	1
55	<i>Leptocheilia dubia</i>	B3b VV	2
12	<i>Lophopanopeus bellus</i>	B1b VV	1
40	<i>Melita</i> sp.	BCA2 VV	1
15	<i>Mesocrangon munitella</i>	B1b VV	1
23	<i>Monocorophium acherusicum</i>	BCA5 VV	3
20	<i>Monocorophium insidiosum</i>	BCA5 VV	2
35	<i>Munnogonium</i> sp.	B6bVV	1
56	<i>Nippoleucon hinumensis</i>	B3b VV	2
51	<i>Nitokra</i> sp. A	B10a Core	2
4	<i>Orchomene decipiens</i>	B1b VV	1
10	<i>Pagurus caurinus</i>	B1b VV	1
34	Parapleustinae	BCA4 VV	1
53	<i>Parathalestris</i> sp.	B3a Core	1
6	<i>Perampithoe</i> sp.	B1b VV	2
61	<i>Photis brevipes</i>	B7b VV	1
39	<i>Pinnixa schmitti</i>	BCA2 VV	1

Table B-1, cont.

Crustacea Vouchers			
VIAL NUMBER	TAXON	STATION	NUMBER OF SPECIMENS
57	<i>Pinnixa</i> sp.	B3b VV	1
32	<i>Pleurogonium rubicundum</i>	BCA4 VV	2
42	<i>Protomedeia prudens</i>	B2b VV	2
48	<i>Sinelobus stanfordi</i>	B4a Core	1
13	<i>Spirontocaris prionata</i>	B1b VV	1
64	<i>Tisbe</i> sp.	B9a core	1
3	<i>Westwoodilla caecula</i>	B1b VV	1

Mollusca Vouchers		
TAXON	STATION	NUMBER OF SPECIMENS
<i>Axinopsida serricata</i>	B3b VV	1
<i>Chlamys hastata</i>	B1b VV	1
<i>Clinocardium nuttallii</i>	B1b VV	1
<i>Compsomyx subdiaphana</i>	B2b VV	1
<i>Cryptomya californica</i>	B1b VV	1
<i>Ennucula tenuis</i>	B4b VV	1
<i>Hiatella arctica</i>	B1b VV	1
<i>Lucinoma annulatum</i>	B2b VV	1
<i>Lyonsia californica</i>	B7b VV	1
<i>Macoma balthica</i>	B5b VV	1
<i>Macoma carlottensis</i>	B7b VV	1
<i>Macoma elimata</i>	B2b VV	1
<i>Macoma golikovi</i>	B4b VV	1
<i>Macoma inquinata</i>	B5b VV	1
<i>Macoma nasuta</i>	B4b VV	1
<i>Macoma yoldiformis</i>	B7b VV	1
<i>Modiolus modiolus</i>	B1b VV	1
<i>Mya arenaria</i>	BCA4 VV	1
<i>Mytilus</i> sp.	B3b VV	1
<i>Nutricola lordi</i>	B7b VV	1
<i>Pandora filosa</i>	B7b VV	1
<i>Parvilucina tenuisculpta</i>	B3b VV	1
<i>Pododesmus macrochisma</i>	B1b VV	1
<i>Protothaca staminea</i>	B2b VV	1
<i>Rochefortia tumida</i>	B3b VV	1
<i>Saxidomus gigantea</i>	B2b VV	1
<i>Simomactra falcata</i>	B7b VV	1
<i>Solamen columbianum</i>	B3b VV	1
<i>Solen sicarius</i>	B7b VV	1
<i>Tellina modesta</i>	B5b VV	1
<i>Thyasira flexuosa</i>	B4b VV	1
<i>Aeolidiacea</i> sp.	B1b VV	1

Table B-1, cont.

Mollusca Vouchers		
TAXON	STATION	NUMBER OF SPECIMENS
<i>Alvania compacta</i>	B3b VV	1
<i>Astyrus gausapata</i>	B4b VV	1
<i>Balcis thersites</i>	BCA4 VV	1
<i>Cylichna attonsa</i>	B7b VV	1
<i>Kurtzia arteaga</i>	B2b VV	1
<i>Lacuna vincta</i>	B1b VV	1
<i>Melanochlamys diomedea</i>	B3b VV	1
<i>Nassarius mendicus</i>	B1b VV	1
<i>Odostomia</i> sp.	B2b VV	1
<i>Olivella baetica</i>	B1b VV	1
<i>Onchidella</i> sp.	B2b VV	1
<i>Turbonilla</i> sp.	B4b VV	1

Miscellaneous Vouchers		
TAXON	STATION	NUMBER OF SPECIMENS
<i>Amphiodia (Amphisgina) urtica</i>	B4b VV	1
<i>Amphiodia</i> sp.	B2b VV	2
<i>Amphipholis squamata</i>	B1b VV	2
<i>Amphiporus</i> sp.	B2b VV	1
<i>Barentsia benedeni</i>	B1b VV	fragment
<i>Bowerbankia gracilis</i>	B1b VV	fragment
<i>Bugulidae</i> sp.	B1b VV	fragment
<i>Celleporella hyalina</i>	B1b VV	fragment
<i>Dendrochirotida</i> spp.	B1b VV	2
<i>Edwardsia sipunculoides</i>	B1b VV	1
<i>Euphysa</i> sp.	B2a C	3
<i>Hydrallmania distans</i>	B1b VV	fragment
Invertebrate sp. unidentified	B6a Core	2
Leptoplanidae sp.	B1b VV	1
Lineidae spp.	B1b VV	2
Nynantheae spp.	BCA1 C	2
Ophiurida spp.	B3b VV	1
Paleonemertea spp.	B1b VV	3
<i>Paranemertes peregrina</i>	BCA4 VV	1
<i>Pentamera lissoplaca</i>	B1b VV	1
<i>Pentamera populifera</i>	BCA4 VV	1
<i>Pentamera</i> sp. B	B2b VV	1
<i>Pentamera trachyplaca</i>	B1b VV	1
<i>Polycladida</i> spp.	B1b VV	2
<i>Priapulid</i> sp.	B2b VV	1
<i>Ptilosarcus gurneyi</i>	B2b VV	2
<i>Rhabdocoela</i> sp.	BCA6 C	3

Table B-1, cont.

Miscellaneous Vouchers		
TAXON	STATION	NUMBER OF SPECIMENS
<i>Thysanocardia nigra</i>	B4b VV	1
<i>Tubulanus capistratus</i>	B2b VV	1
<i>Tubulanus pellucidus/ polymorphus</i>	B6b VV	1
<i>Tubulanus</i> sp.	B2bVV	1

Table B-2. Verification of voucher collections

Annelida			
K WELCH IDENTIFICATION	H JONES IDENTIFICATION	COMMENTS	RESOLUTION
<i>Abarenicola pacifica</i>	OK		
<i>Ampharete</i> cf <i>crassiseta</i>	OK	one juvenile <i>Terebellides</i> sp. also present	
<i>Ampharete labrops</i>	OK		
<i>Ampharetidae</i> sp. juvenile	OK		
<i>Aphelochaeta</i> cf <i>glandaria</i>	Accepted	good specimens that closely fit the " <i>glandaria</i> " concept	
<i>Aphelochaeta</i> sp.	OK		
<i>Aricidea lopezi</i>	OK		
<i>Armandia brevis</i>	OK		
<i>Artacama coniferi</i>	OK	rather poor condition	
<i>Asabellides sibirica</i>	OK		
Autolytinae	OK		
<i>Barantolla</i> nr. <i>americana</i>	OK		
<i>Capitella capitata</i> complex	OK	also known as <i>Capitella capitata</i> hyperspecies	
<i>Caulleriella pacifica</i>	OK		
<i>Chaetozone acuta</i>	OK		
<i>Chaetozone</i> nr <i>setosa</i>	OK		
<i>Chaetozone</i> sp.	OK		
<i>Chaetozone</i> sp. N-1	OK		
Cirratulidae sp.	OK		
<i>Cirratulus</i> sp.	OK		
<i>Cossura pygodactylata</i>	<i>Cossura</i> sp.	without a posterior a positive ID is not possible	left as <i>C. pygodactylata</i> based on other specimens available
<i>Dipolydora caulleryi</i>	OK		
<i>Dipolydora quadrilobata</i>	Accepted	poor condition	
<i>Dipolydora socialis</i>	OK		
<i>Dipolydora</i> sp.	Accepted	poor condition	
<i>Dorvillea annulata</i>	OK		
<i>Eteone californica</i>	Accepted		
<i>Eteone spilotus</i>	Accepted		
<i>Euchone incolor</i>	OK		
<i>Euchone limnicola</i>	OK		
Euclymeninae	OK	anterior fragment	
<i>Eumida longicornuta</i>	OK		
<i>Eupolymnia heterobranchia</i>	OK		
<i>Exogone lourei</i>	OK		
<i>Exogone molesta</i>	OK		

Table B-2, cont.

Annelida			
K WELCH IDENTIFICATION	H JONES IDENTIFICATION	COMMENTS	RESOLUTION
<i>Gattyana treadwelli</i>	OK	nice specimen	
<i>Glycera americana</i>	OK		
<i>Glycera nana</i>	Accepted	specimen in poor condition	
<i>Glycinde armigera</i>	OK		
<i>Glycinde polygnatha</i>	OK		
<i>Harmothoe imbricata</i>	OK		
<i>Heteromastus filobranchus</i>	OK		
<i>Heteromastus</i> sp.	OK	anterior fragment	
<i>Hobsonia florida</i>	OK		
<i>Lanassa venusta</i>	OK		
<i>Leitoscoloplos pugettensis</i>	OK	see <i>Scoloplos</i> above	
<i>Lumbrineris californiensis</i>	OK		
<i>Magelona hobsonae</i>	OK		
<i>Malmgreniella macginitiei</i>	Accepted	anterior fragment	
<i>Malmgreniella</i> sp.	Accepted		
<i>Manayunkia aestuarina</i>	OK		
<i>Mediomastus</i> sp.	OK		
<i>Mesochaetopterus taylori</i>	OK		
<i>Micropodarke dubia</i>	OK		
<i>Monticellina secunda</i>	<i>Monticellina</i> sp.	all are anterior fragments, many posterior fragments also present in the vial but I personally stay away from building worms from parts in a sample, especially in a group as subjective as cirratulids tend to be.	left as <i>M. secunda</i> based on other specimens available
<i>Monticellina serratiseta</i>	OK	nice specimen	
<i>Monticellina</i> sp.	OK		
<i>Neanthes limnicola</i>	OK		
<i>Neosabellaria cementarium</i>	OK		
<i>Nephtys cornuta</i>	OK		
<i>Nephtys ferruginea</i>	OK		
<i>Nereis procera</i>	OK		
<i>Nereis vexillosa</i>	OK	nice specimen	
<i>Notomastus hemipodus</i>	OK		
Oligochaeta	OK		
Onuphidae sp. juvenile	Accepted	specimen in poor condition	
<i>Ophelina acuminata</i>	OK		
<i>Ophiodromus pugettensis</i>	OK		
<i>Paleonotus bellus</i>	OK	fragmented specimen	

Table B-2, cont.

Annelida			
K WELCH IDENTIFICATION	H JONES IDENTIFICATION	COMMENTS	RESOLUTION
<i>Paraprionospio pinnata</i>	OK		
<i>Paraprionospio pinnata</i>	OK		
<i>Pectinaria californiensis</i>	OK		
<i>Pectinaria granulata</i>	OK		
<i>Pholoe minuta</i>	OK		
<i>Pholoe</i> sp. N-1	OK	nice specimen	
<i>Pholoides aspera</i>	OK		
<i>Phyllochaetopterus prolifica</i>	OK		
<i>Phyllodoce groenlandica</i>	OK		
<i>Phyllodoce hartmanae</i>	OK		
<i>Phyllodoce longipes</i>	OK		
<i>Phylo felix</i>	OK		
<i>Pista nr brevibranchiata</i>	OK		
<i>Platynereis bicanaliculata</i>	OK		
<i>Podarkeopsis glabra</i>	OK		
<i>Polycirrus</i> sp.	Accepted	<i>Polycirrus</i> in this area is often considered a complex of species and is noted as such, also there was a specimen of Cirratulidae pressed into this <i>Polycirrus</i> .	
<i>Polycirrus</i> sp. 1 (Banse)	Accepted	<i>Polycirrus</i> sp. complex	
<i>Polydora cornuta</i>	OK		
<i>Praxillella gracilis</i>	OK		
<i>Prionospio lighti</i>	OK		
<i>Prionospio multibranchiata</i>	OK		
<i>Prionospio steenstrupi</i>	OK		
<i>Prionospio steenstrupi</i>	OK		
<i>Protodorvillea gracilis</i>	OK		
<i>Pseudopolydora kempfi</i>	OK		
<i>Pygospio elegans</i>	OK		
<i>Rhodine bitorquata</i>	OK		
<i>Scoletoma luti</i>	OK		
<i>Scoloplos acmeceps</i>	OK	a size sequence study of this family is likely to result in changes to the genera descriptions within the family.	
<i>Scoloplos</i> sp.	OK	<i>Scoloplos</i> sp. juvenile. Very small specimen	
<i>Sphaerodoropsis sphaerulifer</i>	OK	plus one anterior oligochaete fragment	
<i>Sphaerosyllis ranunculus</i>	OK		

Table B-2, cont.

Annelida			
K WELCH IDENTIFICATION	H JONES IDENTIFICATION	COMMENTS	RESOLUTION
<i>Spio filicornis</i>	OK		
<i>Spiochaetopterus pottsii</i>	OK	also known as <i>S. costarum</i> in this area	
<i>Spiophanes berkeleyorum</i>	OK		
<i>Stheneais berkeleyi</i>	OK		
<i>Streblosoma bairdi</i>	Accepted	specimen in poor condition	
<i>Tenonia priops</i>	OK		
<i>Terebellidae</i> sp.	OK	anterior fragment	
<i>Terebellides californica</i>	OK		
<i>Terebellides</i> sp.	OK		
<i>Typosyllis cornuta</i>	OK		
<i>Typosyllis heterochaeta</i>	OK	also known as <i>Ehlersia heterochaeta</i> in some older data sets from Puget Sound	
<i>Typosyllis hyperioni</i>	OK		

Crustacea			
J CORDELL IDENTIFICATION	K LI IDENTIFICATION	COMMENTS	RESOLUTION
<i>Americhelidium rectipalmum</i>	OK		
<i>Americhelidium shoemakeri</i>	OK		
<i>Americhelidium variabilum</i>	OK		
<i>Americorophium salmonis</i>	OK		
<i>Americorophium spinicorne</i>	OK		
<i>Amphiascopsis cinctus</i>	OK		
<i>Ampithoe lacertosa</i>	OK		
<i>Ampithoe valida</i>	OK		
<i>Anisogammarus pugettensis</i>	OK		
<i>Aoroides inermis</i>	OK		
<i>Balanus</i> sp.	OK		
<i>Byblis millsii</i>	OK		
<i>Cancer gracilis</i>	OK		
Chironomidae	OK		
Collembola	OK		
<i>Coullana canadensis</i>	OK		
<i>Crangon alaskensis</i>	OK		
<i>Crangon franciscorum</i>	OK		
<i>Crangon</i> sp.	OK		
<i>Cumella vulgaris</i>	OK		
Cylindroleberididae	OK		

Table B-2, cont.

Crustacea			
J CORDELL IDENTIFICATION	K LI IDENTIFICATION	COMMENTS	RESOLUTION
<i>Dedimelita desdichada</i>	OK		
<i>Diastylis santamariensis</i>	OK		
<i>Dyopedos</i> sp.	OK		
<i>Elassochirus</i> sp.	OK		
Empididae	OK		
<i>Eochelidium</i> sp.	OK		
<i>Eogammarus confervicolus</i>	OK		
<i>Eualus</i> sp.	OK		
<i>Eudorella pacifica</i>	OK		
<i>Euphilomedes carcharodonta</i>	OK		
<i>Euphilomedes producta</i>	OK		
<i>Eurytemora americana</i>	OK		
<i>Gnorimosphaeroma insulare</i>	OK		
<i>Gnorimosphaeroma oregonense</i>	OK		
<i>Grandidierella japonica</i>	OK		
<i>Harpacticus</i> sp.	OK		
<i>Hippomedon coecus</i>	OK		
<i>Huntemannia jadensis</i>	OK		
<i>Idotea</i> sp.	OK		
<i>Lamprops quadriplicata</i>	OK		
<i>Leimia vaga</i>	OK		
<i>Leptochelia dubia</i>	OK		
<i>Lophopanopeus bellus</i>	OK		
<i>Melita</i> sp.	OK		
<i>Mesocrangon munitella</i>	OK		
<i>Monocorophium acherusicum</i>	OK		
<i>Monocorophium insidiosum</i>	OK		
<i>Munnogonium</i> sp.	OK		
<i>Nippoleucon hinumensis</i>	OK		
<i>Nitokra</i> sp. A	OK		
<i>Orchomene decipiens</i>	OK		
<i>Pagurus caurinus</i>	OK		
<i>Parapleustinae</i>	Pleustidae sp.		Parapleustinae
<i>Parathalestris</i> sp.	OK		
<i>Perampithoe</i> sp.	OK		
<i>Photis brevipes</i>	OK		
<i>Pinnixa schmitti</i>	OK		

Table B-2, cont.

Crustacea			
J CORDELL IDENTIFICATION	K LI IDENTIFICATION	COMMENTS	RESOLUTION
<i>Pinnixa</i> sp.	OK		
<i>Pleurogonium rubicundum</i>	OK		
<i>Protomedeia prudens</i>	<i>Protomedeia</i> sp.		<i>Protomedeia prudens</i>
<i>Sinelobus stanfordi</i>	OK		
<i>Spirontocaris prionata</i>	OK		
<i>Tisbe</i> sp.	OK		
<i>Westwoodilla caecula</i>	OK		

Mollusca			
A FUKUYAMA IDENTIFICATION	S WEEKS IDENTIFICATION	COMMENTS	RESOLUTION
Bivalvia			
<i>Axinopsida serricata</i>	confirmed		
<i>Chlamys hastata</i>	confirmed		
<i>Clinocardium nuttallii</i>	confirmed		
<i>Compsomyax subdiaphana</i>	confirmed		
<i>Cryptomya californica</i>	<i>Semele rubropicta</i>		re-examined and agree on <i>S. rubropicta</i>
<i>Ennucula tenuis</i>	confirmed		
<i>Hiatella arctica</i>	confirmed		
<i>Lucinoma annulatum</i>	confirmed		
<i>Lyonsia californica</i>	confirmed		
<i>Macoma balthica</i>	confirmed		
<i>Macoma carlottensis</i>	confirmed		
<i>Macoma elimata</i>	confirmed		
<i>Macoma golikovi</i>	confirmed		
<i>Macoma inquinata</i>	confirmed		
<i>Macoma nasuta</i>	confirmed		
<i>Macoma yoldiformis</i>	confirmed		
<i>Modiolus modiolus</i>	confirmed		
<i>Mya arenaria</i>	confirmed		
<i>Mytilus</i> sp.	confirmed		
<i>Nutricula lordi</i>	confirmed		
<i>Pandora filosa</i>	confirmed		
<i>Parvilucina tenuisculpta</i>	confirmed		
<i>Pododesmus macrochisma</i>	confirmed		
<i>Protothaca staminea</i>	confirmed		

Table B-2, cont.

Mollusca			
A FUKUYAMA IDENTIFICATION	S WEEKS IDENTIFICATION	COMMENTS	RESOLUTION
<i>Rochefortia tumida</i>	confirmed		
<i>Saxidomus gigantea</i>	confirmed		
<i>Simomactra falcata</i>	confirmed		
<i>Solamen columbianum</i>	confirmed		
<i>Solen sicarius</i>	confirmed		
<i>Tellina modesta</i>	confirmed		
<i>Thyasira flexuosa</i>	confirmed		
Gastropoda			
<i>Aeolidiacea sp.</i>	confirmed		
<i>Alvania compacta</i>	confirmed		
<i>Astyris gausapata</i>	confirmed		
<i>Balcis thersites</i>	<i>Polygireulima rutila</i>		re-examined and agree on <i>P. rutila</i> (translucent)
<i>Cylichna attonsa</i>	confirmed		
<i>Kurtzia arteaga</i>	confirmed		
<i>Lacuna vincta</i>	confirmed		
<i>Melanochlamys diomedea</i>	confirmed		
<i>Nassarius mendicus</i>	confirmed		
<i>Odostomia sp.</i>	confirmed		
<i>Olivella baetica</i>	confirmed		
<i>Onchidella sp.</i>	maybe		cannot confirm
<i>Turbonilla sp.</i>	confirmed		

Miscellaneous			
S. McEUEEN IDENTIFICATION	S. HULSMAN/ V. HIRONAKA IDENTIFICATION	COMMENTS	RESOLUTION
Invertebrate sp. unid.	confirmed		
Nematoda	confirmed		
Cnidaria			
<i>Edwardsia sipunculoides</i>	confirmed		
<i>Euphysa sp.</i>	confirmed		
<i>Hydrallmania distans</i>	confirmed		
Nynantheae spp.	confirmed		
<i>Ptilosarcus gurneyi</i>	confirmed	many juvenile specimens	
Platyhelminthes			
Leptoplanidae sp.	confirmed		
Polycladida spp.	confirmed		
Rhabdozoela sp.	confirmed		
Nemertea			

Table B-2, cont.

Miscellaneous			
S. McEUEEN IDENTIFICATION	S. HULSMAN/ V. HIRONAKA IDENTIFICATION	COMMENTS	RESOLUTION
<i>Amphiporus</i> spp.	<i>Paranemertes californica</i>	typical pair of prominent black ocelli at tip of head	re-examined and agree on <i>P. californica</i>
Lineidae spp.	confirmed		
Paleonemertea spp.	<i>Tubulanus</i> sp. juv.		left at higher level; juv. specimen
<i>Paranemertes peregrina</i>	confirmed		
<i>Tubulanus capistratus</i>	<i>Tubulanus cingulatus</i>	has 4 longitudinal white lines; <i>T. capistratus</i> has only 3	re-examined and agree on <i>T. cingulatus</i>
<i>Tubulanus pellucidus/polymorphus</i>	<i>Tubulanus polymorphus</i>		left at original ID; too much variation
<i>Tubulanus</i> spp.	<i>Carinoma mutabilis</i>	lateral nerve chord embedded in longitudinal muscle posteriorally	re-examined and agree on <i>C. mutabilis</i>
Priapulida			
<i>Priapulus caudatus</i>	confirmed		
Sipuncula			
<i>Thysanocardia nigra</i>	confirmed		
Entoprocta			
<i>Barentsia benedeni</i>	confirmed		
Bryozoa			
<i>Bowerbankia gracilis</i>	<i>Alcyonidium</i> sp.	not connected by creeping stolons and lacking gizzards typical of <i>Bowerbankia</i>	re-examined and agree on <i>Alcyonidium</i> sp.
Bugulidae sp.	<i>Chaperiopsis patula</i>		left at higher level (Bugulidae sp.)
<i>Celleporella hyalina</i>	confirmed		
Echinodermata			
<i>Amphiodia (Amphispina) urtica</i>	confirmed	<i>Amphiodia</i> taxonomy in state of flux	
<i>Amphiodia</i> sp.	confirmed		
<i>Amphipholis squamata</i>	confirmed		
<i>Dendrochirotida</i> spp.	confirmed		
Ophiurida spp.	confirmed		
<i>Pentamera lissoplaca</i>	confirmed		
<i>Pentamera populifera</i>	confirmed		
<i>Pentamera</i> sp. B	<i>Pentamera</i> sp.		<i>Pentamera</i> sp.
<i>Pentamera trachyplaca</i>	confirmed		