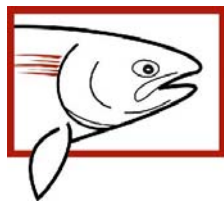


Vancouver Island Winter Steelhead Creel Survey 2002/03



Funding provided by

The Quality Waters Strategy of
The Habitat Conservation Trust Fund



GREATER GEORGIA BASIN

STEELHEAD Recovery Plan

www.SteelheadRecoveryPlan.ca

OUTLINE FOR PROGRESS, ANNUAL AND FINAL REPORTS

1. **PROJECT NAME:** VANCOUVER ISLAND WINTER STEELHEAD CREEL SURVEY (FUNDED BY THE QUALITY WATERS STRATEGY OF HCTF).
2. **HCTF PROJECT FILE #** 2979123
3. **TYPE OF REPORT** Progress Annual Final
4. **FISCAL YEAR** 2002/2003
5. **LOCATION:** SELECTED VANCOUVER ISLAND STREAMS

6. **PROJECT RATIONALE**

a) *Executive Summary*

River guardians were employed to conduct roving creel surveys/angler checks on 27 Vancouver Island streams during the 2002/03 steelhead season. A total of 1,884 anglers were contacted during 406 river patrols. Anglers were interviewed in an effort to determine their steelhead catch rate, expressed as Catch Per Unit Effort (CPUE), as well as to determine the level of compliance with current fishing regulations. East coast streams with steelhead conservation concerns were the primary focus. West coast streams with significant angler effort were also surveyed to compare catch statistics, and increase the profile of the project. Relatively little angler activity, and low catch rates indicated poor returns to central east coast streams. Catch success and angler activity remained comparatively high on the Cowichan River, in relation to most east coast streams. On popular west coast rivers (Stamp/Somass and Gold) CPUE values were down in 2002/03, but were still higher than most other Vancouver Island streams surveyed.

Increased regulation compliance monitoring, in co-operation with district conservation officers, resulted in more enforcement actions than in 2001/02. This was achieved through increased patrols of closed and gear-restricted open sections of central east coast streams. A total of 30 non-compliance incidents were observed by river guardians. Significant infractions were reported to conservation officers resulting in six warnings and four charges being laid.

River guardians provided anglers with an opportunity to be informed, and express opinions about current steelhead management programs. The ability to generate in-season measures of angling success allowed provincial fisheries managers to make informed decisions about the current status of steelhead stocks. The continuation of the River Guardian Program is essential for improved understanding of steelhead sport fisheries on Vancouver Island streams.

b) Issue

Steelhead stocks on the east coast of Vancouver Island began to decline in the early 1990's and reached record lows during the 1996/97 winter season. This resulted in the closure of many systems and increased consultation between provincial fisheries staff and various angling groups. During the inaugural "Steelhead Workshop", hosted by MWLAP staff in November 1997, public representatives demanded funding for improved stock abundance monitoring to increase government's ability to effectively conserve the steelhead resource. Other conservation measures identified at the workshop included: improved stock abundance monitoring, more conservative sport fishing regulations with increased enforcement, monitoring of the expected angler shift to west coast rivers and an increase in the public profile of the steelhead conservation crisis (Wightman et al 1998).

In 2001/02, further consultation identified a need to increase angling opportunity on east coast Vancouver Island streams. The result was the opening of sections of a few key systems under an "artificial fly" only regulation. These included the Little Qualicum, Big Qualicum, Oyster and Campbell rivers. Another opening occurred on the lower Puntledge and Courtenay rivers in early March, 2003. In addition to the opening of these waters, a natural bait ban was implemented for most Region 1 streams on April 1, 2001. With regulations remaining similar for 2002/03, and recognizing the Conservation Officer Service had limited resources to do wide-spread angler checks, a need existed to again have river guardians on patrol during the 2002/03 steelhead season.

Sport fishing openings for coho, chinook and chum in the fall possibly pose a risk to juvenile steelhead and trout in rivers with conservation concerns. River guardians monitored the incidental catch rate of steelhead and trout, and regulation compliance during these openings. This allowed provincial staff to be better informed of the levels of steelhead and trout interception, and encouraged anglers to comply with current regulations.

The Cowichan River was surveyed more intensively than other systems in 2002/03 because it traditionally supports a high number of steelhead angler days, shares the same geographic area of other watersheds with depleted steelhead stocks, and is difficult to monitor effectively by snorkel surveys (turbid water).

c) Project Objectives

Program objectives were similar to the 2001/02 season, however, more effort was directed at ensuring compliance with current fishing regulations on east coast Vancouver Island streams. Program objectives were as follows:

1. Collect creel census data from which angling success can be expressed in terms of CPUE. The CPUE statistic is generally comparable between years and can reflect inter-annual steelhead abundance and angling conditions.
2. Show an increased uniformed presence on Vancouver Island streams to monitor and ensure compliance with current fishing regulations. Particular attention to be directed at east coast streams to protect critically low populations of steelhead.

3. Inform and educate the public about the current steelhead conservation crisis and the management initiatives undertaken to protect and restore the species on Vancouver Island.

7. Activities/Technique(s)

Twenty-seven Vancouver Island streams (Table 1) were identified by J.C. Wightman, Senior Fisheries Biologist for Region 1 of MWLAP, to be surveyed during the 2002/2003 angling season. Twenty streams were surveyed during open winter steelhead fisheries to determine catch statistics and regulation compliance rates. Seven streams were surveyed during the fall to monitor incidental steelhead catch during fall salmon fisheries. Closed water checks were done regularly on four streams to monitor compliance with regulations. River guardians used marked vehicles to survey different streams each week. Stream selection was influenced by historic run timing, river conditions, and recent angling reports. Weekends were included in the five-day census week in order to maximize the number of angler contacts.

In general, contact was made with anglers by hiking into known angling areas along the banks of selected streams. On several occasions, river guardians rafted or heli-surveyed sections of streams with district conservation officers. This was done primarily to check closed rivers and to make contact with boat anglers. Each angler was asked specific questions and the information was recorded on creel survey report forms (Attachment 1). Anglers were also queried about current fishing regulations and practices, with river guardians taking note of angling gear selection as well as license possession. When violations were noted, judgements were made as to the seriousness of the infraction, with local conservation officers being contacted when necessary. Detailed information was gathered on anglers committing serious violations and was subsequently reported to the nearest office of the Conservation Officer Service. Information regarding angler knowledge of steelhead management programs, angling regulation concerns, etc. was noted and directed to regional fisheries staff in Nanaimo.

Table 1. Summary of the number of river checks performed by river guardians during 2002/2003, as well as the number and type of angling regulation infractions that occurred.

Stream	Class	# of Times Patrolled	Season	# of Anglers Checked	# of Resulting Charges	Charge Type	# of Resulting Warnings	Warning Type	Additional Non Compliance*	Type
Sooke	Open	5	winter	2						
Muir Creek	Open	5	winter	6						
San Juan	Open	13	fall/ winter	19						
Cowichan	Open	49	fall/ winter	614					6	Illegal gear, bait
Harris	Open	16	fall/ winter	75						
Gordon	Partially Closed	10	fall/ winter	0						
Caycuse	Open	1	fall	0						
Nahmint	Open	1	fall	0						
Koksilah	Closed	4	winter	1			1	Fishing closed water		
Chemainus	Closed	5	winter	0						
Nanaimo	Closed	5	winter	0						
Englishman	Closed	14	winter	0						
Little Qualicum	Partially Closed	33	winter	4						
Big Qualicum	Partially Closed	43	fall/ winter	214					5	Bait, no lic., non artificial fly
Stamp/Somass	Open	24	fall/ winter	413	2	Fishing bait in "closed to bait" area				
Sproat	Open	15	winter	22	1	Harvest wild steelhead				
Puntledge	Partially Closed	43	fall/ winter	184					6	Non artificial fly, fishing closed water
Oyster	Partially Closed	27	winter	10						
Campbell	Open	33	winter	30					1	Non artificial fly
Quinsam	Open/Closed	32	fall/ winter	49	1	Fishing closed water, bait	4	Fishing closed water, bait	2	Fishing closed water
Gold	Open	11	winter	203			1	Bait		
Salmon	Open	7	winter	21						
Adam/Eve	Partially Closed	2	winter	0						
Nimpkish	Partially Closed	2	winter	2						
Cluxewe	Partially Closed	3	winter	0						
Quatse	Partially Closed	2	winter	15						
Nahwitti	Open	1	winter	0						
Totals		406		1884	4		6		20	

* Notes: verbal warnings issued by river guardians. No conservation officer contacted.

Survey conducted October 5 – April 30, 2003

8. MEASURES OF RESULTS

a) *Angler Densities*

A total of 1,884 angler contacts were made on the 27 surveyed Vancouver Island streams (Table 1). Angler contacts were made during 406 river patrols; 295 patrols during open winter steelhead fisheries, 37 patrols during fall salmon fisheries, and 74 patrols on closed streams. During winter steelhead fisheries, 1,386 anglers were contacted, for an average of 4.7 anglers per river patrol (Table 2). Relatively high numbers of anglers were creelied during the fall salmon fisheries (Table 3). A total of 490 anglers were contacted for an average of 13.2 per river patrol. Five anglers were encountered during closed water checks.

Streams with relatively high numbers of anglers included the Gold (18 anglers/patrol), Stamp/Somass (18.4 anglers/patrol), Cowichan (12.6 anglers/patrol), Quatse (7.5 anglers/patrol) and Harris (5.1 anglers/patrol) (Table 2). The number of anglers encountered on the Cowichan and Stamp/Somass rivers are comparable because both were patrolled numerous times, and both have a high component of boat anglers that are often not surveyed by river guardians on foot. Gold River was typically surveyed during the weekend and when water conditions were good for angling, thus the number of contacts per patrol was relatively high. The Quatse River was only surveyed on two days and angling pressure was low compared to last year. Harris Creek received remarkably high effort considering it is a relatively small, remote stream.

The Little Qualicum, Big Qualicum, Oyster and Campbell rivers had sections opened with an artificial fly restriction for the 2001/02 and 2002/03 winter seasons. These recently opened fisheries continued to receive little angling pressure based on the number of contacts per patrol (Table 2). The Big Qualicum, which provided good angling for resident trout, and a reasonable opportunity to catch a steelhead, had an average of 1.3 anglers per river patrol. The Little Qualicum received very little angling pressure, and had a poor associated catch rate for both steelhead and trout. The Campbell, which mainly provides a fishery for trout in the winter, had low to moderate fishing activity with 0.9 anglers contacted per river check. The lower Oyster was checked 27 times for only 10 anglers. A section of the lower Puntledge River was opened to artificial fly from March 8 to April 30, 2003. An average of 1.5 anglers were interviewed per day following the opening.

b) *Steelhead Catch Statistics*

Catch success based on angler reports of past day's effort was generally highest on west coast streams. Two streams on the east coast with CPUE statistics comparable to west coast streams were the Cowichan and Nimpkish. The Cowichan has always been considered a highly productive stream and continues to support a moderate CPUE despite poor ocean survivals affecting east coast stocks. The Nimpkish was only surveyed twice, and the anglers interviewed were experienced locals. The average CPUE for all anglers on the Nimpkish in 2002/03 would likely be much lower.

Table 2. Summary of creel survey results from river guardian patrols on open winter steelhead streams 2002/03.

Stream	Current Day's Effort				Past Collective Effort		
	# Days Checked	# Anglers Checked	# Fish Caught	CPUE	# Days Fishing	# Fish Caught	CPUE
Sooke	5	2	0				
Muir Creek	5	6	0				
San Juan	9	2	0				
Cowichan	46	584	120	0.21	531	281	0.53
Harris	12	61	9	0.15	30	11	0.37
Gordon	8	0					
Little Qualicum	33	4	0		7	0	
Big Qualicum	35	44	3	0.07	25	7	0.28
Stamp/Somass	19	350	61	0.17	392	181	0.46
Sproat	15	22	8	0.36	22	4	0.18
Puntledge	20	30	3	0.10	19	5	0.26
Oyster	27	10	0		7	0	
Campbell	33	30	0		39	2	0.05
Gold	11	203	140	0.69	203	160	0.79
Salmon	7	21	0		13	3	0.23
Adam/Eve	2	0	0				
Nimpkish	2	2	2	1.00	18	11	0.61
Cluxewe	3	0					
Quatse	2	15	2	0.13	70	22	0.31
Nahwitti	1	0					
Totals	295	1386	348		1376	687	

Table 3. Summary of creel survey results from river guardian patrols during fall salmon and remote summer steelhead fisheries, 2002/03.

Stream	Current Day's Effort				Past Collective Effort		
	# Days Checked	# Anglers Checked	# Sthd Caught	CPUE	# Days Fishing	# Sthd Caught	CPUE
Gordon	2	0			0		
San Juan	4	17	0	0	25	0	0
Harris	4	14	8	0.57	17	6	0.35
Caycuse	1	0			0		
Cowichan	3	30	0	0	6	0	0
Big Qualicum	8	170	1	0.01	6	0	0
Stamp/Somass	5	63	11	0.17	17	4	0.24
Puntledge	6	154	0	0	32	0	0
Quinsam	3	42	0	0	20	0	0
Nahmint	1	0			0		
Totals	37	490	20		123	10	

Although the Cowichan still provides anglers with an average of approximately one fish for every two days, the catch rate is significantly lower than it was in the mid-1980's, when anglers averaged approximately one steelhead per day (Figure 1). The decreased catch rate reflects the decadal decline in steelhead populations on the east coast of Vancouver Island through the 1990's. Steelhead survival has been more consistent on west coast streams, as displayed in Figure 2. Anglers on the Stamp/Somass have maintained a catch rate close to one fish per day, on average, between 1999 and 2003.

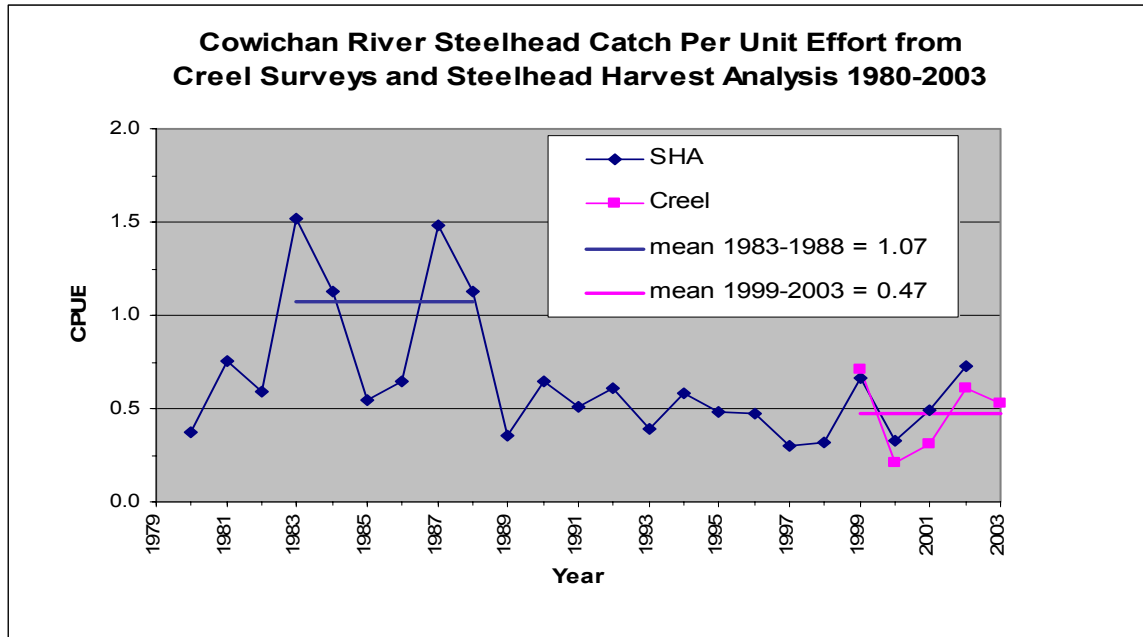


Figure 1. Cowichan River Steelhead CPUE 1980-2003.

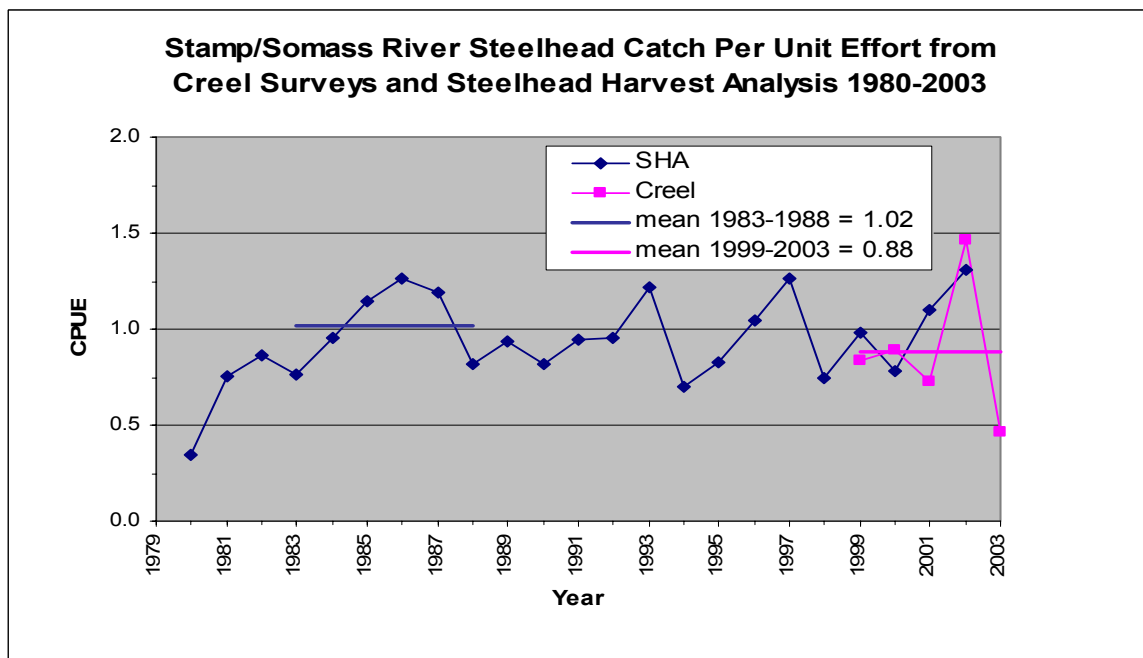


Figure 2. Stamp/Somass River Steelhead CPUE 1980-2003.

On the two main west coast rivers (Stamp/Somass and Gold) the CPUE was very low in 2003 compared with past Steelhead Harvest Analysis data and recent creel results (Figures 2 and 3). Gold River still produced the highest catch rate of all the streams surveyed, with close to one fish per day based on past effort. This is poor compared to previous years when anglers averaged closer to 1.5 fish per day. Reduced run size is likely the major cause of poor catch success in 2002/03, although poor water conditions and increased angling pressure may be factors.

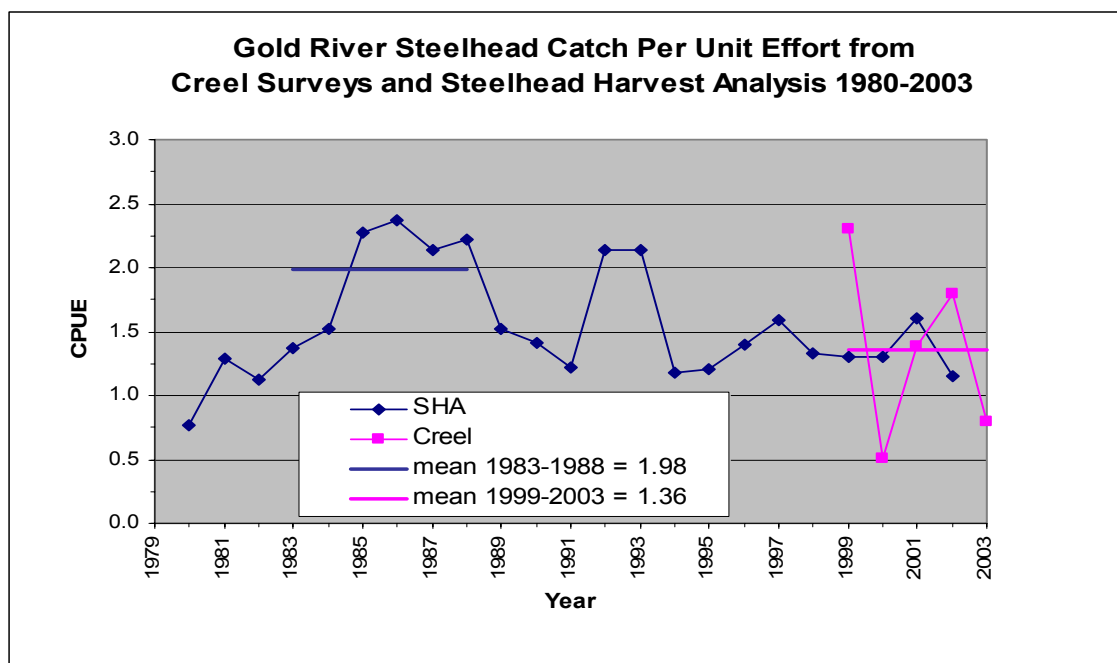


Figure 3. Gold River Steelhead CPUE 1980-2003.

Anglers on the Quatse caught fewer fish than in the past few years with approximately one steelhead for every three days fished. The Quatse was only checked twice by river guardians because angler activity was generally low due to poor water conditions.

Catch success was very low on the Little Qualicum, Big Qualicum, Puntledge, Campbell and Oyster rivers. No steelhead were reported caught on the Little Qualicum and Oyster rivers and two were reported on the Campbell. Anglers on the Big Qualicum and Puntledge averaged approximately one steelhead for every four days of fishing.

The ratio of marked hatchery vs. wild steelhead caught on the Quatse, Stamp/Somass and Cowichan rivers varied considerably. On the Quatse, two steelhead were reported caught on the day of the survey, and both were hatchery. On the Cowichan, 120 steelhead were reported caught on the survey days, of which 18% were hatchery. Stamp/Somass anglers reported 61 steelhead, of which 34% were hatchery. No hatchery fish were reported caught on any of the other rivers checked.

Creel survey results from the fall salmon fisheries indicated there was a very low rate of steelhead interception (Table 3). A total of 20 steelhead were reported caught on the day of the interviews, from 490 contacts. Of these 20 fish, 11 were from the Stamp/Somass, 8 were from Harris Creek, and one was reported on the Big Qualicum. An additional 10 steelhead were reported caught on the Stamp/Somass and Harris systems from past days' efforts. A significant percentage of the anglers interviewed were on the Puntledge, Quinsam and Big Qualicum rivers, where only one steelhead was reported caught in the fall. People were informed of the conservation concern regarding steelhead and trout, hopefully encouraging anglers to strictly target salmon. Monitoring of intense angling on the Quinsam in November is a priority for provincial fisheries managers because it has a unique stock of early winter steelhead. Forty-two anglers were contacted, none of whom reported catching a steelhead.

c) *Gear Selection and Angler Origin*

The proportion of winter steelhead anglers using fly tackle versus drift gear was slightly higher than last year. Fourteen percent of anglers chose fly tackle in 2002/03, compared with 11% in 2001/02. The lowest percentage of fly fishers was encountered on the Stamp/Somass (4.4%) and Quatse (0%) rivers. These two popular rivers are located close to communities and generally have strong hatchery returns, suggesting fly fishers tend to fish more remote areas, and target wild stocks. On streams with artificial fly only regulations, approximately half of the anglers presented their flies with drift gear as opposed to conventional fly tackle. On the Puntledge and Big Qualicum rivers, where anglers caught approximately one steelhead every four days, fly fishers were the minority (26.7% and 36.4%, respectively). On streams where the primary target was trout, the percentage of fly fishers was much higher. All anglers encountered on the lower Oyster River were fly fishing, and 73% were fly fishing on the Campbell. Only four anglers were contacted on the Little Qualicum; two fly fishers and two drift fishers.

In areas where anglers had the option of using natural bait, terminal tackle selection was highly variable. On the Quatse, 60% of the anglers contacted were using bait. On the Stamp/Somass, 16% were using bait, although approximately half of the section creeled was closed to the use of bait. Only 1% of the anglers on the Cowichan were using bait, however, the small area open to the use of bait received relatively little angling pressure.

The vast majority of steelhead anglers creeled were from Vancouver Island. Of the 1,386 anglers creeled during the winter steelhead season, 88.6% were Vancouver Island residents, 6.4% were from the BC lower mainland area, 1.0% were from elsewhere in BC, 1.6% were from another province in Canada, and 2.4% were from outside Canada. On streams where significant angler effort was recorded, the Gold had the highest proportion of anglers from outside of Vancouver Island (39%). On the Stamp/Somass, 10% of the anglers creeled were from outside Vancouver Island, and on the Cowichan, 4.4% were not from Vancouver Island.

d) *Angling Regulation Compliance*

Compliance with current angling regulations was good overall, with only 30 infractions noted from 1,884 angler contacts (i.e., 1.6%) (Table 1). Twenty of the infractions were deemed to be minor with the anglers being advised of current regulations. Six infractions were followed-up with warnings from local conservation officers, and four infractions were

followed-up with charges. In 2001/02, river guardians only observed three non-compliance incidents from 1,454 angler contacts (i.e., 0.2%). Last year more effort was spent on steelhead rivers with high angling pressure (i.e., Cowichan, Stamp/Somass, Gold). In 2002/03 an additional river guardian was employed to do more compliance monitoring on the North Island. Closed water checks, and intense monitoring of east coast streams with *artificial fly* regulations resulted in more non-compliance observations than last year. More details on compliance monitoring was presented in *An Assessment of Angling Regulation Compliance on Vancouver Island Streams during the 2002/2003 Winter Steelhead Season*, by S. Silvestri and I. Muirhead, April 2003.

9. BENEFITS/RISKS

Creel data were provided bi-weekly to fisheries managers to better assess steelhead stocks at suspected low abundance levels. Regulation changes to reduce hooking mortality from catch and release fisheries were considered, however, in the final analysis none were needed based on creel census and other stock monitoring results.

Having river guardians and conservation officers patrol streams likely had a deterrent effect on anglers attempting to fish illegally.

10. EXTENSION/PUBLIC INFORMATION/PARTICIPATION/PARTNERS

The majority of anglers responded very positively to an increase in presence of river guardians and conservation officers on Vancouver Island streams. Anglers were generally pleased to be interviewed so they could voice their concerns/support for steelhead angling issues, realizing this information would be passed on to provincial steelhead managers. Anglers also appreciated being kept up-to-date with the general state of the steelhead fishery in 2002/03. It proved useful to present the rationale behind management decisions to anglers not completely familiar with current conservation problems.

Information to river guardians regarding stream access points and patterns of fishing success was provided by the BCCF fisheries technicians, MWLAP fisheries staff, conservation officers, hatchery managers, angling guides and lodge owners.

11. CONTRACTOR PERFORMANCE

Funding was provided through the Quality Waters Strategy of the Habitat Conservation Trust Fund. BCCF successfully administered the contract, providing employees with necessary liability coverage and budget tracking services. River guardians met all of the project objectives through regular consultation with MWLAP fisheries managers and Greater Georgia Basin Steelhead Recovery Plan fisheries technicians. Work was carried out professionally resulting in a positive image to the public and useful data for stock management purposes.

12. PHOTOGRAPHIC RECORD



Figure 4. River guardian, Ian Muirhead, interviewing an angler on the Stamp River.

14. BUDGET DETAILS

The total project budget approved by HCTF was \$57,500. Approximately \$35,000 was spent on wages for two river guardians to work a total of 225 days. Additional project costs totalled \$15,800, of which the majority was spent on transportation (fuel, truck rental, helicopter rental). BCCF took a 12.5% administration fee off the working budget, or \$6,400. **More detailed budget information can be found in the attached project financial report.**

15. RECOMMENDATIONS AND SUGGESTIONS

On streams with significant angler effort (Cowichan, Stamp/Somass, Gold, Quatse) creel survey results were more meaningful and reflective of steelhead abundance trends. Streams with conservation concerns and low associated angler activity/catch were well covered using river guardians. Communication between anglers and Ministry staff/contractors is essential if steelhead management programs are to be understood and conservation measures supported by resource users. With reduced government staff expected over the next several years, the use of contracted river guardians could provide critical public “feedback” on stock status, angling success, river conditions and performance of recovery projects like the experimental “Living Gene Bank” at the Vancouver Island Trout Hatchery. MWLAP’s Vancouver Island fisheries program strongly supports continuation of the river guardian program (Quality Waters Strategy) under HCTF.

Project Financial Report

Proponent / Project Leader: Craig Wightman **HCTF Proj. #:** 2979123

HCTF Approved Budget Amount: \$57,500

Project Name: Vancouver Island Winter Steelhead Survey (a sub contract of the HCTF Quality Waters Strategy)

Reporting Period: 10/05/02 to 04/30/03 Reporting Purpose: Progress Report
 mm/dd/yy mm/dd/yy Annual Report
 Final Report

NOTE: Report year-to-date expenditures that relate to HCTF funding only
PART 1. BUDGET DETAILS

A. Labour Costs

i. Human Resources – Wages & Salaries (include Youth employment as a separate line)

Position	# of Crew	# of Work Days	Rate/day	HCTF Amount
River Guardian	2	225	155.45	34975.24
Person Days (# of crew x work days)			Subtotal i	\$34975.24

ii. Subcontractors & Consultants (provide details in text)

Contractor	# of Crew	# of Work Days	Rate/day	HCTF Amount
Subtotal ii				\$
A. Total Labour Costs				\$34975.24

B. Site / Project Costs

	Details	HCTF Amount
Travel	Fuel, Accommodations, Per Diem, Mileage.	6023.53
Small Tools & Equipment		
Site Supplies & Materials		
Equipment Rental	Chain Rental	120.00
Vehicle Rental (incl. Helicopters)	Truck Rental	7440.87
Work & Safety Supplies	Uniforms, Couriers, Signs, Saws, Waders, Rain Gear, Decals	1767.63
Repairs & Maintenance	Vehicle Operating Costs	28.74
Permits		
Technical Monitoring		
Other Site / Project Costs	GST (3.5%)	440.32
B. Total Site / Project Costs		\$15821.09

C. Overhead

Details		HCTF Amount
Office space, utilities, etc.		
Insurance		
Office supplies		
Telephone & long distance		301.72
Photocopies & printing	Publication (Photocopies)	13.06
Administration fees (BCCF)	12.5% on total	6388.89
Other overhead costs		
C. Total Overhead Costs		\$6703.67

PART 2. SUMMARY OF EXPENDITURES FROM ALL FUNDING SOURCES

	HCTF Funding Amount	Other Funding			Total
		Source	In-kind	Cash	
A. Labour Costs	34975.24				34975.24
B. Project / Site Costs	15821.09				15821.09
C. Overhead Costs	6703.67				6703.67
Total Costs	\$				\$57500.00

PART 3. EQUIPMENT PURCHASE SUMMARY

Equipment (list items >\$1000 purchased and quantity)	Serial Number	Dollar Value	Location Stored	Contact
No items purchased over \$1000				

Certified that the project has been satisfactorily completed and all purchases and equipment over \$1000 per item have been returned in satisfactory condition.

	DECEMBER 23, 2003	J.C. WIGHTMAN
Project Proponent Signature	Date	Print Name

HCTF USE ONLY – Accepted by:

R.S. Silver, Habitat Conservation Trust Fund, Manager &	Date
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Attachment 1

River guardian creel survey report form.

Date: _____
Surveyor: _____

River: _____
Weather: _____
Water level: _____

#	Or	GT	Ef	Steelhead				Other	Past Effort			Comments:
				Wm	Wf	Hm	Hf		Days	Steelhead		
										W	H	
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
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16												
17												
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19												
20												
21												
22												
23												
24												
25												

Or-place of residence
 R=resident
 NRC=non resident canadian
 A=alien

Comments *ie.* Location on the river
Additional comments on back

GT-gear type
 (DFA=drift fishing with artificial lure, DFB=drift fishing with bait, FLY=fly fishing, SPIN=spinners/spoons)
Ef-hrs of fishing on day of census

Attachment 2

River guardian winter creel survey record.

Vancouver Island Winter Steelhead - 2002/2003

Angler Creel Survey Record

Last Updated: April 30, 2003

As surveyed by River Guardian, open rivers only.

	Day #	Date	# of Anglers	Day's Collective Effort					Past Collective Effort			
				Hrs	Wf	Wm	Hf	Hm	Comments	# Days	# Fish	Comments
Sooke	1	4-Jan	0	0	0	0	0	0	2 boat anglers	0	0	
	2	5-Jan	0	0	0	0	0	0				
	3	16-Mar	2	10	0	0	0	0				
	4	8-Apr	0	0	0	0	0	0				
	5	16-Apr	0	0	0	0	0	0				
	Totals	5		2	10	0	0	0	0	0	0	Past CPUE
			CPUE TO DATE:		0.00							
Muir Creek	1	15-Mar	2	12	0	0	0	0		0	0	
	2	16-Mar	0	0	0	0	0	0				
	3	21-Mar	2	2	0	0	0	0				
	4	8-Apr	2	4	0	0	0	0				
	5	16-Apr	0	0	0	0	0	0				
	Totals	5		6	18	0	0	0	0	0	0	Past CPUE
			CPUE TO DATE:		0.00							
San Juan	1	16-Dec	0	0	0	0	0	0		0	0	
	2	4-Jan	0	0	0	0	0	0				
	3	5-Jan	0	0	0	0	0	0				
	4	7-Jan	0	0	0	0	0	0				
	5	16-Jan	0	0	0	0	0	0				
	6	30-Jan	0	0	0	0	0	0				
	7	1-Feb	0	0	0	0	0	0				
	8	10-Apr	0	0	0	0	0	0				
	9	25-Apr	2	2	0	0	0	0				
	Totals	9		2	2	0	0	0	0	0	0	Past CPUE
			CPUE TO DATE:		N/A							

Cowichan	1	9-Dec	7	13	0	0	0	0		0	0	
	2	10-Dec	10	20	0	0	0	0	1 CO, 1 illegal bait use, 3 spin anglers in fly area	0	0	
	3	12-Dec	3	8	0	0	0	0		0	0	
	4	13-Dec	7	11	0	0	0	0	2 anglers using treble hooks with bait	0	0	
	5	17-Dec	4	8	0	0	0	0		4	0	2 Co
	6	19-Dec	5	7	0	0	0	0		0	0	
	7	21-Dec	12	41	1	0	0	0	2 RB. 1 BT killed (atlantic?). 5 boat anglers	0	0	
	8	22-Dec	8	17	0	0	0	0	2 boats anglers	0	0	
	9	28-Dec	14	34	0	2	0	0	3 boat anglers. 1 BT	5	2	2 WR: both W
	10	29-Dec	15	37	0	0	0	0	1 BT	1	1	
	11	30-Dec	7	24	0	0	0	0		3	0	
	12	31-Dec	16	48	2	2	0	0	4 boat anglers	11	17	1 Bt
	13	15-Jan	8	18	0	0	0	0		0	0	
	14	17-Jan	16	44	1	0	1	0	1 lost. 1 BT	12	23	
	15	20-Jan	15	45	1	0	1	0	1 RB	16	9	
	16	21-Jan	14	52	1	0	1	0	1 lost. 3 BT (1@20"). 1 RB. 1 CT	9	2	1 lost
	17	23-Jan	4	8	0	0	0	0		1	0	
	18	25-Jan	15	32	0	0	0	0	2 BT	6	1	
	19	26-Jan	3	7	0	0	0	0		1	0	
	20	29-Jan	7	19	0	0	0	0		6	2	2 WR: both W
	21	6-Feb	16	62	2	3	2	1	2 boat anglers	71	27	27 WR: 23 W, 4 H
	22	7-Feb	9	27	1	0	0	1		9	9	9 WR: 9 W, 0 H
	23	10-Feb	25	115	1	2	1	2	10 boat anglers	17	3	3 WR: 2 W, 1 H
	24	11-Feb	16	48	1	2	2	0	5 boat anglers, 2 RB	9	2	2 WR: 1W, 1 H
	25	15-Feb	27	113	1	3	0	1	7 boat anglers	26	16	16 WR: 14 W, 2 H
	26	17-Feb	16	81	9	8	1	2	6 boat anglers	7	2	2 WR: both W
	27	18-Feb	19	61	2	2	0	0	5 boat anglers	12	7	7 WR: 6W, 1H
	28	20-Feb	16	56	4	3	1	0	3 boat anglers	10	2	2 WR: both W
	29	24-Feb	18	62	7	4	0	0	2 boat anglers	54	46	46 WR: 41 W, 5 H
	30	25-Feb	26	64	2	2	0	1	6 boat anglers	54	10	10 WR: 6 W, 4 H
	31	26-Feb	23	62	0	4	1	0	8 boat anglers	18	26	26 WR: 23 W, 3 H
	32	27-Feb	14	39	2	0	0	0	1 RB	8	4	4 WR: 3 W, 1 H, 1 BR
	33	1-Mar	14	40	2	1	0	0	4 boat anglers	29	19	19 WR: 15 W, 4 H
	34	2-Mar	30	88	1	0	2	0	7 boat anglers	34	9	9 WR: 8 W, 1 H
	35	6-Mar	10	19	0	0	0	0	2 RB's	7	9	9 WR: 8 W, 1 H

Cowichan con't	36	7-Mar	21	88	3	3	1	0	1 RB, 1 BT	45	12	12 WR: 10 W, 2 H	
	37	8-Mar	16	69	0	0	0	0	16 boat anglers	4	7	7 WR: 7 W	
	38	9-Mar	12	26	1	3	0	0	2 WR were kelts	26	13	13 WR: 10 W, 3 H	
	39	13-Mar	10	31	0	0	0	0		6	1		
	40	14-Mar	5	7	0	0	0	0		4	0		
	41	29-Mar	11	43	4	4	0	0	3 BT	2	0		
	42	6-Apr	9	44	0	1	0	0	3 boat anglers	2	0		
	43	13-Apr	6	15	0	0	0	0		0	0		
	44	17-Apr	8	23	0	0	0	0		2	0		
	45	28-Apr	12	36	0	0	0	0	5 RB, 1 BT	0	0		
	46	29-Apr	5	12	0	0	0	0	3 RB	0	0		
Totals	46		584	1824	49	49	14	8		531	281	Past CPUE	0.53
			CPUE TO DATE:		0.21								
Harris	1	16-Dec	3	8	0	0	0	0		2	3		
	2	4-Jan	12	42	1	1	0	0	6 SR	2	2		
	3	5-Jan	11	16	0	2	0	0		2	0	1 SR	
	4	7-Jan	9	36	0	1	0	0	6 SR	0	0		
	5	16-Jan	0	0	0	0	0	0		0	0		
	6	30-Jan	4	7	0	0	0	0		3	0	2 SR	
	7	1-Feb	7	17	0	0	0	0	1 SR	7	3	3 WR: all wild	
	8	11-Mar	4	8	1	2	0	0		8	3		
	9	15-Mar	4	15	1	0	0	0	2 SR	4	0		
	10	21-Mar	4	11	0	0	0	0		2	0		
	11	10-Apr	3	13	0	0	0	0		0	0		
	12	25-Apr	0	0	0	0	0	0		0	0		
Totals	12		61	173	3	6	0	0		30	11	Past CPUE	0.37
			CPUE TO DATE:		0.15								
Gordon	1	16-Dec	0	0	0	0	0	0		0	0		
	2	4-Jan	0	0	0	0	0	0		0	0		
	3	5-Jan	0	0	0	0	0	0		0	0		
	4	16-Jan	0	0	0	0	0	0		0	0		
	5	30-Jan	0	0	0	0	0	0		0	0		
	6	1-Feb	0	0	0	0	0	0		0	0		

Gordon cont'd	7	10-Apr	0	0	0	0	0	0		0	0		
	8	25-Apr	0	0	0	0	0	0		0	0		
Totals	8		0	0	0	0	0	0		0	0	Past CPUE	N/A
		CPUE TO DATE:			N/A								
Little Qualicum	1	2-Dec	0	0	0	0	0	0		0	0		
	2	3-Dec	0	0	0	0	0	0		0	0		
	3	5-Dec	0	0	0	0	0	0		0	0		
	4	9-Dec	1	1.5	0	0	0	0		0	0		
	5	11-Dec	0	0	0	0	0	0		0	0		
	6	14-Dec	0	0	0	0	0	0		0	0		
	7	30-Dec	0	0	0	0	0	0		0	0		
	8	31-Dec	0	0	0	0	0	0		0	0		
	9	10-Jan	0	0	0	0	0	0		0	0		
	10	11-Jan	0	0	0	0	0	0		0	0		
	11	15-Jan	0	0	0	0	0	0		0	0		
	12	18-Jan	0	0	0	0	0	0		0	0		
	13	19-Jan	0	0	0	0	0	0		0	0		
	14	28-Jan	0	0	0	0	0	0		0	0		
	15	1-Feb	1	1	0	0	0	0		1	0		
	16	5-Feb	0	0	0	0	0	0		0	0		
	17	6-Feb	0	0	0	0	0	0		0	0		
	18	8-Feb	0	0	0	0	0	0		0	0		
	19	13-Feb	0	0	0	0	0	0		0	0		
	20	17-Feb	0	0	0	0	0	0	1 angler just started fishing	4	0	1 12" RB, 1 14" CT	
	21	18-Feb	0	0	0	0	0	0		0	0		
	22	20-Feb	0	0	0	0	0	0		0	0		
	23	23-Feb	0	0	0	0	0	0		0	0		
	24	25-Feb	0	0	0	0	0	0		0	0		
	25	26-Feb	2	4	0	0	0	0	1 CT (16" hatchery)	1	0		
	26	1-Mar	0	0	0	0	0	0	3 anglers just started fishing	1	0		
	27	8-Mar	0	0	0	0	0	0		0	0		
	28	18-Mar	0	0	0	0	0	0		0	0		
	29	19-Mar	0	0	0	0	0	0		0	0		
	30	24-Mar	0	0	0	0	0	0		0	0		

Little Qualicum con't	31	18-Apr	0	0	0	0	0	0		0	0	
	32	24-Apr	0	0	0	0	0	0		0	0	
	33	25-Apr	0	0	0	0	0	0		0	0	
	Totals	33		4	6.5	0	0	0	0		7	0
		CPUE TO DATE:			0.00							
Big Qualicum	1	2-Dec	1	1	0	0	0	0		0	0	
	2	3-Dec	0	0	0	0	0	0		0	0	
	3	5-Dec	2	0	0	0	0	0	2 anglers just starting fishing	0	0	
	4	9-Dec	0	0	0	0	0	0		0	0	
	5	10-Dec	0	0	0	0	0	0		0	0	
	6	14-Dec	0	0	0	0	0	0		0	0	
	7	15-Dec	4	7	0	0	0	0	2 anglers just started fishing	0	0	
	8	30-Dec	0	0	0	0	0	0		0	0	
	9	31-Dec	0	0	0	0	0	0		0	0	
	10	10-Jan	1	0.5	0	0	0	0	Father out with young child (3yrs).	0	0	
	11	11-Jan	0	0	0	0	0	0		0	0	
	12	15-Jan	0	0	0	0	0	0		0	0	
	13	18-Jan	0	0	0	0	0	0	2 anglers just started fishing	0	0	
	14	19-Jan	0	0	0	0	0	0		0	0	
	15	28-Jan	0	0	0	0	0	0		0	0	
	16	1-Feb	2	10	0	0	0	0	1 RB, 1 steelhead lost	2	0	
	17	5-Feb	1	1	0	0	0	0		2	5	
	18	6-Feb	0	0	0	0	0	0		0	0	
	19	8-Feb	4	21.5	0	0	0	0	5 RB	2	0	4 RB, 1 CT
	20	13-Feb	0	0	0	0	0	0	2 anglers in parking lot, about to fish	0	0	
	21	17-Feb	3	9	1	0	0	0		6	1	
	22	18-Feb	0	0	0	0	0	0	No anglers, check part of snorkel survey	0	0	
	23	20-Feb	3	6	0	0	0	0		0	0	
	24	23-Feb	4	10	0	1	0	0	2 RB, 4 anglers just started fishing	1	0	2 RB
	25	25-Feb	2	8	0	0	0	0	3 RB, 1 CT	0	0	0
	26	1-Mar	4	10	0	0	0	0	2 RB, 2 native anglers fishing worms	1	0	2 RB
	27	8-Mar	3	1.5	0	0	0	0		5	0	15" CT
	28	15-Mar	5	12.5	0	1	0	0	1 RB	2	1	RB
	29	16-Mar	3	3	0	0	0	0		4	0	4 CT

Big Qualicum con't	30	18-Mar	0	0	0	0	0	0		0	0	
	31	19-Mar	0	0	0	0	0	0		0	0	
	32	24-Mar	0	0	0	0	0	0		0	0	
	33	26-Mar	0	0	0	0	0	0		0	0	
	34	6-Apr	2	10	0	0	0	0	Lost 1 Rb and 1 CT	0	0	
	35	18-Apr	0	0	0	0	0	0		0	0	
Totals	35		44	111	1	2	0	0		25	7	Past CPUE 0.28
		CPUE TO DATE:			0.07							
Stamp/Somass	1	1-Dec	10	26	1	0	0	1	2 pontoon boats	6	0	1 SR: W
	2	4-Dec	10	20	0	0	0	0	1 CM, 1 SR: H?. 1 small resident Rb	8	1	5 SR: 1 H, 4 W
	3	7-Dec	34	65	2	1	1	0	3 SR: 1 Hm, 1 Wf, 1 Hf. 9 boat anglers	19	9	24 SR
	4	8-Dec	26	75	0	1	0	0	5 SR: 2 Hf, 2 Hm, 1 Wf	39	2	24 SR: 22 H, 2 W. 2 resident trout
	5	10-Dec	7	17	0	0	0	0	1 SR: Hf. 1 Resident Trout	9	3	3 WR: 2 W, 1 H. 3 SR: all H
	6	14-Dec	6	13	1	1	0	1	Water extremely high (out), CO blitz cancelled	2	4	0
	7	17-Dec	10	22	1	0	0	0	1 SR: Hm	7	0	6 SR
	8	19-Dec	18	46.5	1	1	3	0	2 SR: 1Hf, 1 ?. 1 resident trout	17	3	3 WR: all W. 3 SR: all H. 1 sea run Ct
	9	29-Dec	33	94	1	0	1	1	2 boat anglers	29	5	5 WR: 2 W, others unknown
	10	1-Jan	10	25.5	1	1	0	0	2 boat anglers	6	4	4 WR: 2 W and 2 H. 2 SR: 1 W, 1 H
	11	8-Jan	23	48.5	1	0	0	0	5 boat anglers	10	4	4 WR: all Wm. 4 SR: 2 Hf, 1Hm, 1?.
	13	12-Jan	28	89	3	1	1	2	Drift with COS. 2 boat anglers. 1 Res Rb	67	57	56 WR: 53 W, 3H. Plus 17 SR
	14	18-Jan	18	47.5	1	0	1	1	6 boat anglers	25	12	12 WR: 7W, 5H. 6 SR. 1 Trout
	15	4-Feb	23	90	6	2	1	2	5 boat anglers	47	27	27 WR: 23W 4H, 3 SR
	16	9-Feb	27	98	0	4	1	0	3 SR, 2 boat anglers	48	26	2 SR, 2 RB
	17	21-Feb	17	41	1	0	0	0	4 boat anglers	11	4	
	18	22-Feb	13	21	0	0	0	0	6 boat anglers	1	0	
	19	2-Mar	8	19.5	0	0	0	0		19	11	3 SR
	Totals	19		350	987.5	22	18	11	10		392	181
		CPUE TO DATE:			0.17							
Sproat	1	4-Dec	4	7	0	0	0	0	4 SR: 3 Wf, 1 Wm.	3	1	1 SR: H
	2	7-Dec	3	3	0	0	0	0	No Sthd captured	0	0	
	3	8-Dec	2	12	0	0	0	0	3 SR: 2 Hf, 1 Wm	3	0	1 SR: H. 1 resident trout
	4	10-Dec	0	0	0	0	0	0		0	0	
	5	17-Dec	0	0	0	0	0	0		0	0	

Sproat cont'd	6	19-Dec	1	1	0	0	0	0	1 resident trout (small)	3	2	2 WR: 1 H, 1 W. 1 SR: H			
	7	1-Jan	0	0	0	0	0	0		0	0				
	8	8-Jan	0	0	0	0	0	0		0	0				
	9	12-Jan	4	4	0	0	0	0	2 SR: 1H, 1W	0	0				
	10	18-Jan	0	0	0	0	0	0		0	0				
	11	4-Feb	0	0	0	0	0	0		0	0				
	12	9-Feb	4	17.5	1	2	1	0	1 SR, 1 angler with fresh AD fin clipped fish	7	0		1 SR		
	13	21-Feb	4	20	1	2	1	0		6	1				
	14	22-Feb	0	0	0	0	0	0		0	0				
	15	2-Mar	0	0	0	0	0	0		0	0				
	Totals	15		22	64.5	2	4	2	0		22		4	Past CPUE	0.18
			CPUE TO DATE:			0.36									
	Puntledge (Post March 8)	1	8-Mar	4	14	1	1	0	0		0		0	3 WR: all Wild	
		2	9-Mar	4	8	1	0	0	0		2		0		
		3	16-Mar	3	2	0	0	0	0		4		3		
4		18-Mar	0	0	0	0	0	0		0	0				
5		19-Mar	0	0	0	0	0	0		0	0				
6		22-Mar	3	9	0	0	0	0		0	0				
7		23-Mar	3	3	0	0	0	0		0	0				
8		25-Mar	3	3	0	0	0	0		6	0				
9		26-Mar	0	0	0	0	0	0		0	0				
10		29-Mar	3	7	0	0	0	0		0	0				
11		5-Apr	0	0	0	0	0	0		0	0				
12		6-Apr	2	2	0	0	0	0		5	2				
13		12-Apr	0	0	0	0	0	0		0	0				
14		13-Apr	0	0	0	0	0	0		0	0				
15		18-Apr	0	0	0	0	0	0		0	0				
16		19-Apr	3	10	0	0	0	0	2 boat anglers, 1 RB	2	0				
17		20-Apr	0	0	0	0	0	0		0	0				
18		21-Apr	0	0	0	0	0	0		0	0				
19		26-Apr	0	0	0	0	0	0		0	0				

Campbell	1	3-Dec	2	4	0	0	0	0		0	0	
	2	5-Dec	1	1	0	0	0	0		0	0	
	3	9-Dec	0	0	0	0	0	0		0	0	
	4	11-Dec	0	0	0	0	0	0		0	0	
	5	14-Dec	0	0	0	0	0	0		0	0	
	6	30-Dec	0	0	0	0	0	0		0	0	
	7	31-Dec	2	6.5	0	0	0	0	1 sea run CT. 1 angler fishing spinners	8	0	1 angler: 1-2 Ct/day. Lots of Rb (1-3lbs)
	8	10-Jan	3	5	0	0	0	0		3	0	2 resident trout
	9	11-Jan	2	3	0	0	0	0		7	1	1 clipped Sthd (13lbs). 4 Rb (2-4lbs). 2 Ct.
	10	14-Jan	1	2	0	0	0	0		0	0	
	11	16-Jan	3	3	0	0	0	0		1	0	
	12	18-Jan	0	0	0	0	0	0		0	0	
	13	19-Jan	2	1.5	0	0	0	0	1 RB	2	0	
	14	26-Jan	0	0	0	0	0	0		0	0	
	15	28-Jan	0	0	0	0	0	0	1 angler just started fishing	5	1	1 WR: Wf
	16	1-Feb	1	2.5	0	0	0	0		3	0	
	17	6-Feb	0	0	0	0	0	0	No anglers present	0	0	
	18	8-Feb	0	0	0	0	0	0	No anglers present	0	0	
	19	13-Feb	0	0	0	0	0	0	No anglers present	0	0	
	20	17-Feb	0	0	0	0	0	0	No anglers present	0	0	
	21	20-Feb	0	0	0	0	0	0		0	0	
	22	22-Feb	2	2	0	0	0	0	3 anglers just started fishing	8	0	
	23	25-Feb	0	0	0	0	0	0		0	0	
	24	4-Mar	0	0	0	0	0	0		0	0	
	25	5-Mar	0	0	0	0	0	0	2 anglers just started fishing	0	0	
	26	18-Mar	0	0	0	0	0	0		0	0	
	27	23-Mar	2	4	0	0	0	0		2	0	
	28	25-Mar	0	0	0	0	0	0		0	0	
	29	29-Mar	0	0	0	0	0	0		0	0	
	30	5-Apr	3	5	0	0	0	0	1 angler using pink worms, verbal warning	0	0	
	31	12-Apr	1	0.5	0	0	0	0		0	0	
	32	13-Apr	2	4	0	0	0	0		0	0	

Nimpkish	1	25-Jan	2	5	1	1	0	0	1 Rb	18	11	Past effort Dec. 1 - Present
	2	26-Jan	0	0	0	0	0	0	River not fishable, very turbid	0	0	
Totals	2		2	5	1	1	0	0		18	11	Past CPUE 0.61
			CPUE TO DATE:		1.00							
Cluxewe	1	25-Jan	0	0	0	0	0	0	No anglers present, creel part of snorkel survey	0	0	
	2	26-Jan	0	0	0	0	0	0				
	3	14-Feb	0	0	0	0	0	0				
Totals	3		0	0	0	0	0	0		0	0	Past CPUE N/A
			CPUE TO DATE:		N/A							
Quatse	1	25-Jan	11	22.5	0	0	1	1		65	22	Past effort Dec. 1 - Present
	2	26-Jan	4	6	0	0	0	0		5	0	Past effort Dec. 1 - Present
Totals	2		15	28.5	0	0	1	1		70	22	Past CPUE 0.31
			CPUE TO DATE:		0.13							
Nahwitti	1	26-Jan	0	0	0	0	0	0	River not fishable, too high	0	0	
Totals	1		0	0	0	0	0	0		0	0	Past CPUE N/A
			CPUE TO DATE:		N/A							

NOTE: 1 "Day's Collective Effort" uses only the sum of the hours that each surveyed angler has fished to that point in the day, and the total number of steelhead landed thus far. It does not necessarily represent a complete day's effort.

2 Anglers contacted who had fished for less than 30 minutes were surveyed for their "Past Collective Effort" only.

3 Anglers surveyed on a previous day were asked for their results since last survey, only.

4 Summer run steelhead encounters are included ONLY in the comments section, and not in the current or past effort columns.

Attachment 3

River guardian fall creel survey record.

Vancouver Island Summer Steelhead - 2002

Angler Creel Survey Record

Last Updated: January 16, 2003

As surveyed by River Guardian.

Stream	Day	Date	# of Anglers	Day's Collective Effort					Past Collective Effort			
				Hrs	Wf	Wm	Hf	Hm	Other/Comments	# Days	# Sthd	Oth/Comm
Gordon	1	12-Oct	0	0	0	0	0	0		0	0	
	2	29-Oct	0	0	0	0	0	0		0	0	
	Totals	2	0	0	0	0	0	0		0	0	Past CPUE: N/A
			CPUE TO DATE:		N/A							
San Juan	1	12-Oct	0	0	0	0	0	0		0	0	0
	2	29-Oct	0	0	0	0	0	0		0	0	0
	3	12-Nov	17	8	0	0	0	0	1 group of 13 anglers	25	0	14 Co
	4	26-Nov	0	0	0	0	0	0	No anglers present	0	0	
	Totals	4	17	8	0	0	0	0		25	0	Past CPUE: 0.00
			CPUE TO DATE:		0.00							
Harris	1	12-Oct	1	2	0	0	0	0		0	0	
	2	29-Oct	0	0	0	0	0	0		0	0	
	3	21-Nov	10	22	4	4	0	0	5 Co. 8 Sthd: 4 chrome and 4 mod. colored . 2 SR from confluence pool	17	6	20 Co
	4	26-Nov	3	7	0	0	0	0		0	0	
	Totals	4	14	31	4	4	0	0		17	6	Past CPUE: 0.35
			CPUE TO DATE:		0.57							
Caycuse	1	29-Oct	0	0	0	0	0	0		0	0	
	Totals	1	0	0	0	0	0	0		0	0	Past CPUE: N/A
			CPUE TO DATE:		N/A							
Cowichan	1	6-Oct	12	39	0	0	0	0		4	0	11 "smolts" (small Rb?) caught
	2	9-Oct	5	10	0	0	0	0	1 Co Jack	2	0	0
	3	13-Oct	13	20	0	0	0	0		0	0	0
	Totals	3	30	69	0	0	0	0		6	0	Past CPUE: 0.00
			CPUE TO DATE:		0.00							

Big Qualicum	1	18-Oct	23	50	0	0	0	0	7 Co	0	0	1 Co, 1 Ct
	2	19-Oct	20	29	0	0	0	0	1 Ct, 5 Co	3	0	
	3	30-Oct	23	37	0	0	0	0	38 Co. One angler claimed a Sthd on Puntledge	0	0	
	4	7-Nov	21	65	0	0	0	0	18 Co, 2 Cm	0	0	
	5	8-Nov	34	56	0	0	0	0	17 Co, one large Rb	0	0	
	6	20-Nov	12	23	0	0	0	0	12 Cm, 1 Co	3	0	
	7	23-Nov	23	44	0	0	0	0	7 Co, 1 Cm	0	0	
	8	28-Nov	14	21	0	0	1	0	6 Cm, 3 Co	0	0	
	Totals	8		170	325	0	0	1	0		6	0
			CPUE TO DATE:		0.01							
Stamp/Somass	1	26-Oct	18	55	0	0	0	0	27 Co	2	0	15 Co
	2	27-Oct	20	42	0	0	0	1	48 Co, 1 Cn	7	4	2 Co, 4 Ct
	3	3-Nov	5	4	0	0	0	0	Nothing. Posted 5 Bait Ban Signs. Evidence of recent roe use at GCL bridge crossing	6	0	4 Co
	4	16-Nov	7	27	1	0	8	1	1 Cn, 9 SR, 1 WR (all Guiget fish)	0	0	
	5	17-Nov	13	25	0	0	0	0		2	0	
	Totals	5		63	153	1	0	8	2		17	4
			CPUE TO DATE:		0.17							
Puntledge	1	5-Oct	37	79	0	0	0	0	1 angler "heard of a Sthd caught"	12	0	6 Ct to 16", 12 Co, 11 Cn, 1 Cm
	2	18-Oct	19	43	0	0	0	0	4 Co, 12 Cm. One ILLEGAL angler u/s boundary. 1 Sthd reported below fence by DFO swim count	19	0	5 Ct to 3 lbs, 1 Co, 2 Cm
	3	19-Oct	27	54	0	0	0	0	22 Cm, 3 Co, 3 Cn. Two ILLEGAL anglers u/s boundary	0	0	0
	4	30-Oct	18	40	0	0	0	0	11 Co, 39 Cm. Two ILLEGAL anglers u/s boundary	0	0	0
	5	2-Nov	36	50	0	0	0	0	9 Co, 1 Co Jack, 21 Cm	1	0	1 Ct 14"
	6	9-Nov	17	25	0	0	0	0	2 Co, 8 Cm. 1 Sthd reportedly caught yesterday	0	0	0
	Totals	6		154	291	0	0	0	0		32	0
			CPUE TO DATE:		0							
Quinsam	1	18-Oct	16	20	0	0	0	0	3 Cn, 1 Co Jack. One angler using treble	1	0	
	2	19-Oct	19	22	0	0	0	0	5 Cn, 1 Co, 1 Co Jack. One Sthd (18 lbs) heard to be caught	19	0	

Quinsam Con't	3	9-Nov	7	14	0	0	0	0	Guy from River Sportsman caught 18lb buck. Dan Huddy caught 12 lb (both 2 weeks earlier)	0	0	
Totals	3		42	56	0	0	0	0		20	0	Past CPUE: 0.00
		CPUE TO DATE:			0.00							
Nahmint	1	27-Oct	0	0	0	0	0	0	Murphy out day before: 2 clients, no fish	0	0	
Totals	1		0	0	0	0	0	0		0	0	Past CPUE: N/A
		CPUE TO DATE:			N/A							

NOTE: 1 "Day's Collective Effort" uses only the sum of the hours that each surveyed angler has fished to that point in the day, and the total number of steelhead landed thus far. It does not necessarily represent a complete day's effort.

2 Anglers contacted who had fished for less than 30 minutes were surveyed for their "Past Collective Effort" only.

3 Anglers surveyed on a previous day were asked for their results since last survey, only.

4 Past Collective Effort may be incomplete, and may only indicate days when trout or steelhead were encountered

5 Primary purpose of survey is to determine if trout and steelhead are being encountered in coho fisheries.

6 Survey was conducted from Oct. 1 - Dec. 1, 2002. Creel dates after Dec. 1, 2002 can be viewed in the winter steelhead creel data for the 2002/2003 winter steelhead season.

Attachment 4

River guardian closed water check record.

Closed River Check Record

Last Updated: April 30, 2003

As performed by River Guardians.

Stream	Day #	Date	Survey By:	W x	Water Level	# of Anglers	Area Checked	Vehicle Description
Gordon	1	16-Dec	IM	Cloudy	Mod	0	All areas above Bugaboo Creek	
	2	4-Jan	IM	Rain	High	0	All areas above Bugaboo Creek	
	3	5-Jan	IM	Sunny	Mod	0	All areas above Bugaboo Creek	
	4	16-Jan	IM	Sunny	Mod	0	All areas above Bugaboo Creek	
	5	30-Jan	IM	OC	Mod	0	All areas above Bugaboo Creek	
	6	1-Feb	IM	Sunny	Mod	0	All areas above Bugaboo Creek	
Total	6					0		
Koksilah	1	19-Feb	IM			0	All areas above Hwy 19 bridge	
	2	3-Mar	IM			1	All areas above Hwy 19 bridge	
	3	19-Mar	IM			0	All areas above Hwy 19 bridge	
	4	26-Mar	IM			0	All areas above Hwy 19 bridge	
Total	4					1		
Chemainus	1	19-Feb	IM			0	All areas above Hwy 19 bridge	
	2	21-Feb	IM			0	All areas above Hwy 19 bridge	
	3	12-Mar	IM			0	All areas above Hwy 19 bridge	
	4	17-Mar	IM/GH			0	All areas above Hwy 19 bridge	
	5	31-Mar	IM			0	All areas above Hwy 19 bridge	
Total	5					0		
Nanaimo	1	19-Feb	IM			0	Bore Hole and all areas below Hwy 19 bridge	
	2	21-Feb	IM			0	Bore Hole and all areas below Hwy 19 bridge	
	3	12-Mar	IM			0	Bore Hole and all areas below Hwy 19 bridge	
	4	18-Mar	IM			0	Bore Hole and all areas below Hwy 19 bridge	
	5	31-Mar	IM			0	Bore Hole and all areas below Hwy 19 bridge	
Total	5					0		
Englishman	1	5-Dec	SS	90% OC	Mod	0	Checked all areas below fall park	
	2	30-Dec	SS	50% OC	Mod	0	Checked all areas below fall park	
	3	10-Jan	SS	50% OC	Mod	0	Checked all areas below fall park	
	4	15-Jan	SS	90% OC	Mod	0	Checked all areas below fall park	
	5	19-Jan	SS	Light Rain	Mod	0	Checked all areas below fall park	
	6	28-Jan	SS	100% OC	Mod-high	0	Checked all areas below fall park	
	7	8-Feb	SS	100% OC	Low	0	Checked all areas below Englishman River Road	
	8	17-Feb	SS	60% OC	Low	0	Checked all areas below Englishman River Road	
	9	23-Feb	SS	Sunny	Low	0	Checked all areas below Englishman River Road	
	10	25-Feb	SS	Sunny	Low	0	Checked all areas below falls park	New toyota tacoma, grey, xtra cab, 4x4, near falls with pontoon boat
	11	26-Feb	SS	Sunny	Low	0	Checked all areas below falls park	
	12	1-Mar	SS	80% OC	Low	0	Checked all areas below Englishman River Road	
	13	19-Mar	SS	Light Rain	Mod	0	Checked all areas below Englishman River Road	
	14	24-Mar	SS	100% OC	Mod	0	Checked all areas below Englishman River Road	
Total	14					0		
Little Qualicum (closed section)	1	9-Dec	SS	100% OC	Low	0	Checked between Hwy 4 and Hatchery	
	2	11-Dec	SS	100% OC	Low	0	Checked between Hwy 4 and Hatchery	
	3	10-Jan	SS	50% OC	Mod	0	Checked between Hwy 4 and Hatchery	
	4	11-Jan	SS	Light Rain	Mod	0	Checked between Hwy 4 and Hatchery	
	5	15-Jan	SS	90% OC	Mod	0	Checked between Hwy 4 and Hatchery	

Little Qualicum Con't (closed section)	6	18-Jan	SS	Fog	Mod-Low	0	Checked between Hwy 4 and Hatchery	Red single cab 4x4 Dodge Ram 2500 Lic # 6858 SD parked at top of hatchery (closed area)		
	7	19-Jan	SS	Light Rain	Mod	0	Checked between Hwy 4 and Hatchery			
	8	28-Jan	SS	100% OC	Mod-High	0	Checked between Hwy 4 and Hatchery			
	9	1-Feb	SS	80% OC	Mod	0	Checked between Hwy 4 and Hatchery			
	10	5-Feb	SS	70% OC	Mod	0	Checked between Hwy 4 and Hatchery			
	11	6-Feb	SS	Sunny	Mod-Low	0	Checked between Hwy 4 and Hatchery			
	12	8-Feb	SS	100% OC	Mod	0	Checked between Hwy 4 and Hatchery			
	13	13-Feb	SS	Sunny	Low	0	Checked between Hwy 4 and Hatchery			
	14	17-Feb	SS	60% OC	Low	0	Checked between Hwy 4 and Hatchery			
	15	20-Feb	SS	Light Rain	Low	0	Checked between Hwy 4 and Hatchery			
	16	23-Feb	SS	Sunny	Low	0	Checked between Hwy 4 and Hatchery			
	17	25-Feb	SS	Sunny	Low	0	Checked between Hwy 4 and Hatchery			
	18	26-Feb	SS	Sunny	Low	0	Checked between Hwy 4 and Hatchery			
	19	1-Mar	SS	90% OC	Low	0	Checked between Hwy 4 and Hatchery			
	20	8-Mar	SS	100% OC	Low	0	Checked between Hwy 4 and Hatchery			
	21	18-Mar	IM			0	Checked between Hwy 4 and Hatchery			
	22	19-Mar	SS	Light Rain	Mod-High	0	Checked between Hwy 4 and Hatchery			
	23	24-Mar	SS	100% OC	Mod	0	Checked between Hwy 4 and Hatchery			
	24	18-Apr	SS	100% OC	Mod-Low	0	Checked between Hwy 4 and Hatchery			
	25	24-Apr	SS	50% OC	Low	0	Checked between Hwy 4 and Hatchery			
	26	25-Apr	SS	50% OC	Low	0	Checked between Hwy 4 and Hatchery			
	Total	26					0			
	Puntledge (Pre March 8 and closed area)	1	3-Dec	SS	Drizzle	Mod-Low	0		Checked all areas below Hydro Dam	Green, Dodge Dakota 4x4 extended cab, Lic# 908 HBF
		2	9-Dec	SS	100% OC	Mod-Low	0		Checked all areas below Hydro Dam	
		3	11-Dec	SS	100% OC	Low-Mod	0		Checked all areas below Hydro Dam	
		4	30-Dec	SS	50% OC	Mod-Low	0		Checked all areas below Hydro Dam	
5		31-Dec	SS	100% OC	Mod-Low	0	Checked all areas below Hydro Dam			
6		10-Jan	SS	20% OC	Mod	0	Checked all areas below Hydro Dam			
7		11-Jan	SS	100% OC	Mod	0	Checked all areas below Hydro Dam			
8		13-Jan	SS	Light Rain	Mod-Low	0	Checked all areas below Hydro Dam			
9		14-Jan	SS	50% OC	Mod	0	Checked all areas below Stotan Falls			
10		15-Jan	SS	90% OC	Mod-Low	0	Checked all areas below Stotan Falls			
11		16-Jan	SS	Light Rain	Mod-Low	0	Checked all areas below Stotan Falls			
12		19-Jan	SS	Light Rain	Mod-Low	0	Checked all areas below Stotan Falls			
13		28-Jan	SS	80% OC	Mod	0	Checked all areas below Stotan Falls			
14		5-Feb	SS	40% OC	Low	0	Checked all areas below Stotan Falls			
15		6-Feb	SS	Sunny	Low	0	Checked all areas below Nymph Falls			
16		13-Feb	SS	Sunny	Low	0	Checked all areas below Upper Hatchery			
17		23-Feb	SS	Sunny	Low	0	Checked all areas below Upper Hatchery			
18		24-Feb	SS	Sunny	Low	0	Checked all areas below Upper Hatchery			
19		1-Mar	SS	Sunny	Low	0	Checked all areas below Upper Hatchery			
20		3-Mar	SS	Sunny	Low	0	Checked all areas below Upper Hatchery			
21		5-Mar	SS	100% OC	Low	0	Checked all areas below Upper Hatchery			
22		8-Mar	SS	Snow	Low	0	Checked all areas below Upper Hatchery			
23		9-Mar	SS	100% OC	Low	0	Checked all areas below Upper Hatchery			
24		16-Mar	SS	50% OC	High	0	Checked all areas below Upper Hatchery			
25		22-Mar	SS	30% OC	Mod	0	Checked all areas below Upper Hatchery			
26		23-Mar	SS	80% OC	Mod	0	Checked all areas below Upper Hatchery			
27		25-Mar	SS	100% OC	Mod-Low	0	Checked all areas below Upper Hatchery			
28		26-Mar	SS	50% OC	Mod-Low	0	Checked all areas below Upper Hatchery			
29		29-Mar	SS	100% OC	Mod	0	Checked all areas below Upper Hatchery			
30		5-Apr	SS	100% OC	Low	0	Checked all areas below Upper Hatchery			
31		6-Apr	SS	50% OC	Mod-Low	0	Checked all areas below Upper Hatchery			

Puntledge Con't (Pre March 8 and closed area)	32	18-Apr	SS	90% OC	Low	0	Checked all areas below Upper Hatchery	
	33	19-Apr	SS	Rain	Low	0	Checked all areas below Upper Hatchery	
	34	20-Apr	SS	60% OC	Low	0	Checked all areas below Upper Hatchery	
	35	21-Apr	SS	Sunny	Low	0	Checked all areas below Upper Hatchery	
	36	26-Apr	SS	50% OC	Low	0	Checked all areas below Upper Hatchery	
	37	27-Apr	SS	100% OC	Low	0	Checked all areas below Upper Hatchery	
	Total	37					0	
Quinsam	1	9-Dec	SS	100% OC	Low	0	Checked all areas below hatchery	
	2	11-Dec	SS	100% OC	Low-Mod	0	Checked all areas below hatchery	
	3	30-Dec	SS	50% OC	Low-Mod	0	Checked all areas below hatchery	
	4	31-Dec	SS	100% OC	Low-Mod	0	Checked all areas below hatchery	
	5	11-Jan	SS	Rain	Mod-Low	0	Checked all areas below hatchery	
	6	14-Jan	SS	50% OC	Low-Mod	2	Checked all areas below hatchery	Mazda 626 (1985-1992), light grey/blue, 2 door, Lic# 420 GED
	7	16-Jan	SS	Light Rain	Low	0	Checked all areas below hatchery	
	8	17-Jan	SS	Sunny	Low	0	Checked all areas below sandpits	
	9	18-Jan	IM	Sunny	Low	0	Checked all areas below sandpits	
	10	19-Jan	SS	Light Rain	Low	2	Checked all areas below sandpits	
	11	26-Jan	SS	70% OC	Mod	0	Checked all areas below hatchery	
	12	28-Jan	SS	100% OC	Mod	0	Checked all areas below hatchery	
	13	1-Feb	SS	100% OC	Mod	0	Checked all areas below sandpits	
	14	6-Feb	SS	Fog	Low	0	Checked all areas below sandpits	
	15	8-Feb	SS	Sunny	Low	0	Checked all areas below sandpits	Chevy Tracker (New), grey 4 door, 4x4, Lic# 535 HDD, fishing gear in back, couldn't find
	16	13-Feb	SS	Sunny	Low	0	Checked all areas below sandpits	
	17	17-Feb	SS	50% OC	Low	0	Checked all areas below sandpits	
	18	20-Feb	SS	Light Rain	Low	0	Checked all areas below sandpits	
	19	25-Feb	SS	Sunny	Low	0	Checked all areas below sandpits	
	20	4-Mar	SS	100% OC	Low	0	Checked all areas below sandpits	
	21	5-Mar	SS	Light Rain	Low	0	Checked all areas below sandpits	
	22	18-Mar	SS	60% OC	Mod-High	0	Checked all areas below sandpits	
	23	22-Mar	IM			0	Checked all areas below hatchery	
	24	23-Mar	SS/IM	50% OC	Mod	0	Checked all areas below sandpits	
	25	25-Mar	SS	100% OC	Mod-Low	0	Checked all areas below sandpits	
	26	26-Mar	SS	Light Rain	Mod	3	Checked all areas below sandpits	Newer model Ford Ranger, xtended cab, silver, Lic# 9336 PP
	27	5-Apr	SS	Rain	Low-Mod	0	Checked all areas below sandpits	
	28	13-Apr	SS	50% OC	Mod	0	Checked all areas below sandpits	
	29	21-Apr	SS	Sunny	Low	0	Checked all areas below sandpits	
Total	29					7		
Oyster (closed section)	1	5-Dec	SS	90% OC	Mod	0	Checked from James Cr. to hwy 19 A	
	2	9-Dec	SS	100% OC	Low	0	Checked from James Cr. to hwy 19 A	
	3	37631	SS	20% OC	Mod	0	Checked from James Cr. to hwy 19 A	
	4	14-Jan	SS	50% OC	Mod	0	Checked from James Cr. to hwy 19 A	
	5	16-Jan	SS	100% OC	Mod-Low	0	Checked from James Cr. to hwy 19 A	
	6	17-Jan	SS	Sunny	Low	0	Checked from James Cr. to hwy 19 A	
	7	19-Jan	SS	Light Rain	Low	0	Checked from James Cr. to hwy 19 A	
	8	28-Jan	SS	Light Rain	Mod-High	0	Checked from Inland hwy to hwy 19 A	
	9	1-Feb	SS	Light Rain	Mod-High	0	Checked from Inland hwy to hwy 19 A	
	10	6-Feb	SS	Fog	Low	0	Checked from Inland hwy to hwy 19 A	
	11	8-Feb	SS	Sunny	Low	0	Checked from Inland hwy to hwy 19 A	
	12	13-Feb	SS	Sunny	Low	0	Checked from Inland hwy to hwy 19 A	
	13	20-Feb	SS	Light Rain	Low	0	Checked from Inland hwy to hwy 19 A	
	14	4-Mar	SS	100% OC	Low	0	Checked from Inland hwy to hwy 19 A	
	15	25-Mar	SS	100% OC	Mod	0	Checked from Inland hwy to hwy 19 A	

Oyster Con't (closed section)	16	29-Mar	SS	100% OC	Mod	0	Checked from Inland hwy to hwy 19 A
	17	5-Apr	SS	Light Rain	Mod-Low	0	Checked from Inland hwy to hwy 19 A
	18	13-Apr	SS	50% OC	Mod	0	Checked from Inland hwy to hwy 19 A
	19	21-Apr	SS	Sunny	Low	0	Checked from Inland hwy to hwy 19 A
Total	19					0	