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1996 BULKLEY-MORICE RIVERS SPORT FISHERY SURVEY SUMMARY REPORT

Prepared by:

Doug Tallman
J.O. Thomas and Associates
December 1996

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799.12/T147	1996	
1996 Bulkley-Morice Rivers Sport Fishery Summary		
Tallman, Doug / J.O. Thomas and Associates Ltd.		
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Dec 6/01	<i>Ken Rabnett</i>	

799.12/T147

1996 Bulkley-Morice Rivers Sport Fishery Summary

Tallman, Doug / J.O. Thomas and Associates Ltd.

1996 BULKLEY-MORICE RIVERS SPORT FISHERY SURVEY CATCH
AND EFFORT ESTIMATES SUMMARY

PERIOD	ZONE	CATCH/HARVEST					EFFORT		
		CHINOOK (SE)	COHO (SE)	STLD (SE)	PINK (SE)	SOCKEYE (SE)	DOLLY WARDEN (SE)	ANGLER HOURS (SE)	ANGLER TRIPS
1	1	468(181)	0	12(11)	0	4(3)	7(7)	4222(893)	1441
		364(119)	0	0	0	0	7(7)		
2	1	176(51)	0	0	0	0	70(32)	7015(2234)	1682
		125(44)	0	0	0	0	55(29)		
2	1	209(44)	16(7)	3(2)	860(332)	3(2)	4(3)	3113(793)	1007
		171(38)	16(7)	0	182(108)	0	4(3)		
2	19(17)	19(17)	0	239(82)	0	0	2652(666)	1457	
	0	0	0	85(28)	0	0			
TOTAL	872(194)	35(18)	15(11)	1099(342)	7(3)	81(33)	17002(2620)	5587	
	660(132)	16(7)	0	267(112)	0	66(30)			

NOTES:

PERIOD 1: JULY 1 - AUGUST 5, 1996

PERIOD 2: AUGUST 6 - AUGUST 25, 1996

ZONE 1: ANDERSON FLATS - SMITHERS BOAT LAUNCH (INCLUSIVE)

ZONE 2: SMITHERS BOAT LAUNCH - LAMPREY CREEK

1.0 INTRODUCTION

The Bulkley and Morice Rivers provide a number of different sport fishing opportunities during the ice-free months of each year. The most notable of these is an intense late summer and fall steelhead fishery which has been the focus of several structured surveys in the past by Chudyk et al (1975,1976), O'Neill and Whately (1982, 1983), and the Steelhead Harvest Analysis mail survey conducted annually by the British Columbia Ministry of Environment, Lands and Parks Fisheries Branch. A less intense mid-summer sport fishery occurs on these rivers which targets primarily on chinook. To date, no structured survey of this fishery has been conducted and so its impact on Bulkley and Morice Rivers chinook, particularly Little Bulkley River stocks, is not well understood.

In order to estimate catch and effort in the summer chinook fishery an on-site survey was conducted from July 1 to August 25, 1996. The survey area covered the Bulkley River between its confluences with the Skeena and Morice Rivers, and the Morice River from its confluences with the Bulkley River and Lamprey Creek (Figure 1). The goals of this survey were to estimate angler effort and catch and to determine the incidence of adipose-clip marked chinook in the catch. Given that no quantitative information on the variability of fishery parameters was available, the purpose of this survey, in practical terms, was to gather data that would provide measures of variability in effort and catch rates among fishery strata with reasonable utility in calculating chinook catch and effort estimates. Additional biological data (length, sex, and scales) would be collected opportunistically.

2.0 METHODS

Considering the survey boundaries, goals, and relatively focused access to the fishery, sample data was collected on site according to a stratified access-access survey design (Pollock et al, 1994).

The survey area and period were stratified into two zones, time periods, day types, and daily periods to investigate and minimize sample variance (Table 1). Access point sites in each stratum were sampled according to non-uniform probability sampling based on expected angler use of each site(Pollock et al, 1994). The probability of site selection changed between periods reflecting the diffusion of fishing effort and access over time as the fishery shifted from chinook to coho and pink targets. At least two samples were drawn from each stratum using simple random sampling without replacement in order to calculate variances and provide for catch and effort estimates. Data were collected for both boat and shore-based angling trips respectively but estimates were calculated for one general fishing mode.

Due to uncertainty regarding levels of catch and effort in parts of the survey area other than those specifically identified, a periodic aerial reconnaissance was conducted through the entire survey area in order to determine and, if necessary, estimate "leakage" from other access points.

The analytical program CREESES was used to calculate estimates of catch and effort along with other fishery parameters (Lester and Trippel, 1985; Orsatti et al, 1991).

3.0 RESULTS

3.1 Operations

- Sixty-one access-point work shifts were completed for the survey of which 31 were conducted in Zone 1 and 30 in Zone 2. A total of 339 fishing parties representing 563 individual anglers were interviewed during these shifts.
- Work shifts during Period 1 covered five access point sites: seven sites were covered during Period 2.
- Interview data was collected for 1674 angler hours which is about 10% of the estimated angler effort for the survey area and period.
- One weekend and two weekday reconnaissance overflights were conducted during the survey each taking approximately two hours to complete following a route downstream from Lamprey Creek on the Morice River to Anderson Flats at the confluence of the Bulkley and Skeena Rivers.

3.2 Catch and Effort Estimates

- A total of 132 chinook caught were documented in interview records of which 100 were harvested (32 chinook were released). One adipose clipped chinook was observed in this harvest.
- The chinook catch estimate for the total survey period and area is 872 fish (+/- 320 @ 90% confidence). Of these 661 (+/- 218 @ 90% confidence) was the estimated harvest.
- Most chinook (74%) were caught in Period 1 and most of this catch (73%) was taken in Zone 1, primarily at Moricetown (Idiot Rock) (Table 2 and Figure 6).
- For the total survey period 78% of the chinook catch was taken in Zone 1 primarily at the Moricetown access point with most of the balance taken at Bymac and The Forks access points.
- Species other than chinook were caught only incidentally during Period 1. Angling effort during Period 2 became more spatially diffused through the survey area with many anglers targeting pink salmon (Table 2 and Figure 7). Pink catch for the survey was estimated at 1099 fish (+/- 564 @ 90% confidence). Of this catch only 276 (+/- 185 @ 90% confidence) were harvested.
- A total of 17,002 angler hours of fishing effort (+/- 4323 @ 90% confidence) were estimated to have been expended during this survey. In Zone 1 the average observed trip length was about three hours in both survey periods: the average observed trip length in Zone 2 during Period 1 was just over 4 hour and decreased to 1.8 hours in Period 2 as more local anglers came into the fishery in proximate locations for short trips to target pink.
- More angler effort was estimated in Zone 2 during both periods in terms of hours and, to a lesser degree, angler trips. The absolute precision for effort estimates in Zones 1 and 2 are +/- 27% and +/- 40% respectively at 90 % confidence with coefficients of

variation of 16.2% and 24.1% respectively. This indicates high variability in effort during the survey relative to the sample size and higher variability of effort in Zone 2 compared to Zone 1.

- Reconnaissance overflights of the survey area during this period indicated that the fishery was accessed mostly at sampled sites (Table 3). Some sample leakage occurred at a several low-volume sites resulting in some negative bias in effort and catch. The most significant of these sites appears to have been Trout Creek and the confluence of the Bulkley and Skeena River at Old and South Hazleton. There is not sufficient quantitative information to confidently estimate effort leakage through these access points given relatively high variability in effort observed at other sites within Zone 1 and there is no quantitative information on species catch rates.

3.3 Angler Characteristics

- Seventy-eight percent of 563 anglers interviewed originated from the Bulkley Valley area, 18% originated from other areas of B.C. and Canada, and the remaining 4% came from the United States and overseas.
- Only 6 guided anglers were encountered during the survey period.
- Ninety-seven percent of anglers interviewed used lures (e.g. Spin'n'Glow) with the balance using fly fishing gear.

REFERENCES

- Chudyk, W.E., Morris, M.C., Whately, M.R. 1978. Morice River Steelhead Trout: The 1976 and 1977 Sport Fishery and Life History Characteristics from Anglers' Catches. British Columbia Fish and Wildlife Branch. Fisheries Report No. 77-4 (S.E.P.) March 1978.
- Lester, N., Trippel, E. 1985. CREESYS User Manual, Second Edition. Prepared by the Fisheries Branch, Ontario Ministry of Natural Resources.
- O'Neill, M.J., Whately, M.R. 1984. Bulkley River Steelhead Trout A Report on Angler Use, Tagging, and Life History Studies Conducted in 1982 and 1983. British Columbia Fish and Wildlife Branch. Skeena Fisheries Report No. 83-3 May 1984.
- Orsatti, S., Daniels, M., Lester, N. 1991. CREESYS: A Software System for Management of Ontario Creel Survey Data. American Fisheries Society Symposium 12:285-291.
- Pollock, K., Jones, C., Brown, T. 1994. Angler Survey Methods. American Fisheries Society Special Publication No. 25. 371 pages.
- Scheaffer, R., Mendenhall, W., Ott, L. 1990. Elementary Survey Sampling, Fourth Edition. Duxbury Press, Belmont, California. 390 pages.

TABLES

Table 1: Survey period and space stratification, probabilities of site selection, and Creesys Codes.

Table 2: 1996 Bulkley and Morice Rivers Fishery Survey operations, catch and effort estimates summary.

Table 3: Bulkley and Morice Rivers sport fishery overflight angler counts.

Season	Space	Daytype	Period
Period 1 (96/07/01 - 96/08/05)	Zone 1 (Creesys Code = 10) Suskwa: $\pi^*=0.2$ (Creesys Code =10)	Weekday	0500-1330 1330-2200
	Idiot Rock: $\pi=0.8$ (Creesys Code =11)		0500-1330 1330-2200
	Zone 2 (Creesys Code = 30) Forks: $\pi=0.5$ (Creesys Code = 30) Bymac: $\pi=0.4$ (Creesys Code = 31) Aspen: $\pi=0.1$ (Creesys Code = 32)	Weekday	0500-1330 1330-2200
			0500-1330 1330-2200
		Weekend	0500-1330 1330-2200
			0500-1330 1330-2200
Period 2 (96/08/06 - 96/08/25)	Zone 1 (Creesys Code = 20) Idiot Rock: $\pi=0.7$ (Creesys Code =20)	Weekday	0600-1330 1330-2100
	Chicken Creek: $\pi=0.15$ (Creesys Code = 21) Smithers Boat Launch: $\pi=0.15$ (Creesys Code = 22)		0600-1330 1330-2100
	Zone 2 (Creesys Code = 40) Telkwa: $\pi=0.25$ (Creesys Code = 40) Forks: $\pi=0.20$ (Creesys Code = 41) Bymac: $\pi=0.25$ (Creesys Code = 42)	Weekday	0600-1330 1330-2100
			0600-1330 1330-2100
		Weekend	0600-1330 1330-2100
			0600-1330 1330-2100

Table 1. Survey period and space stratification, probabilities of site selection (π), and Creesys Codes.

1. OPERATIONS SUMMARY

PERIOD	ZONE	SHIFTS USED	# PARTY INTERVIEWS	# ANGLER INTERVIEWS	OBSERVED ANGLER EFFORT (HRS)
1	1	15	105	154	452
	2	15	57	112	466
2	1	16	106	168	521
	2	15	71	129	235
TOTAL		61	339	563	1674

2. EFFORT ESTIMATES

PERIOD	ZONE	ANGLER HOURS	MEAN TRIP LENGTH (HRS)	ANGLER TRIPS
1	1	4222	2.93	1441
	2	7015	4.17	1682
2	1	3113	3.09	1007
	2	2652	1.82	1457
TOTAL		17002	3.04	5587

3. CATCH AND HARVEST ESTIMATES

PERIOD	ZONE	CATCH/HARVEST					
		CHINOOK	COHO	STLD	PINK	SOCKEYE	DOLLY VARDEN
1	1	468	0	12	0	4	7
		364	0	0	0	0	7
	2	176	0	0	0	0	70
		125	0	0	0	0	55
2	1	209	16	3	860	3	4
		171	16	0	182	0	4
	2	19	19	0	239	0	0
		0	0	0	85	0	0
TOTAL		872	35	15	1099	7	81
		660	16	0	267	0	66

NOTES:

PERIOD 1: JULY 1 - AUGUST 5, 1996

PERIOD 2: AUGUST 6 - AUGUST 25, 1996

ZONE 1: ANDERSON FLATS - SMITHERS BOAT LAUNCH (INCLUSIVE)

ZONE 2: SMITHERS BOAT LAUNCH - LAMPREY CREEK

Table 2. 1996 Bulkley-Morice Rivers sport fishery survey operations, catch and effort estimates summary.

Location	Date		
	July 20, 1996	August 2, 1996	August 22, 1996
Morice @ 40 km		3-S	
Morice @ 38km		1-S	
Aspen Rec. Site	6-S (Shore) 1-B (Boat)	4-S	
ByMac	2-S	1-B	1-S
Barrett	2-S		1-S
Walcott		1-S	2-S
Quick	2-B		1-B
Telkwa		1-B 2-S	7-S
Smithers Boat Launch		3-S	
Smithers Rec. Park		1-S	
Chicken Creek		4-S	7-S
Trout Creek		4-S	
Moricetown	2-S	16-S	9-S
Porphyry	1-S		
Bulkley/Skeena		2-S	3-S

Table 3. Bulkely and Morice Rivers sport fishery overflight angler counts.

FIGURES

Figure 1: 1996 Bulkley-Morice Rivers sport fishery survey area, zones, and access points.

Figure 2: July workshift schedule for the 1996 Bulkley-Morice Rivers Sport Fishery Survey

Figure 3: August workshift schedule for the 1996 Bulkley-Morice Rivers Sport Fishery Survey

Figure 4: Access point survey count and interview form.

Figure 5: Access point survey biological sample form.

Figure 6: Bulkley-Morice Rivers sport chinook CPUE from July 1 to August 25, 1996.

Figure 7: Bulkley-Morice Rivers sport pink CPUE from July 1 to August 25, 1996.

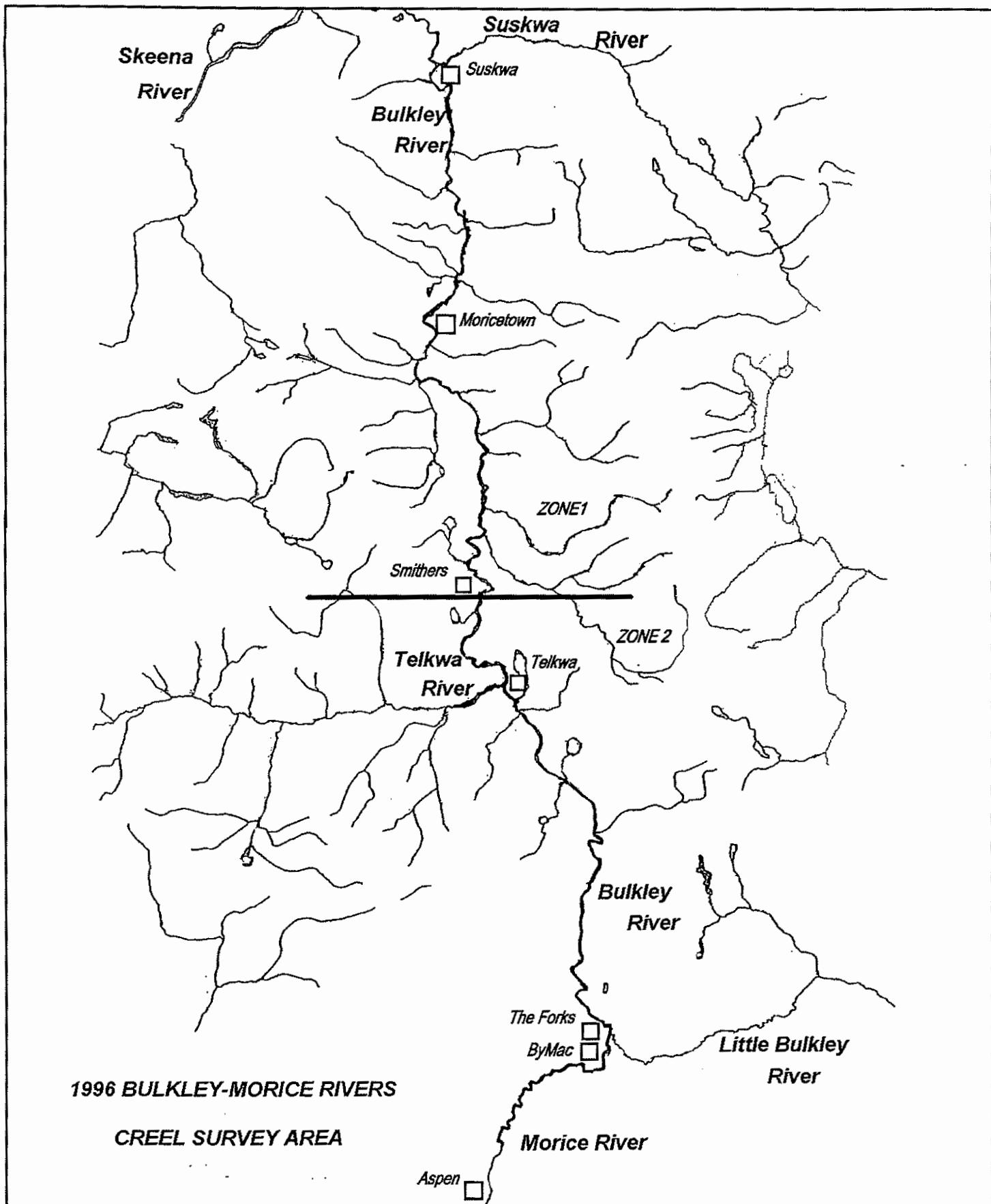


Figure 1. 1996 Bulkley-Morice Rivers sport fishery survey area, zones, and access points.

STINT SCHEDULE

MONTH: JULY, 1996

LOCATION: BULKLEY - MORICE RIVERS

SAMPLE SITE	DAYS OF MONTH																													SHIFT			
	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
SUSKWA																																	A
																																	B
MORICE-TOWN																																	A
																																	B
CHICKEN CREEK																																	A
																																	B
SMITHERS BOAT LAUNCH																																	A
																																	B
TELKWA																																	A
																																	B
THE FORKS																																	A
																																	B
BYMAC																																	A
																																	B
ASPEN																																	A
																																	B

NOTE:

JULY 1 - AUGUST 5

SHIFT A = 5:30 AM TO 1:30 PM (8 HOURS)

SHIFT B = 1:30 PM TO 10:00 PM (8.5 HOURS)

AUGUST 6- AUGUST 25

SHIFT A = 6:00 AM TO 1:30 PM (7.5 HOURS)

SHIFT B = 1:30 PM TO 9:00 PM (7.5 HOURS)

Figure 2. July workshift schedule for the 1996 Bulkley-Morice River Sport Fishery Survey.

STINT SCHEDULE

MONTH: AUGUST, 1996

LOCATION: BULKLEY - MORICE RIVERS

SAMPLE SITE	DAYS OF MONTH																													SHIFT		
	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
SUSKWA																																A
																																B
MORICE-TOWN																																A
																																B
CHICKEN CREEK																																A
																																B
SMITHERS BOAT LAUNCH																																A
																																B
TELKWA																																A
																																B
THE FORKS																																A
																																B
BYMAC																																A
																																B
ASPEN																																A
																																B

Figure 3. August workshift schedule for the 1996 Bulkley-Morice River Sport Fishery Survey.

Survey Name: BULKLEY - MORICE RIVER CREEL SURVEY Year: 1996

Figure 4. Access point survey count and interview form.

Figure 5. Access point survey biological sample form

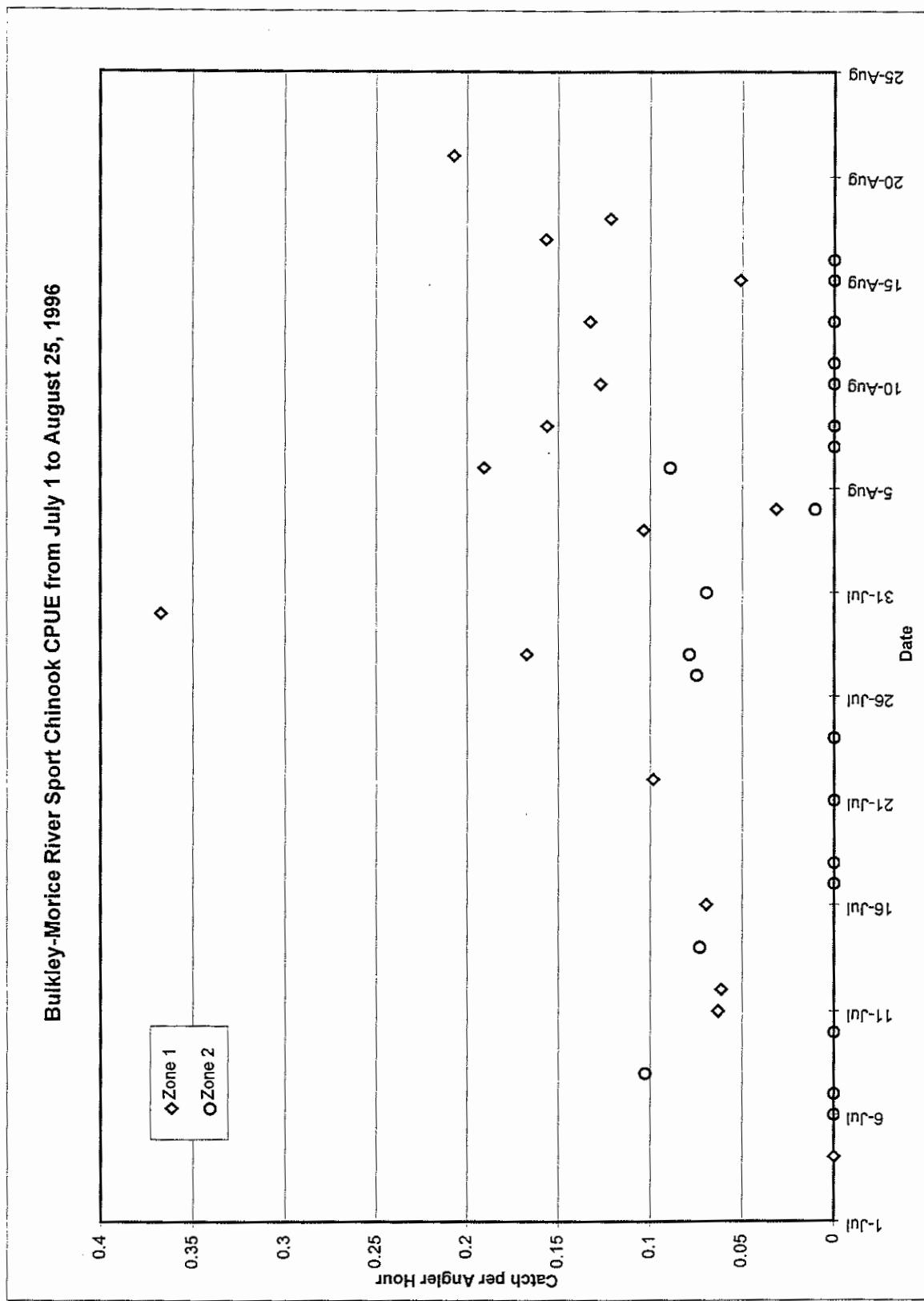


Figure 6. Bulkley-Morice River Sport Chinook CPUE from July 1 to August 25, 1996

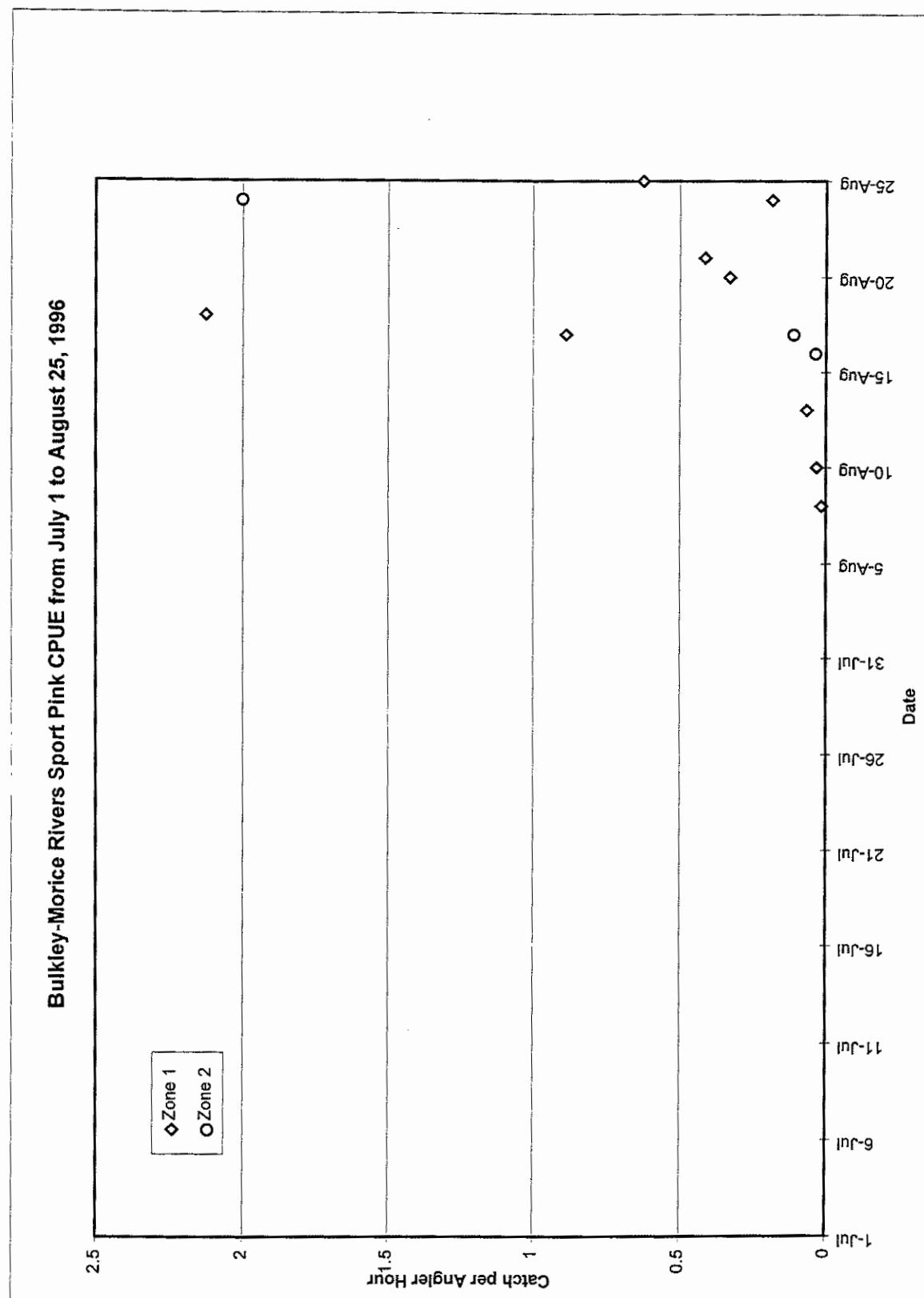


Figure 7.—Bulkley-Morice River Pink Chinook CPUE from July 1 to August 25, 1996

APPENDIX 1

Creel Survey Access Point Data Entry Codes and Procedures

CREEL SURVEY ACCESS POINT DATA FORM ENTRY CODES AND PROCEDURES

Do not include data from more than one shift on a form. It is ok to use more than one form per shift. Indicate page number and total pages for shift in the spaces provided at the upper right of the form. Use only pencil to make all entries.

Survey Name: Bulkley - Morice.

Year: 1996

SHIFT DATA

Sample Area Code: Zone 1 or 2 (and site name if applicable).

Sample Start Time: Shift start times at either 0530, 0600, or 1330 hrs.

Sample Date: Year, Month, Date (00/00/00)

Day Code: 1=Sunday

2=Monday

3=Tuesday

4=Wednesday

5=Thursday

6=Friday

7=Saturday

Weather Code: 0= No obvious effect on fishing activity

1= Possible adverse effect on fishing activity

2= Adverse effect on fishing effort

COUNT DATA

Count Start Time: Equals start of shift period (see schedule).

Count Stop Time: Equals end of shift period (see schedule).

Activity Count: Number of anglers exiting from access point (interviewed plus not interviewed).

Interview Count: Number of party interviews, by fishing mode from INTERVIEW DATA below.

Fishing Mode Code: 1=Boat

2=Shore

Comments: Water levels, turbidity, etc.

INTERVIEW DATA

Fishing Mode Code: as in COUNT DATA

Interview Sequence Code: Sequential number for each interview starting at 1 for each shift.

Interview Start Time: Time each interview is initiated on the 24-hour clock.

Fishing Start Time: Fishing Start Time is recorded as the time, on the 24-clock, when the interviewed party started fishing on the current day.

Trip Complete Code: 0=fishing trip not yet completed for the day.

1=fishing trip completed for the day.

Fishing Stop Time: If Trip Complete Code =1, then the Fishing Stop Time is recorded as the time, on the 24-clock, when the interviewed party stopped fishing for the day.

Person Count: Number of persons in the interviewed party.

Angler Count: Number of persons in the interviewed party who were actually fishing.

Rod Count: Number of rods used by interviewed party.

Fishing Method Code: 1=bottom bouncing

2=drift fishing (from boats only)

3=fly casting

8=other

Guide Code: 0=no

1=yes

Origin Code: 1=local (Bulkley Valley area)

2=B.C.

3=Canada

4=U.S.

5=Other

Location: Name of bar or river confluence (or nearest one)

Species Code: 1=chinook

2=coho

3=steelhead

4=pink

5=sockeye

6=chum

7=Cutthroat

8=Dolly Varden

9=Other(Specify in Comments)

Harvest Count: The number of fish of the species indicated by the Species Code that were caught and kept by the interviewed party.

Release Count: The number of fish of the species indicated by the Species Code that were caught and released by the interviewed party.

Sought Code: This code refers to the species indicated by the Species Code.

0=no

1=yes

BIOLOGICAL DATA

Collected for chinook, coho, and steelhead only.

Interview Sequence Number: As per INTERVIEW DATA.

Species: As per INTERVIEW DATA.

Length: Length measured in mm.

Length Code: FL=nose to fork length

SL=standard length

Sex: M=male

F=female

Sex Mat. Code: 0=immature

1=mature

Scale Book Number: This is the five-digit code preprinted on the scale book.

Scale number: 1-10 (Scales oriented five-down for each fish)

Adipose Marked: N=no

Y=yes

APPENDIX 2

Creesys Definition

CREESYS 3.3

REPORT ON CREEEL DEFINITION - 96/12/10

JOT-CR-96-BM...1

BULKLEY MORICE

Access (Unequal Prob.) - 32 STRATA (96/07/01 - 96/08/25)

PAGE 1

Survey Identification:

PROJECT-NAME _____ BULKLEY MORICE
PROJECT-LEADER _____ DOUG TALLMAN
MNR-UNIT-NAME _____ J.O. THOMAS AND ASSC.
MNR-UNIT-LOCATION _____ VANCOUVER

Waterbodies Identification:

LOCAL-NAME _____ BULKLEY-MORICE RIVER
LOCAL-NAME2 _____
LOCAL-NAME3 _____
LOCAL-NAME4 _____
LOCAL-NAME5 _____

Survey Definition:

SURVEY-START-DATE _____ 96/07/01
SURVEY-END-DATE _____ 96/08/25
FISHING-TYPE-CODE _____ 1 ...open-water (summer)
CONTACT-METHOD-CODE _____ 1 ...access

STRATUM-TIME-COUNT _____ 8
TIME-SAMPLE-FLAG _____ 0
STRATUM-SPACE-COUNT _____ 4
SPACE-SAMPLE-FLAG _____ 1
STRATUM-MODE-COUNT _____ 1
STRATUM-COUNT _____ 32

CIF-OPTIONS-FLAG _____ 0
CIF-MEASURE-FLAG _____ 0
SPECIES-CODES _____ 001 002 003 004 005 006 007 008 009 010

Creel Definition Form (CDF):.....JOT-CR-96-BM...1
PROJECT-NAME BULKLEY MORICE
PROJECT-LEADER DOUG TALLMAN
MNR-UNIT-NAME J.O. THOMAS AND ASSC.
MNR-UNIT-LOCATION VANCOUVER

Waterbodies Identification: (Use WIP form to supply details)

LOCAL-NAME BULKLEY-MORICE RIVER
LOCAL-NAME2 _____
LOCAL-NAME3 _____
LOCAL-NAME4 _____
LOCAL-NAMES _____

Survey Definition:

SURVEY-START-DATE	<u>96/07/01</u>	SURVEY-END-DATE	<u>96/08/25</u>
FISHING-TYPE-CODE	<u>1</u>	CONTACT-METHOD-CODE	<u>1</u>
STRATUM-TIME-COUNT	<u>8</u>	TIME-SAMPLE-FLAG	<u>0</u>
STRATUM-SPACE-COUNT	<u>4</u>	SPACE-SAMPLE-FLAG	<u>1</u>
STRATUM-MODE-COUNT	<u>1</u>	STRATUM-COUNT	<u>32</u>
CIF-OPTIONS-FLAG	<u>0</u>	CIF-MEASURE-FLAG	<u>0</u>
SPECIES-CODES	<u>001 002 003 004 005 006 007 008 009 010</u>		

SEASONS (SDF1A):.....JOT-CR-96-BM...1 No. of Pages = 1

ENTRY#	SEASON CODE	SEASON NAME	SEASON START-DATE	SEASON END-DATE
Page 1				
00001	1	PERIOD 1	96/07/01	96/08/05
00002	2	PERIOD 2	96/08/06	96/08/25
END				

DAYTYPES (SDF1B):.....JOT-CR-96-BM...1 No. of Pages = 1

ENTRY#	SEASON CODES	DAYTYPE CODE	DAYTYPE NAME	DAY-CODES
Page 1				
00001	1	1	WEEKDAY	23456
00002	1	2	WEEKEND	17
00003	2	1	WEEKDAY	23456
00004	2	2	WEEKEND	17
END				

DAYTYPE EXCEPTIONS (SDF1C):..JOT-CR-96-BM...1 No. of Pages = 1

ENTRY#	EXCEPTION DATE	DAYTYPE CODE
Page 1		
00001	96/07/01	2
00002	96/08/05	2
END		

PERIODS (SDF1D):.....JOT-CR-96-BM...1 No. of Pages = 1

ENT SM DTPPERIOD.... WT:----- ACTIVITY EXPECTATIONS -----
CD CD START END PL: (To be entered only if WEIGHT-FLAG = 1)

Page 1

1	1	01	1	05-00	13-30	0
2	1	01	2	13-30	22-00	0
3	1	02	1	05-00	13-30	0
4	1	02	2	13-30	22-00	0
5	2	01	3	06-00	13-30	0
6	2	01	4	13-30	21-00	0
7	2	02	3	06-00	13-30	0
8	2	02	4	13-30	21-00	0

END

STRATUM SPACES (SDF2):.....JOT-CR-96-BM...1 No. of Pages = 1

ENTRY# SPACE SPACE AREA :--- SAMPLE AREA CODES --: WEIGHT
ENTRY# CODE NAME SIZE COUNT :--(ACTIVITY EXPCTNS)----: FLAG

Page 1

00001	10	ZN1-PERD1	2	10 11	1
			20 80		
00002	20	ZN1-PERD2	3	20 21 22	1
			70 15 15		
00003	30	ZN2-PERD1	3	30 31 32	1
			50 40 10		
00004	40	ZN2-PERD2	4	40 41 42 43	1
			25 20 25 30		

END

FISHING MODES (SDF3):.....JOT-CR-96-BM...1 No. of Pages = 1

ENTRY# MODE MODE ACTVTY INTRVW CHECK
ENTRY# CODE NAME UNIT UNIT CT-FLAG

Page 1

00001	1	GENERAL	1	2	0
-------	---	---------	---	---	---

END

96/12/10

REPORT ON CREEL DEFINITION: JOT-CR-96-BM...1

Temporal Strata: JOT-CR-96-BM...1

SEASON	DAYTYPE	....PERIODS....	WEIGHT	PERIOD	STRATUM
CODE	CODE	CODE START END	FLAG	DURATN	SIZE
1	1	1 05-00 13-30	0	8.50	24
		2 13-30 22-00	0	8.50	24
1	2	1 05-00 13-30	0	8.50	12
		2 13-30 22-00	0	8.50	12
2	1	3 06-00 13-30	0	7.50	14
		4 13-30 21-00	0	7.50	14
2	2	3 06-00 13-30	0	7.50	6
		4 13-30 21-00	0	7.50	6

Spatial Strata: JOT-CR-96-BM...1

.....STRATUM.....			SAMPLE		
SPACE	SPACE	SPACE	AREA	...SAMPLE-AREA-CODES.....	WEIGHT
CODE	NAME	SIZE	COUNT	...(ACTIVITY-EXPECTNS)....	FLAG
10	ZN1-PERD1	2	10 11 20 80		1
20	ZN1-PERD2	3	20 21 22 70 15 15		1
30	ZN2-PERD1	3	30 31 32 50 40 10		1
40	ZN2-PERD2	4	40 41 42 43 25 20 25 30		1

Spatial Expansion Table:

00001	10	10	5.000
00002	11	10	1.250
00003	20	20	1.428
00004	21	20	6.666
00005	22	20	6.666
00006	30	30	2.000
00007	31	30	2.500
00008	32	30	10.000
00009	40	40	4.000
00010	41	40	5.000
00011	42	40	4.000
00012	43	40	3.333

Mode Strata: JOT-CR-96-BM...1

FISHING MODE CODE	FISHING MODE NAME	ACTIVITY UNIT CODE	INTERVIEW UNIT CODE	CHECK COUNT FLAG
1	GENERAL	1	2	0

Calender file - TB\$DATE: JOT-CR-96-BM...1

SAMPLE DATE	DAY CODE	SEASON CODE	DAYTYPE CODE	STRATUM SIZE
00001	96/07/01	2	1	2
00002	96/07/02	3	1	24
00003	96/07/03	4	1	24
00004	96/07/04	5	1	24
00005	96/07/05	6	1	24
00006	96/07/06	7	1	2
00007	96/07/07	1	1	2
00008	96/07/08	2	1	24
00009	96/07/09	3	1	24
00010	96/07/10	4	1	24
00011	96/07/11	5	1	1
00012	96/07/12	6	1	1
00013	96/07/13	7	1	2
00014	96/07/14	1	1	2
00015	96/07/15	2	1	1
00016	96/07/16	3	1	1
00017	96/07/17	4	1	1
00018	96/07/18	5	1	1
00019	96/07/19	6	1	1
00020	96/07/20	7	1	2
00021	96/07/21	1	1	2
00022	96/07/22	2	1	1
00023	96/07/23	3	1	1
00024	96/07/24	4	1	1
00025	96/07/25	5	1	1
00026	96/07/26	6	1	1
00027	96/07/27	7	1	2
00028	96/07/28	1	1	2
00029	96/07/29	2	1	1
00030	96/07/30	3	1	1
00031	96/07/31	4	1	1
00032	96/08/01	5	1	1
00033	96/08/02	6	1	1
00034	96/08/03	7	1	2
00035	96/08/04	1	1	2
00036	96/08/05	2	1	2
00037	96/08/06	3	2	1
00038	96/08/07	4	2	1
00039	96/08/08	5	2	1
00040	96/08/09	6	2	1
00041	96/08/10	7	2	2
00042	96/08/11	1	2	2
00043	96/08/12	2	2	1
00044	96/08/13	3	2	1
00045	96/08/14	4	2	1
00046	96/08/15	5	2	1
00047	96/08/16	6	2	1
00048	96/08/17	7	2	2
00049	96/08/18	1	2	2
00050	96/08/19	2	2	1
00051	96/08/20	3	2	1
00052	96/08/21	4	2	1
00053	96/08/22	5	2	1
00054	96/08/23	6	2	1
00055	96/08/24	7	2	2
00056	96/08/25	1	2	2

Status of DATA/DEF:

JOT-CR-96-BM...1

FORM#	FORM-NAME	# OF RECORDS	STATUS
1	Creel Definition (CDP)	1	+
2	Seasons (SDP1A)	2	+
3	Daytypes (SDP1B)	4	+
4	Exception Dates (SDP1C)	2	+
5	Periods (SDP1D)	8	+
6	Spaces (SDP2)	4	+
7	Modes (SDP3)	1	+

APPENDIX 3

Creesys Report on Samples

CREESYS 3.3

REPORT ON SAMPLES - 96/12/10

JOT-CR-96-BM...1

BULKLEY MORICE

Access (Unequal Prob.) - 32 STRATA (96/07/01 - 96/08/25)

STRATUM is: SEASON...1 SPACE...10 MODE...1
 DAYTYPE..1
 PERIOD...1

PAGE 1

EFFORT-ACTIVITY Totals:

SAMPLE	OBSERVED				ESTIMATED				NO.	MEAN	NO.	MEAN	NO.	MEAN	
	EFFORT		EFFORT		...EFFORT...		...EFFORT...								
	DATE	AG-HR	RD-HR	AG-HR	SE	RD-HR	SE	CTS	UNIT	/CT	ATY:CT	ITVS	/ITV	/ITV	
96/07/04	:	4.0	4.0	5.0	-	5.0	-	:	I	1	2.0	2.0	1	2.00	1.99
96/07/08	:	7.5	7.5	9.4	-	9.4	-	:	I	1	4.0	4.0	3	1.33	1.33
96/07/12	:	16.3	16.3	24.5	-	24.5	-	:	I	1	12.0	12.0	6	1.33	1.33
96/07/16	:	43.1	43.1	53.9	-	53.9	-	:	I	1	14.0	14.0	9	1.44	1.44

ANGLERS1 Totals:

SAMPLE	FISHING METHOD								GUIDE		ORIGIN					VISITOR-TYPE											
	DATE	1	2	3	4	5	6	7	8	ML:	0	1	ML:	1	2	3	4	5	ML:	1	2	3	4	5	6	7	8	ML:
07/04	0	0	0	0	0	0	0	2	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
07/08	0	0	0	0	0	0	0	4	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
07/12	8	0	0	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
07/16	13	0	0	0	0	0	0	0	0	13	0	0	9	3	1	0	0	0	0	0	0	0	0	0	0	0	13

CATCH (ALL ANGLERS) Totals:

SAMPLE	SPEC	OBSERVED				ESTIMATED				....CUE....	....CATCH...	....HRVST...	....EFFORT...	....CUE....				
		DATE	CODE	CT	CT	CT	AG-HR	RD-HR	/AG-HR /RD-HR		CT	SE	CT	SE	AG-HR	RD-HR	/AG-HR /RD-HR	
07/04	001	07/04	001	2	0	0	4.0	4.0	0.000	0.000	0.0	-	0.0	-	5.0	5.0	0.000	0.000
07/12	001	07/12	001	8	1	1	16.3	16.3	0.061	0.061	1.5	-	1.5	-	24.5	24.5	0.061	0.061
07/16	001	07/16	001	13	3	3	43.1	43.1	0.070	0.070	3.8	-	3.8	-	53.9	53.9	0.070	0.070
07/08	009	07/08	009	4	1	1	7.5	7.5	0.133	0.133	1.2	-	1.2	-	9.4	9.4	0.132	0.132
07/12	009	07/12	009	8	0	0	16.3	16.3	0.000	0.000	0.0	-	0.0	-	24.5	24.5	0.000	0.000
07/16	009	07/16	009	13	0	0	43.1	43.1	0.000	0.000	0.0	-	0.0	-	53.9	53.9	0.000	0.000

CREESYS 3.3

REPORT ON SAMPLES - 96/12/10

JOT-CR-96-BM...1

BULKLEY MORICE

Access (Unequal Prob.) - 32 STRATA (96/07/01 - 96/08/25)

STRATUM is: SEASON...1 SPACE...30 MODE...1
 DAYTYPE..1
 PERIOD...1

PAGE 1

EFFORT-ACTIVITY Totals:

SAMPLE DATE	OBSERVED				ESTIMATED				NO. CTS	MEAN ATY UNIT /CT	NO. ITVS	MEAN ATY:CT	NO. ITV	MEAN ITV /ITV						
	EFFORT		EFFORT		...EFFORT...		...EFFORT...								OF	ATY	SAMPLE	OF	AGLRS	RODS
	AG-HR	RD-HR	AG-HR	SE	RD-HR	SE	AG-HR	RD-HR												
96/07/10	19.3	19.3	38.7	-	38.7	-	38.7	-	1	1	4.0	4.0	2	2.00	1.99					
96/07/17	17.0	17.0	34.0	-	34.0	-	34.0	-	1	1	3.0	3.0	2	1.50	1.49					
96/07/24	15.6	15.6	31.2	-	31.2	-	31.2	-	1	1	4.0	4.0	2	2.00	1.99					

ANGLERS1 Totals:

SAMPLE DATE	FISHING METHOD								GUIDE		ORIGIN					VISITOR-TYPE											
	1	2	3	4	5	6	7	8	ML:	0	1	ML:	1	2	3	4	5	ML:	1	2	3	4	5	6	7	8	ML:
07/10	0	0	0	0	0	0	0	4	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
07/17	0	0	0	0	0	0	0	3	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
07/24	0	0	0	0	0	0	0	1	3	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4

CATCH (ALL ANGLERS) Totals:

SAMPLE DATE	OBSERVED								ESTIMATED							
	SPEC	AGLR	CATCH	HRVST	...EFFORT...	CUE....	CATCH...	HRVST....	EFFORT...	CUE....	
	CODE	CT	CT	CT	AG-HR	RD-HR	/AG-HR /RD-HR	CT	SE	CT	SE	AG-HR	RD-HR	/AG-HR /RD-HR		
07/10	001	4	0	0	19.3	19.3	0.000 0.000	0.0	-	0.0	-	38.7	38.7	0.000 0.000		
07/17	001	3	0	0	17.0	17.0	0.000 0.000	0.0	-	0.0	-	34.0	34.0	0.000 0.000		
07/24	001	4	0	0	15.6	15.6	0.000 0.000	0.0	-	0.0	-	31.2	31.2	0.000 0.000		
07/10	008	4	0	0	19.3	19.3	0.000 0.000	0.0	-	0.0	-	38.7	38.7	0.000 0.000		

CREESYS 3.3

REPORT ON SAMPLES - 96/12/10

JOT-CR-96-BM...1

BULKLEY MORICE

Access (Unequal Prob.) - 32 STRATA (96/07/01 - 96/08/25)

STRATUM is: SEASON...1 SPACE...10 MODE...1
 DAYTYPE..1
 PERIOD...2

PAGE 1

EFFORT-ACTIVITY Totals:

SAMPLE DATE	OBSERVED				ESTIMATED				NO. CTS	MEAN ATY /CT	NO. ATY:CT	MEAN SAMPLE ITVS	NO. ITV	MEAN AGLRS /ITV	MEAN RODS /ITV
	EFFORT	EFFORT	...EFFORT...	...EFFORT...	OF	ATY	ATY	SAMPLE							
	AG-HR	RD-HR	AG-HR	SE	RD-HR	SE	/CT	ITVS							
96/07/10	14.4	14.4	18.0	-	18.0	-	1	1	7.0	7.0	6	1.17	1.16		
96/07/11	31.7	31.7	66.1	-	66.1	-	1	1	25.0	25.0	12	1.25	1.24		
96/07/22	30.5	30.5	169.4	-	169.4	-	1	1	10.0	10.0	2	4.50	4.48		
96/07/30	68.1	68.1	96.7	-	96.7	-	1	1	25.0	25.0	18	1.17	1.16		

ANGLERS1 Totals:

SAMPLE DATE	FISHING METHOD								GUIDE				ORIGIN								VISITOR-TYPE							
	1	2	3	4	5	6	7	8	ML:	0	1	ML:	1	2	3	4	5	ML:	1	2	3	4	5	6	7	8	ML:	
07/10	7	0	0	0	0	0	0	0	7	0	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	7		
07/11	15	0	0	0	0	0	0	0	15	0	0	12	1	2	0	0	0	0	0	0	0	0	0	0	0	15		
07/22	5	0	0	0	0	0	4	0	9	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9		
07/30	18	0	0	0	0	0	0	3	0	21	0	0	17	3	0	1	0	0	0	0	0	0	0	0	0	21		

CATCH (ALL ANGLERS) Totals:

SAMPLE DATE	OBSERVED								ESTIMATED								
	SPEC	AGLR	CATCH	HRVST	...EFFORT...CUE....CATCH...HRVST...EFFORT...CUE....	CT	CT	CT	SE	AG-HR	RD-HR	/AG-HR
07/11	001	15	2	2	31.7	31.7	0.063	0.063	4.2	-	4.2	-	66.1	66.1	0.063	0.063	
07/22	001	9	3	3	30.5	30.5	0.098	0.098	16.7	-	16.7	-	169.4	169.4	0.098	0.098	
07/30	001	21	25	15	68.1	68.1	0.367	0.367	35.5	-	21.3	-	96.7	96.7	0.367	0.367	
07/11	003	15	1	0	31.7	31.7	0.032	0.032	2.1	-	0.0	-	66.1	66.1	0.031	0.031	
07/10	008	7	1	1	14.4	14.4	0.070	0.070	1.2	-	1.2	-	18.0	18.0	0.069	0.069	
07/10	009	7	0	0	14.4	14.4	0.000	0.000	0.0	-	0.0	-	18.0	18.0	0.000	0.000	
07/11	009	15	0	0	31.7	31.7	0.000	0.000	0.0	-	0.0	-	66.1	66.1	0.000	0.000	
07/22	009	9	0	0	30.5	30.5	0.000	0.000	0.0	-	0.0	-	169.4	169.4	0.000	0.000	
07/30	009	21	0	0	68.1	68.1	0.000	0.000	0.0	-	0.0	-	96.7	96.7	0.000	0.000	

CREESYS 3.3

REPORT ON SAMPLES - 96/12/10

JOT-CR-96-BM...1

BULKLEY MORICE

Access (Unequal Prob.) - 32 STRATA (96/07/01 - 96/08/25)

STRATUM is: SEASON...1 SPACE...30 MODE...1
 DAYTYPE..1
 PERIOD...2

PAGE 1

EFFORT-ACTIVITY Totals:

SAMPLE	OBSERVED				ESTIMATED				NO.	MEAN	NO.	MEAN	NO.	MEAN	
	EFFORT		EFFORT		...EFFORT...		...EFFORT...								
	DATE	AG-HR	RD-HR	AG-HR	SE	RD-HR	SE	CTS	UNIT	/CT	ATY:CT	ITVS	/ITV	RODS	
96/07/08	:	19.5	19.5	48.7	-	48.7	-	:	1	1	4.0	4.0	2	2.00	1.99
96/07/11	:	7.4	7.4	30.7	-	30.7	-	:	1	1	5.0	5.0	2	1.50	1.49
96/07/18	:	70.0	70.0	175.0	-	175.0	-	:	1	1	18.0	18.0	7	2.43	2.42
96/07/31	:	43.2	43.2	86.4	-	86.4	-	:	1	1	10.0	10.0	5	2.00	1.99

ANGLERS1 Totals:

SAMPLE	FISHING METHOD								GUIDE		ORIGIN					VISITOR-TYPE											
	DATE	1	2	3	4	5	6	7	8	NL:	0	1	NL:	1	2	3	4	5	NL:	1	2	3	4	5	6	7	8	NL:
07/08	0	0	0	0	0	0	0	4	0	4	0	0	3	0	0	1	0	0	0	0	0	0	0	0	0	0	4
07/11	0	0	1	0	0	0	0	2	0	3	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	3
07/18	0	0	0	0	0	0	0	17	0	17	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	17
07/31	0	0	0	0	0	0	0	10	0	6	4	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	10

CATCH (ALL ANGLERS) Totals:

SAMPLE	SPEC	OBSERVED				ESTIMATED				....CUE....	....CATCH....	....HRVST....	....EFFORT...	....CUE....				
		DATE	CODE	CT	CT	CT	AG-HR	RD-HR	/AG-HR /RD-HR		CT	SE	CT	SE	AG-HR	RD-HR	/AG-HR /RD-HR	
07/08	001	07/08	001	4	2	0	19.5	19.5	0.103	0.103	5.0	-	0.0	-	48.7	48.7	0.103	0.103
07/18	001	07/18	001	17	0	0	70.0	70.0	0.000	0.000	0.0	-	0.0	-	175.0	175.0	0.000	0.000
07/31	001	07/31	001	10	3	3	43.2	43.2	0.069	0.069	6.0	-	6.0	-	86.4	86.4	0.069	0.069
07/08	008	07/08	008	4	2	2	19.5	19.5	0.103	0.103	5.0	-	5.0	-	48.7	48.7	0.103	0.103
07/11	008	07/11	008	3	1	1	7.4	7.4	0.136	0.136	4.2	-	4.2	-	30.7	30.7	0.136	0.136
07/11	009	07/11	009	3	1	1	7.4	7.4	0.136	0.136	4.2	-	4.2	-	30.7	30.7	0.136	0.136

CREESYS 3.3

REPORT ON SAMPLES - 96/12/10

JOT-CR-96-BM...1

BULKLEY MORICE

Access (Unequal Prob.) - 32 STRATA (96/07/01 - 96/08/25)

STRATUM is: SEASON...1 SPACE...10 MODE...1
 DAYTYPE..2
 PERIOD...1

PAGE 1

EFFORT-ACTIVITY Totals:

SAMPLE DATE	OBSERVED				ESTIMATED				NO. CTS	MEAN ATY/CT	NO. ITVS	MEAN AGLRS/ITV	MEAN RODS/ITV
	EFFORT		EFFORT		...EFFORT...		...EFFORT...						
	AG-HR	RD-HR	AG-HR	SE	RD-HR	SE	ATY	ATY:CT					
96/07/14	33.1	33.1	41.4	-	41.4	-	1	1	8.0	8.0	4	2.00	1.99
96/07/20	0.0	0.0	0.0	-	0.0	-	1	1	0.0	0.0	0	0.00	0.00
96/07/28	83.7	83.7	104.7	-	104.7	-	1	1	29.0	32.0	17	1.71	1.70
96/08/03	67.6	67.6	84.5	-	84.5	-	1	1	16.0	16.0	13	1.15	1.15

ANGLERS1 Totals:

SAMPLE DATE	FISHING METHOD								GUIDE		ORIGIN					VISITOR-TYPE											
	1	2	3	4	5	6	7	8	ML:	0	1	ML:	1	2	3	4	5	ML:	1	2	3	4	5	6	7	8	ML:
07/14	5	0	0	0	0	0	0	3	0	8	0	0	5	3	0	0	0	0	0	0	0	0	0	0	0	0	8
07/28	24	0	0	0	0	0	0	5	0	29	0	0	17	9	3	0	0	0	0	0	0	0	0	0	0	0	29
08/03	15	0	0	0	0	0	0	0	0	15	0	0	11	4	0	0	0	0	0	0	0	0	0	0	0	0	15

CATCH (ALL ANGLERS) Totals:

SAMPLE DATE	OBSERVED								ESTIMATED							
	SPEC CODE	AGLR CT	CATCH CT	HRVST CT	...EFFORT...		....CUE....		...CATCH...		....HRVST...		....EFFORT...		....CUE....	
				AG-HR	RD-HR	/AG-HR	/RD-HR	CT	SE	CT	SE	AG-HR	RD-HR	/AG-HR	/RD-HR	
07/28	001	29	14	12	83.7	83.7	0.167	0.167	17.5	-	15.0	-	104.7	104.7	0.167	0.167
08/03	001	15	7	4	67.6	67.6	0.104	0.104	8.7	-	5.0	-	84.5	84.5	0.103	0.103
07/28	005	29	1	0	83.7	83.7	0.012	0.012	1.3	-	0.0	-	104.7	104.7	0.012	0.012
07/14	009	8	0	0	33.1	33.1	0.000	0.000	0.0	-	0.0	-	41.4	41.4	0.000	0.000
07/28	009	29	2	0	83.7	83.7	0.024	0.024	2.5	-	0.0	-	104.7	104.7	0.024	0.024
08/03	009	15	1	1	67.6	67.6	0.015	0.015	1.2	-	1.2	-	84.5	84.5	0.015	0.015

CREESYS 3.3

REPORT ON SAMPLES - 96/12/10

JOT-CR-96-BM...1

BULKLEY MORICE

Access (Unequal Prob.) - 32 STRATA (96/07/01 - 96/08/25)

STRATUM is: SEASON...1 SPACE...30 MODE...1
 DAYTYPE..2
 PERIOD...1

PAGE 1

EFFORT-ACTIVITY Totals:

SAMPLE	OBSERVED				ESTIMATED				NO.	MEAN	NO.	MEAN	MEAN			
	DATE	EFFORT	EFFORT	AG-HR	RD-HR	AG-HR	SE	RD-HR	SE	OF CTS	ATY /CT	SAMPLE ATY:CT	OF ITVS	AGLRS /ITV	RODS /ITV	
96/07/06	:	22.6	22.6	52.7	-	52.7	-	-	-	1	1	7.0	7.0	3	2.00	1.99
96/07/14	:	13.7	13.7	43.8	-	43.8	-	-	-	1	1	8.0	8.0	3	1.67	1.66
96/07/21	:	10.8	10.8	27.1	-	27.1	-	-	-	1	1	4.0	4.0	2	2.00	1.99
96/08/03	:	0.0	0.0	0.0	-	0.0	-	-	-	1	1	0.0	0.0	0	0.00	0.00

ANGLERS1 Totals:

SAMPLE	FISHING METHOD								GUIDE				ORIGIN					VISITOR-TYPE									
	DATE	1	2	3	4	5	6	7	8	ML:	0	1	ML:	1	2	3	4	5	ML:	1	2	3	4	5	6	7	8	ML:
07/06	0	0	0	0	0	0	0	6	0	6	0	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	6
07/14	1	0	0	0	0	0	0	4	0	5	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
07/21	0	0	0	0	0	0	0	4	0	4	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	4

CATCH (ALL ANGLERS) Totals:

SAMPLE	SPEC	AGLR	CATCH	HRVST	OBSERVED				ESTIMATED										
					DATE	CODE	CT	CT	CT	AG-HR	RD-HR	/AG-HR /RD-HR	CT	SE	CT	SE	AG-HR	RD-HR	/AG-HR /RD-HR
07/06	001	6	0	0	22.6	22.6	0.000	0.000	0.0	-	0.0	-	52.7	52.7	0.000	0.000			
07/14	001	5	1	1	13.7	13.7	0.073	0.073	3.2	-	3.2	-	43.8	43.8	0.073	0.073			
07/21	001	4	0	0	10.8	10.8	0.000	0.000	0.0	-	0.0	-	27.1	27.1	0.000	0.000			

CREESYS 3.3

REPORT ON SAMPLES - 96/12/10

JOT-CR-96-BM...I

BULKLEY MORICE

Access (Unequal Prob.) - 32 STRATA (96/07/01 - 96/08/25)

STRATUM is: SEASON...1 SPACE...10 MODE...1
 DAYTYPE..2
 PERIOD...2

PAGE 1

EFFORT-ACTIVITY Totals:

SAMPLE DATE	OBSERVED				ESTIMATED				NO. CTS	MEAN ATY / CT	NO. ITVS	MEAN AGLRS / ITV	MEAN RODS / ITV
	EFFORT		...EFFORT....		EFFORT		...EFFORT....						
	AG-HR	RD-HR	AG-HR	SE	RD-HR	SE	ATY	ATY:CT					
96/07/13	11.5	11.5	15.4	-	15.4	-	1	1	15.0	15.0	8	1.12	1.12
96/07/21	9.0	9.0	45.0	-	45.0	-	1	1	4.0	4.0	1	4.00	3.98
96/08/04	31.5	31.5	157.7	-	157.7	-	1	1	11.0	16.0	5	2.00	1.99

ANGLERS1 Totals:

SAMPLE DATE	FISHING METHOD								GUIDE		ORIGIN						VISITOR-TYPE									
	1	2	3	4	5	6	7	8	ML:	0	1	ML:	1	2	3	4	5	ML:	1	2	3	4	5	6	7	8	ML:
07/13	9	0	0	0	0	0	0	0	9	0	0	5	4	0	0	0	0	0	0	0	0	0	0	0	0	9
07/21	0	0	0	0	0	0	4	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
08/04	7	0	0	0	0	0	0	3	0	10	0	0	8	1	1	0	0	0	0	0	0	0	0	0	0	10

CATCH (ALL ANGLERS) Totals:

SAMPLE DATE	OBSERVED								ESTIMATED							
	SPEC	AGLR	CATCH	HRVST	...EFFORT...		.....CUE.....		....CATCH...		....HRVST....		....EFFORT...		.....CUE.....	
	CODE	CT	CT	CT	AG-HR	RD-HR	/AG-HR /RD-HR	CT	SE	CT	SE	AG-HR	RD-HR	/AG-HR /RD-HR		
08/04	001	10	1	1	31.5	31.5	0.032	0.032	5.0	-	5.0	-	157.7	157.7	0.032	0.032
07/13	009	9	0	0	11.5	11.5	0.000	0.000	0.0	-	0.0	-	15.4	15.4	0.000	0.000
07/21	009	4	0	0	9.0	9.0	0.000	0.000	0.0	-	0.0	-	45.0	45.0	0.000	0.000
08/04	009	10	0	0	31.5	31.5	0.000	0.000	0.0	-	0.0	-	157.7	157.7	0.000	0.000

CREESTS 3.3

REPORT ON SAMPLES - 96/12/10

JOT-CR-96-BM...1

BULKLEY MORICE

Access (Unequal Prob.) - 32 STRATA (96/07/01 - 96/08/25)

STRATUM is: SEASON...1 SPACE...30 MODE...1
 DAYTYPE..2
 PERIOD...2

PAGE 1

EFFORT-ACTIVITY Totals:

SAMPLE DATE	OBSERVED				ESTIMATED				NO. CTS	MEAN ATY UNIT	NO. ATY:CT	MEAN ITVS	NO. ITV	MEAN AGLRS RODS /ITV
	EFFORT		EFFORT		EFFORT		EFFORT							
	AG-HR	RD-HR	AG-HR	SE	RD-HR	SE	/CT	ATY:CT						
96/07/07	2.7	2.7	5.3	-	5.3	-	1	1	1.0	1.0	1	1.00	0.99	
96/07/27	40.1	40.1	80.3	-	80.3	-	1	1	10.0	12.0	6	1.67	1.66	
96/07/28	89.0	89.0	222.4	-	222.4	-	1	1	21.0	25.0	9	2.33	2.33	
96/08/04	94.8	94.8	948.1	-	948.1	-	1	1	20.0	20.0	11	1.82	1.81	

ANGLERS1 Totals:

SAMPLE DATE	FISHING METHOD								GUIDE			ORIGIN						VISITOR-TYPE								
	1	2	3	4	5	6	7	8	ML:	0	1	ML:	1	2	3	4	5	ML:	1	2	3	4	5	6	7	8	ML:
07/07	0	0	0	0	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07/27	0	0	0	0	0	0	0	10	0	10	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	10
07/28	0	0	2	0	0	0	0	19	0	19	2	0	21	0	0	0	0	0	0	0	0	0	0	0	0	21
08/04	0	0	0	0	0	0	0	20	0	20	0	0	7	13	0	0	0	0	0	0	0	0	0	0	0	20

CATCH (ALL ANGLERS) Totals:

SAMPLE DATE	OBSERVED								ESTIMATED							
	SPEC	AGLR	CATCH	HRVST	EFFORT...		CUE....		CATCH...		HRVST....		EFFORT...		CUE....	
	CODE	CT	CT	CT	AG-HR	RD-HR	/AG-HR /RD-HR	CT	SE	CT	SE	AG-HR	RD-HR	/AG-HR /RD-HR		
07/07	001	1	0	0	2.7	2.7	0.000	0.000	0.0	-	0.0	-	5.3	5.3	0.000	0.000
07/27	001	10	3	2	40.1	40.1	0.075	0.075	6.0	-	4.0	-	80.3	80.3	0.075	0.075
07/28	001	21	7	5	89.0	89.0	0.079	0.079	17.5	-	12.5	-	222.4	222.4	0.079	0.079
08/04	001	20	1	1	94.8	94.8	0.011	0.011	10.0	-	10.0	-	948.1	948.1	0.011	0.011
07/28	008	21	2	0	89.0	89.0	0.022	0.022	5.0	-	0.0	-	222.4	222.4	0.022	0.022

CREESYS 3.3

REPORT ON SAMPLES - 96/12/10

JOT-CR-96-BM...1

BULKLEY MORICE

Access (Unequal Prob.) - 32 STRATA (96/07/01 - 96/08/25)

STRATUM is: SEASON...2 SPACE...20 MODE...1
 DAYTYPE..1
 PERIOD...3

PAGE 1

EFFORT-ACTIVITY Totals:

SAMPLE DATE	OBSERVED				ESTIMATED				NO. CTS	MEAN ATY/CT	NO. ITVS	MEAN AGLRS /ITV	MEAN RODS /ITV						
	EFFORT		EFFORT		EFFORT		EFFORT												
	AG-HR	RD-HR	AG-HR	SE	RD-HR	SE	/CT	ATY:CT											
96/08/14	0.7	0.7	4.8	-	4.8	-	1	1	2.0	2.0	1	2.00	1.99						
96/08/21	4.8	4.8	6.8	-	6.8	-	1	1	2.0	2.0	1	2.00	1.99						

ANGLERS1 Totals:

SAMPLE DATE	FISHING METHOD								GUIDE		ORIGIN					VISITOR-TYPE											
	1	2	3	4	5	6	7	8	ML:	0	1	ML:	1	2	3	4	5	ML:	1	2	3	4	5	6	7	8	ML:
08/14	0	0	0	0	0	0	0	2	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
08/21	2	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2

CATCH (ALL ANGLERS) Totals:

SAMPLE DATE	SPEC CODE	OBSERVED				ESTIMATED											
		AGLR CT	CATCH CT	HRVST CT	...EFFORT...	....CUE....	....CATCH...	....HRVST....	....EFFORT...	....CUE....							
		AG-HR	RD-HR	/AG-HR /RD-HR			CT	SE	CT	SE	AG-HR	RD-HR	/AG-HR /RD-HR				
08/21	001	2	1	1	4.8	4.8	0.207	0.207	1.4	-	1.4	-	6.8	6.8	0.206	0.206	
08/21	004	2	2	0	4.8	4.8	0.415	0.415	2.8	-	0.0	-	6.8	6.8	0.414	0.414	
08/14	009	2	0	0	0.7	0.7	0.000	0.000	0.0	-	0.0	-	4.8	4.8	0.000	0.000	

CREESYS 3.3

REPORT ON SAMPLES - 96/12/10

JOT-CR-96-BM...1

BULKLEY MORICE

Access (Unequal Prob.) - 32 STRATA (96/07/01 - 96/08/25)

STRATUM is: SEASON...2 SPACE...40 MODE...1
 DAYTYPE..1
 PERIOD...3

PAGE 1

EFFORT-ACTIVITY Totals:

SAMPLE DATE	OBSERVED				ESTIMATED				NO. CTS	MEAN ATY/CT	NO. ITVS	MEAN AGLRS/ITV	MEAN RODS/ITV
	EFFORT		EFFORT		EFFORT		EFFORT						
	AG-HR	RD-HR	AG-HR	SE	RD-HR	SE	ATY	UNIT					
96/08/08	3.1	3.1	15.7	-	15.7	-	1	1	1.0	1.0	1	1.00	0.99
96/08/12	0.0	0.0	0.0	-	0.0	-	1	1	0.0	0.0	0	0.00	0.00
96/08/13	6.3	6.3	25.0	-	25.0	-	1	1	1.0	1.0	1	1.00	0.99
96/08/15	4.4	4.4	14.8	-	14.8	-	1	1	4.0	4.0	2	2.00	1.99

ANGLERSI Totals:

SAMPLE DATE	FISHING METHOD								GUIDE			ORIGIN						VISITOR-TYPE								
	1	2	3	4	5	6	7	8	ML:	0	1	ML:	1	2	3	4	5	ML:	1	2	3	4	5	6	7	8	ML:
08/08	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
08/13	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
08/15	0	0	2	0	0	0	0	2	0	0	4	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4

CATCH (ALL ANGLERS) Totals:

SAMPLE DATE	OBSERVED								ESTIMATED							
	SPEC	AGLR	CATCH	HRVST	...EFFORT...		....CUE....		....CATCH...		....HRVST....		....EFFORT...		....CUE....	
	CODE	CT	CT	CT	AG-HR	RD-HR	/AG-HR /RD-HR	CT	SE	CT	SE	AG-HR	RD-HR	/AG-HR /RD-HR		
08/08	001	1	0	0	3.1	3.1	0.000	0.000	0.0	-	0.0	-	15.7	15.7	0.000	0.000
08/13	001	1	0	0	6.3	6.3	0.000	0.000	0.0	-	0.0	-	25.0	25.0	0.000	0.000
08/15	001	4	0	0	4.4	4.4	0.000	0.000	0.0	-	0.0	-	14.8	14.8	0.000	0.000

CREESYS 3.3

REPORT ON SAMPLES - 96/12/10

JOT-CR-95-BM...1

BULKLEY MORICE

Access (Unequal Prob.) - 32 STRATA (96/07/01 - 96/08/25)

STRATUM is: SEASON...2 SPACE...20 MODE...L
DAYTYPE..1
PERIOD...4

PAGE 1

EFFORT-ACTIVITY Totals:

OBSERVED				ESTIMATED										
SAMPLE	EFFORT	EFFORT	...EFFORT...	EFFORT	EFFORT	...EFFORT...		NO.	ATY	ATY	SAMPLE	NO.	MEAN	MEAN
DATE	AG-HR	RD-HR	AG-HR	SE	RD-HR	SE		CTS	UNIT	/CT	ATY:CT	ITVS	AGLRS	RODS
													/ITV	/ITV
96/08/06	62.9	62.9	99.3	-	99.3	-	:	1	1	30.0	30.0	16	1.50	1.49
96/08/08	64.1	64.1	118.3	-	118.3	-	:	1	1	26.0	26.0	15	1.33	1.33
96/08/09	6.9	6.9	46.0	-	46.0	-	:	1	1	6.0	6.0	4	1.50	1.49
96/08/13	75.5	75.5	119.1	-	119.1	-	:	1	1	20.0	20.0	10	1.80	1.79
96/08/15	58.7	58.7	83.3	-	83.3	-	:	1	1	12.0	12.0	6	2.00	1.99
96/08/20	69.7	69.7	534.4	-	534.4	-	:	1	1	38.0	38.0	13	2.23	2.22

ANGLERSI Totals:

CREESYS 3.3

REPORT ON SAMPLES - 96/12/10

JOT-CR-96-BM...1

BULKLEY MORICE

Access (Unequal Prob.) - 32 STRATA (96/07/01 - 96/08/25)

STRATUM is: SEASON...2 SPACE...20 MODE...1
 DAYTYPE..1
 PERIOD...4

PAGE 2

CATCH (ALL ANGLERS) Totals:

SAMPLE DATE	SPEC CODE	AGLR CT	OBSERVED						ESTIMATED							
			CATCH CT	HRVST CT	...EFFORT... AG-HRCUE.... RD-HR	...CATCH... /AG-HRHRVST... /RD-HR	...EFFORT... AG-HRCUE.... RD-HR	CT	SE	CT	SE	AG-HR	RD-HR
08/06	001	24	12	12	62.9	62.9	0.191	0.191	18.9	-	18.9	-	99.3	99.3	0.191	0.191
08/08	001	20	10	8	64.1	64.1	0.156	0.156	18.5	-	14.8	-	118.3	118.3	0.156	0.156
08/13	001	18	10	7	75.5	75.5	0.133	0.133	15.8	-	11.0	-	119.1	119.1	0.132	0.132
08/15	001	12	3	3	58.7	58.7	0.051	0.051	4.3	-	4.3	-	83.3	83.3	0.051	0.051
08/08	004	20	1	0	64.1	64.1	0.016	0.016	1.8	-	0.0	-	118.3	118.3	0.016	0.016
08/13	004	18	5	2	75.5	75.5	0.066	0.066	7.9	-	3.2	-	119.1	119.1	0.066	0.066
08/20	004	29	23	8	69.7	69.7	0.330	0.330	176.4	-	61.4	-	534.4	534.4	0.330	0.330
08/13	008	18	1	1	75.5	75.5	0.013	0.013	1.6	-	1.6	-	119.1	119.1	0.013	0.013
08/06	009	24	0	0	62.9	62.9	0.000	0.000	0.0	-	0.0	-	99.3	99.3	0.000	0.000
08/08	009	20	1	0	64.1	64.1	0.016	0.016	1.8	-	0.0	-	118.3	118.3	0.016	0.016
08/09	009	6	1	0	6.9	6.9	0.145	0.145	6.7	-	0.0	-	46.0	46.0	0.145	0.145
08/13	009	18	0	0	75.5	75.5	0.000	0.000	0.0	-	0.0	-	119.1	119.1	0.000	0.000
08/15	009	12	0	0	58.7	58.7	0.000	0.000	0.0	-	0.0	-	83.3	83.3	0.000	0.000
08/20	009	29	0	0	69.7	69.7	0.000	0.000	0.0	-	0.0	-	534.4	534.4	0.000	0.000

CREESTS 3.3

REPORT ON SAMPLES - 96/12/10

JOT-CR-96-BM...1

BULKLEY MORICE

Access (Unequal Prob.) - 32 STRATA (96/07/01 - 96/08/25)

STRATUM is: SEASON...2 SPACE...40 MODE...1
 DAYTYPE..1
 PERIOD...4

PAGE 1

EFFORT-ACTIVITY Totals:

SAMPLE DATE	OBSERVED				ESTIMATED				NO. CTS	MEAN ATY /CT	NO. ITVS	MEAN AGLRS /ITV	MEAN RODS /ITV
	EFFORT		EFFORT		...EFFORT....		...EFFORT....						
	AG-HR	RD-HR	AG-HR	SE	RD-HR	SE	ATY	ATY:CT					
96/08/06	11.2	11.2	44.8	-	44.8	-	1	1	5.0	5.0	4	1.25	1.24
96/08/07	67.7	67.7	225.3	-	225.3	-	1	1	23.0	23.0	9	2.56	2.55
96/08/16	27.9	27.9	111.5	-	111.5	-	1	1	21.0	21.0	11	1.91	1.90

ANGLERS1 Totals:

SAMPLE DATE	FISHING METHOD								GUIDE			ORIGIN					VISITOR-TYPE											
	1	2	3	4	5	6	7	8	ML:	0	1	ML:	1	2	3	4	5	ML:	1	2	3	4	5	6	7	8	ML:	
08/06	0	0	0	0	0	0	0	5	0	0	5	0	0	1	2	0	0	2	0	0	0	0	0	0	0	0	0	5
08/07	0	0	0	0	0	0	0	23	0	0	23	0	0	22	1	0	0	0	0	0	0	0	0	0	0	0	0	23
08/16	0	0	0	0	0	0	0	21	0	0	21	0	0	20	1	0	0	0	0	0	0	0	0	0	0	0	0	21

CATCH (ALL ANGLERS) Totals:

SAMPLE DATE	SPEC CODE	OBSERVED				ESTIMATED										
		AGLR CT	CATCH CT	HRVST CT	...EFFORT... AG-HR	...EFFORT... RD-HR	....CUE.... /AG-HR	....CUE.... /RD-HR	....CATCH.... CT	....CATCH.... SE	....HRVST.... CT	....HRVST.... SE	....EFFORT... AG-HR	....EFFORT... RD-HR	....CUE.... /AG-HR	....CUE.... /RD-HR
08/06	001	5	1	0	11.2	11.2	0.089	0.089	4.0	-	0.0	-	44.8	44.8	0.089	0.089
08/07	001	23	0	0	67.7	67.7	0.000	0.000	0.0	-	0.0	-	225.3	225.3	0.000	0.000
08/16	001	21	0	0	27.9	27.9	0.000	0.000	0.0	-	0.0	-	111.5	111.5	0.000	0.000
08/06	002	5	1	0	11.2	11.2	0.089	0.089	4.0	-	0.0	-	44.8	44.8	0.089	0.089
08/16	003	21	0	0	27.9	27.9	0.000	0.000	0.0	-	0.0	-	111.5	111.5	0.000	0.000
08/16	004	21	1	1	27.9	27.9	0.036	0.036	4.0	-	4.0	-	111.5	111.5	0.036	0.036
08/16	009	21	0	0	27.9	27.9	0.000	0.000	0.0	-	0.0	-	111.5	111.5	0.000	0.000

CREESYS 3.3

REPORT ON SAMPLES - 96/12/12

JOT-CR-96-BM...1

BULKLEY MORICE

Access (Unequal Prob.) - 32 STRATA (96/07/01 - 96/08/25)

STRATUM is: SEASON...2 SPACE...20 MODE...1
 DAYTYPE..2
 PERIOD...3

PAGE 1

EFFORT-ACTIVITY Totals:

SAMPLE DATE	OBSERVED				ESTIMATED				NO. CTS	MEAN ATY/CT	NO. ITVS	MEAN AGLRS/ITV	MEAN RODS/ITV
	EFFORT AG-HR	EFFORT RD-HR	...EFFORT... AG-HR	...EFFORT... RD-HR	...EFFORT... SE	...EFFORT... SE	ATY UNIT	ATY:CT					
	5.7	5.7	38.2	-	38.2	-	1	1					
96/08/11	5.7	5.7	38.2	-	38.2	-	1	1	4.0	4.0	4	1.00	0.99
96/08/17	26.7	26.7	56.8	-	56.8	-	1	1	6.0	6.0	2	2.00	1.99
96/08/18	16.5	16.5	56.1	-	56.1	-	1	1	12.0	12.0	5	1.00	0.99
96/08/24	10.7	10.7	83.4	-	83.4	-	1	1	7.0	7.0	3	2.00	1.99

ANGLERS1 Totals:

SAMPLE DATE	FISHING METHOD								GUIDE				ORIGIN					VISITOR-TYPE								
	1	2	3	4	5	6	7	8	ML:	0	1	ML:	1	2	3	4	5	ML:	1	2	3	4	5	6	7	8	ML:
08/11	3	0	1	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
08/17	4	0	0	0	0	0	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
08/18	3	0	0	0	0	0	0	2	5	0	0	3	0	0	2	0	0	0	0	0	0	0	0	0	0	5
08/24	0	0	1	0	0	0	0	5	0	6	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6

CATCH (ALL ANGLERS) Totals:

SAMPLE DATE	OBSERVED								ESTIMATED							
	SPEC	AGLR	CATCH	HRVST	...EFFORT...		....CUE....		....CATCH...		....HRVST...		....EFFORT...		....CUE....	
	CODE	CT	CT	CT	AG-HR	RD-HR	/AG-HR /RD-HR	CT	SE	CT	SE	AG-HR	RD-HR	/AG-HR /RD-HR		
08/17	001	4	4	4	26.7	26.7	0.150	0.150	8.5	-	8.5	-	56.8	56.8	0.150	0.150
08/18	001	5	2	1	16.5	16.5	0.122	0.122	6.8	-	3.4	-	56.1	56.1	0.121	0.121
08/18	002	5	2	2	16.5	16.5	0.122	0.122	6.8	-	6.8	-	56.1	56.1	0.121	0.121
08/17	004	4	14	0	26.7	26.7	0.525	0.525	29.8	-	0.0	-	56.8	56.8	0.525	0.525
08/18	004	5	35	0	16.5	16.5	2.126	2.126	119.3	-	0.0	-	56.1	56.1	2.126	2.126
08/24	004	6	2	2	10.7	10.7	0.186	0.186	15.5	-	15.5	-	83.4	83.4	0.186	0.186
08/11	009	4	1	0	5.7	5.7	0.175	0.175	6.7	-	0.0	-	38.2	38.2	0.174	0.174
08/18	009	5	0	0	16.5	16.5	0.000	0.000	0.0	-	0.0	-	56.1	56.1	0.000	0.000
08/24	009	6	0	0	10.7	10.7	0.000	0.000	0.0	-	0.0	-	83.4	83.4	0.000	0.000

CREESYS 3.3

REPORT ON SAMPLES - 96/12/10

JOT-CR-96-BM...1

BULKLEY MORICE

Access (Unequal Prob.) - 32 STRATA (96/07/01 - 96/08/25)

STRATUM is: SEASON...2 SPACE...40 MODE...1
 DAYTYPE..2
 PERIOD...3

PAGE 1

EFFORT-ACTIVITY Totals:

SAMPLE DATE	OBSERVED				ESTIMATED				NO. CTS	MEAN ATY/CT	NO. ITVS	MEAN AGLRS /ITV	MEAN RODS /ITV
	EFFORT		EFFORT		EFFORT		EFFORT						
	AG-HR	RD-HR	AG-HR	SE	RD-HR	SE	ATY	UNIT					
96/08/17	15.3	15.3	61.3	-	61.3	-	1	1	12.0	15.0	8	1.50	1.49
96/08/18	0.0	0.0	0.0	-	0.0	-	1	1	0.0	0.0	0	0.00	0.00
96/08/24	5.7	5.7	19.0	-	19.0	-	1	1	4.0	7.0	3	1.33	1.33
96/08/25	0.9	0.9	3.6	-	3.6	-	1	1	1.0	1.0	1	1.00	0.99

ANGLERS1 Totals:

SAMPLE DATE	FISHING METHOD								GUIDE		ORIGIN					VISITOR-TYPE											
	1	2	3	4	5	6	7	8	ML:	0	1	ML:	1	2	3	4	5	ML:	1	2	3	4	5	6	7	8	ML:
08/17	0	0	0	0	0	0	0	12	0	12	0	0	9	0	0	3	0	0	0	0	0	0	0	0	0	0	12
08/24	0	0	0	0	0	0	0	4	0	4	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	4
08/25	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1

CATCH (ALL ANGLERS) Totals:

SAMPLE DATE	OBSERVED								ESTIMATED							
	SPEC	AGLR	CATCH	HRVST	EFFORT...		CUE....		CATCH....		HRVST....		EFFORT...		CUE....	
	CODE	CT	CT	CT	AG-HR	RD-HR	/AG-HR	/RD-HR	CT	SE	CT	SE	AG-HR	RD-HR	/AG-HR	/RD-HR
08/17	004	12	0	0	15.3	15.3	0.000	0.000	0.0	-	0.0	-	61.3	61.3	0.000	0.000
08/24	004	4	9	4	5.7	5.7	1.579	1.579	30.0	-	13.3	-	19.0	19.0	1.579	1.579
08/25	008	1	0	0	0.9	0.9	0.000	0.000	0.0	-	0.0	-	3.6	3.6	0.000	0.000
08/17	009	12	1	0	15.3	15.3	0.065	0.065	4.0	-	0.0	-	61.3	61.3	0.065	0.065

CREESYS 3.3

REPORT ON SAMPLES - 96/12/10

JOT-CR-96-BM...1

BULKLEY MORICE

Access (Unequal Prob.) - 32 STRATA (96/07/01 - 96/08/25)

STRATUM is: SEASON...2 SPACE...20 MODE...1
 DAYTYPE..2
 PERIOD...4

PAGE 1

EFFORT-ACTIVITY Totals:

SAMPLE DATE	OBSERVED				ESTIMATED				NO. CTS	MEAN ATY/CT	MEAN ATY:CT	SAMPLE ITVS	NO. AGLRS	MEAN ITV:CT	MEAN ITV							
	EFFORT		EFFORT		...EFFORT...		...EFFORT...									OF	ATY	ATY	SAMPLE	OF	AGLRS	RODS
	AG-HR	RD-HR	AG-HR	SZ	RD-HR	SE	AG-HR	RD-HR								CT	UNIT	/CT	ITVS	ITV	/ITV	
96/08/10	63.0	63.0	111.9	-	111.9	-	111.9	-	1	1	20.0	20.0	9	1.78	1.77							
96/08/17	49.9	49.9	88.6	-	88.6	-	88.6	-	1	1	20.0	20.0	12	1.25	1.24							
96/08/24	2.2	2.2	19.9	-	19.9	-	19.9	-	1	1	4.0	4.0	3	1.00	0.99							
96/08/25	3.2	3.2	10.6	-	10.6	-	10.6	-	1	1	7.0	7.0	2	1.50	1.49							

ANGLERS1 Totals:

SAMPLE DATE	FISHING METHOD								GUIDE				ORIGIN						VISITOR-TYPE									
	1	2	3	4	5	6	7	8	ML:	0	1	ML:	1	2	3	4	5	ML:	1	2	3	4	5	6	7	8	ML:	
08/10	14	0	0	0	0	0	0	2	0	16	0	0	6	8	2	0	0	0	0	0	0	0	0	0	0	0	16	
08/17	10	0	0	0	0	0	0	5	0	15	0	0	13	1	1	0	0	0	0	0	0	0	0	0	0	0	0	15
08/24	0	0	1	0	0	0	0	0	2	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
08/25	0	0	0	0	0	0	0	0	3	0	3	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	3

CATCH (ALL ANGLERS) Totals:

SAMPLE DATE	OBSERVED								ESTIMATED							
	SPEC CODE	AGLR CT	CATCH CT	HRVST CT	...EFFORT...		....CUE....		....CATCH....		....HRVST....		....EFFORT...		....CUE....	
				AG-HR	RD-HR	/AG-HR	/RD-HR	CT	SE	CT	SE	AG-HR	RD-HR	/AG-HR	/RD-HR	
08/10	001	16	8	5	63.0	63.0	0.127	0.127	14.2	-	8.9	-	111.9	111.9	0.127	0.127
08/17	001	15	8	6	49.9	49.9	0.160	0.160	14.2	-	10.6	-	88.6	88.6	0.160	0.160
08/17	002	15	2	2	49.9	49.9	0.040	0.040	3.5	-	3.5	-	88.6	88.6	0.040	0.040
08/17	003	15	1	0	49.9	49.9	0.020	0.020	1.8	-	0.0	-	88.6	88.6	0.020	0.020
08/10	004	16	2	0	63.0	63.0	0.032	0.032	3.5	-	0.0	-	111.9	111.9	0.032	0.032
08/17	004	15	54	3	49.9	49.9	1.082	1.082	95.8	-	5.3	-	88.6	88.6	1.081	1.081
08/25	004	3	2	0	3.2	3.2	0.525	0.525	6.6	-	0.0	-	10.6	10.6	0.625	0.625
08/17	005	15	1	0	49.9	49.9	0.020	0.020	1.8	-	0.0	-	88.6	88.6	0.020	0.020
08/10	009	16	3	1	63.0	63.0	0.048	0.048	5.3	-	1.8	-	111.9	111.9	0.048	0.048
08/17	009	15	0	0	49.9	49.9	0.000	0.000	0.0	-	0.0	-	88.6	88.6	0.000	0.000
08/24	009	3	0	0	2.2	2.2	0.000	0.000	0.0	-	0.0	-	19.9	19.9	0.000	0.000
08/25	009	3	0	0	3.2	3.2	0.000	0.000	0.0	-	0.0	-	10.6	10.6	0.000	0.000

CREEYS 3.3

REPORT ON SAMPLES - 96/12/10

JOT-CR-96-BM...1

BULKLEY MORICE

Access (Unequal Prob.) - 32 STRATA (96/07/01 - 96/08/25)

STRATUM is: SEASON...2 SPACE...40 MODE...1
 DAYTYPE..2
 PERIOD...4

PAGE 1

EFFORT-ACTIVITY Totals:

SAMPLE	OBSERVED				ESTIMATED				NO.	MEAN	NO.	MEAN	NO.	MEAN	
	EFFORT		EFFORT		...EFFORT...		...EFFORT...								
	DATE	AG-HR	RD-HR	AG-HR	SE	RD-HR	SE	CTS	UNIT	/CT	ATTY:CT	ITVS	/ITV	RODS	/ITV
96/08/10	:	32.9	32.9	131.6	-	131.6	-	:	1	1	20.0	22.0	11	1.82	1.81
96/08/11	:	8.2	8.2	40.8	-	40.8	-	:	1	1	3.0	3.0	2	1.50	1.49
96/08/17	:	38.2	38.2	152.8	-	152.8	-	:	1	1	26.0	35.0	15	1.73	1.73
96/08/24	:	12.8	12.8	42.6	-	42.6	-	:	1	1	8.0	8.0	3	2.67	2.66

ANGLERS1 Totals:

SAMPLE	FISHING METHOD								GUIDE				ORIGIN					VISITOR-TYPE											
	DATE	1	2	3	4	5	6	7	8	ML:	0	1	ML:	1	2	3	4	5	ML:	1	2	3	4	5	6	7	8	ML:	
08/10	0	0	0	0	0	0	0	20	0	20	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	
08/11	0	0	0	0	0	0	0	0	3	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
08/17	0	0	2	0	0	0	0	0	24	0	26	0	0	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26
08/24	0	0	0	0	0	0	0	0	8	0	8	0	0	0	2	0	0	6	0	0	0	0	0	0	0	0	0	0	8

CATCH (ALL ANGLERS) Totals:

SAMPLE	SPEC	AGLR	CATCH	HRVST	OBSERVED				ESTIMATED							
					DATE	CODE	CT	CT	CT	AG-HR	RD-HR	/AG-HR /RD-HR	CT	SE	CT	SE	/AG-HR /RD-HR
08/10	001	20	0	0	32.9	32.9	0.000	0.000	0.0	-	0.0	-	131.6	131.6	0.000	0.000
08/11	001	3	0	0	8.2	8.2	0.000	0.000	0.0	-	0.0	-	40.8	40.8	0.000	0.000
08/17	004	26	6	6	38.2	38.2	0.157	0.157	24.0	-	24.0	-	152.8	152.8	0.157	0.157
08/24	004	8	28	2	12.8	12.8	2.191	2.191	93.2	-	6.7	-	42.6	42.6	2.191	2.191
08/17	009	26	0	0	38.2	38.2	0.000	0.000	0.0	-	0.0	-	152.8	152.8	0.000	0.000

APPENDIX 4

Creesys Report on Strata

CREESTS 3.3

REPORT ON STRATA - 96/12/10

JOT-CR-96-BM...1

BULKLEY MORICE

Access (Unequal Prob.) - 32 STRATA (96/07/01 - 96/08/25)

ALL STRATA

PAGE 1

EFFORT-ACTIVITY Totals:

			OBSERVED				ESTIMATED												
STRATUM.	SAMPLE		EFFORT	EFFORT		...EFFORT...	...EFFORT...	AG-HR	RD-HR	SE	RD-HR	SE	NO.	MEAN	MEAN	NO.	MEAN	MEAN	
CODE	SIZE	COUNT	: AG-HR	: RD-HR	:	AG-HR	SE						: CTS	ATY	ATY	SAMPLE	OF	ACLRS	RODS
111101	24	4	: 70.9	: 70.9		556	242		556	242		4	1	8.0	8.0	19	1.42	1.42	
111301	24	3	: 52.0	: 52.0		831	49		831	49		3	1	3.7	3.7	6	1.83	1.83	
112101	24	4	: 144.7	: 144.7		2101	695		2101	695		4	1	16.8	16.8	38	1.37	1.37	
112301	24	4	: 140.0	: 140.0		2044	703		2044	703		4	1	9.3	9.3	16	2.12	2.12	
121101	12	4	: 184.4	: 184.4		692	228		692	228		4	1	13.3	14.0	34	1.53	1.53	
121301	12	4	: 47.1	: 47.1		371	114		371	114		4	1	4.8	4.8	8	1.87	1.87	
122101	12	3	: 52.1	: 52.1		872	450		872	450		3	1	10.0	11.7	14	1.64	1.64	
122301	12	4	: 226.6	: 226.6		3768	2117		3768	2117		4	1	13.0	14.5	27	1.93	1.93	
213201	14	2	: 5.5	: 5.5		81	13		81	13		2	1	2.0	2.0	2	2.00	2.00	
213401	14	4	: 13.8	: 13.8		194	61		194	61		4	1	1.5	1.5	4	1.50	1.50	
214201	14	6	: 337.7	: 337.7		2334	787		2334	787		6	1	22.0	22.0	64	1.70	1.70	
214401	14	3	: 106.7	: 106.7		1781	654		1781	654		3	1	16.3	16.3	24	2.04	2.04	
223201	6	4	: 59.6	: 59.6		352	32		352	32		4	1	7.3	7.3	14	1.36	1.36	
223401	6	4	: 21.9	: 21.9		126	49		126	49		4	1	4.3	5.8	12	1.42	1.42	
224201	6	4	: 118.4	: 118.4		346	87		346	87		4	1	12.8	12.8	26	1.42	1.42	
224401	6	4	: 92.0	: 92.0		552	102		552	102		4	1	14.3	17.0	31	1.84	1.84	

CREESYS 3,3

REPORT ON STRATA - 96/12/10

JOT-CR-96-BM...1

BULKLEY MORICE

Access (Unequal Prob.) - 32 STRATA (96/07/01 - 96/08/25)

ALL STRATA

PAGE 2

ANGLERSI Totals:

BULKLEY MORICE

Access (Unequal Prob.) - 32 STRATA (96/07/01 - 96/08/25)

ALL STRATA

PAGE 3

CATCH (ALL ANGLERS) Totals:

STRAT	SPEC	OBSERVED						ESTIMATED							
		AGLR	CATCH	HRVST	...EFFORT...	....CUE....	/AG-HR /RD-HR	...CATCH...	HRVST...	...EFFORT...	....CUE....	/AG-HR /RD-HR			
CODE	CODE	CT	CT	CT	AG-HR	RD-HR		CT	SE	CT	SE	AG-HR	RD-HR		
111101	001	27	4	4	71	71	0.056	0.056	32	19	32	19	556	556	0.057 0.057
111101	009	27	1	1	71	71	0.014	0.014	7	7	7	7	556	556	0.013 0.013
111301	001	11	0	0	52	52	0.000	0.000	0	0	0	0	831	831	0.000 0.000
111301	008	11	0	0	52	52	0.000	0.000	0	0	0	0	831	831	0.000 0.000
112101	001	52	30	20	145	145	0.207	0.207	338	175	253	110	2101	2101	0.161 0.161
112101	003	52	1	0	145	145	0.007	0.007	12	11	0	0	2101	2101	0.006 0.006
112101	008	52	1	1	145	145	0.007	0.007	7	7	7	7	2101	2101	0.004 0.004
112101	009	52	0	0	145	145	0.000	0.000	0	0	0	0	2101	2101	0.000 0.000
112301	001	34	5	3	140	140	0.036	0.036	66	35	36	33	2044	2044	0.032 0.032
112301	008	34	3	3	140	140	0.021	0.021	55	29	55	29	2044	2044	0.027 0.027
112301	009	34	1	1	140	140	0.007	0.007	25	23	25	23	2044	2044	0.012 0.012
121101	001	52	21	16	184	184	0.114	0.114	79	41	60	35	692	692	0.114 0.114
121101	005	52	1	0	184	184	0.005	0.005	4	3	0	0	692	692	0.005 0.005
121101	009	52	3	1	184	184	0.016	0.016	11	6	4	3	692	692	0.016 0.016
121301	001	15	1	1	47	47	0.021	0.021	10	8	10	8	371	371	0.026 0.026
122101	001	23	1	1	52	52	0.019	0.019	20	17	20	17	872	872	0.023 0.023
122101	009	23	0	0	52	52	0.000	0.000	0	0	0	0	872	872	0.000 0.000
122301	001	52	11	8	227	227	0.049	0.049	100	36	79	28	3768	3768	0.027 0.027
122301	008	52	2	0	227	227	0.009	0.009	15	12	0	0	3768	3768	0.004 0.004
213201	001	4	1	1	6	6	0.181	0.181	10	9	10	9	81	81	0.121 0.121
213201	004	4	2	0	6	6	0.361	0.361	20	18	0	0	81	81	0.243 0.243
213201	009	4	0	0	6	6	0.000	0.000	0	0	0	0	81	81	0.000 0.000
213401	001	6	0	0	14	14	0.000	0.000	0	0	0	0	194	194	0.000 0.000
214201	001	109	35	30	338	338	0.104	0.104	134	39	114	34	2334	2334	0.057 0.057
214201	004	109	29	10	338	338	0.086	0.086	434	308	150	107	2334	2334	0.186 0.186
214201	008	109	1	1	338	338	0.003	0.003	4	3	4	3	2334	2334	0.002 0.002
214201	009	109	2	0	338	338	0.006	0.006	20	12	0	0	2334	2334	0.008 0.008
214401	001	49	1	0	107	107	0.009	0.009	19	17	0	0	1781	1781	0.010 0.010
214401	002	49	1	0	107	107	0.009	0.009	19	17	0	0	1781	1781	0.010 0.010
214401	003	49	0	0	107	107	0.000	0.000	0	0	0	0	1781	1781	0.000 0.000
214401	004	49	1	1	107	107	0.009	0.009	19	17	19	17	1781	1781	0.010 0.010
214401	009	49	0	0	107	107	0.000	0.000	0	0	0	0	1781	1781	0.000 0.000
223201	001	19	6	5	60	60	0.101	0.101	23	8	18	7	352	352	0.065 0.065
223201	002	19	2	2	60	60	0.034	0.034	10	6	10	6	352	352	0.029 0.029
223201	004	19	51	2	60	60	0.856	0.856	247	93	23	13	352	352	0.702 0.702
223201	009	19	1	0	60	60	0.017	0.017	10	6	0	0	352	352	0.028 0.028
223401	004	17	9	4	22	22	0.410	0.410	45	26	20	12	126	126	0.357 0.357
223401	008	17	0	0	22	22	0.000	0.000	0	0	0	0	126	126	0.000 0.000
223401	009	17	1	0	22	22	0.046	0.046	6	3	0	0	126	126	0.048 0.048
224201	001	37	16	11	118	118	0.135	0.135	43	14	29	10	346	346	0.123 0.123
224201	002	37	2	2	118	118	0.017	0.017	5	3	5	3	346	346	0.015 0.015
224201	003	37	1	0	118	118	0.008	0.008	3	2	0	0	346	346	0.008 0.008
224201	004	37	58	3	118	118	0.490	0.490	159	80	8	5	346	346	0.459 0.459
224201	005	37	1	0	118	118	0.008	0.008	3	2	0	0	346	346	0.008 0.008
224201	009	37	3	1	118	118	0.025	0.025	8	5	3	2	346	346	0.023 0.023
224401	001	57	0	0	92	92	0.000	0.000	0	0	0	0	552	552	0.000 0.000
224401	004	57	34	8	92	92	0.369	0.369	176	76	46	20	552	552	0.319 0.319
224401	009	57	0	0	92	92	0.000	0.000	0	0	0	0	552	552	0.000 0.000

APPENDIX 5

Creesys Report on Combined Strata

CREESYS 3.3

REPORT ON COMBINED STRATA - 96/12/10

JOT-CR-96-BM...1

BULKLEY MORICE

Access (Unequal Prob.) - 32 STRATA (96/07/01 - 96/08/25)

SEASONS: 1

DAYTYPES: 1 2

PERIODS: 1 2

SPACES: 10

MODES: 1

Number of strata selected = 4

PAGE 1

EFFORT-ACTIVITY Totals:

SAMPLE COUNT	OBSERVED				ESTIMATED				NO. CTS	MEAN OF UNIT	MEAN ATY /CT	MEAN ATY:CT	NO. ITVS	MEAN AGLRS /ITV	MEAN RODS /ITV
	EFFORT	EFFORT	...EFFORT...	...EFFORT...	AG-HR	RD-HR	AG-HR	RD-HR							
					SE	SE									
15	452	452	4222	893	4222	893	:	15	1	12.1	12.7	105	1.47	1.47	

ANGLERS1 Totals:

FISHING-METHOD:	0	1	2	3	4	5	6	7	8	9	NUL
GUIDE.....	154	0	-	-	-	-	-	-	-	-	0
VISITOR-TYPE...	-	0	0	0	0	0	0	0	-	154	:
ORIGIN.....	-	117	29	7	1	0	-	-	-	-	0

CATCH (ALL ANGLERS) Totals:

SPEC CODE	OBSERVED				ESTIMATED										
	AGLR	CATCH	HGVST	...EFFORT...	....CUE....	...CATCH....	....HGVST....	...EFFORT...	....CUE....						
	CT	CT	CT	AG-HR / RD-HR	AG-HR / RD-HR	CT	SE	CT	SE	AG-HR / RD-HR	AG-HR / RD-HR				
001	154	56	41	452	452	0.124	0.124	468	181	364	119	4222	4222	0.111	0.111
003	154	1	0	452	452	0.002	0.002	12	11	0	0	4222	4222	0.003	0.003
005	154	1	0	452	452	0.002	0.002	4	3	0	0	4222	4222	0.001	0.001
008	154	1	1	452	452	0.002	0.002	7	7	7	7	4222	4222	0.002	0.002
009	154	4	2	452	452	0.009	0.009	19	9	11	7	4222	4222	0.004	0.004

CREESYS 3.3

REPORT ON COMBINED STRATA - 96/12/10

JOT-CR-96-BM...1

BULKLEY MORICE

Access (Unequal Prob.) - 32 STRATA (96/07/01 - 96/08/25)

SEASONS: 1

DAYTYPES: 1 2

PERIODS: 1 2

SPACES: 30

MODES: 1

Number of strata selected = 4

PAGE 1

EFFORT-ACTIVITY Totals:

SAMPLE COUNT	OBSERVED				ESTIMATED				NO. CTS	MEAN ATY /CT	MEAN ATY /CT	NO. ITVS	MEAN AGLRS /ITV	MEAN RODS /ITV	
	EFFORT		EFFORT		EFFORT		EFFORT								
	AG-HR	RD-HR	AG-HR	SE	RD-HR	SE	RD-HR	SE							
15	466	466	7015	2234	7015	2234	7015	2234	15	1	7.9	8.3	57	1.96	1.96

ANGLERS1 Totals:

FISHING-METHOD:	1	0	3	0	0	0	0	105	-	3
GUIDE.....:	106	6	-	-	-	-	-	-	-	0
VISITOR-TYPE....:	-	0	0	0	0	0	0	0	-	112
ORIGIN.....:	-	90	18	0	4	0	-	-	-	0

CATCH (ALL ANGLERS) Totals:

SPEC CODE	OBSERVED				ESTIMATED										
	AGLR CT	CATCH CT	HRVST CT	...EFFORT... AG-HR RD-HR	....CUE.... /AG-HR /RD-HR	...CATCH.... CT	HRVST.... CT SE	...EFFORT... AG-HR RD-HR	....CUE.... /AG-HR /RD-HR						
001	112	17	12	466	466	0.037	0.037	176	51	125	44	7015	7015	0.025	0.025
008	112	5	3	466	466	0.011	0.011	70	32	55	29	7015	7015	0.010	0.010
009	112	1	1	466	466	0.002	0.002	25	23	25	23	7015	7015	0.004	0.004

CREESYS 3.3

REPORT ON COMBINED STRATA - 96/12/12

JOT-CR-96-BM...1

BULKLEY MORICE

Access (Unequal Prob.) - 32 STRATA (96/07/01 - 96/08/25)

SEASONS: 2

DAYTYPES: 1 2

PERIODS: 3 4

SPACES: 20

MODES: 1

Number of strata selected = 4

PAGE 1

EFFORT-ACTIVITY Totals:

SAMPLE COUNT	OBSERVED				ESTIMATED				NO. CTS	MEAN ATY /CT	MEAN ATY:CT	NO. ITVS	MEAN ITV /ITV	MEAN AGLRS RODS			
	EFFORT		EFFORT		...EFFORT....		...EFFORT....								OF	ATY	SAMPLE
	AG-HR	RD-HR	AG-HR	SE	RD-HR	SE		UNIT							/CT	ATY:CT	ITVS	/ITV
16	521	521	3113	793	3113	793	:	16	1	13.5	13.5	106	1.59	1.59			

ANGLERS1 Totals:

FISHING-METHOD..	107	0	10	0	0	0	0	50	-	0
GUIDE.....	167	0	-	-	-	-	-	-	-	2
VISITOR-TYPE...	-	0	0	0	0	0	0	0	-	169
ORIGIN.....	-	123	31	9	3	3	-	-	-	0

CATCH (ALL ANGLERS) Totals:

SPEC CODE	OBSERVED				ESTIMATED										
	ACLR	CATCH	HRSVT	...EFFORT...	....CUE....	...CATCH....	....HRSVT....	....EFFORT...	....CUE....						
	CT	CT	CT	AG-HR	RD-HR	/AG-HR	/RD-HR	CT	SE	CT	SE	AG-HR	RD-HR	/AG-HR	/RD-HR
001	169	58	47	521	521	0.111	0.111	209	44	171	38	3113	3113	0.067	0.067
002	169	4	4	521	521	0.008	0.008	16	7	16	7	3113	3113	0.005	0.005
003	169	1	0	521	521	0.002	0.002	3	2	0	0	3113	3113	0.001	0.001
004	169	140	15	521	521	0.269	0.269	860	332	182	108	3113	3113	0.276	0.276
005	169	1	0	521	521	0.002	0.002	3	2	0	0	3113	3113	0.001	0.001
008	169	1	1	521	521	0.002	0.002	4	3	4	3	3113	3113	0.001	0.001
009	169	6	1	521	521	0.012	0.012	38	14	3	2	3113	3113	0.012	0.012

CREESYS 3.3

REPORT ON COMBINED STRATA - 96/12/10

JOT-CR-96-BM...1

BULKLEY MORICE

Access (Unequal Prob.) - 32 STRATA (96/07/01 - 96/08/25)

SEASONS: 2

DAYTYPES: 1 2

PERIODS: 3 4

SPACES: 40

MODES: 1

Number of strata selected = 4

PAGE 1

EFFORT-ACTIVITY Totals:

SAMPLE COUNT	OBSERVED				ESTIMATED				NO. CTS	MEAN ATY /CT	MEAN ATY /CT	MEAN SAMPLE ITVS	NO. AGLRS	MEAN RODS /ITV
	EFFORT	EFFORT	...EFFORT...	...EFFORT...	OF	ATY	ATY	SAMPLE						
	AG-HR	RD-HR	AG-HR	SE	RD-HR	SE	/CT	ITVS						
15	235	235	2652	666	2652	666	15	1	8.6	9.7	71	1.82	1.82	

ANGLERS1 Totals:

FISHING-METHOD..	0	1	2	3	4	5	6	7	8	9	NUL
GUIDE.....	128	0	-	-	-	-	-	-	-	-	1
VISITOR-TYPE...	-	0	0	0	0	0	0	0	-	129	
ORIGIN.....	-	108	8	0	5	8	-	-	-	-	0

CATCH (ALL ANGLERS) Totals:

SPEC CODE	OBSERVED						ESTIMATED						
	AGLR	CATCH	HRVST	...EFFORT...	....CUE....	...CATCH....	...HRVST....	....EFFORT...	....CUE....	AG-HR	RD-HR	/AG-HR /RD-HR	
001	129	1	0	235	235	0.004	0.004	19	17	0	0	2652	2652 0.007 0.007
002	129	1	0	235	235	0.004	0.004	19	17	0	0	2652	2652 0.007 0.007
003	129	0	0	235	235	0.000	0.000	0	0	0	0	2652	2652 0.000 0.000
004	129	44	13	235	235	0.188	0.188	239	82	85	28	2652	2652 0.090 0.090
008	129	0	0	235	235	0.000	0.000	0	0	0	0	2652	2652 0.000 0.000
009	129	1	0	235	235	0.004	0.004	6	3	0	0	2652	2652 0.002 0.002

CREESYS 3.3

REPORT ON COMBINED STRATA - 96/12/12

JOT-CR-96-BM...1

BULKLEY MORICE

Access (Unequal Prob.) - 32 STRATA (96/07/01 - 96/08/25)

SEASONS: 1 2

DATATYPES: 1 2

PERIODS: 1 2 3 4

SPACES: 10 20

MODES: 1

*** WARNING (621A): 24 of the 32 selected strata were not sampled (see Section 3, p 54)

PAGE 1

EFFORT-ACTIVITY Totals:

SAMPLE COUNT	OBSERVED				ESTIMATED				NO. CTS	MEAN ATY /CT	MEAN ATY /ATY:CT	MEAN SAMPLE ITVS	MEAN AGLRS /ITV	MEAN RODS /ITV
	EFFORT	EFFORT	...EFFORT...	...EFFORT...	OF	ATY	SAMPLE	AGLRS						
	AG-HR	RD-HR	AG-HR	SE	RD-HR	SE	/CT	ITVS							RODS
31	973	973	7335	1194	7335	1194	:	31	1	12.8	13.1	211	1.53	1.53

ANGLERS1 Totals:

FISHING-METHOD..	.....0.....1.....2.....3.....4.....5.....6.....7.....8.....9.....NUL :								
	233	0	10	0	0	0	0	78	-	0
GUIDE.....	321	0	-	-	-	-	-	-	2
VISITOR-TYPE...	-	0	0	0	0	0	0	-	323
ORIGIN.....	-	240	60	16	4	3	-	-	0

CATCH (ALL ANGLERS) Totals:

SPEC CODE	OBSERVED						ESTIMATED								
	AGLR	CATCH	HRVST	...EFFORT...	....CUE....	...CATCH....	...HRVST....	...EFFORT...	....CUE....	AG-HR	RD-HR	/AG-HR	/RD-HR		
001	323	114	88	973	973	0.117	0.117	677	186	535	124	7335	7335	0.092	0.092
002	323	4	4	973	973	0.004	0.004	16	7	16	7	7335	7335	0.002	0.002
003	323	2	0	973	973	0.002	0.002	15	11	0	0	7335	7335	0.002	0.002
004	323	140	15	973	973	0.144	0.144	860	332	182	108	7335	7335	0.117	0.117
005	323	2	0	973	973	0.002	0.002	6	3	0	0	7335	7335	0.001	0.001
008	323	2	2	973	973	0.002	0.002	11	7	11	7	7335	7335	0.002	0.002
009	323	10	3	973	973	0.010	0.010	56	16	14	8	7335	7335	0.008	0.008

CREESTS 3.3

REPORT ON COMBINED STRATA - 96/12/10

JOT-CR-96-BM...I

BULKLEY MORICE

Access (Unequal Prob.) - 32 STRATA (96/07/01 - 96/08/25)

SEASONS: 1 2

DAYTYPES: 1 2

PERIODS: 1 2 3 4

SPACES: 30 40

MODES: 1

*** WARNING (621A): 24 of the 32 selected strata were not sampled (see Section 3, p 54)

PAGE 1

EFFORT-ACTIVITY Totals:

SAMPLE COUNT	OBSERVED				ESTIMATED				NO. CTS	MEAN OF UNIT	MEAN ATY /CT	MEAN ATY:CT	NO. ITVS	MEAN AGLRS /ITV	MEAN RODS /ITV
	EFFORT	EFFORT	...EFFORT...	...EFFORT...	OF	ATY	SAMPLE	OF							
	AG-HR	RD-HR	AG-HR	SE	RD-HR	SE	/CT	ITV							
30	700	700	9667	2332	9667	2332	:	30	1	8.3	9.0	128	1.88	1.88	

ANGLERS1 Totals:

FISHING-METHOD:	1	2	3	4	5	6	7	8	9	NUL
GUIDE.....	234	6	-	-	-	-	-	-	-	1
VISITOR-TYPE....	-	0	0	0	0	0	0	0	-	241
ORIGIN.....	-	198	26	0	9	8	-	-	-	0

CATCH (ALL ANGLERS) Totals:

SPEC CODE	OBSERVED						ESTIMATED												
	AGLR	CATCH	HGVST	...EFFORT...	...CUE...	...CATCH...	...HGVST...	...EFFORT...	...CUE...	CT	CT	CT	SE	CT	SE	AG-HR	RD-HR	/AG-HR	/RD-HR
001	241	18	12	700	700	0.026	0.026	195	53	125	44	9667	9667	0.020	0.020				
002	241	1	0	700	700	0.001	0.001	19	17	0	0	9667	9667	0.002	0.002				
003	241	0	0	700	700	0.000	0.000	0	0	0	0	9667	9667	0.000	0.000				
004	241	44	13	700	700	0.063	0.063	239	82	85	28	9667	9667	0.025	0.025				
008	241	5	3	700	700	0.007	0.007	70	32	55	29	9667	9667	0.007	0.007				
009	241	2	1	700	700	0.003	0.003	31	23	25	23	9667	9667	0.003	0.003				

CREESYS 3.3

REPORT ON COMBINED STRATA - 96/12/10

JOT-CR-96-BM...1

BULKLEY MORICE

Access (Unequal Prob.) - 32 STRATA (96/07/01 - 96/08/25)

SEASONS: 1

DAYTYPES: 1 2

PERIODS: 1 2

SPACES: 10 30

MODES: 1

Number of strata selected = 8

PAGE 1

EFFORT-ACTIVITY Totals:

SAMPLE COUNT	OBSERVED				ESTIMATED				NO. CTS	MEAN ATY /CT	MEAN ATY /CT:CT	MEAN SAMPLE ITVS	MEAN OP ITV	MEAN AGLRS /ITV	MEAN RODS /ITV							
	EFFORT		EFFORT		EFFORT		EFFORT															
	AG-HR	RD-HR	AG-HR	SE	RD-HR	SE	RD-HR	SE														
30	918	918	11236	2406	11236	2406	11236	2406	30	1	10.0	10.5	162	1.64	1.64							

ANGLERS1 Totals:

FISHING-METHOD:	-	127	0	3	0	0	0	0	133	-	3
GUIDE.....:	260	6	-	-	-	-	-	-	-	-	0
VISITOR-TYPE...:	-	0	0	0	0	0	0	0	0	-	266
ORIGIN.....:	-	207	47	7	5	0	-	-	-	-	0

CATCH (ALL ANGLERS) Totals:

SPEC CODE	OBSERVED				ESTIMATED				....CUE.... 0.057 0.057
	AGLR CT	CATCH CT	HRVST CT	...EFFORT... AG-HR RD-HR /AG-HR /RD-HR	....CUE.... 0.080 0.080	...CATCH.... 644	HRVST.... 188	...EFFORT... 11236 11236 /AG-HR /RD-HR	
001	266	73	53	918 918	0.080 0.080	644	188	489 126	0.057 0.057
003	266	1	0	918 918	0.001 0.001	12	11	0 0	0.001 0.001
005	266	1	0	918 918	0.001 0.001	4	3	0 0	0.000 0.000
008	266	6	4	918 918	0.007 0.007	77	32	62 30	0.007 0.007
009	266	5	3	918 918	0.005 0.005	44	24	36 24	0.004 0.004

CREESYS 3.3

REPORT ON COMBINED STRATA - 96/12/12

JOT-CR-96-BM...I

BULKLEY MORICE

Access (Unequal Prob.) - 32 STRATA (96/07/01 - 96/08/25)

SEASONS: 2

DAYTYPES: 1 2

PERIODS: 3 4

SPACES: 20 40

MODES: 1

Number of strata selected = 8

PAGE 1

EFFORT-ACTIVITY Totals:

SAMPLE COUNT	OBSERVED				ESTIMATED				NO. CTS	MEAN ATY /CT	MEAN ATY /CT:CT	NO. ITVS	MEAN AGLRS /ITV	MEAN RODS /ITV	
	EFFORT		EFFORT		EFFORT		EFFORT								
	EFFORT	EFFORT	EFFORT	EFFORT	EFFORT	EFFORT	EFFORT	EFFORT							
	AG-HR	RD-HR	AG-HR	SZ	RD-HR	SE	SE								
31	756	756	5766	1035	5766	1035	1035	:	31	1	11.1	11.7	177	1.68	1.68

ANGLERS1 Totals:

FISHING-METHOD:	0	1	2	3	4	5	6	7	8	9	NUL
GUIDE.....:	295	0	-	-	-	-	-	-	-	-	3
VISITOR-TYPE....:	-	0	0	0	0	0	0	0	0	0	298
ORIGIN.....:	-	231	39	9	8	11	-	-	-	-	0

CATCH (ALL ANGLERS) Totals:

SPEC CODE	OBSERVED								ESTIMATED									
	AGLR	CATCH	HRVST	EFFORT	EFFORT	CUE	CUE	CATCH	CATCH	HRVST	EFFORT	EFFORT	CUE	CUE	AG-HR	RD-HR	/AG-HR	/RD-HR
	CT	CT	CT	AG-HR	RD-HR	/AG-HR	/RD-HR	CT	SE	CT	SE	AG-HR	RD-HR	/AG-HR	/RD-HR			
001	298	59	47	756	756	0.078	0.078	228	47	171	38	5766	5766	0.040	0.040			
002	298	5	4	756	756	0.007	0.007	34	18	16	7	5766	5766	0.006	0.006			
003	298	1	0	756	756	0.001	0.001	3	2	0	0	5766	5766	0.000	0.000			
004	298	184	28	756	756	0.243	0.243	1099	342	266	112	5766	5766	0.191	0.191			
005	298	1	0	756	756	0.001	0.001	3	2	0	0	5766	5766	0.000	0.000			
008	298	1	1	756	756	0.001	0.001	4	3	4	3	5766	5766	0.001	0.001			
009	298	7	1	756	756	0.009	0.009	44	14	3	2	5766	5766	0.008	0.008			

CREESYS 3.3

REPORT ON COMBINED STRATA - 96/12/12

JOT-CR-96-BM...I

BULKLEY MORICE

Access (Unequal Prob.) - 32 STRATA (96/07/01 - 96/08/25)

SEASONS: 1 2

DAYTYPES: 1 2

PERIODS: 1 2 3 4

SPACES: 10 30 20 40

MODES: 1

** WARNING (621A): 48 of the 64 selected strata were not sampled (see Section 3, p 54)

PAGE 1

EFFORT-ACTIVITY Totals:

SAMPLE COUNT	OBSERVED				ESTIMATED				NO. CTS	MEAN ATY /CT	MEAN ATY /UNIT	NO. SAMPLE /CT	MEAN AGLRS ITVS	MEAN RODS /ITV
	EFFORT AG-HR	EFFORT RD-HR	...EFFORT.... AG-HR	...EFFORT.... RD-HR	EFFORT SE	EFFORT SE	ATY /CT	ATY /UNIT						
	1673	1673	17002	2620	17002	2620	1	10.6						
61						11.1	339	1.66	1.66					

ANGLERS1 Totals:

FISHING-METHOD..	0	1	2	3	4	5	6	7	8	9	NUL
GUIDE.....	555	6	-	-	-	-	-	-	-	-	3
VISITOR-TYPE...	-	0	0	0	0	0	0	0	0	0	564
ORIGIN.....	-	438	86	16	13	11	-	-	-	-	0

CATCH (ALL ANGLERS) Totals:

SPEC CODE	OBSERVED				ESTIMATED										
	AGLR CT	CATCH CT	HRVST CT	...EFFORT... AG-HR	...EFFORT... RD-HR	...CUE.... /AG-HR	...CUE.... /RD-HR	...CATCH.... CT	...HRVST.... SE	...CATCH.... CT	...HRVST.... SE	...EFFORT... AG-HR	...EFFORT... RD-HR	...CUE.... /AG-HR	...CUE.... /RD-HR
001	564	132	100	1673	1673	0.079	0.079	872	194	661	132	17002	17002	0.051	0.051
002	564	5	4	1673	1673	0.003	0.003	34	18	16	7	17002	17002	0.002	0.002
003	564	2	0	1673	1673	0.001	0.001	15	11	0	0	17002	17002	0.001	0.001
004	564	184	28	1673	1673	0.110	0.110	1099	342	266	112	17002	17002	0.065	0.065
005	564	2	0	1673	1673	0.001	0.001	6	3	0	0	17002	17002	0.000	0.000
008	564	7	5	1673	1673	0.004	0.004	81	33	66	30	17002	17002	0.005	0.005
009	564	12	4	1673	1673	0.007	0.007	87	28	39	24	17002	17002	0.005	0.005