

Skeena Watershed

Angling Data Summary

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Babine River Angling Data



Fig. 1a Total Number of Anglers on the Babine River, 1983-2005, by Residency

	NUMBER OF ANGLERS ON THE BABINE RIVER			
YEAR	B.C. Residents	Non-resident Canadians	Non-Canadians	Total
1983	192	11	192	395
1984	154	6	199	359
1985	179	13	236	428
1986	272	17	320	609
1987	158	10	337	505
1988	187	39	295	521
1989	140	2	251	393
1990	227	28	263	518
1991	215	0	235	450
1992	189	24	237	450
1993	120	47	251	418
1994	204	38	250	492
1995	211	26	290	527
1996	166	11	350	527
1997	348	26	348	722
1998	208	26	344	578
1999	196	25	379	600
2000	212	14	436	662
2001	203	35	500	738
2002	267	20	279	566
2003	219	22	338	579
2004	-	-	-	-
2005	120	24	306	450

TO NOTE: There was no Steelhead Harvest Analysis conducted in 2004.

1. HIGHEST USE IS BY NON-CANADIANS

The table in Figure 1a and the graph in Figure 1b (p. 4), were both constructed from the same source of data: results of the **Steelhead Harvest Analysis**, a mailout survey of steelhead anglers. The Steelhead Harvest Analysis collects angler effort information, on an annual basis, and is not limited to the Classified Waters period.

As Figures 1a and 1b show, Steelhead Harvest Analysis data suggest that between 1983 and 2003,

• The total number of **non-Canadian steelhead anglers** on the Babine has generally increased.

• Non-Canadian anglers have consistently remained the largest user group on the Babine River. Their use ranged from a low of 192 anglers in 1983, to a high of 500 anglers in 2001. Non-Canadian angler days ranged from 1,031 in 1983 to 3,098 in 2001.

◆ B.C. resident anglers have consistently remained the second largest user group of the Babine River. Their use ranged from a low of 120 anglers in 1993 and 2005, to a high of 348 anglers in 1997. B.C. resident angler days ranged from 348 in 1993, to 1,824 in 1997.

• Non-resident Canadians have consistently remained the smallest user group for the Babine River. Their use ranged from a low of zero anglers in 1991, to a high of 47 anglers in 1993. Non-resident Canadian angler days ranged from zero in 1991, to 492 in 2001.

Babine River Angling Data



Fig. 1b Total Number of Angler Days Recorded Annually on the Babine River, 1983-2005, by Residency

Fig. 2 Proportionate Size, Over Time, Of Babine River Angler User Groups By Residency





2. TWO DATA SOURCES DESCRIBE RELATIVE SIZE OF BABINE RIVER USER GROUPS

The graph in Figure 2, p. 4, describes the proportionate size of Babine River angler user groups by residency — by illustrating the *percentage* (*not* the total number) of Babine River anglers who were B.C. residents, non-resident Canadians, and non-Canadians. The Figure 2 graph illustrates data from two sources:

1) **Steelhead Harvest Analyses,** which computed the number of anglers annually between 1983 and 2005, excepting 2004. Steelhead Harvest Analyses data are shown by **red, blue and yellow horizontal lines.**

2) a 1997 **creel survey**, which involved interviews with selected Babine river anglers. Creel survey data are shown by **red**, **blue and yellow vertical bars**.

TO NOTE: The validity of Steelhead Harvest Analysis data in 1997 appears to be supported by creel survey data from the same year, in that creel survey data roughly mirror user-group proportions estimated by the SHA.



Fig. 1a Total Number of Anglers on the Bulkley River, 1983-2005, by Residency

	NUMBER OF ANGLERS ON THE BULKLEY RIVER			
YEAR	B.C. Residents	Non-resident Canadians	Non-Canadians	Total
1983	1217	133	125	1475
1984	1102	144	166	1412
1985	1173	139	220	1532
1986	1815	193	317	2325
1987	1198	142	287	1627
1988	1226	179	402	1807
1989	854	132	354	1340
1990	1028	105	309	1442
1991	510	0	246	756
1992	413	18	139	570
1993	471	81	338	890
1994	696	73	437	1206
1995	721	105	482	1308
1996	722	57	520	1299
1997	822	42	642	1506
1998	1087	82	590	1759
1999	1016	99	677	1792
2000	1156	89	781	2026
2001	965	108	890	1963
2002	1031	121	690	1842
2003	1098	153	685	1936
2004	-	-	-	-
2005	862	124	590	1576

TO NOTE: There was no Steelhead Harvest Analysis conducted in 2004.

1. HIGHEST USE IS BY B.C. RESIDENTS

The table in Figure 1a and the graph in Figure 1b (p. 7), were both constructed from the same source of data: results of the **Steelhead Harvest Analysis**, a mailout survey of steelhead anglers. The Steelhead Harvest Analysis collects angler effort information on an annual basis, and is not limited to the Classified Waters period.

As Figures 1a and 1b show, Steelhead Harvest Analysis data suggest that between 1983 and 2003,

• **B.C. resident anglers** have remained the largest user group on the Bulkley River. Their use ranged from a low of 413 anglers in 1992, to a high of 1226 anglers in 1988. B.C. resident angler days ranged from 2,034 in 1993, to 13,624 in 1986.

• Non-Canadian anglers have, overall, remained the second largest user group on the Bulkley River. Their use ranged from a low of 125 anglers in 1983, to a high of 890 anglers in 2001. Non- Canadian angler days ranged from 612 in 1992 to 4,645 in 2001.

• Non-resident Canadians have consistently remained the smallest user group for the Bulkley River. Their use ranged from a low of zero anglers in 1991, to a high of 193 anglers in 1986. Nonresident Canadian angler days ranged from zero in 1991, to 994 in 1986.





Fig. 1b Total Number of Angler Days Recorded Annually on the Bulkley River, 1983-2005, by Residency







2. TWO DATA SOURCES DESCRIBE RELATIVE SIZE OF BULKLEY RIVER USER GROUPS

The graph in Figure 2, p. 7, describes *the proportionate size* of Bulkley River angler user groups by residency — by illustrating the *percentage* (*not* the total number) of Bulkley River anglers who were B.C. residents, non-resident Canadians, and non-Canadians. The Figure 2 graph illustrates data from two sources:

1) **Steelhead Harvest Analyses,** which computed the number of anglers annually between 1983 and 2005, excepting 2004. Steelhead Harvest Analyses data are shown by **red, blue and yellow horizontal lines.**

2) 1989, 1995, 1997, 1998 and 2000 creel surveys, which involved interviews with selected Bulkley river anglers. Creel survey data are shown by red, blue and yellow vertical bars.

TO NOTE: The validity of Steelhead Harvest Analysis data in 1989, 1997, 1998 and 2000 appears to be supported by creel survey data from the same years, in that creel survey data roughly mirror user-group proportions estimated by the SHA.

In 1995, creel survey results reported a higher proportion of resident anglers than the Steelhead Harvest Analysis for the same year.

Kitsumkalum River Angling Data



Fig. 1a Total Number of Anglers on the Kitsumkalum River, 1983-2005, by Residency

	NUMBER OF ANGLERS ON THE KITSUMKALUM RIVER			
YEAR	B.C. Residents	Non-resident Canadians	Non-Canadians	Total
1983	548	9	8	565
1984	689	13	8	710
1985	623	18	11	652
1986	872	23	24	919
1987	694	34	10	738
1988	600	42	14	656
1989	589	32	14	635
1990	576	11	9	596
1991	395	0	11	406
1992	260	4	6	270
1993	224	11	4	239
1994	250	11	14	275
1995	351	10	27	388
1996	221	0	18	239
1997	325	4	18	347
1998	256	7	39	302
1999	351	0	26	377
2000	363	11	91	465
2001	401	31	68	500
2002	485	20	80	585
2003	473	11	81	565
2004	-	-	-	-
2005	293	33	72	398

TO NOTE: There was no Steelhead Harvest Analysis conducted in 2004.

1. HIGHEST USE IS BY B.C. RESIDENTS

The table in Figure 1a and the graph in Figure 1b (p.10), were both constructed from the same source of data: results of the **Steelhead Harvest Analysis**, a mailout survey of steelhead anglers. The Steelhead Harvest Analysis collects angler effort information on an annual basis, and is not limited to the Classified Waters period.

As Figures 1a and 1b show, Steelhead Harvest data suggest that between 1983 and 2003,

◆ B.C. resident anglers have consistently remained the largest user group on the Kitsumkalum River. Their use ranged from a low of 221 anglers in 1996, to a high of 872 anglers in 1986. B.C. resident angler days ranged from 1,351 in 1992, to 4,775 days in 1984.

• Non-Canadian anglers are, by a very small margin, the second largest user group of the Kitsumkalum River. Their use ranged from a low of four anglers in 1993, to a high of 91 anglers in 2000. Non-Canadian angling days ranged from four in 1993, to 288 in 2000.

• Non-resident Canadians are the smallest user group for the Kitsumkalum River. Their use ranged from a low of zero anglers in three non-consecutive years, to a high of 42 anglers in1988. Non-resident Canadian angler days ranged from zero in three non-consecutive years, to 216 in 1988.

No creel surveys have been completed on the Kitsumkalum River between 1983 and 2005.

Kitsumkalum River Angling Data



Fig. 1b Total Number of Angler Days Recorded Annually on the Kitsumkalum River, 1983-2005, by Residency

Kispiox River Angling Data



Fig. 1a Total Number of Anglers on the Kitsumkalum River, 1983-2005, by Residency

	NUMBER OF ANGLERS ON THE KISPIOX RIVER			
YEAR	B.C. Residents	Non-resident Canadians	Non-Canadians	Total
1983	227	33	111	371
1984	225	45	117	387
1985	330	45	158	533
1986	383	78	231	692
1987	432	77	293	802
1988	414	160	408	982
1989	281	76	428	785
1990	325	32	232	589
1991	171	0	140	311
1992	204	24	164	392
1993	109	22	208	339
1994	254	46	280	580
1995	240	46	402	688
1996	201	45	368	614
1997	172	15	306	493
1998	372	20	456	848
1999	299	33	450	782
2000	351	18	484	853
2001	303	35	519	857
2002	345	28	406	779
2003	379	50	488	917
2004	-	-	-	-
2005	272	24	349	645

TO NOTE: There was no Steelhead Harvest Analysis conducted in 2004.

1. HIGHEST USE IS BY NON-CANADIANS

The table in Figure 1a and the graph in Figure 1b (p. 12), were both constructed from the same source of data: results of the **Steelhead Harvest Analysis**, a mailout survey of steelhead anglers. The Steelhead Harvest Analysis collects angler effort information on an annual basis, and is not limited to the Classified Waters period.

As Figures 1a and 1b show, Steelhead Harvest Analysis data suggest that between 1983 and 2003,

• The total number of B.C. resident and non-Canadian steelhead anglers on the Kispiox is generally increasing.

• Non-Canadian anglers were generally the largest user group on the Kispiox River. Their use ranged from a low of 111 anglers in 1983, to a high of 519 anglers in 2001. Non-Canadian angler days ranged from 676 in 1991, to 2,763 in 2001.

• **B.C. resident anglers** were generally the second largest user group of the Kispiox River. Their use ranged from a low of 109 anglers in 1993, to a high of 432 anglers in 1987. B.C. resident angler days ranged from 219 in 1993, to 1,888 in 1987.

Non-resident Canadians have consistently remained the smallest user group for the Kispiox River. Their use ranged from a low of zero anglers in 1991, to a high of 160 anglers in 1988. Non-resident Canadian angler days ranged from zero in 1991, to 823 in 1988.





Fig. 1b Total Number of Angler Days Recorded Annually on the Kispiox River, 1983-2005, by Residency



Fig. 2 Proportionate Size, Over Time, Of Kispiox River Angler User Groups By Residency



2. TWO DATA SOURCES DESCRIBE RELATIVE SIZE OF KISPIOX RIVER USER GROUPS

The graph in Figure 2, p. 12, describes the proportionate size of Kispiox River angler user groups by residency — by illustrating the *percentage* (*not* the total number) of Kispiox River anglers who were B.C. residents, non-resident Canadians, and non-Canadians. The Figure 2 graph illustrates data from two sources:

1) Steelhead Harvest Analyses, which computed the number of anglers annually between 1983 and 2005, excepting 2004. Steelhead Harvest Analyses data are shown by red, blue and yellow horizontal lines.

2) creel surveys in 1989, 1996, 1997, and 2001, which involved interviews with selected Kispiox river anglers. Creel survey data are shown by **red, blue and yellow vertical bars.**

TO NOTE: The validity of Steelhead Harvest Analysis data in 1989, 1996, 1997, and 2001 appears to be supported by creel survey data from the same year(s), in that creel survey data roughly mirror user-group proportions estimated by the SHA.



Fig. 1a Total Number of Anglers on the Kitseguecla River, 1983-2005, by Residency

	NUMBER OF ANGLERS ON THE KITSEGUECLA RIVER			
YEAR	B.C. Residents	Non-resident Canadians	Non-Canadians	Total
1983	0	0	0	0
1984	17	0	2	19
1985	17	0	0	17
1986	10	0	0	10
1987	18	2	0	20
1988	0	0	0	0
1989	9	0	0	9
1990	11	0	0	11
1991	9	0	0	9
1992	4	0	0	4
1993	5	0	2	7
1994	0	0	0	0
1995	6	0	0	6
1996	3	0	0	3
1997	4	0	0	4
1998	7	0	0	7
1999	0	0	0	0
2000	11	0	0	11
2001	0	0	0	0
2002	0	4	0	4
2003	4	0	0	4
2004	-	-	-	-
2005	4	0	0	4

1. ALMOST EXCLUSIVELY USED BY B.C. RESIDENTS

The table in Figure 1a and the graph in Figure 1b (p. 15), were both constructed from the same source of data: results of the **Steelhead Harvest Analysis**, a mailout survey of steelhead anglers. The Steelhead Harvest Analysis collects angler effort information on an annual basis, and is not limited to the Classified Waters period.

As Figures 1a and 1b show, Steelhead Harvest Analysis data suggest that between 1983 and 2003,

• B.C. residents have been the largest user group on the Kitseguecla River. Their use ranged from a low of zero anglers in six of these years, to a high of 18 anglers in 1987. B.C. resident angler days ranged from zero in six of these years, to 168 in 1984.

• Non-resident Canadian anglers and Canadian anglers from outside of B.C. made very limited use of the Kitseguecla River – in most years, none at all. Nonresident Canadian angler days ranged from zero in 20 of these years, to 16 in 2002. Non-Canadian angler days ranged from zero in 20 of these years, to five in 1984.

No creel surveys have been completed on the Kitseguecla River between 1983 and 2005.

TO NOTE: There was no Steelhead Harvest Analysis conducted in 2004.





Fig. 1b Total Number of Angler Days Recorded Annually on the Kitseguecla River, 1983-2005, by Residency



Fig. 1a Total Number of Anglers on the Kitwanga River, 1983-2005, by Residency

	NUMBER OF ANGLERS ON THE KITWANGA RIVER			
YEAR	B.C. Residents	Non-resident Canadians	Non-Canadians	Total
1983	25	0	0	25
1984	16	2	0	18
1985	24	2	2	28
1986	15	2	0	17
1987	14	4	4	22
1988	20	0	6	26
1989	0	0	10	10
1990	4	0	2	6
1991	8	0	4	12
1992	4	0	0	4
1993	0	0	2	2
1994	6	0	0	6
1995	12	0	0	12
1996	3	0	0	3
1997	0	0	0	0
1998	4	0	3	7
1999	4	0	0	4
2000	7	0	0	7
2001	15	0	6	21
2002	12	0	4	16
2003	13	0	0	13
2004	-	-	-	-
2005	7	0	3	10

TO NOTE: There was no Steelhead Harvest Analysis conducted in 2004.

1. HIGHEST USE IS BY B.C. RESIDENTS

The table in Figure 1a and the graph in Figure 1b (p. 17), were both constructed from the same source of data: results of the **Steelhead Harvest Analysis**, a mailout survey of steelhead anglers. The Steelhead Harvest Analysis collects angler effort information on an annual basis, and is not limited to the Classified Waters period.

As Figures 1a and 1b show, Steelhead Harvest Analysis data suggest that between 1983 and 2003,

◆ **B.C. resident anglers** were the most frequent users of the Kitwanga River. Their use ranged from a low of zero in three non-consecutive years, to a high of 25 in 1983. B.C. resident angler days ranged from zero in three non-consecutive years, to 369 in 1998.

• Non- Canadian anglers rarely used the Kitwanga – not at all during 11 of these years, and to a high of 10 in 1989. Non-Canadian angler days ranged from zero in 11 of these years, to 16 in 1989.

• Non-resident Canadians rarely fished the Kitwanga: from zero anglers in 18 of these years, to a high of four anglers in 1987. Non-resident Canadian angler days ranged from zero in 18 of these years, to 10 in 1987.

No creel surveys have been completed on the Kitwanga River between 1983 and 2005.





Fig. 1b Total Number of Angler Days Recorded Annually on the Kitwanga River, 1983-2005, by Residency



Fig. 1b Total Number of Angler Days on the Lakelse River, 1983-2005, by Residency

	NUMBER OF ANGLERS ON THE LAKELSE RIVER			
YEAR	B.C. Residents	Non-resident Canadians	Non-Canadians	Total
1983	412	29	12	453
1984	494	19	11	524
1985	445	36	27	508
1986	487	48	30	565
1987	512	32	8	552
1988	547	42	25	614
1989	647	66	32	745
1990	421	32	13	466
1991	362	0	9	371
1992	329	13	8	350
1993	214	6	6	226
1994	181	16	12	209
1995	263	10	7	280
1996	182	6	18	206
1997	284	0	6	290
1998	131	23	21	175
1999	182	4	36	222
2000	188	0	27	215
2001	148	8	9	165
2002	206	12	11	229
2003	321	0	47	368
2004	-	-	-	-
2005	183	9	19	211

TO NOTE: There was no Steelhead Harvest Analysis conducted in 2004.

1. HIGHEST USE IS BY B.C. RESIDENTS

The table in Figure 1a and the graph in Figure 1b (p. 19), were both constructed from the same source of data: results of the **Steelhead Harvest Analysis**, a mailout survey of steelhead anglers. The Steelhead Harvest Analysis collects angler effort information on an annual basis, and is not limited to the Classified Waters period.

As Figures 1a and 1b show, Steelhead Harvest Analysis data suggest that between 1983 and 2003,

• **B.C. resident anglers** are the largest user group of the Lakelse River. Their use ranged from a low of 131 anglers in 1998, to a high of 647 anglers in 1989. B.C. resident angler days ranged from 588 in 1998, to 3,909 in 1989.

• Non-Canadian anglers' use on the Lakelse River is similar to non-resident Canadians' use, with a low of six anglers in 1993 and 1997, to a high of 47 in 2003. Non-Canadian angler days ranged from 15 in 2001, to 452 in 1989.

• Non-resident Canadian anglers' use on the Lakelse River is similar to non-Canadian use, with a low of zero anglers in four non-consecutive years, to a high of 66 anglers in 1989. Non-resident Canadian angler days ranged from zero in four non-consecutive years, to 330 in 1989.

No creel surveys have been completed on the Lakelse River between 1983 and 2005.





Fig. 1b Total Number of Angler Days Recorded Annually on the Lakelse River, 1983-2005, by Residency

Morice River Angling Data

Fig. 1a Total Number of Anglers on the Morice River, 1983-2005, by Residency

	NUMBER OF ANGLERS ON THE MORICE RIVER				
YEAR	B.C. Residents	Non-resident Canadians	Non-Canadians	Total	
1983	758	44	119	921	
1984	583	56	98	737	
1985	649	20	110	779	
1986	889	53	173	1115	
1987	572	36	165	773	
1988	550	50	173	773	
1989	346	22	163	531	
1990	414	19	141	574	
1991	275	0	94	369	
1992	189	4	50	243	
1993	228	36	123	387	
1994	338	22	135	495	
1995	371	41	137	549	
1996	397	40	156	593	
1997	372	26	192	590	
1998	517	23	251	791	
1999	615	25	183	823	
2000	485	25	263	773	
2001	480	35	319	834	
2002	500	24	231	755	
2003	543	47	219	809	
2004	-	-	-	-	
2005	315	24	180	519	

TO NOTE: There was no Steelhead Harvest Analysis conducted in 2004.

1. HIGHEST USE IS BY B.C. RESIDENTS

The table in Figure 1a and the graph in Figure 1b (p. 20), were both constructed from the same source of data: results of the **Steelhead Harvest Analysis**, a mailout survey of steelhead anglers. The Steelhead Harvest Analysis collects angler effort information on an annual basis, and is not limited to the Classified Waters period.

As Figures 1a and 1b show, Steelhead Harvest Analysis data suggest that between 1983 and 2003,

• **B.C. resident anglers** have been the largest user group on the Morice River. Their use ranged from a low of 189 in 1992, to a high of 889 in 1986. B.C. resident angler days ranged from 1,148 in 1993, to 6,270 in 1986.

• Non-Canadian anglers have been the second largest user group on the Morice River. Their use ranged from a low of 50 anglers in 1992, to a high of 319 anglers in 2001. Non-Canadian angler days ranged from 217 in 1992, to 1,348 in 2001.

• Non-resident Canadians have consistently remained the smallest user group for the Morice River. Their use ranged from a low of zero anglers in 1991, to a high of 56 anglers in 1984. Non-resident Canadian angler days ranged from zero in 1991, to 186 in 2003.





Fig. 1b Total Number of Angler Days Recorded Annually on the Morice River, 1983-2005, by Residency



Fig. 2 Proportionate Size, Over Time, Of Morice River Angler User Groups By Residency



2. TWO DATA SOURCES DESCRIBE RELATIVE SIZE OF MORICE RIVER USER GROUPS

The graph in Figure 2, p. 21, describes *the proportionate size* of Morice River angler user groups by residency — by illustrating the *percentage* (*not* the total number) of Morice River anglers who were B.C. residents, non-resident Canadians, and non-Canadians. The Figure 2 graph illustrates data from two sources:

1) **Steelhead Harvest Analyses,** which computed the number of anglers annually between 1983 and 2005, excepting 2004. Steelhead Harvest Analyses data are shown by **red, blue and yellow horizontal lines.**

2) a 2004 **creel survey**, which involved interviews with selected Morice river anglers. Creel survey data are shown by **red**, **blue and yellow vertical bars**.

TO NOTE: Because there was no Steelhead Harvest Analysis completed in 2004, it is not possible to compare creel survey data for the same year.

Skeena River Angling Data



Fig. 1a Total Number of Anglers on the Skeena River, 1983-2005, by Residency

	NUMBER OF ANGLERS ON THE SKEENA RIVER			
YEAR	B.C. Residents	Non-resident Canadians	Non-Canadians	Total
1983	977	200	128	1305
1984	1162	231	148	1541
1985	1493	292	203	1988
1986	2082	381	322	2785
1987	1849	341	207	2397
1988	1807	384	276	2467
1989	1419	310	233	1962
1990	1237	118	139	1494
1991	814	0	52	866
1992	357	18	35	410
1993	243	8	70	321
1994	259	16	44	319
1995	400	20	75	495
1996	268	3	74	345
1997	310	0	90	400
1998	314	3	218	535
1999	440	8	179	627
2000	558	7	269	834
2001	536	50	310	896
2002	668	24	231	923
2003	926	31	402	1359
2004	-	-	-	-
2005	636	30	301	967

TO NOTE: There was no Steelhead Harvest Analysis conducted in 2004.

1. HIGHEST USE IS BY B.C. RESIDENTS

The table in Figure 1a and the graph in Figure 1b (p. 24), were both constructed from the same source of data: results of the **Steelhead Harvest Analysis**, a mailout survey of steelhead anglers. The Steelhead Harvest Analysis collects angler effort information on an annual basis, and is not limited to the Classified Waters period.

TO NOTE: Steelhead Harvest Analyses do not differentiate between the classified waters sections 2 and 4 on the Skeena River.

As Figures 1a and 1b show, Steelhead Harvest Analysis data suggest that between 1983 and 2003,

• **B.C. resident anglers** have consistently remained the largest user group of the Skeena River. Their use ranged from a low of 243 in 1993, to a high of 2082 in 1986. B.C. resident angler days ranged from 1,861 in 1994, to 16,502 in 1986.

• Non-Canadian anglers have been, by a wide margin, the second largest user group on the Skeena River. Their use ranged from a low of 35 anglers in 1992, to a high of 402 anglers in 2003. Non-Canadian angler days ranged from 60 in 1992, to 2,297 in 1986.

• Non-resident Canadians have generally been the smallest user group for the Skeena River. Their use ranged from a low of zero anglers in 1991 and 1997, to a high of 384 anglers in 1988. Non-resident Canadian use ranged from zero in 1991 and 1997, to 2,573 in 1986.





Fig. 1b Total Number of Angler Days Recorded Annually on the Skeena River, 1983-2005, by Residency

Fig. 2 Proportionate Size, Over Time, Of Skeena River Angler User Groups By Residency





2. TWO DATA SOURCES DESCRIBE RELATIVE SIZE OF SKEENA RIVER USER GROUPS

The graph in Figure 2, p. 24, describes *the proportionate size* of Skeena River angler user groups by residency — by illustrating the *percentage* (*not* the total number) of Skeena River anglers who were B.C. residents, non-resident Canadians, and non-Canadians. The Figure 2 graph illustrates data from two sources:

1) **Steelhead Harvest Analyses,** which computed the number of anglers annually between 1983 and 2005, excepting 2004. Steelhead Harvest Analyses data are shown by **red, blue and yellow horizontal lines.**

2) creel surveys from 1984, 1989, 1995, 1996, 1999 and 2003, which involved interviews with selected Skeena river anglers. Creel survey data are shown by **red, blue and yellow vertical bars.** It is important to note that, with the exception of the 1989 study which focused on steelhead anglers, all creel surveys shown in Figure 2 were designed to collect information from both salmon and steelhead anglers.

TO NOTE: The validity of Steelhead Harvest Analysis data in 1984, 1989, 1995, 1996, 1999 and 2003 appears to be supported by creel survey data from the same years, in that creel survey data very roughly mirror user-group proportions estimated by the SHA.

Suskwa River Angling Data

Fig. 1a Total Number of Anglers on the Suskwa River, 1983-2005, by Residency

	NUMBER OF ANGLERS ON THE SUSKWA RIVER			
YEAR	B.C. Residents	Non-resident Canadians	Non-Canadians	Total
1983	155	11	13	179
1984	32	9	11	52
1985	57	4	18	79
1986	59	2	13	74
1987	48	6	27	81
1988	47	8	21	76
1989	63	2	28	93
1990	31	0	2	33
1991	16	0	9	25
1992	28	4	21	53
1993	10	0	13	23
1994	55	0	14	69
1995	21	10	17	48
1996	51	6	28	85
1997	69	0	12	81
1998	48	0	18	66
1999	62	4	21	87
2000	73	0	18	91
2001	75	0	31	106
2002	60	8	22	90
2003	66	0	17	83
2004	-	-	-	-
2005	63	0	19	82

TO NOTE: There was no Steelhead Harvest Analysis conducted in 2004.

1. HIGHEST USE IS BY B.C. RESIDENTS

The table in Figure 1a and the graph in Figure 1b (p. 27), were both constructed from the same source of data: results of the **Steelhead Harvest Analysis,** a mail-out survey of steelhead anglers. The Steelhead Harvest Analysis collects angler effort information on an annual basis, and is not limited to the Classified Waters period.

As Figures 1a and 1b show, Steelhead Harvest Analysis data suggest that between 1983 and 2003,

• **B.C. resident anglers** have been the largest user group on the Suskwa River. Their use ranged from a low of 10 anglers in 1993, to a high of 155 anglers in 1983. B.C. resident angler days ranged from 16 in 1993, to 964 in 1983.

• Non-Canadian anglers have consistently remained, by a wide margin, the second largest user group of the Suskwa River. Their use ranged from a low of two anglers in 1990, to a high of 31 anglers in 2001. Non-Canadian angler days ranged from four in 1990, to 92 in 1989.

• Non-resident Canadians have consistently remained the smallest user group for the Suskwa River. Their use ranged from a low of zero anglers in 10 of these years, to a high of 11 anglers in 1983. Non-resident Canadian angler days ranged from zero in 10 of these years, to 27 in 1989.

No creel surveys have been completed on the Suskwa River between 1983 and 2005.





Fig. 1b Total Number of Angler Days Recorded Annually on the Suskwa River, 1983-2005, by Residency



Fig. 1a Total Number of Anglers on the Zymoetz River, 1983-2005, by Residency

	NUMBER OF ANGLERS ON THE ZYMOETZ RIVER			
YEAR	B.C. Residents	Non-resident Canadians	Non-Canadians	Total
1983	329	42	6	377
1984	380	24	26	430
1985	512	45	71	628
1986	699	48	104	851
1987	511	22	69	602
1988	588	32	97	717
1989	356	27	50	433
1990	291	21	73	385
1991	170	0	39	209
1992	161	4	17	182
1993	214	3	28	245
1994	231	13	28	272
1995	285	20	47	352
1996	276	11	37	324
1997	298	11	48	357
1998	321	10	132	463
1999	425	21	212	658
2000	424	18	288	730
2001	423	35	304	762
2002	398	28	217	643
2003	437	42	338	817
2004	-	-	-	-
2005	346	39	209	594

TO NOTE: There was no Steelhead Harvest Analysis conducted in 2004.

1. HIGHEST USE IS BY B.C. RESIDENTS

The table in Figure 1a and the graph in Figure 1b (p. 29), were both constructed from the same source of data: results of the **Steelhead Harvest Analysis**, a mailout survey of steelhead anglers. The Steelhead Harvest Analysis collects angler effort information on an annual basis, and is not limited to the Classified Waters period.

Also, Steelhead Harvest Analyses do not differentiate between the Class 1 and 2 sections of the Zymoetz.

As Figures 1a and 1b show, Steelhead Harvest Analysis data suggest that between 1983 and 2003,

• **B.C. resident anglers** have consistently remained the largest user group on the Zymoetz River. Their use ranged from a low of 161 anglers in 1992, to a high of 588 anglers in 1988. B.C. resident angler days ranged from 545 in 1991, to 4,712 in 1986.

• Non-Canadian anglers have remained, by a wide margin, the second largest user group of the Zymoetz River. Their use ranged from a low of six anglers in 1983, to a high of 338 anglers in 2003. Non-Canadian angler days ranged from 33 in 1983, to 1,259 in 2003.

• Non-resident Canadians have consistently remained the smallest user group for the Zymoetz River. Their use ranged from a low of zero anglers in 1991, to a high of 48 anglers in 1986. Non-resident Canadian angler days ranged from zero in 1991, to 135 in 1986.





Fig. 1b Total Number of Angler Days Recorded Annually on the Zymoetz River, 1983-2005, by Residency

Fig. 2 Proportionate Size, Over Time, Of Zymoetz River Angler User Groups By Residency







2. TWO DATA SOURCES DESCRIBE RELATIVE SIZE OF ZYMOETZ RIVER USER GROUPS

The graph in Figure 2, p. 29, describes the proportionate size of Zymoetz River angler user groups by residency — by illustrating the *percentage* (*not* the total number) of Zymoetz River anglers who were B.C. residents, non-resident Canadians, and non-Canadians. The Figure 2 graph illustrates data from two sources:

1) **Steelhead Harvest Analyses,** which computed the number of anglers annually between 1983 and 2005, excepting 2004. Steelhead Harvest Analyses data are shown by **red, blue and yellow horizontal lines.**

2) creel surveys in 1989 and 1999, which involved interviews with selected Zymoetz river anglers. Creel survey data are shown by red, blue and yellow vertical bars.

TO NOTE: The validity of Steelhead Harvest Analysis data in 1999 appears to be supported by creel survey data from the same year, in that creel survey data roughly mirror user-group proportions estimated by the SHA.

Notes about data sources used in Skeena Watershed Angling Data Summary

The Skeena Watershed Quality Waters Strategy is a transparent public process which utilizes input from key stakeholders to develop solutions to persistent angler use issues. Future management decisions must involve evaluation of the best available data. This summary utilizes data derived from Steelhead Harvest Analyses and creel surveys for specific rivers, to illustrate trends in angler effort by residency through time. As in any decision-making process, all data should be evaluated in light of key facts about how that data was collected, and associated strengths and weaknesses.

A. Steelhead Harvest Analyses

The Steelhead Harvest Analysis (SHA) is a mail-out questionnaire of anglers who purchased a steelhead conservation stamp. The SHA collects angler effort and catch information on an annual, river-specific basis.

To consider:

- These factors may affect the accuracy and precision of Steelhead Harvest Analyses results:
 - O Sampling error: At times, it is possible that the total number of steelhead anglers for a given year may have been under-sampled. For instance, prior to fiscal year 1997/1998, a steelhead stamp was not required when fishing for species other than steelhead during the Classified Waters period. In some cases, it is possible that anglers intentionally targeting steelhead may have not purchased a steelhead stamp. Such instances would negatively impact SHA results as these anglers would not have received the questionnaire.
 - O **Response error:** as with all surveys, inaccuracies in responses can occur due to respondents' failure of memory, tendency to round up numbers, desire for prestige, and intentional deception.
 - o Non-response error: Some anglers fail to complete or return questionnaires.

• Steelhead Harvest Analyses offer useful data about total angler effort and catch. This data can be usefully compared with data from creel surveys in corresponding years. However, Steelhead Harvest Analyses did not collect angler residency information until 1984; therefore, prior to this year, it is difficult to compare SHA data to residency-specific information contained within some pre-1984 creel surveys.

B. Creel Surveys

Creel surveys are structured angler interviews commonly conducted by creel technicians, River Guardians or Conservation Officers at popular fishing locations. They collect information such as angler demographics, number of anglers, gear type, daily fishing effort and location, landed catch and method of access. Unlike the annual Steelhead Harvest Analyses, creel surveys typically focus on a specific river for a specific year. Creel surveys also generate estimates of total effort and catch that are bounded by confidence limits with known statistical properties.

Creel studies can include exit surveys, undertaken at locations where anglers walk or drive in, and roving surveys, undertaken in locations accessed by boat. Together, exit and roving surveys provide a generally accurate picture of angler use on a given river for a specific year.

To consider:

• Most, but not all, anglers agree to participate in creel surveys when approached by creel technicians. The total number of anglers approached for interviews (including those who refused to participate) was typically recorded by surveyors. In some cases, where fishing locations were crowded, creel technicians observed more anglers than they were physically able to interview.

• Creel surveys have not been conducted on all Classified Waters in the Skeena watershed, as the most heavily subscribed rivers were given priority over remote, difficult-to-access settings.

Most creel surveys are undertaken during the height of steelhead angling season (from September to October). While this
captures the majority of steelhead anglers, it should be noted that on some rivers, considerable steelhead angling takes place
in August and November. If creel surveys fail to interview anglers during these "shoulder periods", it is possible that anglers
are under-sampled. Most recently conducted creel surveys have covered portions of August and November; however, this may
not have been the case for many early surveys.



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