



Sports Fish Spawning Surveys 2019-2020

*Results of sports fish spawning surveys, June 2019-June 2020 in the
West Coast Fish & Game Region*

Glen Newton, Fish & Game Officer, July 2020



Salmon Preparing to Spawn in MacDonalDs Creek, Lake Mapourika.



Summary

Fish & Game undertake spawning surveys as a tool to monitor adult sports fish populations and provide information for management purposes. Quinnat salmon were introduced to the West Coast in the early 1900's and spawning counts have been undertaken intermittently since 1966. This season counts of 'Peak' salmon spawning numbers were undertaken at lakes Mapourika and Paringa, the Taramakau, Hokitika and Wanganui rivers were also counted to monitor recent liberations of salmon. At Lake Mapourika 169 live salmon were observed during the peak count at MacDonaldis Creek, below the long-term average of 183 fish. Salmon were also observed in Mummy Creek (19) and Redjacks Creek (1). At Lake Paringa 221 live salmon were observed during the peak count in the Windbag Stream, above the long-term average of 173 fish. Low to very low numbers of live salmon were observed in the Taramakau (22), Hokitika (1) and Wanganui Catchments (1). Surveys were also undertaken at Lake Kaniere to monitor the result of recent liberations of trout. Very low numbers of trout were observed in both Sunny and Geologist Creeks (Lake Kaniere). Staff recommendations are to; stop salmon enhancement in open systems with existing 'wild' salmon populations as no significant benefit is being observed. Redirect any enhancement budget into put and take fisheries. Continue monitoring spawning tributaries MacDonaldis Creek and Windbag Stream with enough frequency to ensure the peak count is measured. Continue to survey catchments where salmon enhancement has occurred.

Introduction

Fish & Game West Coast has a statutory responsibility under section 26Q of the Conservation Act 1987 to: manage, maintain, and enhance the West Coast sports fish and game resource in the recreational interests of anglers and hunters. To honour this responsibility, Fish & Game gathers information on the resource it manages in several ways. This report presents the data collected during sports fish spawning surveys.

Spawning surveys are an effective means for evaluating sports fish populations as they provide an index of the adult population that can be compared between years. This information helps guide management decisions which can influence the adult population ie. changing the fishing regulations to alter harvest rates or enhancing a limited wild population by the release of hatchery reared fish.

Enhancement releases of fish on the West Coast are guided by the West Coast Fish & Game Council's 'Strategy for sports fishery enhancement' adopted in 2010 and revised in 2013. The strategy states that; with limited resources comes the need to select priorities for enhancements. West Coast Fish & Game will give priority to those waters and species where.

- a viable population already exists or has existed in the past,

- the fish will benefit a wider number or range of anglers,
- it has been determined that the liberation will have a reasonable probability of success,
- there is a means of monitoring the success or failure of the release,
- it is a special purpose situation e.g. put and take (take a kid fishing).

This report presents the results from this season's Quinnat salmon (*Oncorhynchus tshawytscha*) spawning surveys in the main spawning tributaries of lakes Mapourika and Paringa along with the Taramakau, Hokitika and Wanganui Rivers. Comparison is made with the long-term dataset from these catchments in context of measuring the success of enhancements undertaken (Appendices 1, 2 and 3). Spawning surveys undertaken at Lake Kaniere were used to measure the success of enhancements of Quinnat salmon, brown trout (*Salmo trutta*) and rainbow trout (*Oncorhynchus mykiss*) (Appendix 4). These enhancements were possible due to the availability of hatchery reared fish from North Canterbury Fish & Game (NCFG). However, in 2020 NCFG ceased all hatchery operations and fish were sourced from alternative hatcheries (Appendix 5).

Method

Spawning surveys are generally undertaken on foot, by walking slowly along the stream bank spotting fish with the aid of Polaroid sunglasses. The lower section of Windbag Stream is counted while kayaking. Counts of live salmon, dead salmon and trout are recorded. If a sports fish cannot be positively identified to species, it is recorded as 'unidentified sports fish'. Weather conditions and stream clarity must be sufficient for accurate counting. Generally, surveys are 'spot checks' during the known spawning seasons. 'Peak' counts are different to spot checks as a series of counts are undertaken at more regular intervals during the spawn and the peak count is the highest live count from that year. The observed counts presented in this report do not represent the total number of salmon that spawned for any spawning season.

Survey Results

Lake Mapourika

Lake Mapourika has five in-flowing streams that have been identified as suitable spawning habitat for Quinnat salmon. Of these, MacDonalds Creek, Redjacks Creek and Mummy Creek were monitored during this season. MacDonalds Creek is the largest and most utilised spawning area for Lake Mapourika.

MacDonalds Creek

The spawning area for MacDonalds Creek starts approximately 100m upstream of where the Creek enters Lake Mapourika and extends 3 km upstream to where the river forks. This is the limit of the area surveyed, although spawning has been observed on occasion up each branch, none further than 200m upstream.

Spawning surveys were conducted on four occasions between the April 29th and June 9th, 2020 at MacDonalds Creek with the peak live count of 169 salmon occurring on May 16th. The average peak count considering all years surveyed is 183 (Figure 1).

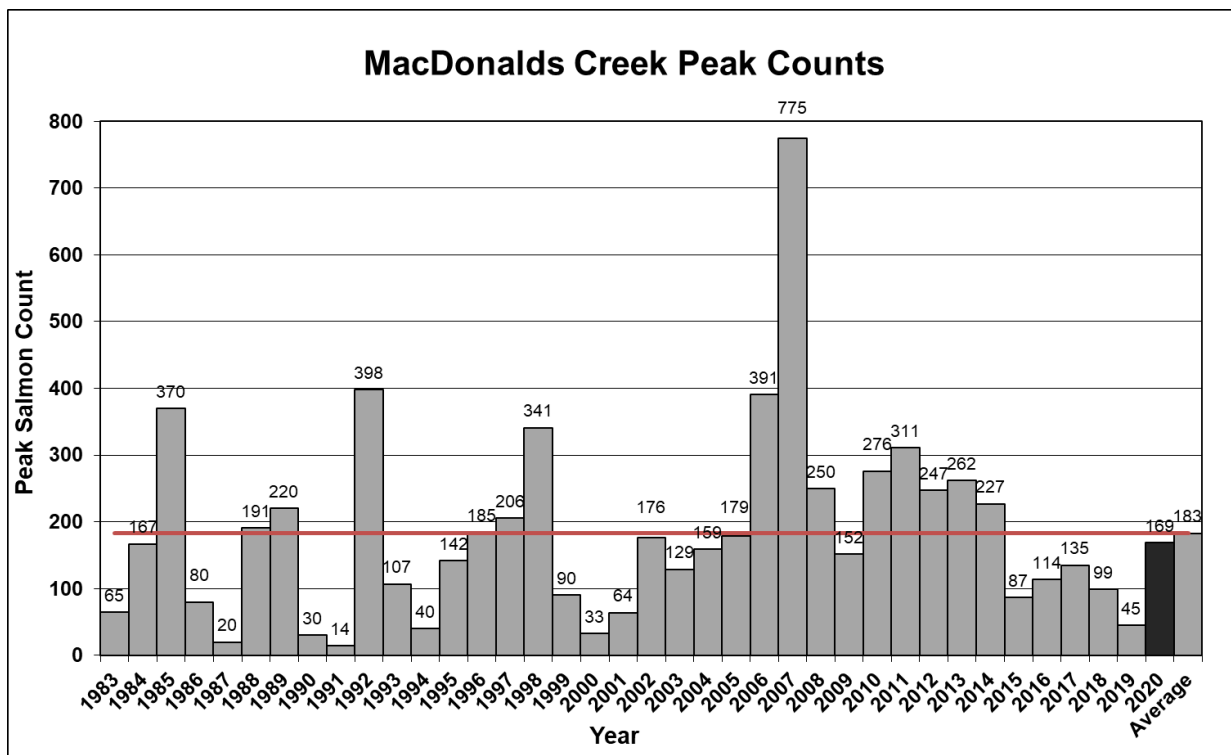


Figure 1: Peak live salmon counts for MacDonalds Creek, Lake Mapourika. 1983 – 2020

Redjacks Creek

Redjacks Creek was surveyed on May 5th, 2020 and one salmon was observed.

Mummy Creek

Mummy Creek was surveyed twice on May 5th and May 15th, 2020 with the peak live count of 19 salmon occurring on May 15th.

Lake Paringa (Windbag Stream)

Lake Paringa has one major spawning area, Windbag Stream, which is the main inflowing tributary of the lake. Windbag Stream has several tributaries that also provide limited spawning areas. These were not surveyed in addition to the main stem of Windbag Stream. The spawning grounds extend from approximately the Rata Creek - Windbag Stream confluence, upstream to where Quad Creek joins the Windbag, a total of 6.5km. The majority of spawning occurs around and upstream of the old Salmon trap site at Dawn Creek.

Spawning surveys were conducted on four occasions between April 30th and June 9th, 2020 with the peak live count of 221 salmon occurring on May 16th. The average ‘peak’ live count considering all years surveyed is 174 (Figure 2).

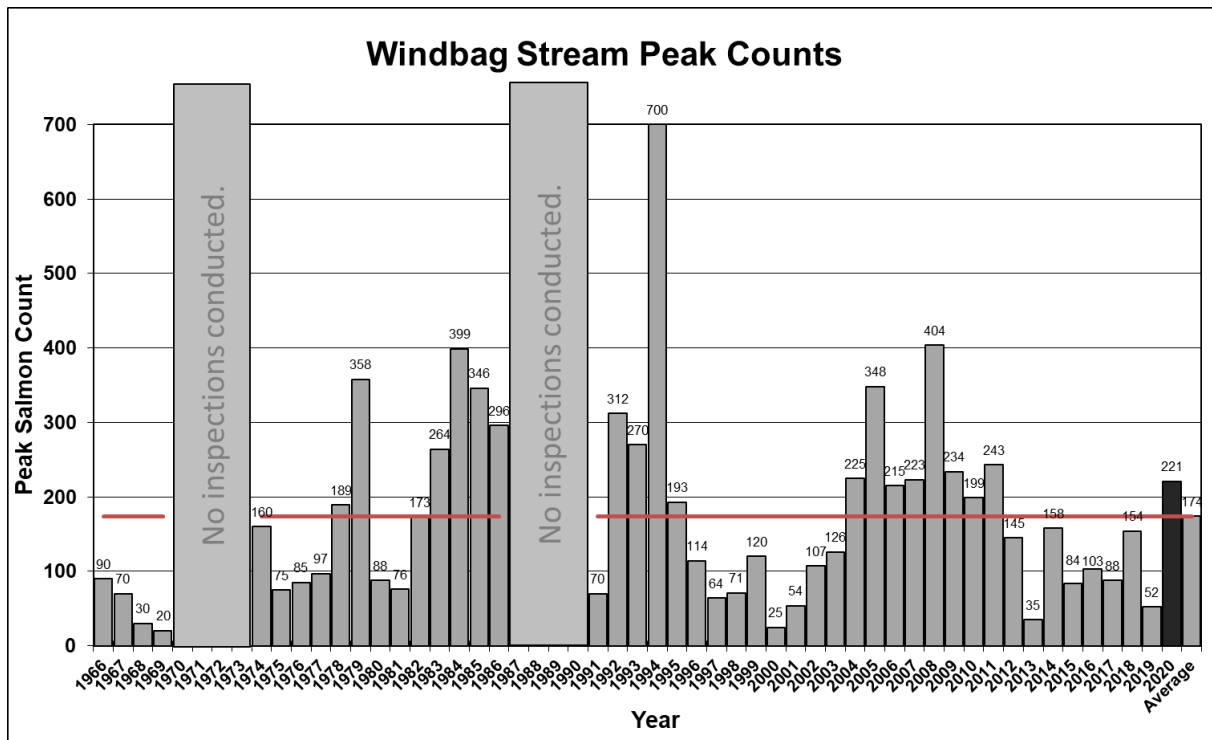


Figure 2: Peak live salmon counts for the Windbag Stream, Lake Paringa. 1966 – 2020.

Taramakau River Catchment Salmon Spawning

Black Creek (tributary of Taipo River) and Clear Creek (Aickens) have been surveyed occasionally from 1996 to 2020 during the salmon spawning season. Both creeks have received salmon smolt releases in this period, Clear Creek in 2010, and Black Creek in 2011. Other small creeks that have been checked in recent years for spawning salmon are Humphries, Debenham, Aickens Spring Creek and the Little Orangipuku. The Little Orangipuku had an enhancement release of smolt during December 2014.

Black Creek

Spawning surveys were conducted on three occasions between May 6th and June 4th, 2020 at Black Creek but no salmon were observed. Historic counts of live spawning salmon in Black Creek range from 25 fish in 2007 to 3 in 2012.

Clear Creek

Spawning surveys were conducted on three occasions between May 6th and June 4th, 2020 at Clear Creek with the peak count of two salmon occurring on May 18th. Historic counts of live spawning salmon in Clear Creek range from 64 fish in 1999 to 0 fish in 2002.

Additional salmon spawning surveys in the Taramakau Catchment

Humphries Creek, Debenham Creek, Aickens Spring Creek, and the Little Orangipuku Creek were surveyed on May 15th, 2020. There were 11 live salmon in Humphries Creek, one in Debenham, eight in the Aickens Spring Creek and none in the Little Orangipuku.

Hokitika River Catchment Salmon Spawning

Three known Hokitika River salmon spawning tributaries; Minnow, Doctors and Diedrichs Creeks have been surveyed occasionally from 2003 to 2020 during the salmon spawning season. Doctors Creek has received releases of salmon smolt recently: in 2013, 2014, 2016, 2017, 2018 and 2019.

Doctors Creek

Spawning surveys were conducted on two occasions at Doctors Creek between May 6th and May 20th, 2020. The peak live fish count was one salmon on May 6th.

Minnow Creek

Spawning surveys were conducted on two occasions at Minnow Creek between May 19th and June 5th, 2020. No salmon were observed.

Diedrichs Creek

Spawning surveys were conducted on three occasions at Diedrichs Creek between May 6th and June 7th, 2019. No live salmon were observed although one dead salmon was noted on June 6th.

Wanganui River Catchment Salmon Spawning

Following releases at Lake Ianthe in recent years a selection of creeks in the Wanganui River catchment have been surveyed to see if salmon were present. This season Amethyst Ravine Creek was surveyed on May 23rd and one live salmon was observed.

Lake Kaniere

Geologist Creek

In the 2020 spawning survey period four surveys were carried out between June 19th and September 2nd, 2019. The peak spawning count from the surveys was two brown trout observed on September 2nd, 2019. No rainbow or salmon were observed on either count.

Lake Kaniere, and Geologist Creek specifically, have received several releases of rainbow trout, salmon and brown trout between 2009 and 2019 attempting to resurrect the previously valued rainbow trout fishery.

Larger Browns have been released from late 2015 and should now be present in spawning streams during early winter.

Sunny Bight Creek

In the 2020 spawning survey period four surveys were carried out between June 19th and September 2nd, 2019. The peak spawning count from the surveys was 2 brown trout observed on July 23rd, 2019. No rainbow or salmon were observed on either count.

Several releases of juvenile and mature sports fish have occurred in or in the vicinity of Sunny Bight Creek in recent years (Appendix 5).

Discussion

Long term monitoring of 'peak' salmon spawning at MacDonald's Creek allows comparison of salmon returns over 38 continuous years. This season the count was well up on last years return and the highest since 2014. It was still slightly below the long-term average although the peak live count was potentially lower than it should have been. A local contracting firm undertook river protection works on a 400m section of the true left bank just above the bridge in early May. The peak live count on May 16th occurred immediately after the works were completed and it is likely salmon were displaced from, or killed in, the earthworks area. However, only five dead fish were observed adjacent to the earthworks on May 16th with most live fish above the work area. The contracting firm accepted that undertaking protection works in a spawning stream during the peak spawning period was unjustifiable and suitable compensation was agreed upon - payment of an enhancement to occur at Lake Ianthe.

Long term monitoring of ‘peak’ salmon spawning at the Windbag Stream allows comparison of salmon returns over 55 years although there are two “gaps” in the dataset. This season the count was well up on last year’s return, the highest since 2011 and above the long-term average. Interestingly anglers reported good catches of salmon just prior to the Covid-19 lockdown showing good numbers of salmon were appearing in the lakes and would likely have been present over the lockdown. Reduced angling pressure over lockdown likely helped increase spawning numbers during the peak run. Catch reports showed salmon to be larger than last season with fish in the 7-8 pound range common rather than 5-6 pound and quite a few double-digit fish were observed in spawning areas.

Unfortunately, the increase experienced in the South Westland lakes wasn’t prevalent in the Hokitika and Taramakau rivers. There does not appear to be any correlation with enhancement releases and the return of salmon in following years. Very few fin clipped salmon have been reported other than small lake fish caught in Lake Ianthe. On top of this Cawthron Institute studies on salmon enhancement and salmon genetics indicate that enhancements have limited benefit to open systems. Cawthron notes salmon enhancements are both expensive and potentially damaging to the wild population with limited evidence to back enhancement.

In the case of Lake Ianthe where no viable wild salmon population exists and with many released salmon remaining in the lake enhancement can be justified. The creation of additional angling opportunities for licence holders, with high chances of enhancement success, justify continued enhancement. With the closure of the NCFG hatcheries an alternate source of salmon will need to be found if funding is available. This season salmon were sourced from the Salmon Smolt New Zealand hatchery at Winchmore, Canterbury.

Continued monitoring of spawning streams surrounding Lake Kaniere during the mid to late winter period gives a good indication as to whether recent enhancement releases have been successful. Following release, the number of brown and rainbow trout observed spawning increased in the short term with some significant runs but then rapidly declined. Since the stronger years of 2011/2012 for rainbow trout, and 2018 for brown trout the populations have declined to very low levels. In 2018 lake netting confirmed a very low density of brown trout and no rainbow trout were even caught (Newton 2019). With the cost, lack of available fish and very limited short term benefit it is increasing hard to justify enhancement at Lake Kaniere.

Staff Recommendations

Staff recommendations for the 2020/21 season are as follows:

- Stop salmon enhancements into open systems with wild salmon populations as no significant benefit has been observed from releases.
- If an enhancement budget is available spend it on put and take fisheries or “closed” systems like Lake Ianthe.
- Continue monitoring spawning tributaries MacDonaldis Creek and Windbag Stream with enough frequency to ensure the peak count is measured.
- Continue to survey catchments where salmon enhancement has occurred.

References

Fish & Game West Coast internal policy. *Strategy for sports fishery enhancement through liberations in the West Coast Fish & Game region.*

Newton, G. 2019. *Gillnetting Survey of the Lake Kaniere Sports fishery 2018. West Coast Fish & Game Internal Report. January 2019.*

Appendices

Appendix 1: Sports fish spawning surveys in Lake Mapourika tributaries. In years with more than one survey completed only the date with the highest live count is tabled.

Date	Tributary	Salmon	Dead Salmon	Brown Trout
30 May 1991	Mummy Creek	0	0	0
24 June 1992	Mummy Creek	4	0	4
29 April 1993	Mummy Creek	2	0	0
15 May 1996	Mummy Creek	23	11	0
13 May 1998	Mummy Creek	1	0	2
27 May 1997	Mummy Creek	2	0	0
13 May 1999	Mummy Creek	14	0	0
07 May 2003	Mummy Creek	2	0	0
10 May 2011	Mummy Creek	6	0	0
11 May 2012	Mummy Creek	21	0	0
14 May 2013	Mummy Creek	21	1	0
13 May 2014	Mummy Creek	12	1	0
18 May 2015	Mummy Creek	22	0	0
19 May 2016	Mummy Creek	32	0	0
10 May 2018	Mummy Creek	7	0	0
07 May 2019	Mummy Creek	5	0	0
15 May 2020	Mummy Creek	19	1	1
13 May 1991	Redjacks Creek	0	0	0
28 May 1992	Redjacks Creek	38	13	0
13 May 1993	Redjacks Creek	20	0	0
25 May 1994	Redjacks Creek	5	0	2
04 May 1995	Redjacks Creek	13	0	0
11 May 1996	Redjacks Creek	23	0	0
17 May 1997	Redjacks Creek	12	3	0
14 May 2002	Redjacks Creek	4	2	0
06 May 2003	Redjacks Creek	5	0	0
18 May 2003	Redjacks Creek	15	4	0
18 May 2005	Redjacks Creek	15	4	0
18 May 2006	Redjacks Creek	9	0	0
10 May 2011	Redjacks Creek	3	0	1
11 May 2012	Redjacks Creek	5	2	1
14 May 2013	Redjacks Creek	0	0	0
13 May 2014	Redjacks Creek	4	0	0
15 May 2015	Redjacks Creek	2	2	2
09 June 2016	Redjacks Creek	2	2	0
10 May 2018	Redjacks Creek	4	0	0
07 May 2019	Redjacks Creek	0	0	0
05 May 2020	Redjacks Creek	1	0	0

Appendix 2: Sports fish spawning surveys in Taramakau River tributaries. In years with more than one survey completed, only the date with the highest live count is tabled.

Date	Tributary	Salmon	Dead salmon	Brown trout
18 May 1998	Black Creek	6	4	0
20 May 1999	Black Creek	16	1	4
10 May 2000	Black Creek	5	0	0
07 May 2002	Black Creek	8	0	0
08 May 2003	Black Creek	5	0	0
19 May 2005	Black Creek	23	0	0
19 May 2006	Black Creek	10	0	4
22 May 2007	Black Creek	25	0	9
13 May 2008	Black Creek	9	0	4
21 May 2009	Black Creek	12	1	9
17 May 2010	Black Creek	9	0	18
10 May 2011	Black Creek	12	0	5
05 May 2012	Black Creek	3	1	4
06 May 2013	Black Creek	11	0	9
12 May 2014	Black Creek	16	0	0
08 May 2015	Black Creek	11	0	3
31 May 2016	Black Creek	17	0	11
26 May 2017	Black Creek	11	2	4
28 May 2018	Black Creek	7	0	5
01 May 2019	Black Creek	5	0	6
18 May 2020	Black Creek	0	0	6
07 May 1996	Clear Creek	9	0	0
18 May 1998	Clear Creek	7	3	0
18 May 1999	Clear Creek	64	9	0
10 May 2000	Clear Creek	6	0	0
07 May 2002	Clear Creek	0	0	0
30 May 2005	Clear Creek	18	7	3
22 May 2007	Clear Creek	23	2	0
25 May 2009	Clear Creek	9	1	0
10 May 2011	Clear Creek	3	0	0
12 May 2012	Clear Creek	6	0	0
23 May 2013	Clear Creek	9	3	0
12 May 2014	Clear Creek	10	0	0
27 May 2014	Clear Creek	8	0	2
08 May 2015	Clear Creek	6	0	1
09 May 2016	Clear Creek	7	0	1
26 May 2017	Clear Creek	22	0	0
28 May 2018	Clear Creek	6	0	0
17 May 2019	Clear Creek	5	0	2
18 May 2020	Clear Creek	2	0	0
02 May 1999	Debenham Creek	0	0	0
28 April 2005	Debenham Creek	0	0	0
04 June 2014	Debenham Creek	1	0	0
22 May 2015	Debenham Creek	0	0	0
03 June 2016	Debenham Creek	4	0	0
15 June 2017	Debenham Creek	0	0	0
17 May 2019	Debenham Creek	0	0	2
15 May 2020	Debenham Creek	1	0	3
22 May 2015	Humphries Creek	1	0	1
03 June 2016	Humphries Creek	1	1	0
15 June 2017	Humphries Creek	2	0	3
28 May 2018	Humphries Creek	0	0	3
17 May 2019	Humphries Creek	0	0	1
15 May 2020	Humphries Creek	11	0	0
17 May 2019	Aickens Spring Creek	2	0	2
15 May 2020	Aickens Spring Creek	8	0	1
15 June 2017	Little Orangipuku	0	0	9

16 May 2019	Little Orangipuku	0	0	0
15 May 2020	Little Orangipuku	0	0	0

Appendix 3: Sports fish spawning surveys in Hokitika River tributaries. In years with more than one survey completed, only the date with the highest live count is tabled.

Date	Tributary	Salmon	Dead salmon	Brown trout
25 May 2007	Minnow Creek	4	0	15
14 June 2011	Minnow Creek	9	17	2
21 June 2012	Minnow Creek	1	0	1
24 May 2013	Minnow Creek	0	0	0
4 June 2014	Minnow Creek	18	0	0
20 May 2015	Minnow Creek	0	1	0
01 June 2016	Minnow Creek	4	0	0
25 May 2017	Minnow Creek	6	0	0
25 May 2018	Minnow Creek	2	0	0
07 June 2019	Minnow Creek	2	0	0
19 May 2020	Minnow Creek	0	0	0
12 May 2003	Doctors Creek	0	0	0
25 May 2005	Doctors Creek	9	0	1
28 May 2007	Doctors Creek	5	0	5
14 June 2011	Doctors Creek	4	1	2
22 June 2012	Doctors Creek	3	1	3
13 May 2013	Doctors Creek	6	0	1
12 May 2014	Doctors Creek	15	0	2
20 May 2015	Doctors Creek	6	0	3
30 May 2016	Doctors Creek	0	0	5
09 June 2017	Doctors Creek	21	0	0
29 May 2018	Doctors Creek	5	0	0
02 May 2019	Doctors Creek	4	0	2
20 May 2020	Doctors Creek	1	0	0
25 May 2005	Diedrichs Creek	2	0	0
25 May 2007	Diedrichs Creek	0	0	0
28 June 2011	Diedrichs Creek	3	1	0
21 June 2012	Diedrichs Creek	1	1	0
24 May 2013	Diedrichs Creek	5	0	1
12 May 2014	Diedrichs Creek	3	0	3
19 May 2015	Diedrichs Creek	0	0	0
02 June 2016	Diedrichs Creek	0	0	2
05 June 2019	Diedrichs Creek	2	0	1
05 June 2020	Diedrichs Creek	0	1	0

Appendix 4: Sports fish spawning surveys in Lake Kaniere tributaries. In years with more than one survey completed, only the date with the highest live count is tabled.

Date	Tributary	Salmon	Rainbow trout	Brown trout
5 August 2011	Geologist Creek	0	-	38
19 October 2011	Geologist Creek	0	31	-
19 July 2012	Geologist Creek	0	-	48
6 September 2012	Geologist Creek	0	19	-
29 July 2013	Geologist Creek	0	-	2
22 October 2013	Geologist Creek	0	7	-
14 August 2014	Geologist Creek	0	-	1
18 September 2014	Geologist Creek	0	13	-
16 November 2015	Geologist Creek	0	1	-
21 July 2016	Geologist Creek	0	-	3
4 October 2016	Geologist Creek	0	2	-
19 July 2018	Geologist Creek	0	-	23
2 September 2019	Geologist Creek	0	-	2
21 July 2011	Sunnybight Creek	0	-	3
23 October 2013	Sunnybight Creek	0	2	-
14 October 2014	Sunnybight Creek	0	9	-
14 October 2015	Sunnybight Creek	0	4	-
21 July 2016	Sunnybight Creek	0	-	3
8 September 2016	Sunnybight Creek	0	3	-
13 July 2017	Sunnybight Creek	0	-	3
19 July 2018	Sunnybight Creek	0	-	19
23 July 2019	Sunnybight Creek	0	-	2

Appendix 5. Sports fish liberations from 2009 to 2018 in catchments relating to 2015-2018 sports fish spawning counts.

Date	Catchment	Location	Number	size	Species	Est. age May 2020
8/11/2009	Hokitika	Harcourts Creek	2000	15g	Rainbow Trout	
8/11/2009	Hokitika	Diedrichs Creek	1000	15g	Rainbow Trout	
8/09/2011	Hokitika	Doctors Creek	16,300	2.8g	Quinnat Salmon	
16/12/2013	Hokitika	Doctors Creek	7,500	5g	Quinnat Salmon	6+
10/12/2014	Hokitika	Doctors Creek	4,200	6g	Quinnat Salmon	5+
14/04/2016	Hokitika	Doctors Creek	3,250	38g	Quinnat Salmon	4+
07/06/2017	Hokitika	Doctors Creek	5,500	35g	Quinnat Salmon	3+
26/04/2018	Hokitika	Doctors Creek	5,000	45g	Quinnat Salmon	2+
16/05/2019	Hokitika	Doctors Creek	4,000	45g	Quinnat Salmon	1+
15/12/2009	L. Kaniere	Geologists Creek	2500	25g	Rainbow Trout	
10/01/2010	L. Kaniere	Geologists Creek	8000	7g	Quinnat Salmon	
31/01/2011	L. Kaniere	Geologists Creek	4000	17g	Rainbow Trout	
18/01/2012	L. Kaniere	Geologists Creek	950	108g	Rainbow Trout	
10/12/2012	L. Kaniere	Geologists Creek	5,000	14g	Rainbow Trout	
28/02/2012	L. Kaniere	Geologists Creek	900	115g	Rainbow Trout	
20/03/2012	L. Kaniere	Hans Bay	5,000	80g	Quinnat Salmon	
18/10/2012	L. Kaniere	Sunny Bight	50	600g	Rainbow Trout	
18/10/2012	L. Kaniere	Sunny Bight	50	500g	Quinnat Salmon	
29/11/2013	L. Kaniere	Sunny Bight	5,000	15g	Rainbow Trout	
17/12/2013	L. Kaniere	Sunny Bight	90	1kg	Rainbow Trout	
8/10/2014	L. Kaniere	Sunny Bight	60	1-2kg	Rainbow Trout	
29/10/2014	L. Kaniere	Sunny Creek	5,000	6g	Brown Trout	
15/05/2015	L. Kaniere	Sunny Creek	7,000	7g	Rainbow Trout	
28/10/2015	L. Kaniere	Sunny Creek/Hans Bay	2,000	150g	Brown Trout	
1/11/2016	Lake Kaniere	Sunny Creek/Hans Bay	7,000	80-100g	Brown Trout	
1/11/2016	Lake Kaniere	Sunny Creek/Hans Bay	1,250	80-100g	Rainbow Trout	
01/03/2018	Lake Kaniere	Sunny Creek/Hans Bay	3,000	80g	Brown Trout	
10/04/2019	Lake Kaniere	Sunny Bight	3,000	80g	Brown Trout	
01/02/2011	L. Mapourika	Jetty Bay	5000	70g	Quinnat Salmon	
20/03/2012	L. Mapourika	Jetty Bay	2,500	80g	Quinnat Salmon	
10/12/2012	L. Mapourika	Otto's Corner	11,500	5g	Quinnat Salmon	
16/12/2013	L. Mapourika	Otto's Corner	7,500	5g	Quinnat Salmon	6+
10/12/2014	L. Mapourika	Otto's Corner	5,900	6g	Quinnat Salmon	5+
14/04/2016	L. Mapourika	Otto's Corner	3,250	38g	Quinnat Salmon	4+
1/02/2011	Lake Paringa	Boat ramp	5000	70g	Quinnat Salmon	
20/01/2016	Lake Paringa	Windbag	2000	22g	Quinnat Salmon	4+
13/10/2016	Lake Paringa	Boat Ramp	1,940	250g	Quinnat Salmon	4+
19/11/2009	Taramakau	Greenstone Pond	1000	15g	Rainbow Trout	
10/01/2010	Taramakau	Clear Creek	2000	7g	Quinnat Salmon	
18/11/2009	Taramakau	Taipo River SH 73	2000	15g	Rainbow Trout	
16/09/2011	Taramakau	Taipo - Black Creek	13,000	3.4g	Quinnat Salmon	
10/12/2014	Taramakau	Little Orangipuku	4,200	6g	Quinnat Salmon	5+

14/04/2016	Taramakau	Otira Aickens	3250	38g	Quinnat Salmon	4+
27/04/2017	Taramakau	Otira Aickens	5,000	50g	Quinnat Salmon	3+
01/04/2018	Taramakau	Otira Aickens	5,000	45g	Quinnat Salmon	2+
17/04/2019	Taramakau	Spring Creek Aickens	4,000	45g	Quinnat Salmon	1+
20/03/2012	L.Ianthe	Boat Ramp	2,500	80g	Quinnat Salmon	
10/12/2012	L.Ianthe	Boat Ramp	11,500	5g	Quinnat Salmon	
10/12/2014	L.Ianthe	Boat Ramp	4,200	6g	Quinnat Salmon	6+
14/04/2016	L.Ianthe	Boat Ramp	1,250	38g	Quinnat Salmon	4+
07/06/2017	L.Ianthe	Boat Ramp	5,500	35g	Quinnat Salmon	3+
31/05/2018	L.Ianthe	Boat Ramp	5,160	45g	Quinnat Salmon	2+
15/05/2019	L.Ianthe	Boat Ramp	4,000	45g	Quinnat Salmon	1+
28/05/2020	L.Ianthe	Boat Ramp	1000	170g	Quinnat Salmon	0+
29/05/2020	L.Ianthe	Boat Ramp	1000	100g	Quinnat Salmon	0+