

# Angler Survey on the Wapiti River, Alberta, 2018

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# Angler Survey on the Wapiti River, Alberta, 2018

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## EXECUTIVE SUMMARY

The Wapiti River, located adjacent to the city of Grande Prairie, Alberta, is known to experience high recreational use. As a multi-use waterbody, the current level of fishing pressure specifically has been unknown. From June 1 to September 30, 2018, we conducted an angler survey to fill in the knowledge gap that will aid Alberta Environment and Parks in managing the fishery.

During the survey, we used angler interviews to capture fish catch, trip information, and angler demographics. Aerial surveys were used to estimate angler effort. We used bootstrapping to derive estimates and confidence intervals for creel parameters.

We interviewed 80 anglers with 66% reporting Grande Prairie as their permanent residence. During instantaneous counts we observed 45 anglers fishing from both boats (53%) and shore (47%). For the 159 river km of the Wapiti River surveyed, we estimated anglers made 3,000 trips (95% CI = 1,678-4,560) and fished for 4,085 hours (95% CI = 2,309-6,082). We estimated anglers caught 2,730 fish (95% CI = 1,262-4,750) comprised of 2,195 walleye (95% CI = 926-3,997), 271 northern pike (95% CI = 30-662), 251 bull trout (95% CI = 40-571), and 13 goldeye (95% CI = 1-46). No anglers reported catching Arctic grayling or mountain whitefish, although they are present in the Wapiti River system. We estimate anglers harvested 207 walleye (95% CI = 74-399). No other species were reported as harvested.

While general observations indicate that the Wapiti River experiences high recreational use, our results indicate low angling effort compared to other waterbodies in Alberta. However, given the low angling effort and catch data recorded during our study period, the resulting estimates should be interpreted with caution.

**Key words:** Wapiti River, angler survey, angler effort, angler interview, sport fishery.

## **ACKNOWLEDGEMENTS**

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## 1.0 INTRODUCTION

The Wapiti River, located adjacent to the city of Grande Prairie, Alberta, is known to experience high recreational use, including jet boating, canoeing, kayaking, swimming, and fishing. As a multi-use waterbody, the current level of fishing pressure was previously unknown. Sport fish species of concern, Arctic grayling (*Thymallus arcticus*) and bull trout (*Salvelinus confluentus*) are present in the system as well as walleye (*Sander vitreus*), northern pike (*Esox lucius*), mountain whitefish (*Prosopium williamsoni*), and goldeye (*Hiodon alosoides*) (Government of Alberta 2014). In 2018 we conducted an angler survey to collect data on angling effort and catch to aid Alberta Environment and Parks (AEP) in managing the fishery on the Wapiti River.

## 2.0 STUDY AREA

The Wapiti River flows east from the British Columbia border passing just south of the city of Grande Prairie, Alberta and confluences with the Smokey River (Figure 1). The study area for this survey stretched from the mouth of the Narraway River at the Wapiti River and ended at the confluence with the Smokey River covering 159 river km. Angler interviews were conducted at four locations along the Wapiti River and one location on the Smoky River (Figure 1). These locations were selected based on being known as high use sites and included Pipestone Creek Campground, O'Brien Provincial Park, Magoo's Landing, "17.5" bridge, and Luge Launch (A. Minke, AEP, personal communication). While Luge Launch is not directly in the study area, it was indicated that boat anglers access this site to head up the mouth of the Wapiti River. We acknowledged that access is not limited to these locations and is also available via private land and 4x4 trails but due to accessibility and perceived use, those sites were not included in angler interviews (A. Minke, AEP, personal communication).

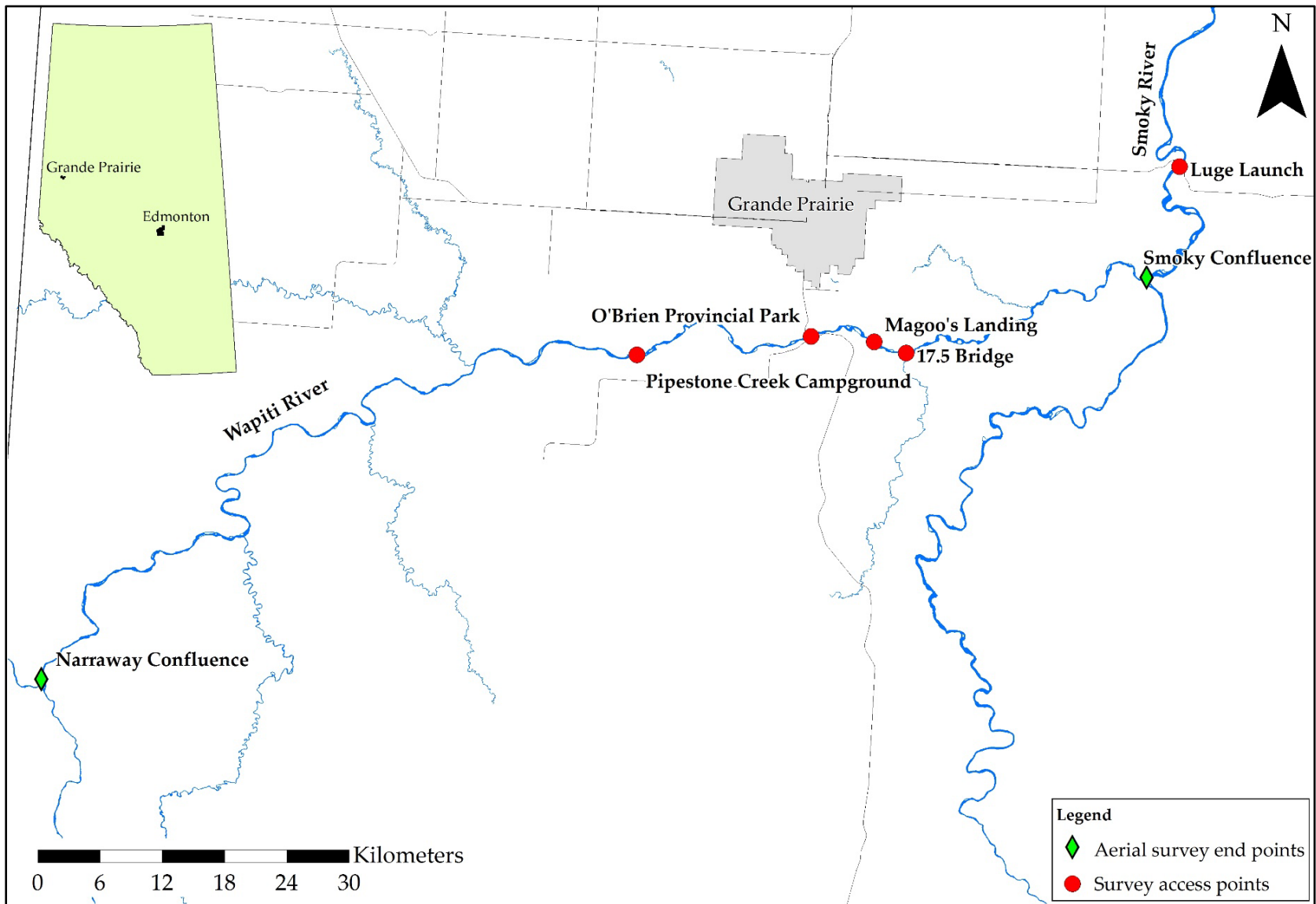


Figure 1. Wapiti River study area including access points used for angler interviews and end points for aerial surveys. Inset map shows the location of the study area (Grande Prairie) within the province of Alberta.

## **3.0 MATERIALS AND METHODS**

### **3.1 Survey design**

From June 1 to September 30, 2018 we conducted an aerial-access-type survey in conjunction with angler interviews at access points on the Wapiti River (Jones and Pollock 2012, Pollock et al. 1994, Government of Alberta 2015). Aerial surveys were used to calculate fishing effort, while angler interviews were used for angler specific data such as trip length, fish catch, and angler demographics. This design was selected to provide the best probability of intercepting boat-based anglers at the end of their trip, as there are several high use access points on the Wapiti River. Surveys were conducted during a cycle of 10 days on shift and four days off shift.

### **3.2 Angler interviews**

We conducted angler interviews according to a randomly assigned schedule using temporal strata of morning (0800 – 1500) and evening (1500 – 2200) and spatial strata by access point (Table 1). During angler interview periods, creel technicians remained at the designated access point. Remaining at the designated access point was selected based on distance between major access points, lack of a continuous route along the river, and to ensure boat angler data was captured when they returned to the access point. Angler interviews consisted of complete and incomplete trips. We asked all anglers a series of questions including hours spent fishing, number of fish caught, number of fish harvested by species, the angler's target species, and the angler's permanent residence (Appendix 1). In addition, boat anglers were asked both the total time between launching and loading their boat and the total time spent fishing.

Table 1. Summary of angler interview survey shifts by access site on the Wapiti River, 2018.

Access Site	Strata		Number of angler surveys conducted
Pipestone Creek	Weekday	a.m.	4
		p.m.	4
	Weekend	a.m.	5
		p.m.	0
O'Brien Park	Weekday	a.m.	5
		p.m.	2
	Weekend	a.m.	2
		p.m.	4
Magoo's Landing	Weekday	a.m.	3
		p.m.	3
	Weekend	a.m.	2
		p.m.	4
"17.5" Bridge	Weekday	a.m.	3
		p.m.	4
	Weekend	a.m.	3
		p.m.	0
Luge Launch	Weekday	a.m.	2
		p.m.	5
	Weekend	a.m.	3
		p.m.	4

### 3.3 Aerial counts

We conducted 18 instantaneous angler counts via aerial surveys on the Wapiti River using a Bell 206 helicopter based out of Grande Prairie Airport. Aerial survey days were selected at random from available “on” shift days between June 1 and September 30, 2018 with the probability of selecting weekday and weekend/holiday dates adjusted to have an equal numbers of flights in each strata (Table 2). Morning and evening strata were separated to time blocks roughly equivalent to the time to complete the count (Pollock et. al. 1994). Start times for flights were either 0800, 1100, or 1300 hours for morning shifts and 1500, 1700, or 1900 hours for evening shifts. When weather conditions prevented safe flight (as determined by the pilot), surveys were rescheduled by randomly selecting a new date from the remaining available dates. Flight path was randomly selected to occur in a clockwise (i.e. start at Smoky River confluence) or counter clockwise direction (i.e. start at Narraway River confluence) (Figure 1).

During aerial surveys, creel technicians recorded location with a handheld global positioning system (GPS) and the number of shore anglers, boat anglers, and non-angling boaters. Flights were flown at a target airspeed of 90 – 110 km/h and 150 m above ground level. Following Canadian Aviation Regulations, flight altitude was increased to a minimum of 305 m over residential areas. When observers were uncertain about angler counts, or river features (braids, cliffs etc.) prevented adequate observations of the entire river, the pilot circled the area until creel technicians confirmed angler counts. Angler counts were assisted with the use of image stabilizing binoculars as required.

Table 2. Summary of instantaneous aerial angler count surveys completed on the Wapiti River, 2018.

Strata		Number of aerial count surveys conducted
Weekday	a.m.	5
	p.m.	4
Weekend	a.m.	4
	p.m.	5

### **3.4 Estimation of creel parameters**

We used bootstrapping (50,000 replicates) to derive estimates and associated 95% confidence intervals (CI) for angler effort, number of angler trips, fish catch, harvest, and release (Sullivan 2004). Angler catch rates were calculated as total ratio estimators following Jones and Pollock (2012) and only include angler interviews where angling time is greater than 0.5 hours as per Pollock et al. (1997). Bootstrapped instantaneous aerial angler counts produced a distribution of mean angler counts used as the basis for calculating survey metrics. Before bootstrapping, a two-sample t-test was conducted to assess differences between weekday and weekend/holiday angler counts. Significant results dictated separate bootstrapping of weekday and weekend/holiday data, then combining these, whereas non-significant results dictated bootstrapping of the combined weekday and weekend counts. Angler count distributions multiplied by the available angling hours, provided estimates and confidence intervals for angling effort (hours). Estimates of creel survey parameters were calculated using the R software package (R Core Team 2019). A flow chart describing the steps used to calculate estimates is provided in Appendix 2.

## **4.0 RESULTS**

### **4.1 Angler interviews**

We interviewed 80 anglers who reported 109.25 hours of fishing (Appendix 3). Most anglers were residents of Grande Prairie (66%) or from local communities in the surrounding area (20%). The remaining anglers came from other areas of Alberta (11.5%) and out of province (2.5%). The majority of anglers (59%) did not target a specific species while 34% targeted walleye, with a small percentage targeting bull trout (2.5%) and northern pike (2.5%). Of the 96 fish caught by interviewed anglers, walleye were the most reported species (82.3%), followed by bull trout (9.4%), northern pike (7.3%), and goldeye (1.1%) (Appendix 3). Anglers reported harvesting 10 walleye. No anglers reported catching Arctic grayling or mountain whitefish, nor harvesting any species other than walleye.

### **4.2 Aerial counts and estimates**

During aerial surveys, we counted a total of 45 anglers split between boat (53%) and shore (47%). An additional 389 individuals were observed boating recreationally (Appendix 4). People were also observed swimming, using ATVs, and generally recreating in or adjacent to the river.

We estimated anglers made 3,000 trips (95% CI = 1,678–4,560) and fished for 4,085 hours (95% CI = 2,309–6,082) on the 159 river km surveyed of the Wapiti River during the survey period. Anglers caught an estimated 2,195 walleye (95% CI = 926–3,997), 271 northern pike (95% CI = 30–662), 251 bull trout (95% CI = 40–571), and 13 goldeye (95% CI = 1–46) and harvested 207 walleye (95% CI = 74–399). Catch rates on the Wapiti River were 0.54 walleye/hour, 0.07 northern pike/hour, 0.06 bull trout/hour, and 0.003 goldeye/hour. While present in the river, no anglers reported catching Arctic grayling or mountain whitefish during angler interviews.

## **5.0 SUMMARY**

Our angler survey provides quantitative estimates of angler effort and fish catch data on the Wapiti River in 2018. While general observations indicate that the Wapiti River experiences high recreational use, our results indicate low angling effort compared to other waterbodies in Alberta. However, given the low angling effort and catch data recorded during our study period, the resulting estimates should be interpreted with caution.



## 6.0 LITERATURE CITED

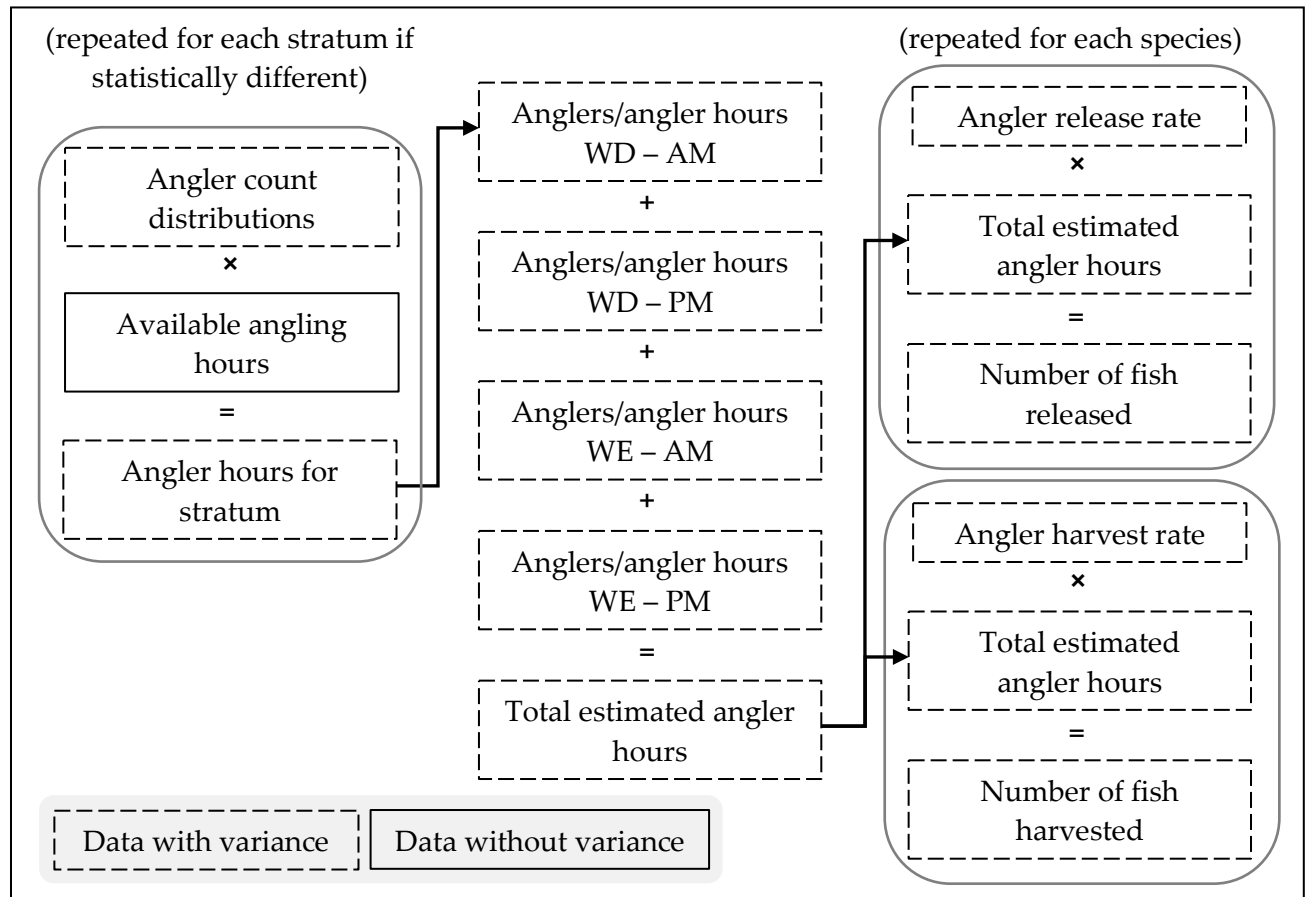
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# 7.0 APPENDICES

Appendix 1. Angler survey form used for angler interviews on the Wapiti River, 2018.

MM / DD	Day Code	Time of day 24h (hour + 12)	Nearest 15 min e.g. 0, 15, 30, 45	Party # i.e. 017	Angler number	Access Type (0=Shore, 1=boat)	# Anglers per boat Mark down only once per party	Hours out	1/4 hrs out (.25,.5,.75)	TIME FISHING	WALL		NRPK		MNWH		BLTR	RGR	Target Species (1=WALL, 2=NRPK, 3=MNWH, 4=BLTR, 5=ARGR, 6=ANY, 7=Other)	Complete trip data (1=No, 2=Yes)	Residence	Comments? Reproduction of other SPP Recreatory noncompliance observed																						
											# WALL Kept	# Legal Released (>50cm)	# NRPK Kept	# Total NRPK Released	# MNWH Kept	# Total MNWH Released							# Legal Released (<30 cm)	# BLTR Released	# ARGR Released																			
1	/																																											
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Appendix 2. Flow chart outlining the process used to calculate estimates for the surveyed stretch (159 river km) of the Wapiti River, 2018. Solid lines represent values with no variance, and dashed lines represent data with variance.  
 Code: WD = week day, WE = weekend/holiday.



Appendix 3. Information collected during angler interviews, Wapiti River, 2018.  
 Species codes: BLTR = bull trout, GOLD = goldeye, NRPK = northern pike,  
 WALL = walleye, NA = not applicable.

Date d/m/y	Access Point	Boat/Shore Angling	Time fished (hours)	Complete trip	Angler residence	Species	Total caught
02/06/2018	HWY 43	Boat	2	Y	Webster	WALL	9
02/06/2018	HWY 43	Boat	2	Y	Webster	WALL	11
02/06/2018	HWY 43	Boat	2	Y	Edmonton	WALL	10
02/06/2018	HWY 43	Boat	1	Y	Grande Prairie	NA	-
02/06/2018	HWY 43	Boat	1	Y	Teepee Creek	NA	-
03/06/2018	Pipestone	Boat	0.5	Y	Grande Prairie	NA	-
03/06/2018	Pipestone	Boat	0.5	Y	Grande Prairie	NA	-
03/06/2018	Pipestone	Boat	0.5	Y	Grande Prairie	NA	-
07/06/2018	Magoo's	Boat	1	Y	Grande Prairie	NA	-
07/06/2018	Magoo's	Boat	1	Y	Grande Prairie	WALL	6
						NRPK	2
07/06/2018	Magoo's	Boat	2	Y	Grande Prairie	BLTR	3
07/06/2018	Magoo's	Boat	2	Y	Grande Prairie	BLTR	3
16/06/2018	Magoo's	Boat	1	Y	Grande Prairie	BLTR	1
18/06/2018	Pipestone	Shore	1	Y	Grande Prairie	NA	-
18/06/2018	Pipestone	Boat	0.5	Y	Wembley	NA	-
18/06/2018	Pipestone	Boat	0.5	Y	Wembley	NA	-
18/06/2018	Pipestone	Boat	0.5	Y	Wembley	NA	-
18/06/2018	Pipestone	Shore	0.75	Y	Grande Prairie	NA	-
18/06/2018	Pipestone	Boat	0.5	Y	Wembley	WALL	1
						NRPK	1
19/06/2018	17.5 Bridge	Shore	1.5	Y	Grande Prairie	NA	-
19/06/2018	17.5 Bridge	Shore	1.5	Y	Grande Prairie	NA	-
21/06/2018	Pipestone	Shore	2.5	Y	Wembley	NA	-
21/06/2018	Pipestone	Shore	2.5	Y	Wembley	NA	-
03/07/2018	17.5 Bridge	Shore	1	Y	Medicine Hat	NA	-
03/07/2018	17.5 Bridge	Shore	1	Y	Medicine Hat	NA	-
03/07/2018	17.5 Bridge	Shore	2	Y	Wembley	WALL	2
03/07/2018	17.5 Bridge	Shore	2	Y	Grande Prairie	NA	-
03/07/2018	17.5 Bridge	Shore	2	Y	Grande Prairie	NA	-
03/07/2018	17.5 Bridge	Shore	1.5	Y	Grande Prairie	NA	-

Date d/m/y	Access Point	Boat/Shore Angling	Time fished (hours)	Complete trip	Angler residence	Species	Total caught
04/07/2018	O'Brien	Shore	1.5	Y	Grande Prairie	NA	-
05/07/2018	17.5 Bridge	Shore	2	Y	Grande Prairie	WALL	1
05/07/2018	17.5 Bridge	Shore	2	Y	Grande Prairie	NA	-
17/07/2018	O'Brien	Shore	1.5	Y	Grande Prairie	NA	-
18/07/2018	Magoo's	Boat	0.25	Y	Grande Prairie	NA	-
18/07/2018	Magoo's	Boat	0.25	Y	Grande Prairie	NA	-
20/07/2018	17.5 Bridge	Shore	0.25	Y	Grande Prairie	NA	-
20/07/2018	17.5 Bridge	Shore	3	Y	Grande Prairie	WALL	1
20/07/2018	17.5 Bridge	Shore	0.5	Y	Grande Prairie	NA	-
20/07/2018	17.5 Bridge	Shore	0.5	Y	Grande Prairie	NA	-
21/07/2018	Magoo's	Shore	1	Y	Grande Prairie	NA	-
21/07/2018	Magoo's	Shore	1	Y	Grande Prairie	NA	-
21/07/2018	Magoo's	Shore	1	Y	Grande Prairie	NA	-
21/07/2018	Magoo's	Shore	0.75	Y	Calgary	NA	-
21/07/2018	Magoo's	Shore	0.75	Y	Halifax, Nova Scotia	NA	-
21/07/2018	Magoo's	Shore	1	Y	Grande Prairie	NA	-
21/07/2018	Magoo's	Shore	1	Y	Grande Prairie	NA	-
04/08/2018	Magoo's	Shore	0.25	Y	Edmonton	NA	-
04/08/2018	Magoo's	Boat	0.5	Y	Grande Prairie	NA	-
05/08/2018	17.5 Bridge	Shore	1.5	Y	Grande Prairie	WALL	1
05/08/2018	17.5 Bridge	Shore	1.5	Y	Grande Prairie	WALL	1
05/08/2018	17.5 Bridge	Shore	1.5	Y	Grande Prairie	NA	-
05/08/2018	17.5 Bridge	Shore	0.75	Y	Edmonton	NA	-
12/08/2018	Magoo's	Boat	1	Y	Grande Prairie	WALL	1
12/08/2018	Magoo's	Shore	2	Y	Grovedale	WALL	1
12/08/2018	Magoo's	Shore	2	Y	Grovedale	NA	-
15/08/2018	Magoo's	Boat	3	Y	Grande Prairie	NA	-
15/08/2018	Magoo's	Boat	3	Y	Grande Prairie	NA	-
16/08/2018	O'Brien	Shore	0.75	Y	Edmonton	NA	-
17/08/2018	17.5 Bridge	Shore	2	Y	Grovedale	WALL	1
17/08/2018	17.5 Bridge	Shore	2	Y	Grovedale	NA	-
17/08/2018	17.5 Bridge	Shore	1.75	Y	Grande Prairie	BLTR	1
17/08/2018	17.5 Bridge	Shore	0.5	Y	Grande Prairie	WALL	1
17/08/2018	17.5 Bridge	Shore	0.5	Y	Grande Prairie	NA	-
17/08/2018	17.5 Bridge	Shore	3	Y	Calgary	NRPK	2

Date d/m/y	Access Point	Boat/Shore Angling	Time fished (hours)	Complete trip	Angler residence	Species	Total caught
17/08/2018	17.5 Bridge	Shore	3	Y	Calgary	WALL	3
18/08/2018	17.5 Bridge	Shore	2.5	Y	Grande Prairie	WALL	3
						NRPK	1
18/08/2018	17.5 Bridge	Shore	0.5	Y	Grande Prairie	NA	-
27/08/2018	Magoo's	Boat	3	Y	Grande Prairie	WALL	4
						BLTR	1
27/08/2018	Magoo's	Boat	3	Y	Grande Prairie	WALL	4
28/08/2018	HWY 43	Boat	0.5	Y	Debolt	WALL	1
28/08/2018	HWY 43	Boat	0.5	Y	Debolt	WALL	1
31/08/2018	O'Brien	Shore	1	Y	Grande Prairie	NA	-
01/09/2018	17.5 Bridge	Shore	1.5	Y	Grande Prairie	NA	-
01/09/2018	17.5 Bridge	Shore	1.5	Y	Grande Prairie	NA	-
01/09/2018	17.5 Bridge	Shore	1.5	Y	Grande Prairie	NA	-
01/09/2018	17.5 Bridge	Shore	1	Y	Grande Prairie	NA	-
08/09/2018	Magoo's	Shore	0.5	Y	Grande Prairie	NA	-
08/09/2018	Magoo's	Shore	1	Y	Ontario	NA	-
09/09/2018	17.5 Bridge	Shore	0.75	Y	Grande Prairie	NA	-
09/09/2018	17.5 Bridge	Shore	4	Y	Grande Prairie	WALL	16
						NRPK	1
						GOLD	1

Appendix 4. Instantaneous aerial angler counts from the Wapiti River, 2018.  
 Code: WDAM = weekday AM, WDPM = weekday PM, WEAM = weekend/  
 holiday AM, WEPM = weekend/holiday PM.

Date (d/m/y)	Total people	Number of anglers	Access type	Strata
04/06/2018	-	-	-	WDAM
09/06/2018	3	0	Boat	WEPM
09/06/2018	3	1	Boat	WEPM
09/06/2018	4	0	Boat	WEPM
09/06/2018	2	2	Shore	WEPM
09/06/2018	2	1	Shore	WEPM
16/06/2018	5	0	Boat	WEPM
16/06/2018	3	0	Boat	WEPM
16/06/2018	5	0	Boat	WEPM
16/06/2018	3	0	Boat	WEPM
16/06/2018	5	0	Boat	WEPM
16/06/2018	4	0	Boat	WEPM
16/06/2018	2	0	Boat	WEPM
16/06/2018	2	0	Boat	WEPM
16/06/2018	4	0	Boat	WEPM
16/06/2018	2	0	Boat	WEPM
16/06/2018	5	0	Boat	WEPM
16/06/2018	5	0	Boat	WEPM
16/06/2018	5	0	Boat	WEPM
16/06/2018	6	0	Boat	WEPM
16/06/2018	2	0	Boat	WEPM
16/06/2018	6	0	Boat	WEPM
16/06/2018	6	0	Boat	WEPM
16/06/2018	2	0	Boat	WEPM
16/06/2018	3	0	Boat	WEPM
16/06/2018	4	0	Boat	WEPM
16/06/2018	3	0	Boat	WEPM
16/06/2018	1	0	Boat	WEPM
16/06/2018	4	0	Boat	WEPM
16/06/2018	6	0	Boat	WEPM
16/06/2018	5	0	Boat	WEPM
16/06/2018	5	0	Boat	WEPM
16/06/2018	5	0	Boat	WEPM

Date (d/m/y)	Total people	Number of anglers	Access type	Strata
16/06/2018	2	0	Boat	WEPM
16/06/2018	2	0	Boat	WEPM
22/06/2018	1	0	Boat	WDAM
22/06/2018	2	0	Shore	WDAM
06/07/2018	1	0	Boat	WDAM
06/07/2018	1	0	Boat	WDAM
06/07/2018	1	0	Boat	WDAM
06/07/2018	1	0	Boat	WDAM
14/07/2018	2	0	Boat	WEPM
14/07/2018	6	0	Boat	WEPM
14/07/2018	3	0	Boat	WEPM
14/07/2018	3	0	Boat	WEPM
14/07/2018	4	0	Boat	WEPM
14/07/2018	2	0	Boat	WEPM
14/07/2018	3	0	Boat	WEPM
14/07/2018	3	0	Boat	WEPM
14/07/2018	3	1	Boat	WEPM
14/07/2018	9	0	Boat	WEPM
14/07/2018	4	0	Boat	WEPM
14/07/2018	4	0	Boat	WEPM
14/07/2018	5	0	Boat	WEPM
14/07/2018	5	0	Boat	WEPM
14/07/2018	4	0	Boat	WEPM
14/07/2018	4	0	Boat	WEPM
14/07/2018	3	0	Boat	WEPM
14/07/2018	2	2	Boat	WEPM
14/07/2018	4	0	Shore	WEPM
14/07/2018	11	1	Shore	WEPM
14/07/2018	2	2	Shore	WEPM
14/07/2018	1	1	Shore	WEPM
14/07/2018	1	0	Shore	WEPM
14/07/2018	3	0	Shore	WEPM
30/07/2018	2	0	Boat	WDPM
30/07/2018	4	0	Boat	WDPM
30/07/2018	2	0	Boat	WDPM
01/08/2018	4	0	Boat	WDPM



Date (d/m/y)	Total people	Number of anglers	Access type	Strata
01/08/2018	3	3	Shore	WDPM
04/08/2018	3	1	Boat	WEPM
04/08/2018	2	0	Boat	WEPM
04/08/2018	2	0	Boat	WEPM
04/08/2018	4	0	Boat	WEPM
04/08/2018	5	0	Boat	WEPM
04/08/2018	4	0	Boat	WEPM
04/08/2018	4	0	Boat	WEPM
04/08/2018	4	0	Boat	WEPM
04/08/2018	4	0	Boat	WEPM
04/08/2018	4	0	Boat	WEPM
04/08/2018	2	0	Boat	WEPM
04/08/2018	3	0	Boat	WEPM
04/08/2018	3	0	Boat	WEPM
04/08/2018	2	0	Boat	WEPM
04/08/2018	1	0	Boat	WEPM
04/08/2018	4	0	Boat	WEPM
04/08/2018	4	0	Boat	WEPM
14/08/2018	1	1	Shore	WDAM
14/08/2018	35	0	Boat	WDAM
14/08/2018	2	2	Boat	WDAM
14/08/2018	2	0	Boat	WDAM
14/08/2018	3	0	Boat	WDAM
19/08/2018	3	1	Boat	WEAM
19/08/2018	4	0	Boat	WEAM
19/08/2018	4	0	Boat	WEAM
19/08/2018	3	0	Boat	WEAM
19/08/2018	2	0	Boat	WEAM
19/08/2018	1	0	Boat	WEAM
19/08/2018	7	0	Boat	WEAM
19/08/2018	4	0	Boat	WEAM
19/08/2018	2	2	Boat	WEAM
19/08/2018	3	0	Boat	WEAM
19/08/2018	2	0	Boat	WEAM
19/08/2018	2	0	Boat	WEAM
19/08/2018	2	0	Boat	WEAM

Date (d/m/y)	Total people	Number of anglers	Access type	Strata
19/08/2018	4	0	Boat	WEAM
19/08/2018	2	1	Boat	WEAM
19/08/2018	4	1	Boat	WEAM
19/08/2018	4	4	Shore	WEAM
26/08/2018	2	0	Boat	WEAM
26/08/2018	4	0	Shore	WEAM
26/08/2018	1	0	Shore	WEAM
26/08/2018	2	0	Boat	WEAM
26/08/2018	5	3	Boat	WEAM
26/08/2018	2	2	Boat	WEAM
31/08/2018	1	1	Boat	WDPM
31/08/2018	3	3	Boat	WDPM
31/08/2018	3	0	Boat	WDPM
31/08/2018	2	0	Boat	WDPM
31/08/2018	1	0	Boat	WDPM
31/08/2018	2	0	Boat	WDPM
31/08/2018	1	0	Boat	WDPM
31/08/2018	1	1	Shore	WDPM
01/09/2018	1	0	Boat	WEPM
01/09/2018	3	1	Boat	WEPM
01/09/2018	2	0	Boat	WEPM
01/09/2018	2	0	Boat	WEPM
01/09/2018	2	0	Boat	WEPM
01/09/2018	1	0	Boat	WEPM
01/09/2018	1	0	Boat	WEPM
01/09/2018	2	0	Boat	WEPM
01/09/2018	1	0	Boat	WEPM
01/09/2018	1	0	Boat	WEPM
01/09/2018	1	0	Boat	WEPM
01/09/2018	2	0	Boat	WEPM
01/09/2018	15	0	Boat	WEPM
01/09/2018	2	1	Shore	WEPM
01/09/2018	5	0	Shore	WEPM
01/09/2018	2	2	Shore	WEPM
09/09/2018	2	0	Boat	WEPM
09/09/2018	6	0	Boat	WEPM

Date (d/m/y)	Total people	Number of anglers	Access type	Strata
09/09/2018	2	0	Boat	WEPM
09/09/2018	1	1	Shore	WEPM
12/09/2018	3	0	Boat	WDPM
12/09/2018	1	1	Shore	WDPM
16/09/2018	2	2	Boat	WEAM
16/09/2018	0	0	Shore	WEAM
16/09/2018	0	0	Shore	WEAM
16/09/2018	0	0	Shore	WEAM
16/09/2018	2	0	Boat	WEAM
25/09/2018	-	-	-	WDAM



**Alberta Conservation Association acknowledges the following partner for its generous support of this project:**

Alberta

