

# Montana Statewide Angling Pressure 2020



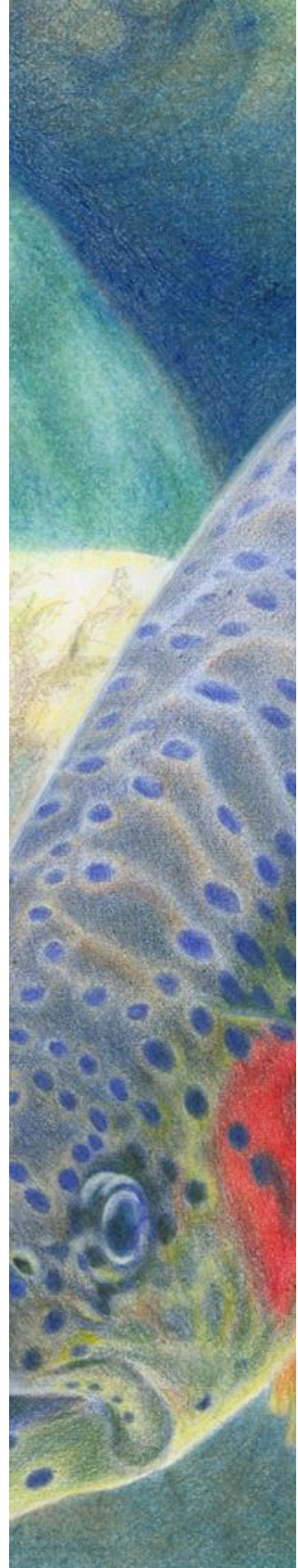
# Montana Statewide Angling Pressure 2020

Prepared by:

Cedar League  
Bethany Caball

July 2022

Cover Art: Angela Smith





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Summary Report



# Angler Pressure 2020 Summary Report

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## 1.0 INTRODUCTION

The year 2020 presented a unique opportunity to conduct the biennial angling pressure survey during an off year, a year in which a global pandemic may have influenced fishing pressure in the lakes and streams of Montana as people were driven to get outdoors. Montana State Parks experienced record visitation with an estimated 3.4 million individuals visiting a state park in 2020, which represents a 29.5% increase over the prior year (Montana FWP, 2021). Similarly, FWP's Aquatic Invasive Species Prevention Program and partners performed a record 174,423 watercraft inspections, representing a 54% increase from 2019 (Montana FWP, 2020).

Results from the 2020 Angler Pressure Survey reveal a similar story. Montana's lakes and streams experienced an estimated 4,014,803 angler days during the 2020 license year (resident and non-resident combined), representing a record 28% increase in pressure from 2019. Not surprisingly, most of the increased pressure came from Montana residents as people were staying closer to home. There was a 39% increase in resident pressure alone, while non-resident pressure saw a 10% increase from the prior 2019 survey year. The following report summarizes the results of the 2020 angling pressure survey, emphasizing changes in angling pressure from the prior 2019 survey year.

Montana Fish, Wildlife and Parks has conducted statewide angling mail surveys for more than 50 years. Bishop (1959, 1960, 1961) conducted the first recorded mail survey of fishing pressure on a statewide basis for Montana from 1958-1960. In 1968 Holton (1970) again initiated the statewide angling pressure mail survey. Holton (1971) conducted another statewide survey for the 1969 license year. No results were reported because it was felt they were too high due to sampling problems. In 1975, Gaffney (unpublished data) conducted a statewide survey of angling pressure by mail. An attempt was made to continue that statewide survey in 1976 using the 1975 mailing lists. This did not provide adequate samples for nonresidents, so only resident pressure was obtained. The surveys were started again in 1982 and ran for four consecutive years (McFarland, 1989). In 1986 the surveys were again canceled for lack of funding. In March 1989, the statewide angling use mail survey was again reinitiated, and has been conducted on a biennial basis since that time through the current year.

The number of questionnaires sent out has varied over the years. Between 1989 and 2011, the number has been in the range of 89,000-97,000 for all but two surveys (68,505 in 2001 and 80,125 in 2005). In 2013, the effort was scaled back to 67,603 questionnaires, a drop of 25 % from 2011. The 2015 survey effort was 67,600 questionnaires, the same as 2013. In 2017 the survey was again scaled back due to budget cuts. A total of 40,300 surveys were mailed out in 2017, a 40% cut over 2015. The consequence of this change is that it increases error measurements for waters and decreases the number of waters for which a pressure estimate can be calculated. In 2019 and 2020 the survey went back to the 2015 effort to decrease error and increase the number of waters for which a pressure estimate can be calculated.



In the current survey, one small change was made to the maps that accompany the questionnaire. Section 2 of the Madison River was divided into sections 2A and 2B to better determine where the pressure lies within that popular section. It is still worthy of mention because any change has the potential to influence the angler response, and ultimately angler pressure estimates. When there is no map, the nearest town or landmark is used to determine which section of the river was fished when the respondent does not include the section.

Contents of the questionnaire changed slightly in 2020. All license holders surveyed were asked if they use a boat, and if so, do they pull the drain plug when taking out of water. The questions regarding Fishing Access Site (FAS) use were omitted in the 2020 survey. Respondents were asked the number of days fished, type of fishing (shore, boat, both, or ice), satisfaction rating on each water, number of people seen, crowding rating on each water, and primary fish species fished for. The angler satisfaction and crowding questions have not appeared on the pressure surveys since the 2011 survey.

## 2.0 METHODS

### 2.1 MAIL SURVEYS

The 2020 statewide angling mail pressure survey was conducted during the license year beginning March 1, 2020 and ending February 28, 2021. The methods used by R. McFarland for surveys conducted from 1989 through 2009 provided the framework for the 2020 survey.

Samples were drawn from the Department's Automated Licensing System (ALS) on the first day of each month. All anglers who purchased a two-day or ten-day license valid for use in the previous month as well as all anglers who purchased or held a season fishing license valid for use in the previous month were included in the eligible angler population. A computer program was written in ORACLE to create three populations of anglers from which to draw samples. A season population, a 2-day population, and a 10-day population were created each month. The licenses that comprise these three populations of anglers are:

1. NonResident 2-day license: enables the nonresident angler to fish for two consecutive days of their choice. Anglers may purchase as many two-day licenses as they want.
2. NonResident 10-day license: enables the nonresident angler to fish for 10 consecutive days of fishing. Anglers may purchase as many ten-day licenses as they want.
3. NonResident Season license includes:
  - combo license - combines a nonresident conservation license and seasonal fishing license.
  - seasonal license
  - deer combo license - includes a deer tag and a fishing license.
  - big game combo - includes a conservation license, an elk tag, a deer "A" tag, a black bear tag, a fishing license and an upland game bird license.
4. Resident 2-day license: valid for 2 consecutive days at a reduced cost.
5. Resident Season license includes:
  - season license
  - combo license - combines a season fishing license and a conservation license
  - sportsman's license - provides a deer "A" tag, elk tag, optional bear tag, conservation license, a game bird stamp and a fishing license
  - "senior" license - 62 years of age and older
  - "youth" license - ages 12 to 17
  - disabled license - certified as permanently and substantially disabled

An ACCESS table was used to pull a random sample from each population. Sampling was done on a monthly-stratified basis (Table 1). The number pulled from each population was proportionally derived from the angling pressure each population exerted based on previous

surveys. A 25/75 ratio to sample non-resident and resident anglers was used in the current survey- the same ratio that has been used since 2007 as reported by McFarland (2009) who found that residents provide approximately 75% of angling pressure. The ratio is 25/75 for this current survey.

The individual samples from each population (by month) were assigned to a wave (Table 1) and given sequential serial numbers. The database of names and addresses were run through a software program (a service provided by Print & Mail Service in Helena) to validate addresses and assign correct 4-digit zip code extensions. Only addresses that passed the mail validation were included in the final sample. This helped reduce the number of non-deliverable surveys. An ACCESS report was written to export the monthly sample data into a spreadsheet for mail merging with the survey WORD document. The merged file contained a single page for each angler included in the sample. This merged file and a separate map file were sent to Print & Mail Services (State of Montana) in Helena, MT where the survey was printed (two-sided), stuffed into envelopes and mailed via first class mail.

Table 1. Period-of-time covered for waves for the 2020-21 Statewide Angling Survey

<b>Wave</b>	<b>Time Period Covered</b>	<b>Season Designation</b>
1	March 2020	Winter
2	April	Winter
3	May	Summer
4	June	Summer
5	July	Summer
6	August	Summer
7	September	Summer
8	October	Winter
9	November	Winter
10	December	Winter
11	January 2021	Winter
12	February	Winter

The sample size for the 2020 survey was the same as the 2015 and 2019 survey. Actual numbers of questionnaires sent varied slightly from wave to wave (Table 2). For the "summer" waves (3 through 7) 8,400 residents and nonresidents were sampled each month. In the "winter" waves (8 through 12 plus 2), the rate dropped to 4,200 residents and nonresidents. Because wave 1 had fewer license holders from which to sample, this wave was sampled at a less intense level.

A single questionnaire was used for all groups. The questionnaire (see Section 6.0 for an example), included questions on: what water was fished; nearest landmark or town; section of stream or river fished (taken from maps on the front survey page and the map page on the back of the survey); number of days fished; fishing satisfaction rating from 1 (poor) to 5 (excellent); number of other people seen recreating on each water; crowding rating from 1(not at all crowded) to 5 (very crowded); the one fish species they were primarily fishing for. The type of fishing (shore, boat, ice or a combination) was also included again in 2020 (it was removed in 2015 and reinstated in 2017

and 2019).

To ease the sorting process, different colored forms were used for each wave as well as for initial and remail mailings. Surveys were mailed “first class pre-sort” for all the waves.

Table 2. Number of questionnaires sent for each wave by residency for the 2020 license year.

Wave	Mailed		Useable (mailed-minus undeliverable)		Returns (initial and remail)		Return Rate Percentage	
	Res	Nonres	Res	Nonres	Res	Nonres	Res	Nonres
01	300	100	296	97	123	29	41.55%	29.90%
02	3150	1050	3060	999	1100	267	35.95%	26.73%
03	6300	2100	6080	2020	1869	547	30.74%	27.08%
04	6300	2100	6075	2034	1933	657	31.82%	32.30%
05	6300	2100	6048	2031	1847	616	30.54%	30.33%
06	6300	2100	6018	2017	1815	606	30.16%	30.04%
07	6300	2100	6022	2013	1897	688	31.50%	34.18%
08	3150	1050	3012	1009	943	371	31.31%	36.77%
09	3150	1053	2996	1001	996	353	33.24%	35.26%
10	3150	1050	2985	1000	976	299	32.70%	29.90%
11	3150	1057	2985	997	974	263	32.63%	26.38%
12	3150	1050	2988	987	942	250	31.53%	25.33%

Remail questionnaires were mailed to those individuals who had not yet responded, approximately six weeks after the initial mailing. Returns for each wave were monitored and when they slowed down to a few each day the remail was sent. Included on the remail survey was a note explaining that we hadn’t received their survey yet but if they had sent one in and our mail crossed paths, to please disregard this second request (see Section 6.0 for survey examples). Returns were grouped and counted according to type of license (residency), wave and mailing (initial or remail). Surveys returned as undeliverable were subtracted from the sample size.

Returned questionnaires were sorted into those that had fished in Montana during the period in question and those that had not. The "yes" respondents were keyed into an Access database using forms and lookup fields. A record was entered for each stream or lake fished. Both the stream or lake name and the nearest town or landmark was entered for each record. These data were used to identify a specific watercode for each record. Edits were run to correct invalid water codes and data out of normal ranges.

Phone surveys have been used in the past for the purpose of determining nonresponse bias associated with the mail surveys and for making adjustments to pressure estimates accordingly.

The most recent phone survey was conducted in 1997. It showed no statistically significant difference in response rate between the phone and mail surveys. No phone surveys were conducted in 2020, so it was assumed that there was no nonresponse bias and no adjustment necessary. Fishing pressure estimates were made for individual waters based upon the formula:

$$P_j = \sum_{i=1}^n \left[ \frac{E_{ij} * D_{ij}}{R_{ij}} \right] * A_{ij}$$

where  $P_j$  = Pressure for an individual water by the  $j^{\text{th}}$  residency

$E_{ij}$  = Number of eligible anglers for the  $i^{\text{th}}$  wave and  $j^{\text{th}}$  residency

$D_{ij}$  = Days fished that particular water for the  $i^{\text{th}}$  wave and  $j^{\text{th}}$  residency

$R_{ij}$  = Number of respondents from the survey for the  $i^{\text{th}}$  wave and  $j^{\text{th}}$  residency

$A_{ij}$  = Adjustment factor for non-response for the  $i^{\text{th}}$  wave and  $j^{\text{th}}$  residency

$n$  = number of waves in the estimate year or season

$j$  = number of residency types (resident, nonresident, or total)

The variance was then calculated using:

$$VAR(P_j) = \sum_{i=1}^n \left[ \frac{E_{ij}^2 * VAR(D_{ij})}{R_{ij}} \right] * A_{ij}^2$$

where  $P_j$ ,  $E_{ij}$ ,  $R_{ij}$ ,  $D_{ij}$ , and  $A_{ij}$  are the same as above.

Pressure estimates between waves and residency were assumed to be independent so variances were summed to obtain total variances. The square root of the variance was calculated and this number was reported as the error for fishing pressure.

### 3.0 RESULTS

#### 3.1 DEMOGRAPHICS

A total of 20,361 anglers responded to the survey, of which 35.3% (n=7,189) reported going on at least one fishing trip during the month/wave they were surveyed, while 64.7% (n=20,361) said they did not fish that month. Respondents ranged in age from 12 to 93 years old. The average age of all respondents was 53.2. The average age of the sample population (as well as the entire angling population) is 44 years old. Figure 1 shows mail survey respondents between the ages 51-90 are overrepresented, while respondents ages 12-50 are underrepresented when compared to the sample population of the angling public. About 76% of all respondents were male, and 24% female, representative of the sample and angler population in the fisheries license database (75% male and 25% female).

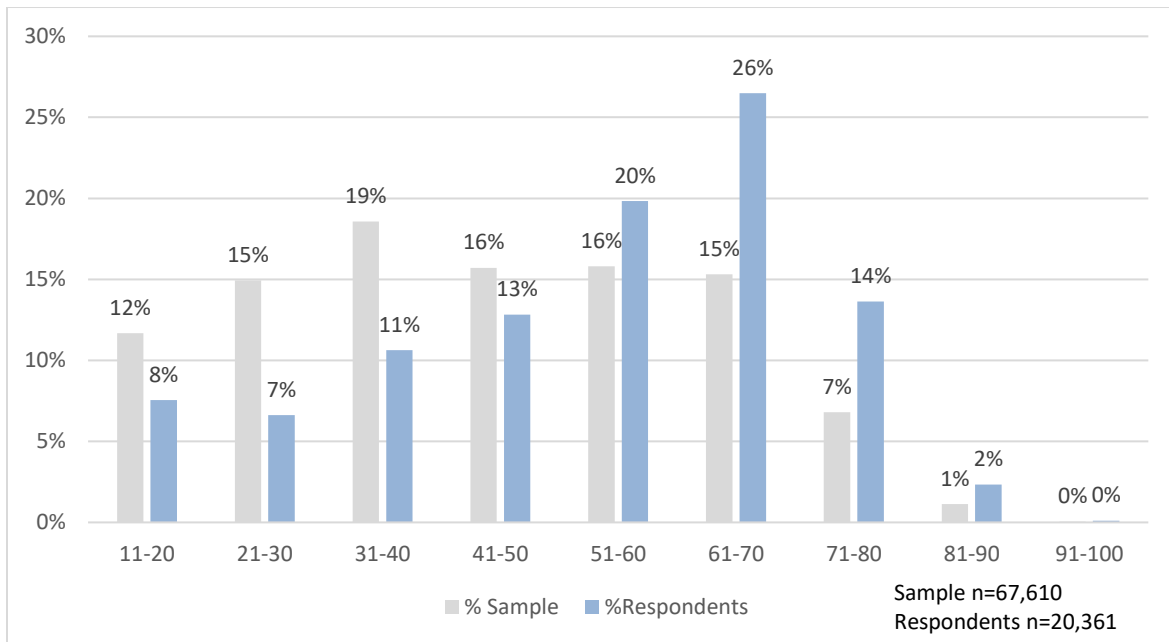


Figure 1. Percent of mail survey respondents versus sample population by age range

Out of 7,189 respondents who reported a fishing trip, 63.9% were residents and 36.1% were non-residents. Non-residents came from all states within the U.S. including the District of Columbia (Figure 2 and 3). Non-residents were mostly from the western U.S., especially Washington, Idaho and California. Foreign residents only from Canada were included in the sample. Only one Canadian reported a fishing trip in 2020, compared to 51 in 2019, likely due to the closure of the Canadian border during Covid-19. Resident anglers were broadly distributed throughout Montana, but mostly came from more densely populated areas (Billings, Bozeman, Missoula, Kalispell, Great Falls, Helena and Butte) (Figure 4).

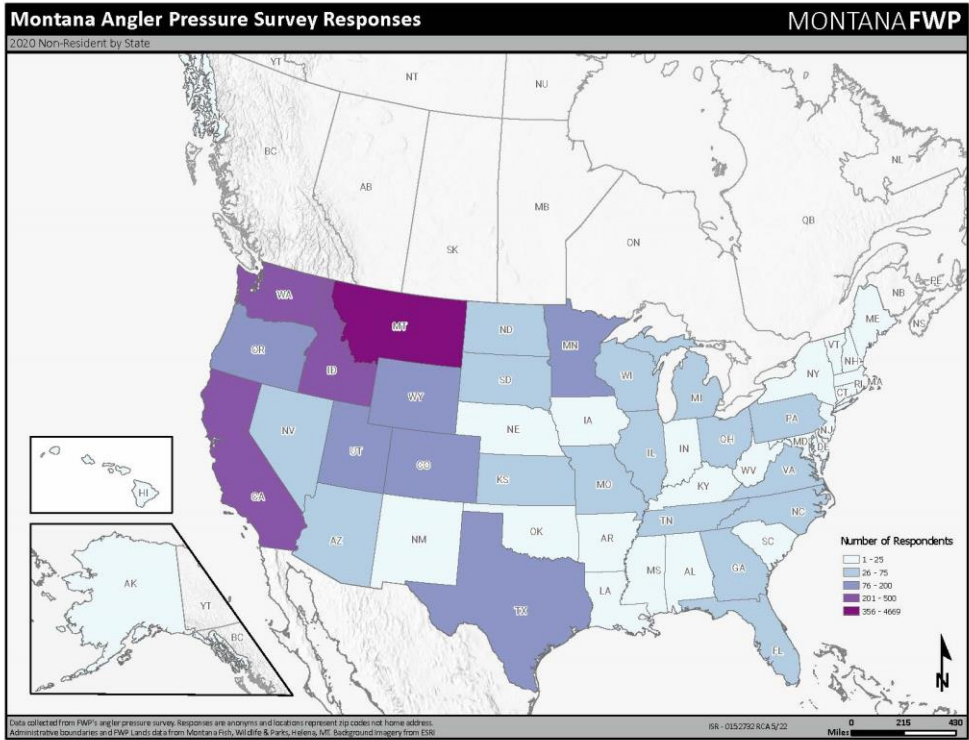


Figure 2. Map of non-residents' home states who fished in Montana

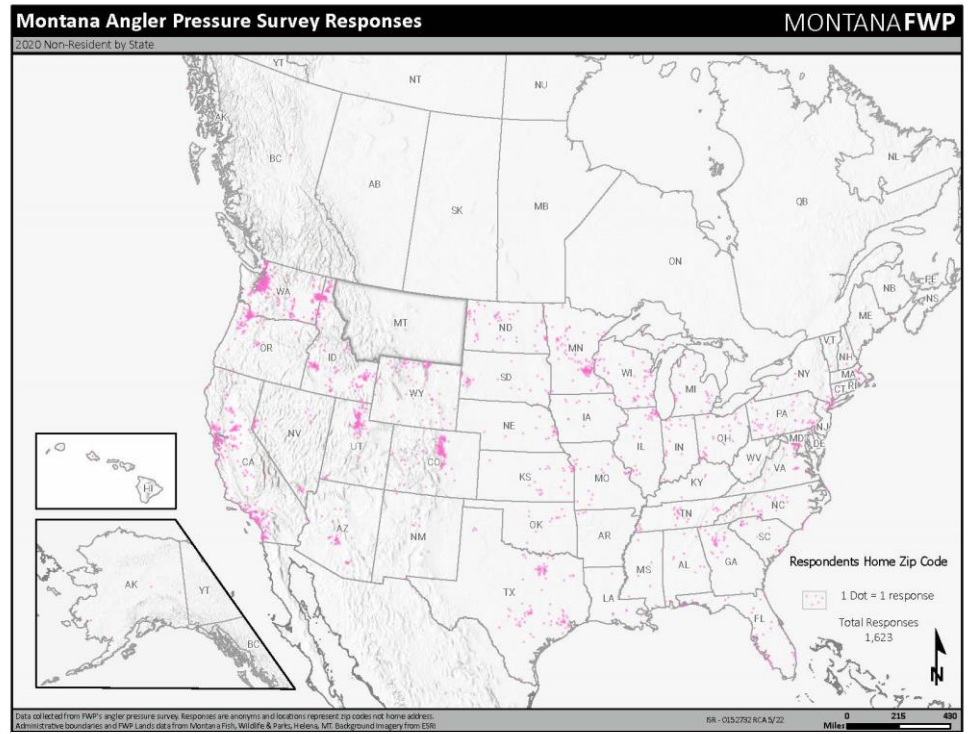


Figure 3. Map of non-residents' home states who fished in Montana by zip code

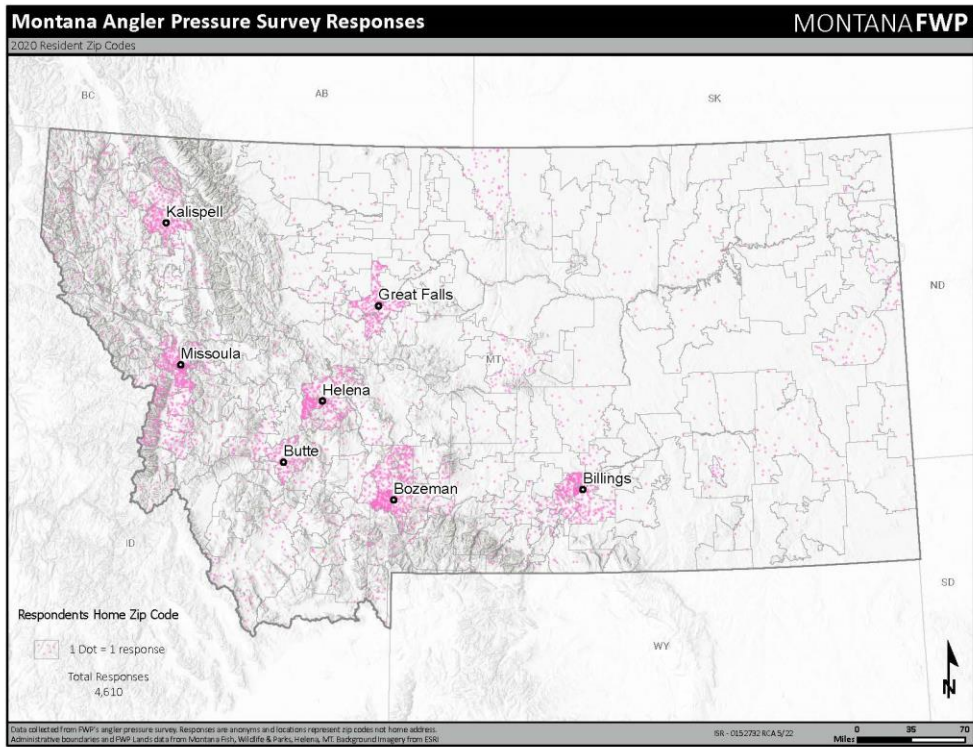


Figure 2. Map of Montana resident respondents, by zip code, who reported a fishing trip



### 3.2 ANGLER PRESSURE ESTIMATES ANNUAL (MARCH 2020-FEBRUARY 2021)

Licensed anglers fishing on Montana waters were estimated to have exerted a record 4,014,803 angler days of pressure for the 2020 license year (Table 3). This represents a 28% increase in pressure compared to the 2019 license year. Prior to 2020, estimated angling pressure had been slowly declining each year since 2013 (Figure 5). License year 2020 shows the largest increase in angling pressure since license year 2013 which had a 26% increase from 2011. Estimates for individual waters were sorted alphabetically and are presented in Appendix A of this report.

Table 3. Statewide Pressure Estimates by 2020 Survey License Year

	---- Totals ----			---- Resident ----		---- Non-Resident ----	
	Pressure	Trips	Error	Pressure	Trips	Pressure	Trips
Undesig	32,268	227	7100	18,699	149	13,569	78
Lake	1,446,787	10,067	47731	1,105,274	7,986	341,513	2,081
Stream	2,535,748	17,422	63292	1,557,166	11,216	978,582	6,206
<b>Statewide Total</b>	<b>4,014,803</b>	<b>27,716</b>	<b>118,123</b>	<b>2,681,139</b>	<b>19,351</b>	<b>1,333,664</b>	<b>8,365</b>

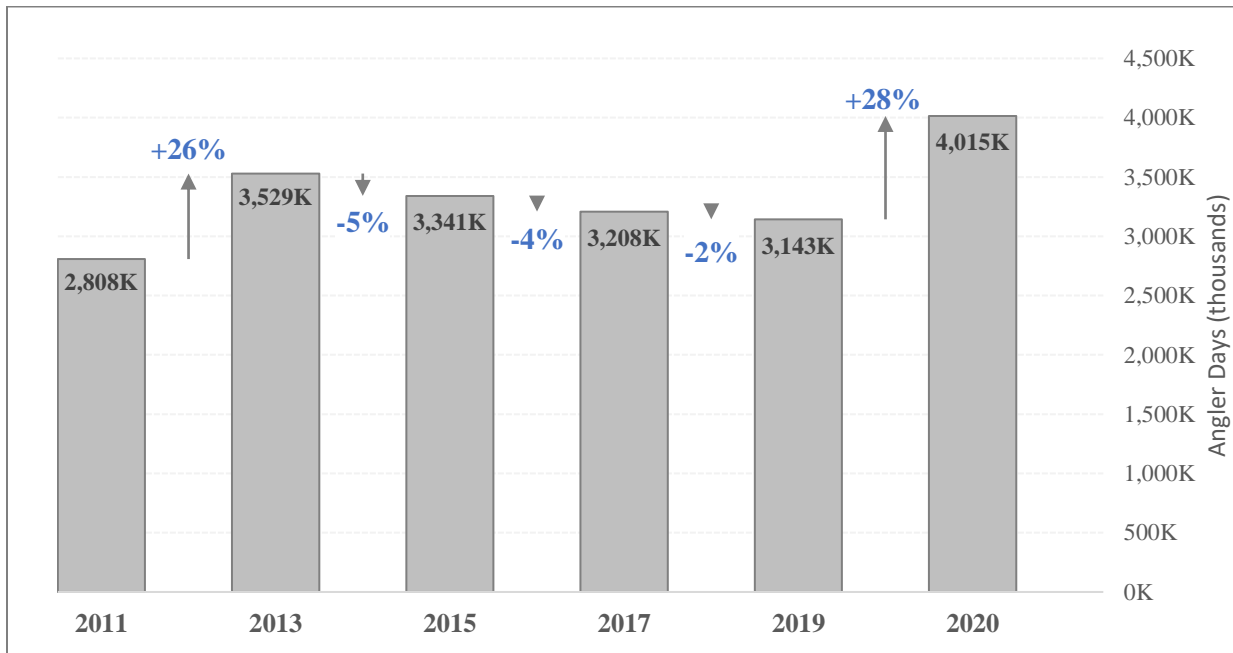


Figure 5. Percent change of annual angling pressure between the years 2011-2020 for residents and non-residents combined.

The distribution of angler pressure among FWP regions (Figure 6, Table 4) is heavily skewed toward the western and central portions of the state (Regions 1-5). Region 3 received the most

angling pressure with a record 1,097,991 angler days (27.3%), followed by Region 4 with 777,091 angler days (19.4%). Regions 2, 1 and 5 were next in order with 710,026 (17.7%), 549,596 (13.7%), and 439,231 (10.9%) angler days respectively. The easternmost regions of 6 and 7 were the lowest in pressure with 314,868 (7.8%) and 102,042 (2.5%) angler days respectively.

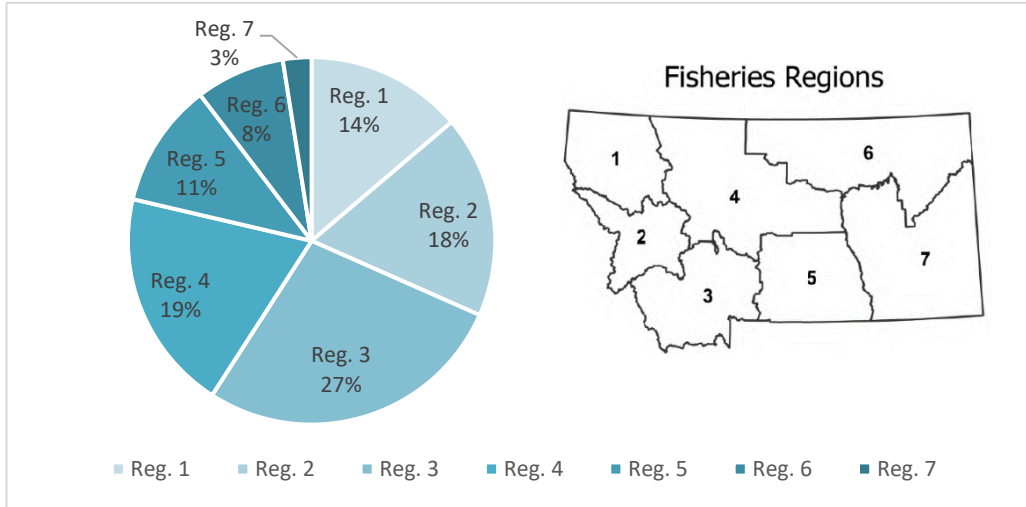


Figure 6. Distribution of annual pressure by FWP Fisheries region

Each region experienced an increase in pressure compared to the previous 2019 survey year (Figure 7). While Region 7 had the fewest angler days of all regions (n=102,042), it had the largest percent increase with 48% more angler days compared to 2019 (n= 69,014).

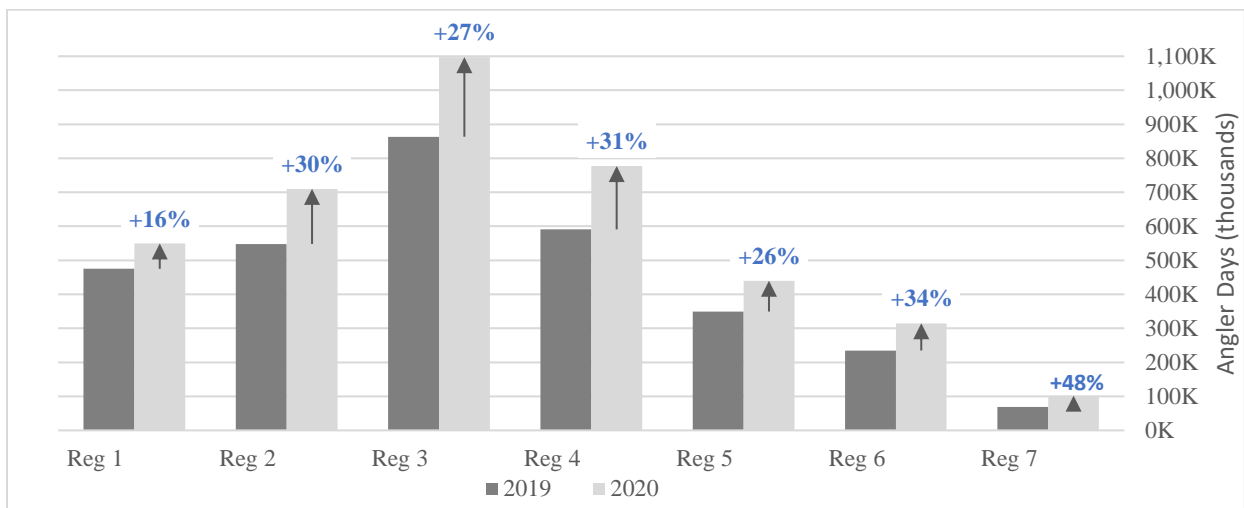


Figure 7. Percent change of annual angling pressure by region between 2019-2020 for residents and non-residents Montana residents made up 67% of the annual pressure (n=2,681,139) compared to 33% non-residents (n=1,333,664) (Table 3). Resident pressure increased 39% compared to 2019 (which had

1,927,738 resident angler days) while non-resident pressure increased 10% compared to 2019 (which had 1,215,367 non-resident angler days).

Residents (Table 4, Figure 8) also exerted the majority of angling pressure in 2020 in all seven regions. All regions had an increase in resident angler days compared to 2019. Only region 6 experienced a slight drop in the percentage of residents in 2020, compared to 2019. All other regions saw an increase in their percentage of resident anglers compared to 2019. The percent of angling pressure by residents for each region was:

Region 1 = 72.6% resident (2019=72.1%)	Region 5 = 69.6% resident (2019=55.6%)
Region 2 = 66.8% resident (2019=61.6%)	Region 6 = 68.9% resident (2019=70.6%)
Region 3 = 50.7% resident (2019=44.5%)	Region 7 = 83.9% resident (2019=80.9%)
Region 4 = 80.5% resident (2019=74.2%)	

Angling on lotic waters (streams/rivers) accounted for 63.2% (2,535,748 angler days) of the statewide pressure while lentic waters (lakes/ponds/reservoirs) accounted for 36% (1,446,787 angler days) of the pressure (Table 3). A small percent (0.8%) of surveys were returned where the waterbody was undesignated as stream or lake. These percentages are consistent with the 2019 survey results.

Regions 1 and 6 were the two regions in which lake angling pressure exceeded stream pressure (65.2% and 76.2%, respectively from lakes), although the lake pressure in Region 6 was due primarily to angling on one water (Fort Peck Reservoir) (Table 4, Figure 9). Region 1 had the greatest number of lake angling pressure of any region with 358,111 angler days. Region 4 was relatively balanced between stream (55%) and lake angling (45%), primarily due to lake angling on Canyon Ferry Reservoir. However, looking at the percent increase in stream angling by residents, Region 4 had a 60% increase in stream fishing by residents (n=305,192) compared to 2019 (n=190,460). Regions 2, 3, 5 and 7 were dominated by stream anglers, and Region 3 had the highest number and percent of stream anglers for any region (905,701 angler days or 82.5%).

Table 4. Angling pressure in angler days by region and lake or stream for 2020 survey license year.

	----- Totals -----		----- Resident -----		----- Non-Resident -----	
	Pressure	Trips	Pressure	Trips	Pressure	Trips
<b>Region 1</b>						
Undesig	1,567	8	549	4	1,018	4
Lake	358,311	2,431	276,894	1,879	81,417	552
Stream	189,718	1,317	121,737	895	67,981	422
<b>Total:</b>	549,596	3,756	399,180	2,778	150,416	978
<b>Region 2</b>						
Undesig	2,010	9	99	1	1,911	8
Lake	186,293	1,223	146,166	993	40,127	230
Stream	521,723	3,653	328,278	2,439	193,445	1,214
<b>Total:</b>	710,026	4,885	474,543	3,433	235,483	1,452
<b>Region 3</b>						
Undesig	2,297	14	943	7	1,353	7
Lake	189,993	1,267	105,965	760	84,028	507
Stream	905,701	6,149	450,044	3,275	455,657	2,874
<b>Total:</b>	1,097,991	7,430	556,952	4,042	541,038	3,388
<b>Region 4</b>						
Undesig	2,092	13	661	5	1,431	8
Lake	349,766	2,543	319,694	2,351	30,072	192
Stream	425,233	2,975	305,192	2,126	120,041	849
<b>Total:</b>	777,091	5,531	625,547	4,482	151,544	1,049
<b>Region 5</b>						
Undesig	691	4	99	1	592	3
Lake	95,709	691	83,086	608	12,623	83
Stream	342,830	2,294	222,395	1,574	120,435	720
<b>Total:</b>	439,231	2,989	305,580	2,183	133,650	806
<b>Region 6</b>						
Undesig	180	1			180	1
Lake	239,834	1,704	150,568	1,219	89,266	485
Stream	74,854	535	66,309	484	8,546	51
<b>Total:</b>	314,868	2,240	216,877	1,703	97,992	537
<b>Region 7</b>						
Lake	26,356	204	22,376	172	3,979	32
Stream	75,686	499	63,211	423	12,476	76
<b>Total:</b>	102,042	703	85,587	595	16,455	108

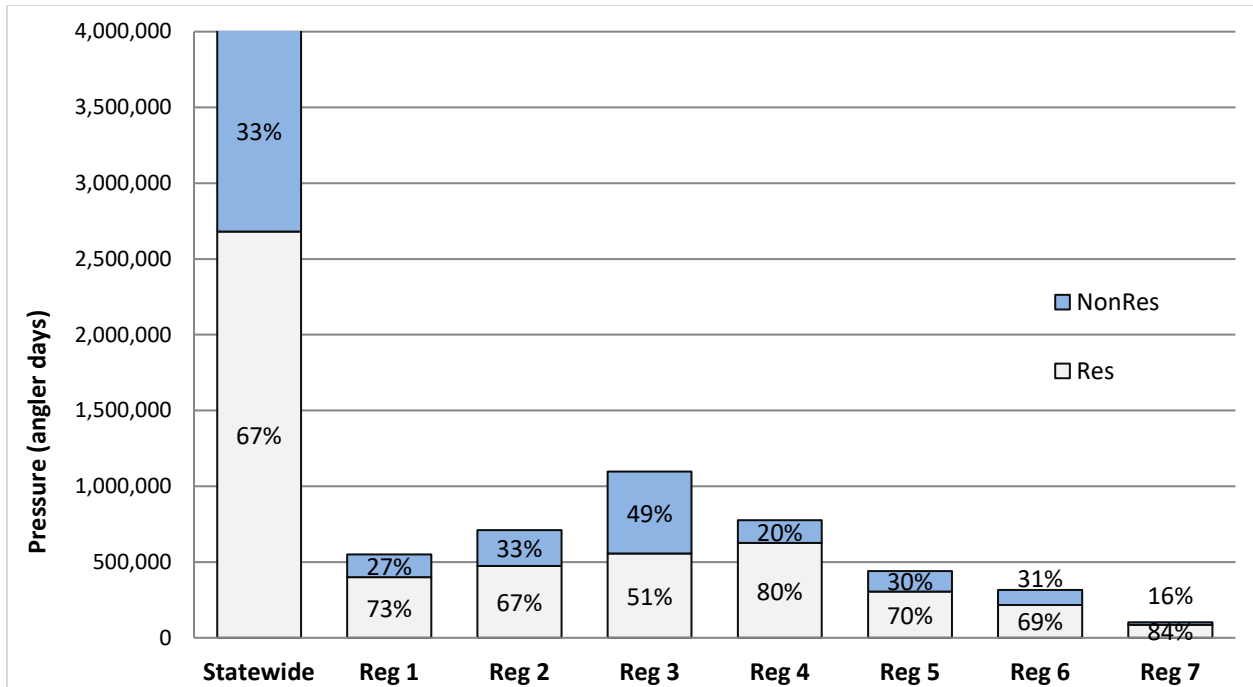


Figure 8. Statewide angling pressure comparing region and residency 2020-21

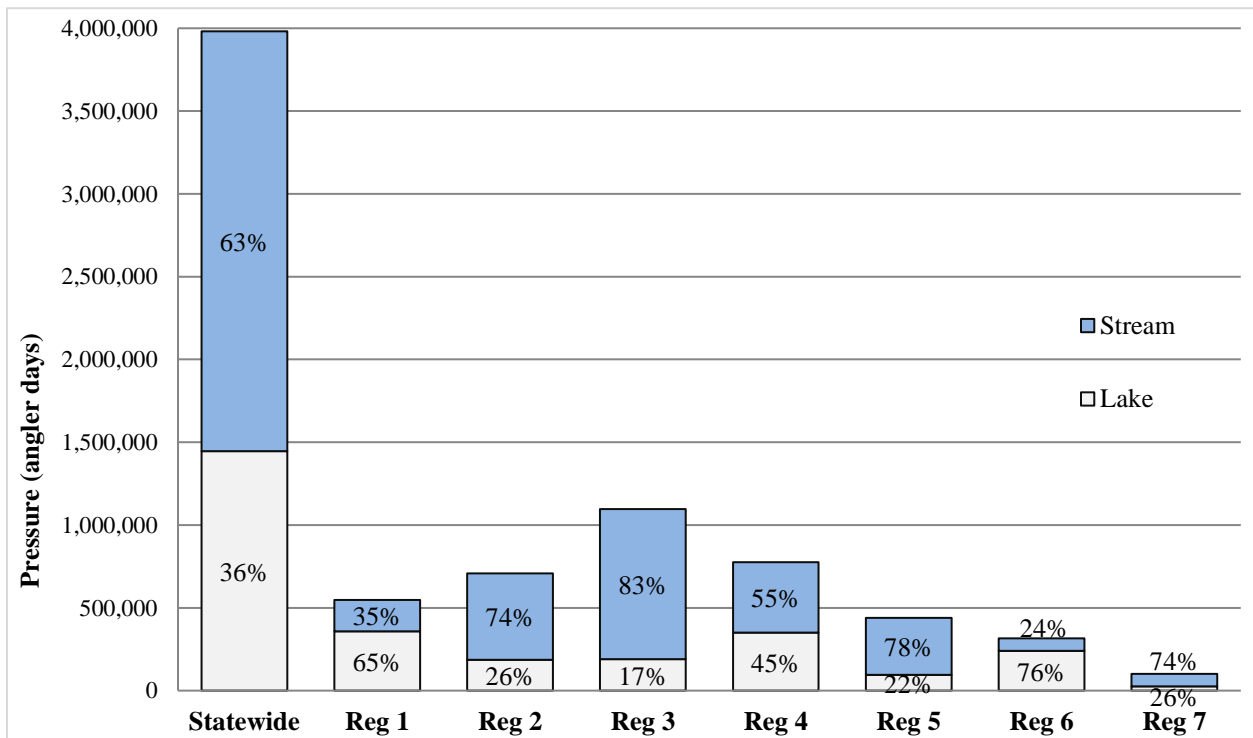


Figure 9. Statewide angling pressure comparing region and water type 2020-21

July (wave 5) was, overall, the peak fishing period for both residents and non-residents with an estimated 817,487 angler days (Table 5). March (wave 1) was the least fished period during the year with 121,247 angler days. Residents fished least in November (wave 9) with 75,742 angler days while nonresidents fished least in March (wave 1) with 10,651. Even though March (wave 1) was the least fished month in 2020, there was an 80% increase compared to 2019 which had just 67,248 angler days (Figure 10). The month of August had the second greatest number of angler days in 2020 (n=622,596) yet this was only a 12% increase in angler days from 2019 (n=555,284). Angling pressure during the month of August may have been influenced by several hoot owl restrictions placed on southwest Montana rivers that month.

Table 5. Pressure in angler days by wave for the 2020 survey license year

Wave	Month	Total	Resident	Nonresident
01	March	121,247	110,597	10,651
02	April	218,217	182,752	35,465
03	May	319,883	260,386	59,498
04	June	463,615	373,006	90,609
05	July	817,487	530,772	286,715
06	August	622,596	408,556	214,040
07	September	506,025	303,171	202,854
08	October	295,461	161,111	134,350
09	November	165,186	75,742	89,444
10	December	145,351	88,117	57,234
11	January	175,399	107,433	67,966
12	February	164,334	79,496	84,838

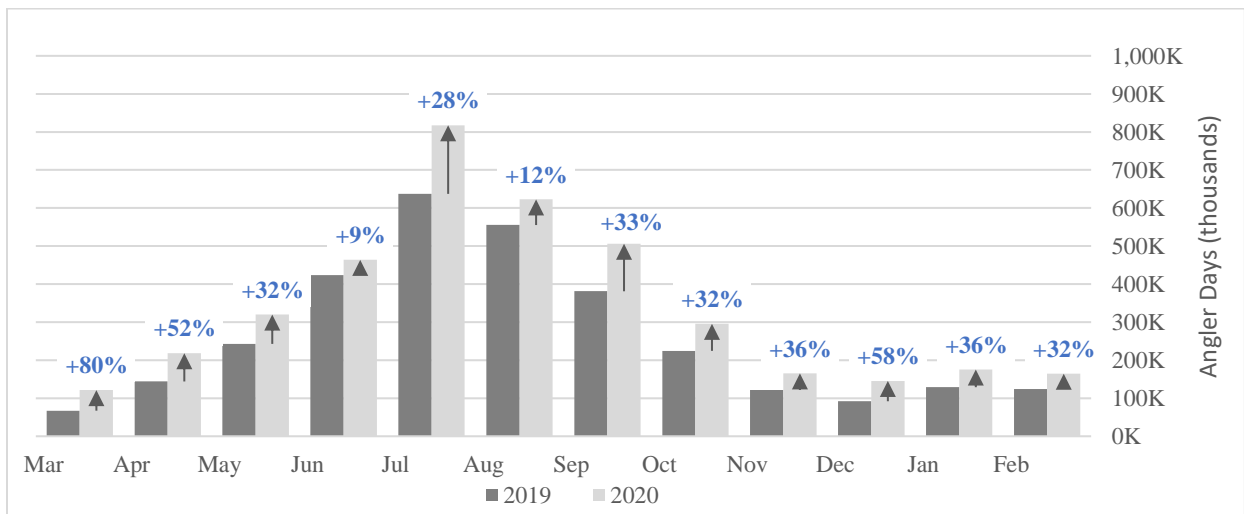


Figure 10. Percent change of statewide monthly angling pressure between license years 2019 to 2020 for residents and non-residents combined

Angling pressure was summarized by the 40 major drainages within the state as identified in the 2019 Statewide Fisheries Management Program and Guide (Figure 11, Table 6). The pressure by drainage ranged from a high of 409,620 angler days for the Upper Yellowstone River drainage (a 46% increase from 2019) to a low of 1,248 angler days for the Powder River drainage. The drainage with the highest percent of resident anglers was the Lower Milk River (97.2%), followed by the Middle Yellowstone (96% resident), and Missouri – Judith (94% resident). The drainage with the highest percent of non-residents was the Madison River (65% non-resident), followed by the Bighorn River (56% non-resident) and the Beaverhead River (49% non-resident).

The Fort Peck Reservoir drainage had the highest percentage of lake anglers (89.5%) mainly due to the influence of Fort Peck Reservoir, followed by the Marias River and Red Rock River (85% lake angling each), and the Lower Missouri River (81% lake angling). Rivers with the lowest percentage of lake anglers were Belt Creek (0%), Missouri River-Deerborn (1.2%), Lower Milk River (1.8%), and the Beaverhead River (4%).



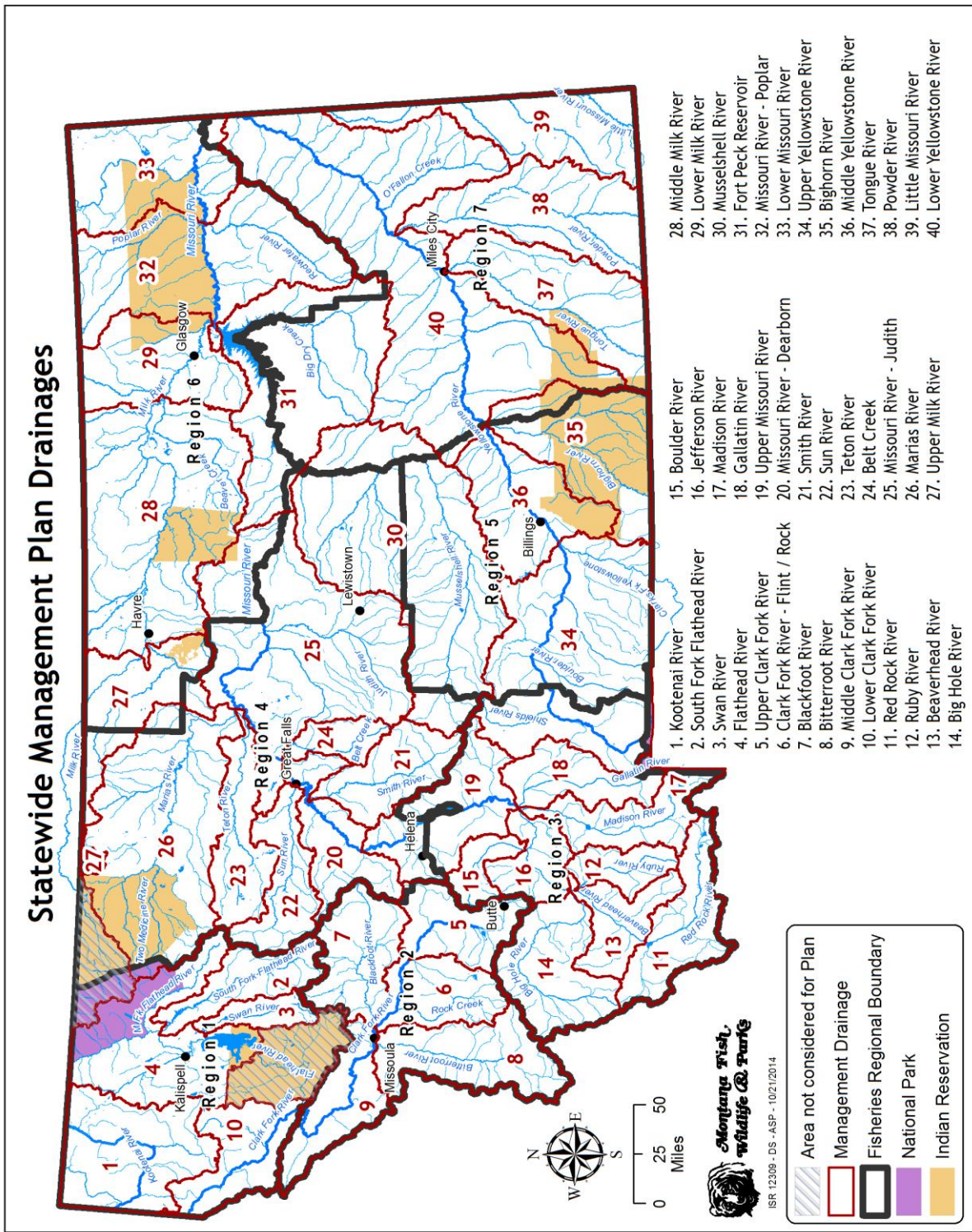


Figure 11. Statewide Management Plan Drainages



Table 6. Angling Pressure in angler days by Drainage by Lake or Stream for the 2020 survey license year

	--- Totals ---		--- Resident ---		--- Non-Resident ---	
	Pressure	Trips	Pressure	Trips	Pressure	Trips
<b>Beaverhead River</b>						
Lake	1,974	14	1,796	13	177	1
Stream	46,247	340	22,830	175	23,417	165
<b>Total:</b>	<b>48,220</b>	<b>354</b>	<b>24,626</b>	<b>188</b>	<b>23,594</b>	<b>166</b>
<b>Belt Creek</b>						
Stream	10,068	69	6,205	47	3,863	22
<b>Total:</b>	<b>10,068</b>	<b>69</b>	<b>6,205</b>	<b>47</b>	<b>3,863</b>	<b>22</b>
<b>Big Hole River</b>						
Undesig	133	1	133	1		
Lake	8,764	69	7,539	59	1,225	10
Stream	128,960	914	87,731	630	41,229	284
<b>Total:</b>	<b>137,857</b>	<b>984</b>	<b>95,403</b>	<b>690</b>	<b>42,454</b>	<b>294</b>
<b>Bighorn River</b>						
Lake	20,542	91	17,784	72	2,758	19
Stream	93,776	537	32,519	195	61,257	342
<b>Total:</b>	<b>114,318</b>	<b>628</b>	<b>50,303</b>	<b>267</b>	<b>64,015</b>	<b>361</b>
<b>Bitterroot River</b>						
Lake	14,102	103	7,800	62	6,302	41
Stream	177,921	1,241	112,538	831	65,383	410
<b>Total:</b>	<b>192,023</b>	<b>1,344</b>	<b>120,338</b>	<b>893</b>	<b>71,685</b>	<b>451</b>
<b>Blackfoot River</b>						
Lake	55,349	393	46,786	341	8,563	52
Stream	112,152	814	77,524	587	34,628	227
<b>Total:</b>	<b>167,501</b>	<b>1,207</b>	<b>124,310</b>	<b>928</b>	<b>43,191</b>	<b>279</b>
<b>Boulder River</b>						
Lake	787	6	787	6		
Stream	7,883	61	6,282	52	1,601	9
<b>Total:</b>	<b>8,670</b>	<b>67</b>	<b>7,069</b>	<b>58</b>	<b>1,601</b>	<b>9</b>
<b>Clark Fork River - Flint / Rock</b>						
Lake	103,802	632	79,465	501	24,337	131
Stream	92,036	653	43,087	342	48,949	311
<b>Total:</b>	<b>195,838</b>	<b>1,285</b>	<b>122,552</b>	<b>843</b>	<b>73,286</b>	<b>442</b>
<b>Flathead River</b>						
Lake	184,238	1,207	141,152	921	43,086	286
Stream	82,388	563	52,817	378	29,571	185
<b>Total:</b>	<b>266,626</b>	<b>1,770</b>	<b>193,969</b>	<b>1,299</b>	<b>72,657</b>	<b>471</b>

Table 6. Angling Pressure in angler days by Drainage by Lake or Stream (continued)

	--- Totals ---		--- Resident ---		--- Non-Resident ---	
	Pressure	Trips	Pressure	Trips	Pressure	Trips
<b>Fort Peck Reservoir</b>						
Lake	191,954	1,349	109,867	897	82,087	452
Stream	22,553	177	16,666	146	5,887	31
<b>Total:</b>	<b>214,507</b>	<b>1,526</b>	<b>126,533</b>	<b>1,043</b>	<b>87,974</b>	<b>483</b>
<b>Gallatin River</b>						
Lake	27,602	182	17,510	135	10,092	47
Stream	175,566	1,150	91,412	643	84,153	507
<b>Total:</b>	<b>203,167</b>	<b>1,332</b>	<b>108,922</b>	<b>778</b>	<b>94,245</b>	<b>554</b>
<b>Jefferson River</b>						
Lake	17,106	92	14,995	80	2,111	12
Stream	19,897	142	13,419	102	6,479	40
<b>Total:</b>	<b>37,004</b>	<b>234</b>	<b>28,414</b>	<b>182</b>	<b>8,590</b>	<b>52</b>
<b>Kootenai River</b>						
Lake	64,987	443	51,592	340	13,395	103
Stream	33,601	230	19,297	147	14,305	83
<b>Total:</b>	<b>98,588</b>	<b>673</b>	<b>70,889</b>	<b>487</b>	<b>27,700</b>	<b>186</b>
<b>Little Missouri River</b>						
Lake	658	3	658	3		
Stream	1,567	11	777	7	790	4
<b>Total:</b>	<b>2,225</b>	<b>14</b>	<b>1,435</b>	<b>10</b>	<b>790</b>	<b>4</b>
<b>Lower Clark Fork River</b>						
Lake	68,338	483	52,884	393	15,454	90
Stream	39,894	288	26,953	204	12,941	84
<b>Total:</b>	<b>108,232</b>	<b>771</b>	<b>79,837</b>	<b>597</b>	<b>28,395</b>	<b>174</b>
<b>Lower Milk River</b>						
Lake	96	1	96	1		
Stream	5,114	37	4,970	36	144	1
<b>Total:</b>	<b>5,210</b>	<b>38</b>	<b>5,066</b>	<b>37</b>	<b>144</b>	<b>1</b>
<b>Lower Missouri River</b>						
Lake	6,939	49	6,244	46	695	3
Stream	1,659	14	1,515	13	144	1
<b>Total:</b>	<b>8,598</b>	<b>63</b>	<b>7,759</b>	<b>59</b>	<b>839</b>	<b>4</b>
<b>Lower Yellowstone River</b>						
Lake	10,541	69	10,453	68	88	1
Stream	48,713	343	43,551	313	5,162	30
<b>Total:</b>	<b>59,253</b>	<b>412</b>	<b>54,004</b>	<b>381</b>	<b>5,250</b>	<b>31</b>

Table 6. Angling Pressure in angler days by Drainage by Lake or Stream (continued)

	--- Totals ---		--- Resident ---		--- Non-Resident ---	
	Pressure	Trips	Pressure	Trips	Pressure	Trips
<b>Madison River</b>						
Lake	77,453	563	28,559	234	48,894	329
Stream	310,762	2,100	108,563	817	202,198	1,283
<b>Total:</b>	<b>388,215</b>	<b>2,663</b>	<b>137,122</b>	<b>1,051</b>	<b>251,092</b>	<b>1,612</b>
<b>Marias River</b>						
Lake	42,155	302	37,124	281	5,031	21
Stream	7,443	61	6,674	54	769	7
<b>Total:</b>	<b>49,598</b>	<b>363</b>	<b>43,798</b>	<b>335</b>	<b>5,800</b>	<b>28</b>
<b>Middle Clark Fork River</b>						
Lake	7,118	56	6,868	54	250	2
Stream	100,344	662	61,955	434	38,389	228
<b>Total:</b>	<b>107,462</b>	<b>718</b>	<b>68,823</b>	<b>488</b>	<b>38,639</b>	<b>230</b>
<b>Middle Milk River</b>						
Undesig	180	1			180	1
Lake	25,192	189	20,477	168	4,715	21
Stream	21,085	142	20,445	137	640	5
<b>Total:</b>	<b>46,457</b>	<b>332</b>	<b>40,922</b>	<b>305</b>	<b>5,535</b>	<b>27</b>
<b>Middle Yellowstone River</b>						
Lake	19,598	169	19,100	164	498	5
Stream	39,967	313	38,361	299	1,605	14
<b>Total:</b>	<b>59,565</b>	<b>482</b>	<b>57,461</b>	<b>463</b>	<b>2,103</b>	<b>19</b>
<b>Missouri River - Dearborn</b>						
Lake	3,856	31	3,856	31		
Stream	196,272	1,361	126,733	877	69,539	484
<b>Total:</b>	<b>200,128</b>	<b>1,392</b>	<b>130,589</b>	<b>908</b>	<b>69,539</b>	<b>484</b>
<b>Missouri River - Judith</b>						
Lake	10,731	76	10,138	71	594	5
Stream	39,081	288	36,743	270	2,338	18
<b>Total:</b>	<b>49,812</b>	<b>364</b>	<b>46,881</b>	<b>341</b>	<b>2,932</b>	<b>23</b>
<b>Missouri River - Poplar</b>						
Lake	1,677	13	1,137	10	540	3
Stream	16,273	114	13,799	97	2,474	17
<b>Total:</b>	<b>17,950</b>	<b>127</b>	<b>14,936</b>	<b>107</b>	<b>3,014</b>	<b>20</b>
<b>Musselshell River</b>						
Lake	18,594	142	17,795	137	799	5
Stream	20,904	158	17,303	134	3,600	24
<b>Total:</b>	<b>39,498</b>	<b>300</b>	<b>35,098</b>	<b>271</b>	<b>4,399</b>	<b>29</b>

Table 6. Angling Pressure in angler days by Drainage by Lake or Stream (continued)

	--- Totals ---		--- Resident ---		--- Non-Resident ---	
	Pressure	Trips	Pressure	Trips	Pressure	Trips
<b>NA</b>						
Lake	8,583	58	8,068	53	516	5
Stream	3,150	18	3,150	18		
<b>Total:</b>	<b>11,733</b>	<b>76</b>	<b>11,218</b>	<b>71</b>	<b>516</b>	<b>5</b>
<b>NA - St. Mary and Belly Rivers</b>						
Lake	1,085	3	728	1	357	2
<b>Total:</b>	<b>1,085</b>	<b>3</b>	<b>728</b>	<b>1</b>	<b>357</b>	<b>2</b>
<b>Powder River</b>						
Lake	478	5	478	5		
Stream	770	6	593	5	177	1
<b>Total:</b>	<b>1,248</b>	<b>11</b>	<b>1,071</b>	<b>10</b>	<b>177</b>	<b>1</b>
<b>Red Rock River</b>						
Lake	37,517	217	20,976	140	16,541	77
Stream	6,454	47	2,482	21	3,972	26
<b>Total:</b>	<b>43,970</b>	<b>264</b>	<b>23,458</b>	<b>161</b>	<b>20,513</b>	<b>103</b>
<b>Ruby River</b>						
Lake	8,998	52	7,704	45	1,295	7
Stream	23,478	153	9,206	70	14,272	83
<b>Total:</b>	<b>32,476</b>	<b>205</b>	<b>16,910</b>	<b>115</b>	<b>15,567</b>	<b>90</b>
<b>Smith River</b>						
Lake	17,620	117	15,798	108	1,822	9
Stream	48,149	409	28,296	240	19,853	169
<b>Total:</b>	<b>65,769</b>	<b>526</b>	<b>44,094</b>	<b>348</b>	<b>21,675</b>	<b>178</b>
<b>South Fork Flathead River</b>						
Lake	12,649	108	9,974	82	2,676	26
Stream	22,727	167	13,234	109	9,493	58
<b>Total:</b>	<b>35,377</b>	<b>275</b>	<b>23,208</b>	<b>191</b>	<b>12,169</b>	<b>84</b>
<b>Sun River</b>						
Lake	25,825	186	24,336	179	1,489	7
Stream	17,652	126	11,926	93	5,726	33
<b>Total:</b>	<b>43,477</b>	<b>312</b>	<b>36,262</b>	<b>272</b>	<b>7,215</b>	<b>40</b>
<b>Swan River</b>						
Lake	19,763	134	13,473	92	6,291	42
Stream	8,102	52	6,286	39	1,816	13
<b>Total:</b>	<b>27,865</b>	<b>186</b>	<b>19,759</b>	<b>131</b>	<b>8,107</b>	<b>55</b>

Table 6. Angling Pressure in angler days by Drainage by Lake or Stream (continued)

	--- Totals ---		--- Resident ---		--- Non-Resident ---	
	Pressure	Trips	Pressure	Trips	Pressure	Trips
<b>Teton River</b>						
Lake	5,324	37	4,874	33	451	4
Stream	7,099	49	6,041	44	1,058	5
<b>Total:</b>	12,424	86	10,915	77	1,509	9
<b>Tongue River</b>						
Lake	14,678	127	10,787	96	3,892	31
Stream	23,653	133	18,191	97	5,462	36
<b>Total:</b>	38,331	260	28,978	193	9,354	67
<b>Undesignated Central District</b>						
Undesig	6,760	55	6,114	49	646	6
<b>Total:</b>	6,760	55	6,114	49	646	6
<b>Undesignated Eastern District</b>						
Undesig	131	1	131	1		
<b>Total:</b>	131	1	131	1		
<b>Undesignated R1</b>						
Undesig	1,567	8	549	4	1,018	4
<b>Total:</b>	1,567	8	549	4	1,018	4
<b>Undesignated R2</b>						
Undesig	2,010	9	99	1	1,911	8
<b>Total:</b>	2,010	9	99	1	1,911	8
<b>Undesignated R3</b>						
Undesig	2,164	13	810	6	1,353	7
<b>Total:</b>	2,164	13	810	6	1,353	7
<b>Undesignated R4</b>						
Undesig	2,092	13	661	5	1,431	8
<b>Total:</b>	2,092	13	661	5	1,431	8
<b>Undesignated R5</b>						
Undesig	691	4	99	1	592	3
<b>Total:</b>	691	4	99	1	592	3
<b>Undesignated Statewide</b>						
Undesig	14,780	110	9,588	76	5,192	34
Lake	525	4	525	4		
<b>Total:</b>	15,305	114	10,113	80	5,192	34
<b>Undesignated Western District</b>						
Undesig	1,762	12	517	5	1,246	7
<b>Total:</b>	1,762	12	517	5	1,246	7

Table 6. Angling Pressure in angler days by Drainage by Lake or Stream (continued)

	--- Totals ---		--- Resident ---		--- Non-Resident ---	
	Pressure	Trips	Pressure	Trips	Pressure	Trips
<b>Upper Clark Fork River</b>						
Lake	5,922	39	5,247	35	675	4
Stream	39,269	283	33,173	245	6,096	38
<b>Total:</b>	<b>45,191</b>	<b>322</b>	<b>38,420</b>	<b>280</b>	<b>6,771</b>	<b>42</b>
<b>Upper Milk River</b>						
Lake	14,739	107	12,560	97	2,178	10
Stream	8,260	50	8,260	50		
<b>Total:</b>	<b>22,999</b>	<b>157</b>	<b>20,820</b>	<b>147</b>	<b>2,178</b>	<b>10</b>
<b>Upper Missouri River</b>						
Lake	229,902	1,695	210,685	1,556	19,217	139
Stream	124,264	774	104,152	643	20,111	131
<b>Total:</b>	<b>354,166</b>	<b>2,469</b>	<b>314,837</b>	<b>2,199</b>	<b>39,328</b>	<b>270</b>
<b>Upper Yellowstone River</b>						
Lake	59,024	451	46,600	372	12,425	79
Stream	350,595	2,372	221,506	1,575	129,090	797
<b>Total:</b>	<b>409,620</b>	<b>2,823</b>	<b>268,106</b>	<b>1,947</b>	<b>141,515</b>	<b>876</b>

### 3.3 ANGLER PRESSURE ESTIMATES SUMMER (MAY-SEPTEMBER)

The "summer" season for angling in Montana is considered that period of the year from the first of May through the end of September. In 2020, 2,729,607 (68%) days of angling pressure occurred during this period (Table 7). Residents accounted for 1,875,891 angler days (68.7%) and nonresidents made up the remaining 853,716 angler days (31.3%). Resident summer pressure increased 31% compared to 2019 (n=1,433,306 angler days), while non-resident summer pressure increased just 5.8% compared to 2019 (n=807,176 angler days).

Angling on lotic waters (streams/rivers) accounted for 64% (1,745,748 angler days) of the statewide pressure during the summer season, which is a 21.6% increase over 2019 (n=1,436,206 angler days). Lentic waters (lakes/ponds/reservoirs) accounted for 35.2% (961,293 angler days) of the summer pressure, which is a 21.2% increase over 2019 (n=793,047 angler days). Undesignated waters accounted for 0.8% (22,566 angler days) of the pressure (Table 7). Estimates for individual waters were sorted alphabetically and are presented in Appendix B of this report. Monthly estimates for all waters are also provided in Appendix D.

Table 7. Statewide Summer Pressure Estimates for the 2020 Survey License Year

	----- Totals -----		----- Resident -----		----- Non-Resident -----	
	Pressure	Trips	Pressure	Trips	Pressure	Trips
Undesig	22,566	182	15,530	131	7,036	51
Lake	961,293	8,090	774,173	6,638	187,120	1,452
Stream	1,745,748	13,765	1,086,188	9,101	659,560	4,664
<b>Statewide Total</b>	<b>2,729,607</b>	<b>22,037</b>	<b>1,875,891</b>	<b>15,870</b>	<b>853,716</b>	<b>6,167</b>

The distribution of angler pressure among FWP regions during summer (Figure 12, Table 8) is heavily skewed toward the western and central portions of the state. Region 3 received the most angling pressure with 731,681 angler days (27%), followed by Region 4 with 526,224 angler days (19%). Regions 2, 1 and 5 were next in order and close to each other, with 498,538 (18%), 396,398 (15%), and 296,976 (11%) angler days respectively. The easternmost regions of 6 and 7 were the lowest in pressure with 198,280 (7%) and 62,665 (2%) angler days respectively.

Residents (Figure 13, Table 8) exerted the majority of angling pressure during the 2020 summer season in all regions. Regions 1, 6, and 7 had a slight decrease in the percentage of resident anglers compared to 2019, while regions 2 through 5 had an increase in the percentage of resident anglers compared to 2019 summer season. The percent of summer angling pressure by residents for each region was:

- |                                       |                                       |
|---------------------------------------|---------------------------------------|
| Region 1 = 70% residents (2019 = 71%) | Region 5 = 73% residents (2019 = 61%) |
| Region 2 = 68% residents (2019 = 62%) | Region 6 = 82% residents (2019 = 87%) |
| Region 3 = 53% residents (2019 = 45%) | Region 7 = 86% residents (2019 = 89%) |
| Region 4 = 81% residents (2019 = 77%) |                                       |

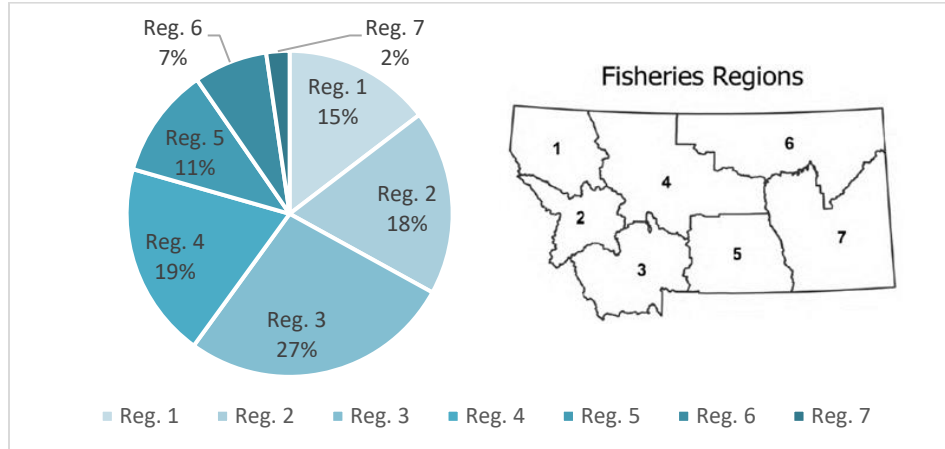


Figure 12. Percent of summer angling pressure by region

Regions 1 and 6 were the two regions in which lake angling pressure exceeded stream pressure during the 2020 summer season (60% and 77%, respectively, from lakes), although the lake pressure in Region 6 was due primarily to angling on one water (Fort Peck Reservoir) (Table 8, Figure 14). Region 4 was closely balanced between stream and lake angling (54 and 46%, respectively). Regions 2, 3, 5 and 7 were dominated by stream anglers, and Region 3 had the highest number of stream anglers for any region (610,296 angler days) and the highest percentage (84%) of anglers that were stream anglers.

Angling pressure during the summer was summarized within the 40 major drainages (Figure 11, Table 9). The pressure by drainage ranged from a high of 295,612 for the Upper Yellowstone River drainage, followed by 267,258 angler days for the Madison River drainage to a low of 751 angler days for the Powder River drainage and 876 angler days for the Little Missouri River drainage. The drainages with the highest percentage of resident anglers were the Lower Milk River, Lower Missouri River, Little Missouri River at 100% residents, while the Madison had the lowest percentage of resident anglers (36.7%). Fort Peck Reservoir had the highest percentage of lake anglers (86.7%) followed by the Marias (84.9%), mainly due to the influence of Tiber Reservoir, the Swan River (73.8%), and the Upper Milk River Drainage (73%). The Lower Milk and Beaverhead Rivers had the lowest percentage of lake anglers (2.6% and 4.6% respectively) except for the Belt Creek Drainage where there was no lake fishing reported.



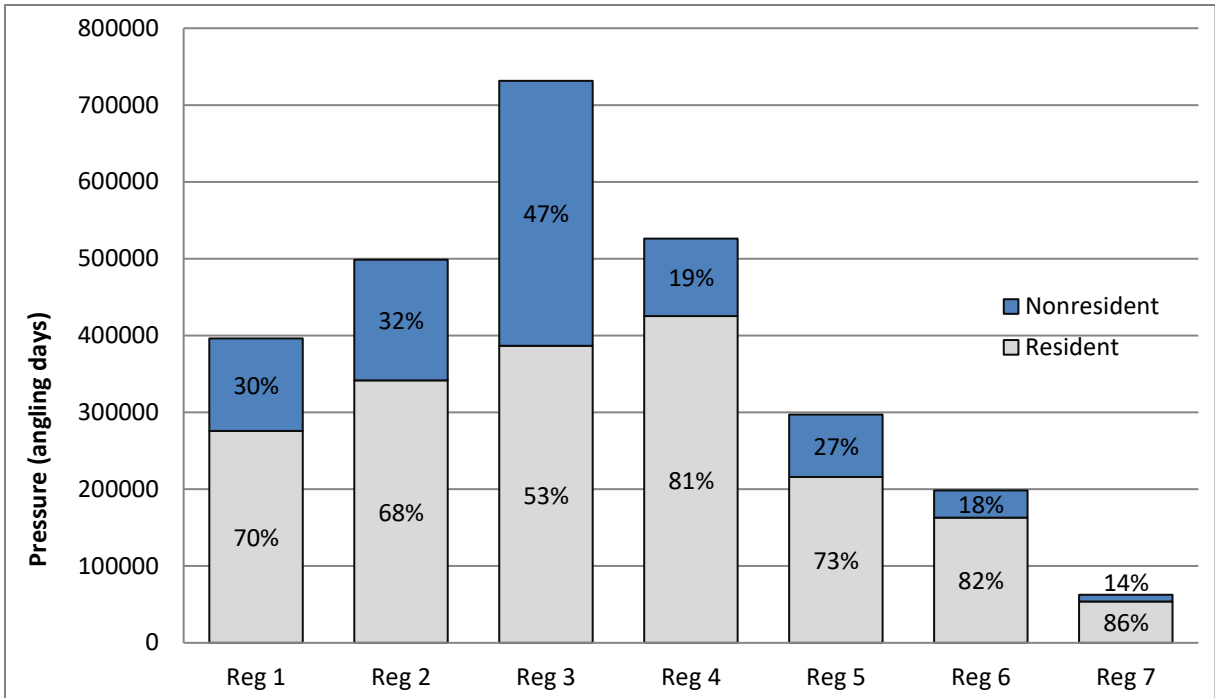


Figure 13. Statewide Angling Pressure Comparing Region and Residency - Summer Months 2020

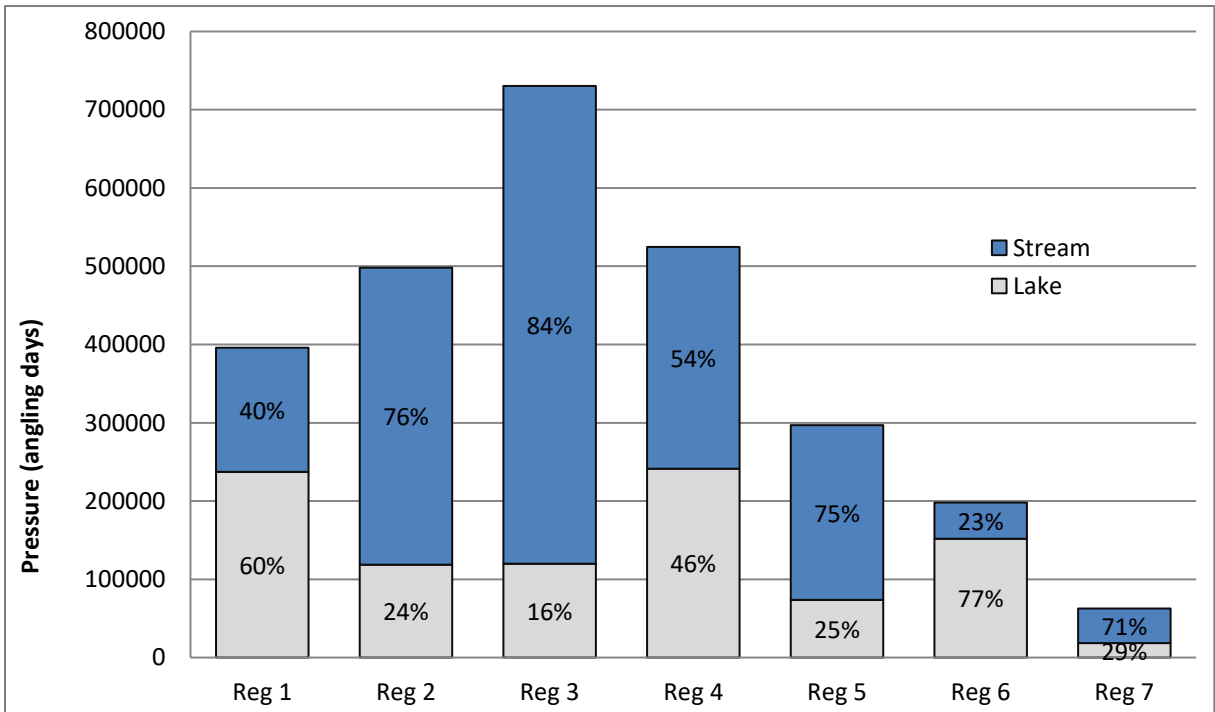


Figure 14. Angling Pressure by Region and Water Type - Summer Months 2020

Table 8. Regional angling pressure in angler days by lake or stream for the 2020 summer season May - September

	----- Totals -----		----- Resident -----		----- Non-Resident -----	
	Pressure	Trips	Pressure	Trips	Pressure	Trips
<b>Region 1</b>						
Undesig	549	4	549	4		
Lake	237,072	1,958	176,424	1,496	60,648	462
Stream	158,777	1,177	98,653	793	60,124	384
<b>Total:</b>	396,398	3,139	275,626	2,293	120,772	846
<b>Region 2</b>						
Undesig	240	2	99	1	141	1
Lake	118,559	962	97,062	810	21,498	152
Stream	379,738	2,974	244,272	2,043	135,466	931
<b>Total:</b>	498,538	3,938	341,433	2,854	157,105	1,084
<b>Region 3</b>						
Undesig	1,475	10	943	7	531	3
Lake	119,910	979	71,985	620	47,925	359
Stream	610,296	4,726	313,572	2,622	296,724	2,104
<b>Total:</b>	731,681	5,715	386,500	3,249	345,180	2,466
<b>Region 4</b>						
Undesig	1,704	11	536	4	1,168	7
Lake	241,356	2,059	228,858	1,943	12,498	116
Stream	283,164	2,344	196,081	1,662	87,083	682
<b>Total:</b>	526,224	4,414	425,475	3,609	100,749	805
<b>Region 5</b>						
Undesig	99	1	99	1		
Lake	73,561	619	62,198	542	11,363	77
Stream	223,316	1,769	153,550	1,283	69,767	486
<b>Total:</b>	296,976	2,389	215,847	1,826	81,130	563
<b>Region 6</b>						
Undesig	180	1			180	1
Lake	151,833	1,341	121,275	1,080	30,559	261
Stream	46,267	407	41,884	376	4,383	31
<b>Total:</b>	198,280	1,749	163,159	1,456	35,122	293
<b>Region 7</b>						
Lake	18,476	168	15,845	143	2,630	25
Stream	44,189	368	38,176	322	6,013	46
<b>Total:</b>	62,665	536	54,021	465	8,643	71

Table 9. Angling pressure in angler days by drainage, lake or stream for the 2020 summer season May - September

	--- Totals ---		--- Resident ---		--- Non-Resident ---	
	Pressure	Trips	Pressure	Trips	Pressure	Trips
<b>Beaverhead River</b>						
Lake	1,694	13	1,517	12	177	1
Stream	34,737	282	17,279	145	17,458	137
<b>Total:</b>	<b>36,430</b>	<b>295</b>	<b>18,796</b>	<b>157</b>	<b>17,635</b>	<b>138</b>
<b>Belt Creek</b>						
Stream	8,474	60	4,755	39	3,719	21
<b>Total:</b>	<b>8,474</b>	<b>60</b>	<b>4,755</b>	<b>39</b>	<b>3,719</b>	<b>21</b>
<b>Big Hole River</b>						
Undesig	133	1	133	1		
Lake	8,481	68	7,256	58	1,225	10
Stream	97,597	787	62,352	531	35,245	256
<b>Total:</b>	<b>106,211</b>	<b>856</b>	<b>69,741</b>	<b>590</b>	<b>36,470</b>	<b>266</b>
<b>Bighorn River</b>						
Lake	9,086	73	6,473	55	2,614	18
Stream	37,289	303	17,251	148	20,038	155
<b>Total:</b>	<b>46,376</b>	<b>376</b>	<b>23,724</b>	<b>203</b>	<b>22,652</b>	<b>173</b>
<b>Bitterroot River</b>						
Lake	12,434	95	6,999	58	5,435	37
Stream	119,237	945	75,760	642	43,478	303
<b>Total:</b>	<b>131,671</b>	<b>1,040</b>	<b>82,759</b>	<b>700</b>	<b>48,913</b>	<b>340</b>
<b>Blackfoot River</b>						
Lake	38,830	325	34,636	291	4,194	34
Stream	94,329	737	64,844	536	29,485	201
<b>Total:</b>	<b>133,159</b>	<b>1,062</b>	<b>99,480</b>	<b>827</b>	<b>33,679</b>	<b>235</b>
<b>Boulder River</b>						
Lake	787	6	787	6		
Stream	7,489	59	6,282	52	1,207	7
<b>Total:</b>	<b>8,275</b>	<b>65</b>	<b>7,069</b>	<b>58</b>	<b>1,207</b>	<b>7</b>
<b>Clark Fork River - Flint / Rock</b>						
Lake	56,877	457	45,934	382	10,943	75
Stream	69,756	542	34,879	299	34,876	243
<b>Total:</b>	<b>126,633</b>	<b>999</b>	<b>80,813</b>	<b>681</b>	<b>45,819</b>	<b>318</b>
<b>Flathead River</b>						
Lake	113,091	939	82,148	705	30,944	234
Stream	71,055	517	43,390	341	27,665	176
<b>Total:</b>	<b>184,146</b>	<b>1,456</b>	<b>125,538</b>	<b>1,046</b>	<b>58,609</b>	<b>410</b>
<b>Fort Peck Reservoir</b>						
Lake	120,849	1,062	91,326	810	29,522	252
Stream	18,522	155	14,626	133	3,896	22
<b>Total:</b>	<b>139,371</b>	<b>1,217</b>	<b>105,952</b>	<b>943</b>	<b>33,418</b>	<b>274</b>

Table 9 Continued. Angling pressure in angler days by drainage, lake or stream for the 2020 summer season May – September

	--- Totals ---		--- Resident ---		--- Non-Resident ---	
	Pressure	Trips	Pressure	Trips	Pressure	Trips
<b>Gallatin River</b>						
Lake	16,673	139	13,703	120	2,971	19
Stream	109,751	828	58,096	475	51,655	353
<b>Total:</b>	<b>126,425</b>	<b>967</b>	<b>71,799</b>	<b>595</b>	<b>54,626</b>	<b>372</b>
<b>Jefferson River</b>						
Lake	7,590	66	6,637	59	953	7
Stream	13,016	107	9,729	83	3,288	24
<b>Total:</b>	<b>20,606</b>	<b>173</b>	<b>16,366</b>	<b>142</b>	<b>4,241</b>	<b>31</b>
<b>Kootenai River</b>						
Lake	42,164	349	29,555	249	12,609	100
Stream	28,095	202	15,858	129	12,237	73
<b>Total:</b>	<b>70,259</b>	<b>551</b>	<b>45,413</b>	<b>378</b>	<b>24,846</b>	<b>173</b>
<b>Little Missouri River</b>						
Lake	99	1	99	1		
Stream	777	7	777	7		
<b>Total:</b>	<b>876</b>	<b>8</b>	<b>876</b>	<b>8</b>		
<b>Lower Clark Fork River</b>						
Lake	50,025	408	42,412	353	7,613	55
Stream	30,546	239	20,801	172	9,745	67
<b>Total:</b>	<b>80,571</b>	<b>647</b>	<b>63,213</b>	<b>525</b>	<b>17,358</b>	<b>122</b>
<b>Lower Milk River</b>						
Lake	96	1	96	1		
Stream	3,628	30	3,628	30		
<b>Total:</b>	<b>3,724</b>	<b>31</b>	<b>3,724</b>	<b>31</b>		
<b>Lower Missouri River</b>						
Lake	3,709	33	3,709	33		
Stream	1,515	13	1,515	13		
<b>Total:</b>	<b>5,224</b>	<b>46</b>	<b>5,224</b>	<b>46</b>		
<b>Lower Yellowstone River</b>						
Lake	5,861	50	5,773	49	88	1
Stream	31,526	260	29,129	244	2,397	16
<b>Total:</b>	<b>37,387</b>	<b>310</b>	<b>34,902</b>	<b>293</b>	<b>2,485</b>	<b>17</b>
<b>Madison River</b>						
Lake	58,716	470	22,743	197	35,973	273
Stream	208,542	1,597	75,445	651	133,098	946
<b>Total:</b>	<b>267,258</b>	<b>2,067</b>	<b>98,188</b>	<b>848</b>	<b>169,071</b>	<b>1,219</b>
<b>Marias River</b>						
Lake	30,493	255	30,333	253	161	2
Stream	5,407	47	4,638	40	769	7
<b>Total:</b>	<b>35,900</b>	<b>302</b>	<b>34,971</b>	<b>293</b>	<b>930</b>	<b>9</b>

Table 9 Continued. Angling pressure in angler days by drainage, lake or stream for the 2020 summer season May - September

	--- Totals ---		--- Resident ---		--- Non-Resident ---	
	Pressure	Trips	Pressure	Trips	Pressure	Trips
<b>Middle Clark Fork River</b>						
Lake	6,174	52	5,924	50	250	2
Stream	66,198	509	42,684	354	23,514	155
<b>Total:</b>	<b>72,372</b>	<b>561</b>	<b>48,608</b>	<b>404</b>	<b>23,764</b>	<b>157</b>
<b>Middle Milk River</b>						
Undesig	180	1			180	1
Lake	16,148	147	15,827	143	321	4
Stream	10,339	97	9,896	93	443	4
<b>Total:</b>	<b>26,668</b>	<b>245</b>	<b>25,723</b>	<b>236</b>	<b>944</b>	<b>9</b>
<b>Middle Yellowstone River</b>						
Lake	16,147	151	15,648	146	498	5
Stream	30,601	272	28,996	258	1,605	14
<b>Total:</b>	<b>46,748</b>	<b>423</b>	<b>44,644</b>	<b>404</b>	<b>2,103</b>	<b>19</b>
<b>Missouri River - Dearborn</b>						
Lake	3,325	28	3,325	28		
Stream	125,991	1,030	77,958	652	48,033	378
<b>Total:</b>	<b>129,316</b>	<b>1,058</b>	<b>81,283</b>	<b>680</b>	<b>48,033</b>	<b>378</b>
<b>Missouri River - Judith</b>						
Lake	8,546	67	7,953	62	594	5
Stream	28,024	242	26,262	227	1,762	15
<b>Total:</b>	<b>36,571</b>	<b>309</b>	<b>34,215</b>	<b>289</b>	<b>2,356</b>	<b>20</b>
<b>Missouri River - Poplar</b>						
Lake	1,411	12	871	9	540	3
Stream	8,716	78	7,927	69	789	9
<b>Total:</b>	<b>10,127</b>	<b>90</b>	<b>8,798</b>	<b>78</b>	<b>1,329</b>	<b>12</b>
<b>Musselshell River</b>						
Lake	13,498	119	12,912	115	586	4
Stream	16,764	135	14,749	118	2,015	17
<b>Total:</b>	<b>30,261</b>	<b>254</b>	<b>27,661</b>	<b>233</b>	<b>2,601</b>	<b>21</b>
<b>Powder River</b>						
Lake	478	5	478	5		
Stream	273	2	96	1	177	1
<b>Total:</b>	<b>751</b>	<b>7</b>	<b>574</b>	<b>6</b>	<b>177</b>	<b>1</b>
<b>Red Rock River</b>						
Lake	15,659	129	11,694	100	3,966	29
Stream	5,648	43	2,482	21	3,166	22
<b>Total:</b>	<b>21,307</b>	<b>172</b>	<b>14,176</b>	<b>121</b>	<b>7,132</b>	<b>51</b>
<b>Ruby River</b>						
Lake	3,125	29	2,897	27	229	2
Stream	13,040	99	7,088	59	5,951	40
<b>Total:</b>	<b>16,165</b>	<b>128</b>	<b>9,985</b>	<b>86</b>	<b>6,180</b>	<b>42</b>

Table 9 Continued. Angling pressure in angler days by drainage, lake or stream for the 2020 summer season May - September

	--- Totals ---		--- Resident ---		--- Non-Resident ---	
	Pressure	Trips	Pressure	Trips	Pressure	Trips
<b>Smith River</b>						
Lake	11,337	93	10,346	87	991	6
Stream	42,358	383	23,728	222	18,630	161
<b>Total:</b>	<b>53,694</b>	<b>476</b>	<b>34,074</b>	<b>309</b>	<b>19,621</b>	<b>167</b>
<b>South Fork Flathead River</b>						
Lake	12,525	107	9,849	81	2,676	26
Stream	21,896	164	13,234	109	8,662	55
<b>Total:</b>	<b>34,421</b>	<b>271</b>	<b>23,083</b>	<b>190</b>	<b>11,338</b>	<b>81</b>
<b>Sun River</b>						
Lake	17,767	154	17,413	152	354	2
Stream	14,000	106	9,605	79	4,394	27
<b>Total:</b>	<b>31,767</b>	<b>260</b>	<b>27,018</b>	<b>231</b>	<b>4,748</b>	<b>29</b>
<b>Swan River</b>						
Lake	15,303	117	9,013	75	6,291	42
Stream	5,444	42	3,629	29	1,816	13
<b>Total:</b>	<b>20,747</b>	<b>159</b>	<b>12,642</b>	<b>104</b>	<b>8,107</b>	<b>55</b>
<b>Teton River</b>						
Lake	2,950	26	2,732	23	219	3
Stream	4,491	34	3,960	31	531	3
<b>Total:</b>	<b>7,441</b>	<b>60</b>	<b>6,692</b>	<b>54</b>	<b>750</b>	<b>6</b>
<b>Tongue River</b>						
Lake	12,037	112	9,494	88	2,543	24
Stream	10,629	93	8,075	69	2,553	24
<b>Total:</b>	<b>22,666</b>	<b>205</b>	<b>17,569</b>	<b>157</b>	<b>5,096</b>	<b>48</b>
<b>Upper Clark Fork River</b>						
Lake	4,244	33	3,568	29	675	4
Stream	30,219	241	26,107	212	4,113	29
<b>Total:</b>	<b>34,463</b>	<b>274</b>	<b>29,675</b>	<b>241</b>	<b>4,788</b>	<b>33</b>
<b>Upper Milk River</b>						
Lake	9,717	87	9,542	85	175	2
Stream	3,637	33	3,637	33		
<b>Total:</b>	<b>13,353</b>	<b>120</b>	<b>13,179</b>	<b>118</b>	<b>175</b>	<b>2</b>
<b>Upper Missouri River</b>						
Lake	158,318	1,361	148,657	1,266	9,661	95
Stream	69,022	558	58,964	480	10,058	78
<b>Total:</b>	<b>227,339</b>	<b>1,919</b>	<b>207,621</b>	<b>1,746</b>	<b>19,719</b>	<b>173</b>
<b>Upper Yellowstone River</b>						
Lake	50,183	407	39,923	338	10,260	69
Stream	245,430	1,874	154,337	1,262	91,093	612
<b>Total:</b>	<b>295,612</b>	<b>2,281</b>	<b>194,260</b>	<b>1,600</b>	<b>101,353</b>	<b>681</b>

### 3.4 ANGLER PRESSURE ESTIMATES WINTER (OCTOBER-APRIL)

The "winter" season for angling is from March through April and October through February of the following year. In 2020-21, 1,285,196 angler days (32%) of the annual fishing pressure occurred during this period, which represents a 42.4% increase in angler days compared to the 2019-20 winter season (n=902,624) (Table 10). Residents accounted for 805,248 angler days (62.7%) and nonresidents made up the remaining 479,947 angler days (37.3%). Estimates for individual waters for the winter season sorted alphabetically are presented in Appendix C of this report. Monthly estimates for the winter months for waters sorted alphabetically are provided in Appendix E.

Table 10. Statewide Pressure Estimates for Winter months by Survey License Year

	----- Totals -----		----- Resident -----		----- Non-Resident -----	
	Pressure	Trips	Pressure	Trips	Pressure	Trips
Undesig	9,702	45	3,169	18	6,533	27
Lake	485,494	1,977	331,101	1,348	154,392	629
Stream	790,000	3,657	470,978	2,115	319,022	1,542
<b>Statewide Total</b>	<b>1,285,196</b>	<b>5,679</b>	<b>805,248</b>	<b>3,481</b>	<b>479,947</b>	<b>2,198</b>

The distribution of angler pressure distributed among FWP regions during winter (Figure 15, Table 11) is heavily skewed toward the western and central portions of the state. Region 3 received the most angling pressure with 366,310 angler days (29%), followed by Region 4 with 250,867 angler days (20%). Regions 2, 1 and 5 were next in order and close to each other, with 211,488 (16%), 153,198 (12%), and 142,255 (11%) angler days respectively. The easternmost regions of 6 and 7 were the lowest in pressure with 116,588 (9%) and 39,378 (3%) angler days respectively.

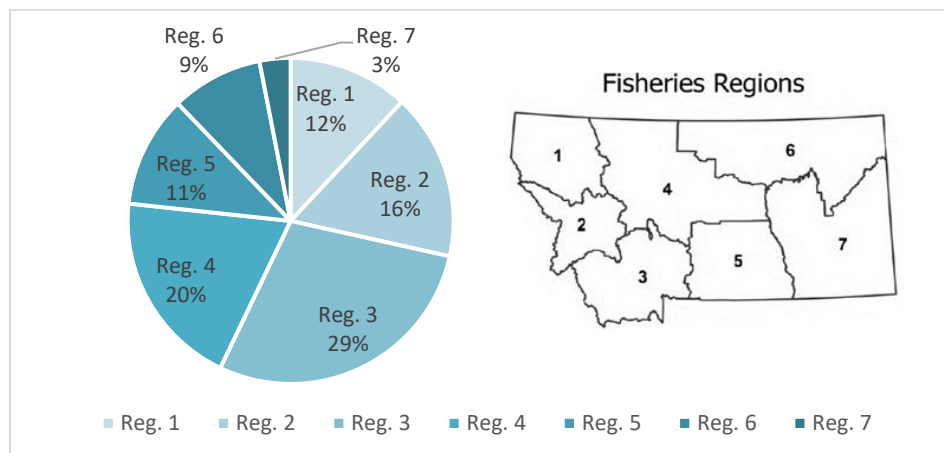


Figure 15. Percent of winter angling pressure by region

Residents (Figure 16, Table 11) exerted the majority of angling pressure during the winter season in 2020-21 in all regions but Regions 3 and 6. Compared to the 2019-20 winter season, all regions had an increase in the percentage of resident anglers.

Region 1 = 81% residents (2019=75.2%)

Region 5 = 63% residents (2019=44.2%)

Region 2 = 63% residents (2019=60.1%)

Region 6 = 46% residents (2019=41.5%)

Region 3 = 47% residents (2019=43%)

Region 7 = 80% residents (2019=56%)

Region 4 = 80% residents (2019=67.6%)

Angling on lotic waters (streams/ivers) accounted for 61.4% (790,000 angler days) of the statewide pressure during the winter season, a 34% increase from 2019. Angling on lentic waters (lakes/ponds/reservoirs) accounted for 37.8% (485,494 angler days) of the pressure, which is a 55.6% increase in angler days compared to 2019. Undesignated waters accounted for less than 0.8% (9,702 angler days) of the pressure (Table 10).

Regions 1 and 6 were the regions in which lake angling pressure exceeded stream pressure during the winter season (80% and 75% respectively, from lakes), although Region 1 had the highest number of lake anglers (121,239) (Table 11, Figure 17). Region 4 had a significant percent of lake anglers, but stream angling was dominant (43% and 57%, respectively). Regions 2, 3, 5 and 7 were dominated by stream anglers, and Region 3 had the highest number of stream anglers for any region (295,405 angler days) while Region 5 had the highest percentage (84%) of anglers that were stream anglers.

Angling pressure during winter was summarized within the 40 major drainages (Figure 11, Table 12). The highest pressure by drainage was 126,826 angler days for the Upper Missouri River, followed by 120,957 for the Madison River drainage, and 114,007 for the Upper Yellowstone River drainage. The lowest pressure by drainage was 395 angler days for the Boulder River drainage, followed by 497 for the Powder River, and 956 for the South Fork Flathead River. The drainages with the highest percentage of resident anglers were the Powder and Swan Rivers at 100% resident, followed by Missouri River-Judith at 96%, Belt Creek at 91%, Lower Milk and Kootenai River at 90%. The lowest percentage of resident anglers were Fort Peck Reservoir at 27% resident, followed by the Madison River at 32%, and Bighorn River at 39%. The Red Rock River (96%), Lower Missouri River (96%) and Fort Peck Reservoir (95%) had the highest percentage of lake anglers. The Boulder River (0%), Belt Creek (0%), and Lower Milk River (0%) reported the lowest percentage lake angling, followed by Missouri River - Dearborn (0.7%) and the Big Hole River (0.9%) drainages.



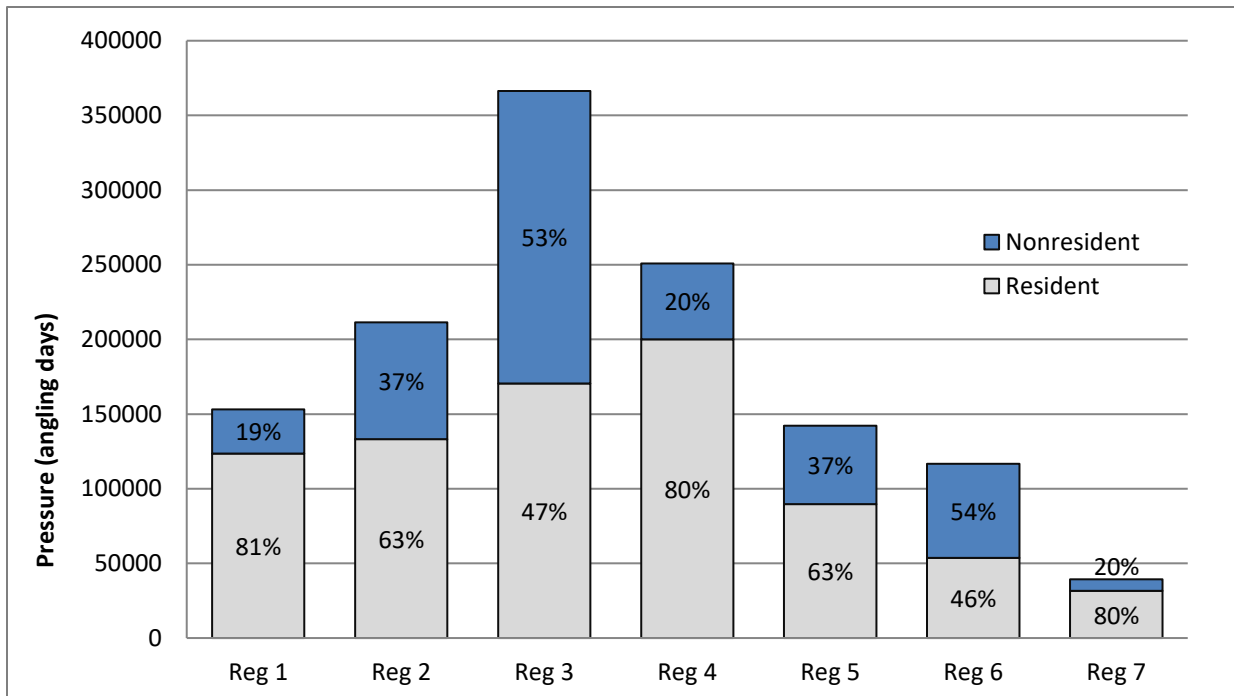


Figure 16. Statewide Angling Pressure by Region and Residency - Winter Months 2020-21

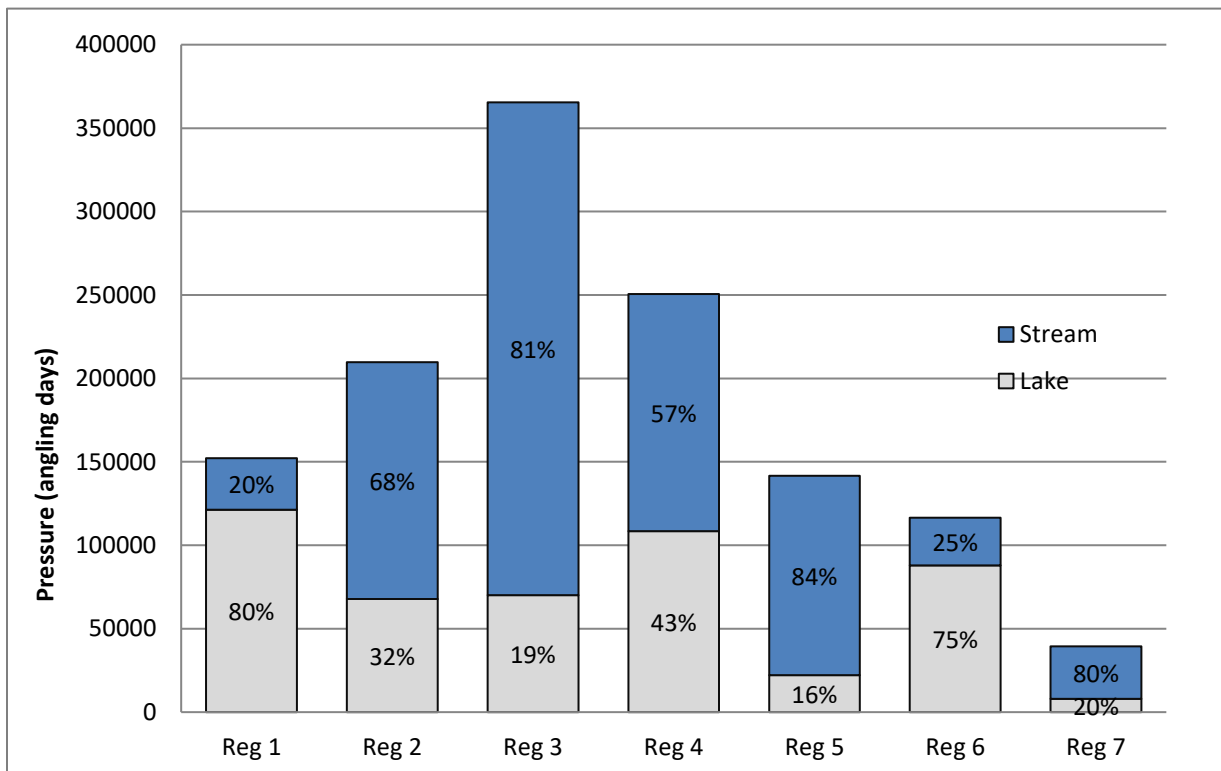


Figure 17. Statewide Angling Pressure Comparing Region and Water Type - Winter Months 2020-21

Table 11. Regional angling pressure in angler days by lake or stream for the 2020-21 winter season (March-April and October – February of the survey license year)

	----- Totals -----		----- Resident -----		----- Non-Resident -----	
	Pressure	Trips	Pressure	Trips	Pressure	Trips
<b>Region 1</b>						
Undesig	1,018	4			1,018	4
Lake	121,239	473	100,470	383	20,769	90
Stream	30,941	140	23,084	102	7,857	38
<b>Total:</b>	153,198	617	123,554	485	29,644	132
<b>Region 2</b>						
Undesig	1,770	7			1,770	7
Lake	67,733	261	49,104	183	18,629	78
Stream	141,985	679	84,005	396	57,979	283
<b>Total:</b>	211,488	947	133,109	579	78,378	368
<b>Region 3</b>						
Undesig	822	4			822	4
Lake	70,083	288	33,979	140	36,104	148
Stream	295,406	1,423	136,473	653	158,933	770
<b>Total:</b>	366,310	1,715	170,452	793	195,859	922
<b>Region 4</b>						
Undesig	388	2	124	1	263	1
Lake	108,410	484	90,836	408	17,574	76
Stream	142,070	631	109,111	464	32,958	167
<b>Total:</b>	250,867	1,117	200,071	873	50,795	244
<b>Region 5</b>						
Undesig	592	3			592	3
Lake	22,148	72	20,888	66	1,261	6
Stream	119,514	525	68,845	291	50,669	234
<b>Total:</b>	142,255	600	89,733	357	52,522	243
<b>Region 6</b>						
Lake	88,001	363	29,294	139	58,707	224
Stream	28,587	128	24,425	108	4,163	20
<b>Total:</b>	116,588	491	53,719	247	62,870	244
<b>Region 7</b>						
Lake	7,880	36	6,531	29	1,349	7
Stream	31,497	131	25,035	101	6,462	30
<b>Total:</b>	39,378	167	31,566	130	7,811	37

Table 12. Angling pressure in angler days by drainage, lake or stream for the 2020-21 winter season (March - April and October - February of the survey license year)

	--- Totals ---		--- Resident ---		--- Non-Resident ---	
	Pressure	Trips	Pressure	Trips	Pressure	Trips
<b>Beaverhead River</b>						
Lake	280	1	280	1		
Stream	11,510	58	5,551	30	5,959	28
<b>Total:</b>	<b>11,790</b>	<b>59</b>	<b>5,831</b>	<b>31</b>	<b>5,959</b>	<b>28</b>
<b>Belt Creek</b>						
Stream	1,594	9	1,450	8	144	1
<b>Total:</b>	<b>1,594</b>	<b>9</b>	<b>1,450</b>	<b>8</b>	<b>144</b>	<b>1</b>
<b>Big Hole River</b>						
Lake	283	1	283	1		
Stream	31,363	127	25,379	99	5,984	28
<b>Total:</b>	<b>31,646</b>	<b>128</b>	<b>25,662</b>	<b>100</b>	<b>5,984</b>	<b>28</b>
<b>Bighorn River</b>						
Lake	11,455	18	11,311	17	144	1
Stream	56,487	234	15,268	47	41,219	187
<b>Total:</b>	<b>67,942</b>	<b>252</b>	<b>26,579</b>	<b>64</b>	<b>41,363</b>	<b>188</b>
<b>Bitterroot River</b>						
Lake	1,668	8	801	4	867	4
Stream	58,684	296	36,778	189	21,906	107
<b>Total:</b>	<b>60,352</b>	<b>304</b>	<b>37,579</b>	<b>193</b>	<b>22,773</b>	<b>111</b>
<b>Blackfoot River</b>						
Lake	16,519	68	12,150	50	4,368	18
Stream	17,823	77	12,680	51	5,143	26
<b>Total:</b>	<b>34,342</b>	<b>145</b>	<b>24,830</b>	<b>101</b>	<b>9,511</b>	<b>44</b>
<b>Boulder River</b>						
Stream	395	2			395	2
<b>Total:</b>	<b>395</b>	<b>2</b>			<b>395</b>	<b>2</b>
<b>Clark Fork River - Flint / Rock</b>						
Lake	46,925	175	33,531	119	13,394	56
Stream	22,281	111	8,208	43	14,073	68
<b>Total:</b>	<b>69,206</b>	<b>286</b>	<b>41,739</b>	<b>162</b>	<b>27,467</b>	<b>124</b>
<b>Flathead River</b>						
Lake	71,147	268	59,005	216	12,142	52
Stream	11,334	46	9,428	37	1,906	9
<b>Total:</b>	<b>82,480</b>	<b>314</b>	<b>68,433</b>	<b>253</b>	<b>14,048</b>	<b>61</b>

Table 12 Continued. Angling pressure in angler days by drainage, lake or stream for the 2020-21 winter season (March - April and October - February of the survey license year)

	--- Totals ---		--- Resident ---		--- Non-Resident ---	
	Pressure	Trips	Pressure	Trips	Pressure	Trips
<b>Fort Peck Reservoir</b>						
Lake	71,106	287	18,541	87	52,565	200
Stream	4,031	22	2,040	13	1,991	9
<b>Total:</b>	<b>75,136</b>	<b>309</b>	<b>20,581</b>	<b>100</b>	<b>54,556</b>	<b>209</b>
<b>Gallatin River</b>						
Lake	10,928	43	3,807	15	7,121	28
Stream	65,814	322	33,316	168	32,498	154
<b>Total:</b>	<b>76,742</b>	<b>365</b>	<b>37,123</b>	<b>183</b>	<b>39,619</b>	<b>182</b>
<b>Jefferson River</b>						
Lake	9,517	26	8,358	21	1,159	5
Stream	6,881	35	3,690	19	3,191	16
<b>Total:</b>	<b>16,398</b>	<b>61</b>	<b>12,048</b>	<b>40</b>	<b>4,350</b>	<b>21</b>
<b>Kootenai River</b>						
Lake	22,823	94	22,037	91	786	3
Stream	5,506	28	3,438	18	2,068	10
<b>Total:</b>	<b>28,329</b>	<b>122</b>	<b>25,475</b>	<b>109</b>	<b>2,854</b>	<b>13</b>
<b>Little Missouri River</b>						
Lake	559	2	559	2		
Stream	790	4			790	4
<b>Total:</b>	<b>1,349</b>	<b>6</b>	<b>559</b>	<b>2</b>	<b>790</b>	<b>4</b>
<b>Lower Clark Fork River</b>						
Lake	18,313	75	10,472	40	7,841	35
Stream	9,348	49	6,152	32	3,196	17
<b>Total:</b>	<b>27,661</b>	<b>124</b>	<b>16,624</b>	<b>72</b>	<b>11,037</b>	<b>52</b>
<b>Lower Milk River</b>						
Stream	1,486	7	1,342	6	144	1
<b>Total:</b>	<b>1,486</b>	<b>7</b>	<b>1,342</b>	<b>6</b>	<b>144</b>	<b>1</b>
<b>Lower Missouri River</b>						
Lake	3,230	16	2,535	13	695	3
Stream	144	1			144	1
<b>Total:</b>	<b>3,375</b>	<b>17</b>	<b>2,535</b>	<b>13</b>	<b>839</b>	<b>4</b>
<b>Lower Yellowstone River</b>						
Lake	4,680	19	4,680	19		
Stream	17,186	83	14,422	69	2,764	14
<b>Total:</b>	<b>21,866</b>	<b>102</b>	<b>19,102</b>	<b>88</b>	<b>2,764</b>	<b>14</b>

Table 12 Continued. Angling pressure in angler days by drainage, lake or stream for the 2020-21 winter season (March - April and October - February of the survey license year)

	--- Totals ---		--- Resident ---		--- Non-Resident ---	
	Pressure	Trips	Pressure	Trips	Pressure	Trips
<b>Madison River</b>						
Lake	18,737	93	5,816	37	12,921	56
Stream	102,220	503	33,119	166	69,101	337
<b>Total:</b>	<b>120,957</b>	<b>596</b>	<b>38,935</b>	<b>203</b>	<b>82,022</b>	<b>393</b>
<b>Marias River</b>						
Lake	11,662	47	6,792	28	4,870	19
Stream	2,036	14	2,036	14		
<b>Total:</b>	<b>13,698</b>	<b>61</b>	<b>8,828</b>	<b>42</b>	<b>4,870</b>	<b>19</b>
<b>Middle Clark Fork River</b>						
Lake	944	4	944	4		
Stream	34,147	153	19,272	80	14,875	73
<b>Total:</b>	<b>35,091</b>	<b>157</b>	<b>20,216</b>	<b>84</b>	<b>14,875</b>	<b>73</b>
<b>Middle Milk River</b>						
Lake	9,044	42	4,650	25	4,393	17
Stream	10,746	45	10,548	44	197	1
<b>Total:</b>	<b>19,789</b>	<b>87</b>	<b>15,198</b>	<b>69</b>	<b>4,590</b>	<b>18</b>
<b>Middle Yellowstone River</b>						
Lake	3,452	18	3,452	18		
Stream	9,365	41	9,365	41		
<b>Total:</b>	<b>12,817</b>	<b>59</b>	<b>12,817</b>	<b>59</b>		
<b>Missouri River - Dearborn</b>						
Lake	531	3	531	3		
Stream	70,281	331	48,775	225	21,506	106
<b>Total:</b>	<b>70,812</b>	<b>334</b>	<b>49,306</b>	<b>228</b>	<b>21,506</b>	<b>106</b>
<b>Missouri River - Judith</b>						
Lake	2,185	9	2,185	9		
Stream	11,057	46	10,481	43	575	3
<b>Total:</b>	<b>13,241</b>	<b>55</b>	<b>12,666</b>	<b>52</b>	<b>575</b>	<b>3</b>
<b>Missouri River - Poplar</b>						
Lake	266	1	266	1		
Stream	7,557	36	5,871	28	1,686	8
<b>Total:</b>	<b>7,823</b>	<b>37</b>	<b>6,137</b>	<b>29</b>	<b>1,686</b>	<b>8</b>
<b>Musselshell River</b>						
Lake	5,097	23	4,883	22	214	1
Stream	4,140	23	2,554	16	1,586	7
<b>Total:</b>	<b>9,237</b>	<b>46</b>	<b>7,437</b>	<b>38</b>	<b>1,800</b>	<b>8</b>

Table 12 Continued. Angling pressure in angler days by drainage, lake or stream for the 2020-21 winter season (March - April and October - February of the survey license year)

	--- Totals ---		--- Resident ---		--- Non-Resident ---	
	Pressure	Trips	Pressure	Trips	Pressure	Trips
<b>Powder River</b>						
Stream	497	4	497	4		
<b>Total:</b>	497	4	497	4		
<b>Red Rock River</b>						
Lake	21,857	88	9,282	40	12,575	48
Stream	806	4			806	4
<b>Total:</b>	22,663	92	9,282	40	13,381	52
<b>Ruby River</b>						
Lake	5,873	23	4,807	18	1,066	5
Stream	10,438	54	2,117	11	8,321	43
<b>Total:</b>	16,311	77	6,924	29	9,387	48
<b>Smith River</b>						
Lake	6,284	24	5,452	21	832	3
Stream	5,791	26	4,568	18	1,223	8
<b>Total:</b>	12,075	50	10,020	39	2,055	11
<b>South Fork Flathead River</b>						
Lake	124	1	124	1		
Stream	832	3			832	3
<b>Total:</b>	956	4	124	1	832	3
<b>Sun River</b>						
Lake	8,057	32	6,923	27	1,134	5
Stream	3,652	20	2,321	14	1,331	6
<b>Total:</b>	11,709	52	9,244	41	2,465	11
<b>Swan River</b>						
Lake	4,460	17	4,460	17		
Stream	2,658	10	2,658	10		
<b>Total:</b>	7,118	27	7,118	27		
<b>Teton River</b>						
Lake	2,374	11	2,142	10	232	1
Stream	2,608	15	2,081	13	527	2
<b>Total:</b>	4,982	26	4,223	23	759	3
<b>Tongue River</b>						
Lake	2,641	15	1,292	8	1,349	7
Stream	13,024	40	10,116	28	2,908	12
<b>Total:</b>	15,665	55	11,408	36	4,257	19

Table 12 Continued. Angling pressure in angler days by drainage, lake or stream for the 2020-21 winter season (March - April and October - February of the survey license year)

	--- Totals ---		--- Resident ---		--- Non-Resident ---	
	Pressure	Trips	Pressure	Trips	Pressure	Trips
<b>Upper Clark Fork River</b>						
Lake	1,678	6	1,678	6		
Stream	9,050	42	7,067	33	1,983	9
<b>Total:</b>	<b>10,728</b>	<b>48</b>	<b>8,745</b>	<b>39</b>	<b>1,983</b>	<b>9</b>
<b>Upper Milk River</b>						
Lake	5,022	20	3,019	12	2,003	8
Stream	4,624	17	4,624	17		
<b>Total:</b>	<b>9,645</b>	<b>37</b>	<b>7,643</b>	<b>29</b>	<b>2,003</b>	<b>8</b>
<b>Upper Missouri River</b>						
Lake	71,585	334	62,028	290	9,556	44
Stream	55,242	216	45,188	163	10,054	53
<b>Total:</b>	<b>126,826</b>	<b>550</b>	<b>107,216</b>	<b>453</b>	<b>19,610</b>	<b>97</b>
<b>Upper Yellowstone River</b>						
Lake	8,842	44	6,677	34	2,165	10
Stream	105,166	498	67,168	313	37,997	185
<b>Total:</b>	<b>114,007</b>	<b>542</b>	<b>73,845</b>	<b>347</b>	<b>40,162</b>	<b>195</b>

### 3.5 PRIMARY SPECIES FISHED FOR

The mail questionnaire asked anglers to indicate the primary species they were fishing for. The answers to this question provide a good generalization regarding angler preferences and intentions but are probably inaccurate on some waters because anglers often will intentionally fish for more than one species but can only indicate one on the questionnaire. Another inaccuracy occurs in situations where anglers are fishing for one of many species of co-existing trout in a lake or stream. The angler may typically expect to catch a rainbow, cutthroat, brown, or brook trout depending on the situation. It is most likely for this reason that a common response to the survey, particularly in the trout-dominant rivers of southwestern Montana, was “trout.”

On a statewide basis, the most common response was “trout” (43.45%), followed by rainbow trout (11.19%), walleye (9.82%), brown trout (7.01%), cutthroat trout (5.84%), bass (2.6%), and channel catfish 2.25% (Table 13). Salmonids (trout, salmon, char, whitefish and grayling) collectively are indicated as the primary species by 73.45% of anglers.

Although salmonid fishing dominates on a statewide basis in terms of angler days, there are notable geographic differences (Table 14). Salmonid fishing comprises the majority of angling pressure in every drainage west of the Continental Divide except for the lower Clark Fork, which is heavily influenced by fishing on Noxon Rapids Reservoir for bass (34.92%), walleye (14.92%), and yellow perch (14.24%). The salmonid-dominant drainages west of the divide have some notable differences. Lake trout are a very highly sought species in the Flathead River drainage (16.21%), primarily due to Flathead Lake as well as the Swan River drainage (12.37%). Cutthroat trout constitute the majority of angling interest in the South Fork Flathead drainage (68%). Cutthroat trout is also the dominant species (outside of “trout”) in the Upper Clark Fork River drainage (16.77%), Blackfoot River drainage (17.56%) and the Bitterroot River drainage (18.01%). Salmon fishing (Kokanee plus “salmon”) is most prominent in the Kootenai River drainage (23.03%), primarily due to fishing on Lake Koocanusa.

The Missouri headwater drainages in Region 3 of southwest Montana are dominated by trout fishing, primarily for rainbow and brown trout in the valley-bottom rivers. For these two species plus “trout”, the percentage ranges from 79.1% in the Boulder River drainage to 93.88% in the Madison River drainage. Cutthroat and brook trout, where indicated as the primary species, are numerically low (typically below 12%), but are often the only game species in the mountain lakes and streams in these drainages.

The upper and middle Missouri River and the drainages in Region 4 represent a transition from salmonids to cool-water species. The Upper Missouri River drainage, which contains Canyon Ferry, Hauser and Holter reservoirs is dominated by “trout” and rainbow trout as a primary species (55.08%), although walleye represent a significant component (33.99%). Downstream in the Missouri-Dearborn drainage, “trout,” rainbow trout and brown trout are the overwhelming favorite species and make up close to 86.86% of the effort. Further downstream in the Missouri River-Judith drainage, “trout”/rainbow trout still comprise the majority of species being fished for, but cool-water species such as walleye (9.92%) and yellow perch (3.68%), as well as warm-water



species such as channel catfish (9.63%) and sturgeon (3.97%) are important to anglers. The Marias River drainage is the most notable tributary to the Missouri in Region 4, due to its high emphasis on walleye (73.55%), sturgeon (4.41%) and yellow perch (3.86%).

The lower Missouri River mainstem drainages within Region 6 are dominated by walleye and northern pike fishing. Combined, these two species comprise 61.12% of angler preference in Fort Peck Reservoir, 65.36% in the Missouri River-Poplar, and 55.55% in the Lower Missouri drainage. Channel catfish is the primary target species on the Lower Milk River (34.21%), and also popular in the Lower Missouri River drainage (9.52%) and Fort Peck Reservoir (6.18%).

Species preferences within the Yellowstone River drainage show a longitudinal shift from salmonid fishing in the headwaters to cool and warm water species in eastern Montana. In the Upper Yellowstone drainage within Region 3, the combination of “trout,” rainbow trout, brown trout and cutthroat trout comprise 93.56% of angler preferences. Further downstream in Region 5, but still within the Upper Yellowstone drainage, these same species make up over 85.43% of preferences. The Middle Yellowstone River drainage still has a substantial component of anglers seeking trout (roughly 33.19% for “trout,” rainbow trout and brown trout), but warm-water species dominate, led by channel catfish (30.91%), bass (17.22%) and smallmouth bass (5.19%). The Lower Yellowstone River drainage is dominated by fishing for channel catfish (40.55%), followed by Walleye (26.21%), Bass (9.47%), and Sauger (4.85%). Of note, restrictions on paddlefish licenses in 2020 due to Covid-19 removed this popular species from the primary species list. Notable tributary drainages to the Yellowstone include the Bighorn River drainage (72.61% for “trout,” rainbow trout and brown trout), and the Tongue River drainage which has high levels for walleye (29.62%), bass (18.46%), channel catfish (17.31%) and crappie (15%) based primarily on fishing in Tongue River Reservoir.

Table 13. Percent of trips for each primary species fished for statewide in 2020 license year

Trout	43.45%	Common Carp	0.18%
Rainbow Trout	11.19%	Rainbow Trout X Cutthroat	0.15%
Walleye	9.82%	Sauger	0.14%
Brown Trout	7.01%	Paddlefish	0.11%
Cutthroat Trout	5.84%	Bluegill	0.10%
Bass	2.60%	Golden Trout	0.07%
Channel Catfish	2.25%	Bull Trout	0.07%
Lake Trout	1.93%	Sucker	0.06%
Yellow Perch	1.71%	Goldeye	0.03%
Salmon	1.29%	Chinook Salmon	0.03%
Brook Trout	1.00%	Bigmouth Buffalo	0.02%
Nothern Pike	0.95%	Sunfish	0.01%
Kokanee salmon	0.83%	Pumpkinseed	0.01%
Smallmouth Bass	0.55%	Blue Sucker	0.01%
Whitefish	0.36%	Rainbow Smelt	0.01%
Burbot	0.31%	Lake Whitefish	0.01%

Crappie	0.25%	Coho Salmon	0.01%
Largemouth Bass	0.24%	Mountain Whitefish	0.00%
Sturgeon	0.22%	Peamouth	0.00%
Arctic Grayling	0.21%	Rainbow Trout X Golden	0.00%

Table 14. Percent of trips for each primary species fished for by region and drainage during 2020 survey year

<b>Drainage</b>	<b>Primary Species Fished for</b>	<b>Percent of days for species</b>
<b><u>Region: 1</u></b>		
Flathead River (47.12% of days fished in this Region.)		
	Trout	19.38%
	Lake Trout	16.21%
	Cutthroat Trout	13.22%
	Yellow Perch	7.63%
	Rainbow Trout	5.82%
	Bass	5.82%
	Salmon	5.59%
	Kokanee salmon	3.84%
	Whitefish	2.94%
	Nothern Pike	1.24%
	Smallmouth Bass	1.13%
	Arctic Grayling	1.07%
	Crappie	0.79%
	Rainbow Trout X Cutthroat Trout Hybrid	0.73%
	Largemouth Bass	0.40%
	Brook Trout	0.23%
	Lake Whitefish	0.11%
	Sturgeon	0.11%
	Walleye	0.11%
	Pumpkinseed	0.11%
	Blue Sucker	0.06%
	Brown Trout	0.06%
Kootenai River (17.92% of days fished in this Region.)		
	Trout	30.31%
	Rainbow Trout	15.30%
	Salmon	12.18%
	Kokanee salmon	10.85%
	Bass	9.81%
	Yellow Perch	6.54%
	Cutthroat Trout	1.93%
	Smallmouth Bass	0.59%
	Largemouth Bass	0.59%
	Lake Trout	0.45%
	Brook Trout	0.45%
	Sunfish	0.45%
	Sucker	0.30%
	Blue Sucker	0.30%
	Nothern Pike	0.30%
	Whitefish	0.15%
	Peamouth	0.15%

Table 14. Percent of trips for each primary species fished for by region and drainage during 2020 survey year

<b>Drainage</b>	<b>Primary Species Fished for</b>	<b>Percent of days for species</b>
Lower Clark Fork River (20.50% of days fished in this Region.)		
	Trout	20.26%
	Bass	19.48%
	Yellow Perch	9.48%
	Walleye	6.75%
	Smallmouth Bass	4.42%
	Brown Trout	3.38%
	Rainbow Trout	2.99%
	Cutthroat Trout	1.82%
	Lake Trout	1.56%
	Nothern Pike	1.56%
	Salmon	1.43%
	Kokanee salmon	1.04%
	Largemouth Bass	0.78%
South Fork Flathead River (7.32% of days fished in this Region.)		
	Cutthroat Trout	68.00%
	Trout	17.45%
	Bull Trout	6.55%
	Rainbow Trout	2.55%
	Whitefish	1.82%
	Brown Trout	0.73%
	Brook Trout	0.36%
Swan River (4.95% of days fished in this Region.)		
	Trout	41.40%
	Rainbow Trout	13.44%
	Lake Trout	12.37%
	Cutthroat Trout	9.68%
	Nothern Pike	3.23%
	Bass	1.08%
	Golden Trout	0.54%
	Yellow Perch	0.54%
	Salmon	0.54%
<b><u>Region: 2</u></b>		
Bitterroot River (27.51% of days fished in this Region.)		
	Trout	58.48%
	Cutthroat Trout	18.01%
	Rainbow Trout	10.49%
	Brown Trout	5.65%
	Whitefish	1.19%
	Nothern Pike	1.12%
	Brook Trout	1.12%
	Rainbow Trout X Cutthroat Trout Hybrid	0.37%
	Lake Trout	0.07%

Table 14. Percent of trips for each primary species fished for by region and drainage during 2020 survey year

<b>Drainage</b>	<b>Primary Species Fished for</b>	<b>Percent of days for species</b>
Blackfoot River (24.71% of days fished in this Region.)		
	Trout	43.74%
	Cutthroat Trout	17.56%
	Rainbow Trout	11.68%
	Brown Trout	6.71%
	Yellow Perch	3.48%
	Bass	2.15%
	Kokanee salmon	0.99%
	Salmon	0.91%
	Nothern Pike	0.91%
	Rainbow Trout X Cutthroat Trout Hybrid	0.66%
	Brook Trout	0.41%
	Largemouth Bass	0.41%
	Walleye	0.17%
	Arctic Grayling	0.17%
	Bull Trout	0.17%
	Smallmouth Bass	0.08%
Clark Fork River - Flint / Rock (26.31% of days fished in this Region.)		
	Trout	51.52%
	Rainbow Trout	18.29%
	Cutthroat Trout	11.52%
	Brown Trout	6.69%
	Kokanee salmon	2.88%
	Salmon	2.72%
	Brook Trout	1.48%
	Arctic Grayling	0.47%
	Coho Salmon	0.16%
	Rainbow Trout X Cutthroat Trout Hybrid	0.16%
	Lake Trout	0.08%
Middle Clark Fork River (14.70% of days fished in this Region.)		
	Trout	49.44%
	Rainbow Trout	20.75%
	Cutthroat Trout	11.14%
	Brown Trout	3.20%
	Bass	2.92%
	Brook Trout	1.39%
	Nothern Pike	0.70%
	Whitefish	0.56%
	Rainbow Smelt	0.28%
	Yellow Perch	0.14%
	Largemouth Bass	0.14%
	Rainbow Trout X Cutthroat Trout Hybrid	0.14%
Upper Clark Fork River (6.59% of days fished in this Region.)		
	Trout	51.55%
	Cutthroat Trout	16.77%
	Brown Trout	13.98%
	Rainbow Trout	7.76%
	Sturgeon	3.11%
	Rainbow Trout X Cutthroat Trout Hybrid	1.55%
	Whitefish	1.24%
	Brook Trout	1.24%

Table 14. Percent of trips for each primary species fished for by region and drainage during 2020 survey year

<b>Drainage</b>	<b>Primary Species Fished for</b>	<b>Percent of days for species</b>
<b>Region: 3</b>		
Beaverhead River (4.76% of days fished in this Region.)		
	Trout	57.06%
	Brown Trout	26.55%
	Rainbow Trout	6.50%
	Brook Trout	2.26%
	Cutthroat Trout	0.85%
	Golden Trout	0.28%
Big Hole River (13.24% of days fished in this Region.)		
	Trout	51.93%
	Brown Trout	21.85%
	Rainbow Trout	6.61%
	Brook Trout	5.08%
	Cutthroat Trout	4.07%
	Arctic Grayling	1.42%
	Burbot	0.81%
	Golden Trout	0.20%
	Lake Trout	0.10%
Boulder River (0.90% of days fished in this Region.)		
	Trout	43.28%
	Brown Trout	19.40%
	Rainbow Trout	16.42%
	Brook Trout	7.46%
	Whitefish	4.48%
Gallatin River (17.93% of days fished in this Region.)		
	Trout	55.26%
	Rainbow Trout	19.97%
	Brown Trout	9.83%
	Cutthroat Trout	7.06%
	Largemouth Bass	1.05%
	Golden Trout	0.60%
	Brook Trout	0.60%
	Lake Trout	0.30%
	Bluegill	0.15%
	Yellow Perch	0.08%
	Smallmouth Bass	0.08%
	Whitefish	0.08%
	Arctic Grayling	0.08%
Jefferson River (3.15% of days fished in this Region.)		
	Trout	68.38%
	Brown Trout	9.83%
	Rainbow Trout	8.97%
	Cutthroat Trout	5.98%
	Brook Trout	0.43%
Lower Clark Fork River (0.01% of days fished in this Region.)		
	Trout	100.00%

Table 14. Percent of trips for each primary species fished for by region and drainage during 2020 survey year

<b>Drainage</b>	<b>Primary Species Fished for</b>	<b>Percent of days for species</b>
Madison River (35.84% of days fished in this Region.)		
	Trout	60.76%
	Brown Trout	17.12%
	Rainbow Trout	16.00%
	Cutthroat Trout	1.13%
	Bluegill	0.30%
	Whitefish	0.19%
	Largemouth Bass	0.19%
	Bass	0.15%
	Brook Trout	0.08%
	Sucker	0.08%
	Arctic Grayling	0.04%
	Mountain Whitefish	0.04%
	Rainbow Smelt	0.04%
	Sunfish	0.04%
Red Rock River (3.55% of days fished in this Region.)		
	Trout	51.14%
	Rainbow Trout	16.67%
	Burbot	14.39%
	Cutthroat Trout	6.06%
	Brown Trout	3.79%
	Brook Trout	1.89%
	Lake Trout	0.76%
	Common Carp	0.76%
	Rainbow Trout X Cutthroat Trout Hybrid	0.76%
	Nothern Pike	0.38%
Ruby River (2.76% of days fished in this Region.)		
	Trout	50.24%
	Brown Trout	20.98%
	Rainbow Trout	12.20%
	Brook Trout	7.32%
	Cutthroat Trout	4.88%
Upper Missouri River (3.06% of days fished in this Region.)		
	Trout	44.93%
	Walleye	19.38%
	Rainbow Trout	11.89%
	Brook Trout	10.57%
	Common Carp	5.73%
	Arctic Grayling	2.20%
	Cutthroat Trout	1.76%
	Brown Trout	0.44%
Upper Yellowstone River (14.62% of days fished in this Region.)		
	Trout	64.55%
	Brown Trout	11.97%
	Rainbow Trout	10.13%
	Cutthroat Trout	6.91%
	Yellow Perch	0.92%
	Rainbow Trout X Cutthroat Trout Hybrid	0.28%
	Whitefish	0.28%
	Brook Trout	0.28%
	Lake Trout	0.18%
	Walleye	0.18%
	Bass	0.09%

Table 14. Percent of trips for each primary species fished for by region and drainage during 2020 survey year

<b>Drainage</b>	<b>Primary Species Fished for</b>	<b>Percent of days for species</b>
<b>Region: 4</b>		
Belt Creek (1.25% of days fished in this Region.)		
	Trout	62.32%
	Brown Trout	27.54%
	Rainbow Trout	7.25%
	Brook Trout	2.90%
Marias River (6.56% of days fished in this Region.)		
	Walleye	73.55%
	Trout	5.51%
	Sturgeon	4.41%
	Yellow Perch	3.86%
	Nothern Pike	2.75%
	Rainbow Trout	2.20%
	Goldeye	1.65%
	Channel Catfish	1.65%
	Bigmouth Buffalo	1.38%
	Lake Trout	0.83%
Missouri River - Dearborn (25.17% of days fished in this Region.)		
	Trout	67.39%
	Rainbow Trout	19.47%
	Brown Trout	6.32%
	Walleye	3.45%
	Bass	0.79%
	Brook Trout	0.36%
	Channel Catfish	0.29%
Missouri River - Judith (6.38% of days fished in this Region.)		
	Trout	37.11%
	Rainbow Trout	11.05%
	Walleye	9.92%
	Channel Catfish	9.63%
	Sturgeon	3.97%
	Yellow Perch	3.68%
	Brown Trout	3.12%
	Brook Trout	2.83%
	Sucker	2.83%
	Common Carp	1.98%
	Cutthroat Trout	1.13%
	Bass	0.85%
	Paddlefish	0.85%
	Sauger	0.85%
	Smallmouth Bass	0.28%
Musselshell River (2.93% of days fished in this Region.)		
	Trout	41.36%
	Rainbow Trout	15.43%
	Walleye	9.88%
	Channel Catfish	9.26%
	Lake Trout	6.17%
	Brown Trout	4.32%
	Bass	3.09%
	Common Carp	2.47%
	Brook Trout	2.47%
	Largemouth Bass	1.23%

Table 14. Percent of trips for each primary species fished for by region and drainage during 2020 survey year

<b>Drainage</b>	<b>Primary Species Fished for</b>	<b>Percent of days for species</b>
NA - St. Mary and Belly Rivers (0.05% of days fished in this Region.)		
	Brook Trout	33.33%
	Rainbow Trout	33.33%
	Cutthroat Trout	33.33%
Smith River (9.51% of days fished in this Region.)		
	Trout	52.28%
	Brown Trout	19.39%
	Rainbow Trout	16.92%
	Burbot	3.61%
	Cutthroat Trout	2.85%
	Brook Trout	1.33%
	Kokanee salmon	0.57%
	Salmon	0.57%
Sun River (5.64% of days fished in this Region.)		
	Trout	42.31%
	Rainbow Trout	25.00%
	Cutthroat Trout	5.45%
	Brown Trout	5.13%
	Kokanee salmon	2.24%
	Salmon	2.24%
	Largemouth Bass	2.24%
	Yellow Perch	1.92%
	Walleye	0.96%
	Channel Catfish	0.96%
	Bass	0.96%
	Arctic Grayling	0.96%
	Nothern Pike	0.64%
	Brook Trout	0.32%
Teton River (1.55% of days fished in this Region.)		
	Trout	32.56%
	Rainbow Trout	20.93%
	Sturgeon	11.63%
	Cutthroat Trout	9.30%
	Common Carp	6.98%
	Yellow Perch	5.81%
	Bass	2.33%
	Channel Catfish	2.33%
Upper Milk River (0.14% of days fished in this Region.)		
	Walleye	37.50%
	Trout	12.50%



Table 14. Percent of trips for each primary species fished for by region and drainage during 2020 survey year

<b>Drainage</b>	<b>Primary Species Fished for</b>	<b>Percent of days for species</b>
Upper Missouri River (40.54% of days fished in this Region.)		
	Trout	40.99%
	Walleye	33.99%
	Rainbow Trout	14.09%
	Yellow Perch	2.68%
	Brown Trout	0.89%
	Kokanee salmon	0.85%
	Bass	0.71%
	Common Carp	0.67%
	Burbot	0.58%
	Salmon	0.45%
	Lake Trout	0.27%
	Brook Trout	0.22%
	Nothern Pike	0.18%
	Channel Catfish	0.09%
	Largemouth Bass	0.04%
	Pumpkinseed	0.04%
<b>Region: 5</b>		
Bighorn River (21.01% of days fished in this Region.)		
	Trout	53.98%
	Brown Trout	10.99%
	Rainbow Trout	7.64%
	Walleye	5.10%
	Bass	4.78%
	Smallmouth Bass	4.46%
	Yellow Perch	2.39%
	Cutthroat Trout	2.07%
	Channel Catfish	1.91%
	Sauger	1.27%
	Crappie	0.80%
	Burbot	0.16%
Middle Yellowstone River (16.13% of days fished in this Region.)		
	Channel Catfish	30.91%
	Trout	28.84%
	Bass	17.22%
	Smallmouth Bass	5.19%
	Rainbow Trout	2.90%
	Yellow Perch	1.66%
	Walleye	1.45%
	Bluegill	1.45%
	Brown Trout	1.45%
	Sauger	1.04%
	Common Carp	0.62%
	Burbot	0.62%
	Largemouth Bass	0.41%
	Crappie	0.41%
	Goldeye	0.21%

Table 14. Percent of trips for each primary species fished for by region and drainage during 2020 survey year

<b>Drainage</b>	<b>Primary Species Fished for</b>	<b>Percent of days for species</b>
Musselshell River (4.62% of days fished in this Region.)		
	Trout	31.88%
	Channel Catfish	25.36%
	Bass	14.49%
	Walleye	13.04%
	Brown Trout	2.90%
	Rainbow Trout	2.17%
	Kokanee salmon	2.17%
	Salmon	1.45%
	Smallmouth Bass	1.45%
Upper Yellowstone River (58.11% of days fished in this Region.)		
	Trout	64.54%
	Rainbow Trout	10.65%
	Brown Trout	6.79%
	Walleye	5.76%
	Cutthroat Trout	3.45%
	Brook Trout	2.59%
	Bass	0.98%
	Arctic Grayling	0.46%
	Golden Trout	0.46%
	Yellow Perch	0.40%
	Whitefish	0.35%
	Channel Catfish	0.23%
	Rainbow Trout X Cutthroat Trout Hybrid	0.17%
	Bluegill	0.17%
	Sucker	0.17%
	Lake Trout	0.06%
	Burbot	0.06%
	Rainbow Trout X Golden Trout Hybrid	0.06%
	Crappie	0.06%
<b>Region: 6</b>		
Fort Peck Reservoir (67.86% of days fished in this Region.)		
	Walleye	55.00%
	Lake Trout	11.58%
	Channel Catfish	6.18%
	Nothern Pike	6.12%
	Salmon	5.99%
	Bass	1.84%
	Paddlefish	1.84%
	Smallmouth Bass	0.86%
	Trout	0.72%
	Chinook Salmon	0.46%
	Crappie	0.33%
Lower Milk River (1.70% of days fished in this Region.)		
	Channel Catfish	34.21%
	Walleye	28.95%
	Sturgeon	26.32%
	Trout	5.26%
Lower Missouri River (2.81% of days fished in this Region.)		
	Nothern Pike	44.44%
	Walleye	11.11%
	Channel Catfish	9.52%
	Bass	7.94%
	Trout	4.76%

Table 14. Percent of trips for each primary species fished for by region and drainage during 2020 survey year

<b>Drainage</b>	<b>Primary Species Fished for</b>	<b>Percent of days for species</b>
Middle Milk River (14.82% of days fished in this Region.)		
	Walleye	35.54%
	Trout	31.02%
	Nothern Pike	5.72%
	Brook Trout	3.92%
	Channel Catfish	3.01%
	Rainbow Trout	2.11%
	Yellow Perch	0.90%
	Smallmouth Bass	0.60%
	Bass	0.60%
	Cutthroat Trout	0.30%
Missouri River - Judith (0.49% of days fished in this Region.)		
	Walleye	90.91%
Missouri River - Poplar (5.67% of days fished in this Region.)		
	Walleye	55.91%
	Nothern Pike	9.45%
	Trout	7.09%
	Channel Catfish	3.94%
	Yellow Perch	1.57%
	Sauger	1.57%
	Goldeye	0.79%
Upper Milk River (6.65% of days fished in this Region.)		
	Walleye	56.38%
	Trout	9.40%
	Channel Catfish	5.37%
	Yellow Perch	2.01%
	Crappie	1.34%
	Nothern Pike	1.34%
<b><u>Region: 7</u></b>		
Fort Peck Reservoir (0.85% of days fished in this Region.)		
	Walleye	83.33%
	Channel Catfish	16.67%
Little Missouri River (1.99% of days fished in this Region.)		
	Rainbow Trout	28.57%
	Nothern Pike	21.43%
	Channel Catfish	21.43%
	Trout	14.29%
	Largemouth Bass	7.14%
Lower Yellowstone River (58.61% of days fished in this Region.)		
	Channel Catfish	40.53%
	Walleye	26.21%
	Bass	9.47%
	Sauger	4.85%
	Yellow Perch	3.64%
	Trout	2.43%
	Bluegill	2.18%
	Smallmouth Bass	1.70%
	Brown Trout	1.70%
	Nothern Pike	1.46%
	Cutthroat Trout	1.46%
	Rainbow Trout	1.21%

Table 14. Percent of trips for each primary species fished for by region and drainage during 2020 survey year

<b>Drainage</b>	<b>Primary Species Fished for</b>	<b>Percent of days for species</b>
Powder River (1.56% of days fished in this Region.)		
	Channel Catfish	54.55%
	Trout	45.45%
Tongue River (36.98% of days fished in this Region.)		
	Walleye	29.62%
	Bass	18.46%
	Channel Catfish	17.31%
	Crappie	15.00%
	Smallmouth Bass	4.23%
	Yellow Perch	2.31%
	Rainbow Trout	1.15%
	Trout	0.38%
	Largemouth Bass	0.38%
	Brown Trout	0.38%
	Nothern Pike	0.38%

### 3.6 BOAT USE – Aquatic Invasive Species Question

All anglers were asked if they use a boat, regardless if they did or did not report a fishing trip during the month they were surveyed. If respondents said “yes” they were asked if they pull the drain plug when taking out of water. This question is related to Montana FWP’s “Clean. Drain. Dry.” education campaign to help stop the spread of aquatic invasive species (AIS).

Out of all surveys returned, 52% (n=10,870) said they do not use a boat, while 29% (n=5,993) use a boat, and 19% (n=3,845) did not answer the question (Figure 18, Table 15). Out of the 5,993 respondents who do use a boat, 82% (n=4,916) said they pull the drain plug when taking out of water, while 10% (n=596) do not pull drain plug, and 8% (n=481) did not answer the question. Some respondents left a comment explaining why they do not pull the drain plug which was because they use a canoe, for example, or because they were with a guide.

Table 15 breaks down all responses by residency and according to whether they reported a fishing trip or did not fish. Up to 47% of residents who reported going fishing during the month surveyed said they use a boat, while just 23% of residents who did not go fishing during the month surveyed use a boat. The question was meant to imply using a boat in general, and not specifically using a boat during the month they were surveyed. It is possible anglers misunderstood the question given the range of boat use by those residents who reported a fishing trip, and those who did not fish.

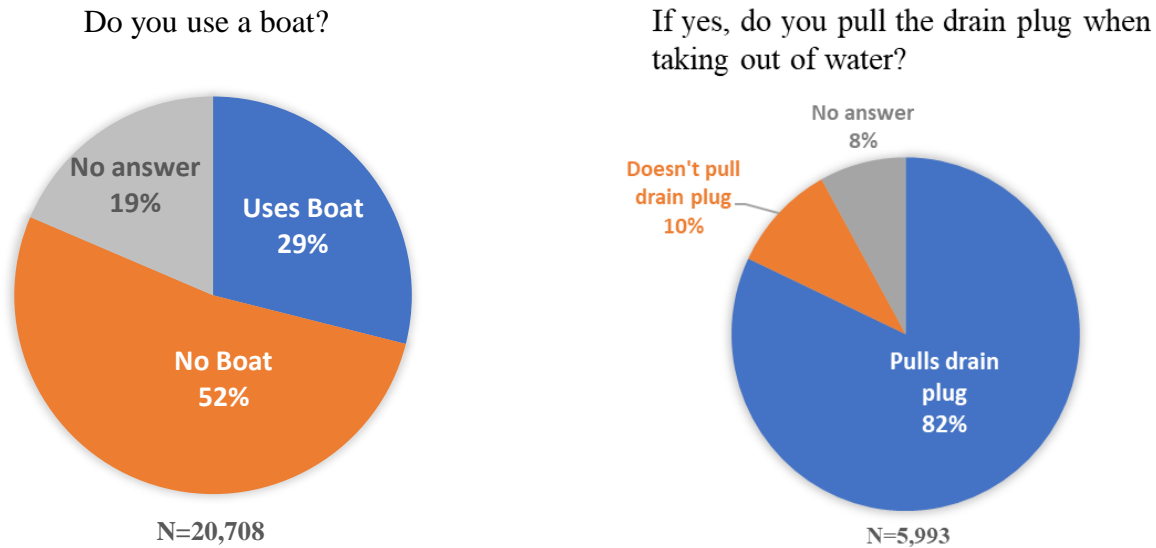


Figure 18. Responses to the questions “Do you use a boat” and “If yes, do you drain the plug when taking out of water?”

Table 15. Crosstab of responses to the AIS questions by residency and fishing status

	<b>Total</b>	<b># Uses Boat</b>	<b># Null Boat</b>	<b># No boat</b>	<b>% No Boat</b>	<b>% Null Boat</b>	<b>% Yes Boat</b>	<b>#Yes Pulls Plug</b>	<b>#No Pulls Plug</b>	<b>#Null Pulls Plug</b>	<b>%Yes Pulls Plug</b>	<b>%No Pulls Plug</b>	<b>%Null Pulls Plug</b>
<b>DID NOT FISH</b>													
NonResident	2426	324	745	1357	56%	31%	13%	265	36	23	82%	11%	7%
Resident	11093	2583	2249	6262	56%	20%	23%	2263	219	101	88%	8%	4%
<b>FISHED</b>													
NonResident	2595	945	303	1348	52%	12%	36%	609	130	205	64%	14%	22%
Resident	4594	2142	550	1903	41%	12%	47%	1779	211	152	83%	10%	7%
<b>COMBINED Fished / Did not fish</b>													
NonResident	5021	1269	1048	2705	54%	21%	25%	874	166	228	69%	13%	18%
Resident	15687	4725	2799	8165	52%	18%	30%	4042	430	253	86%	9%	5%
<b>TOTAL</b>	<b>20708</b>	<b>5994</b>	<b>3847</b>	<b>10870</b>	<b>52%</b>	<b>19%</b>	<b>29%</b>	<b>4916</b>	<b>596</b>	<b>481</b>	<b>82%</b>	<b>10%</b>	<b>8%</b>

### 3.7 ANGLER ACCESS

On the questionnaire, anglers were asked if they had mostly fished from shore, boat, both shore and boat, or ice. When considered on a drainage basis (Table 16), the Fort Peck Reservoir had the lowest percentage (10.55%) fishing from shore, and the highest percent fishing from boats (68.48%). The Powder River drainage had the most fishing from shore (100%), followed by the Boulder River (95.52%), Little Missouri River (92.86%) Gallatin River (88.06%), and Upper Clark Fork (85.4%) drainages. The Powder River had the least fishing by boat (0%). For those drainages where there was ice fishing, the drainages with less than 1% included the South Fork Flathead River, Upper and Middle Clark Fork River, Beaverhead River, Big Hole River, Bighorn River, Bitterroot River, Upper Yellowstone, Missouri River - Judith and Missouri River – Dearborn. Fort Peck Reservoir, Clark Fork River - Flint / Rock, Little Missouri River, Lower Milk River, Missouri River – Poplar, and Red Rock River drainages all had greater than 10% of the anglers fishing through the ice.

Region 6 had the lowest percentage of anglers fishing from shore (20.89%) while Regions 2, 3, and 5 had the greatest percent (59.78%, 60.11% and 61.41% respectively) (Table 17). In terms of fishing from a boat, Regions 5, 3 and 2 were the lowest (25.16%, 27.29% and 28.45%), while Region 6 was highest at 57.68%. Region 5 had the lowest level of ice anglers (0.94%), while Region 6 had the highest level (12.32%). Nonresidents were slightly more likely to fish from shore (51.66%) than were residents (48.84%) (Table 18). More residents fished from a boat (37.41%) compared to non-residents (33.57%). A greater percentage of non-residents (6.35%) ice fished compared to residents (3.12%). Appendix F provides percentage of anglers accessing the water by each of these types for individual waterbodies.

Table 16. Angler types of fishing by drainage (total days fished and percentages)

Drainage Name	Shore	Boat	Shore/ Boat	Ice	Ice /Shore	Total
Beaverhead River	210 (59.32%)	86 (24.29%)	53 (14.97%)	1 (0.28%)		354
Belt Creek	58 (84.06%)	4 (5.8%)	3 (4.35%)			69
Big Hole River	469 (47.66%)	381 (38.72%)	127 (12.91%)	4 (0.41%)		984
Bighorn River	131 (20.86%)	300 (47.77%)	191 (30.41%)	5 (0.8%)		628
Bitterroot River	839 (62.43%)	374 (27.83%)	129 (9.6%)	1 (0.07%)		1344
Blackfoot River	549 (45.48%)	483 (40.02%)	118 (9.78%)	52 (4.31%)		1207
Boulder River	64 (95.52%)	1 (1.49%)				67
Clark Fork River - Flint / Rock	805 (62.65%)	281 (21.87%)	54 (4.2%)	132 (10.27%)	6 (0.47%)	1285
Flathead River	514 (29.04%)	937 (52.94%)	136 (7.68%)	156 (8.81%)		1770
Fort Peck Reservoir	161 (10.55%)	1045 (68.48%)	104 (6.82%)	208 (13.63%)		1526
Gallatin River	1173 (88.06%)	66 (4.95%)	50 (3.75%)	36 (2.7%)		1332
Jefferson River	145 (61.97%)	71 (30.34%)	8 (3.42%)	10 (4.27%)		234
Kootenai River	254 (37.74%)	336 (49.93%)	38 (5.65%)	43 (6.39%)		673
Little Missouri River	13 (92.86%)		1 (7.14%)			14
Lower Clark Fork River	284 (36.84%)	388 (50.32%)	66 (8.56%)	28 (3.63%)		771
Lower Milk River	30 (78.95%)	4 (10.53%)		4 (10.53%)		38
Lower Missouri River	23 (36.51%)	15 (23.81%)	19 (30.16%)	6 (9.52%)		63
Lower Yellowstone River	234 (56.8%)	120 (29.13%)	44 (10.68%)	14 (3.4%)		412
Madison River	1409 (52.91%)	866 (32.52%)	316 (11.87%)	54 (2.03%)	6 (0.23%)	2663
Marias River	82 (22.59%)	209 (57.58%)	39 (10.74%)	32 (8.82%)		363
Middle Clark Fork River	447 (62.26%)	212 (29.53%)	52 (7.24%)	3 (0.42%)		718
Middle Milk River	167 (50.3%)	106 (31.93%)	33 (9.94%)	26 (7.83%)		332

Middle Yellowstone River	384 (79.67%)	65 (13.49%)	26 (5.39%)	7 (1.45%)	482
Missouri River - Dearborn	571 (41.02%)	625 (44.9%)	195 (14.01%)	1 (0.07%)	1392
Missouri River - Judith	269 (73.9%)	72 (19.78%)	20 (5.49%)	3 (0.82%)	364
Missouri River - Poplar	48 (37.8%)	41 (32.28%)	18 (14.17%)	20 (15.75%)	127
Musselshell River	227 (75.67%)	47 (15.67%)	11 (3.67%)	14 (4.67%)	300
Powder River	11 (100%)				11
Red Rock River	77 (29.17%)	95 (35.98%)	14 (5.3%)	75 (28.41%)	264
Ruby River	169 (82.44%)	16 (7.8%)	3 (1.46%)	17 (8.29%)	205
Smith River	166 (31.56%)	234 (44.49%)	105 (19.96%)	21 (3.99%)	526
South Fork Flathead River	138 (50.18%)	90 (32.73%)	47 (17.09%)		275
Sun River	217 (69.55%)	56 (17.95%)	26 (8.33%)	11 (3.53%)	312
Swan River	95 (51.08%)	76 (40.86%)	7 (3.76%)		186
Teton River	57 (66.28%)	15 (17.44%)	6 (6.98%)	8 (9.3%)	86
Tongue River	91 (35%)	126 (48.46%)	25 (9.62%)	15 (5.77%)	260
Upper Clark Fork River	275 (85.4%)	37 (11.49%)	8 (2.48%)	2 (0.62%)	322
Upper Milk River	44 (28.03%)	76 (48.41%)	22 (14.01%)	15 (9.55%)	157
Upper Missouri River	951 (38.52%)	1205 (48.81%)	211 (8.55%)	84 (3.4%)	2469
Upper Yellowstone River	1769 (62.66%)	774 (27.42%)	244 (8.64%)	15 (0.53%)	2823

Table 17. Angler types of fishing by Region (days fished and percentages) for license survey year 2020

Region (Year)	Shore	Boat	Shore/ Boat	Ice	Ice /Shore	Total
1	1284 (34.95%)	1827 (49.73%)	294 (8%)	227 (6.18%)		3674
2	2915 (59.78%)	1387 (28.45%)	361 (7.4%)	190 (3.9%)	6 (0.12%)	4876
3	4458 (60.11%)	2024 (27.29%)	691 (9.32%)	201 (2.71%)	6 (0.08%)	7417
4	2312 (41.94%)	2403 (43.59%)	603 (10.94%)	172 (3.12%)		5513
5	1833 (61.41%)	751 (25.16%)	354 (11.86%)	28 (0.94%)		2985
6	468 (20.89%)	1292 (57.68%)	196 (8.75%)	276 (12.32%)		2240
7	350 (49.79%)	251 (35.7%)	70 (9.96%)	29 (4.13%)		703

Table 18. Angler types of fishing by residency within the state (percent is based on the total number of days which includes null responses)

Residency	Shore	Boat	Shore/ Boat	Ice	Ice /Shore	Total Days
R	9342 (48.84%)	7155 (37.41%)	1905 (9.96%)	597 (3.12%)	11 (0.06%)	19,127
N	4278 (51.66%)	2780 (33.57%)	664 (8.02%)	526 (6.35%)	1 (0.01%)	8281



### 3.8 ANGLER SATISFACTION RATINGS

Licensed anglers fishing on Montana waters rated their fishing experience on a scale of 1 = poor to 5 = excellent for the 2020 license year. The average satisfaction rating overall for all trips on all waterbodies was 2.91 (Table 19). Region 3 had the highest overall satisfaction rating of 3.05 while Region 7 had the lowest satisfaction rating of 2.7. Satisfaction ratings for individual waters can be found in Appendix H of this report, while Appendix I shows crowding ratings by drainage for summer and winter months.

Table 19. Angler satisfaction ratings by region

Region	1-poor (count)	2 (count)	3 (count)	4 (count)	5-excellent (count)	Avg. Satisfaction Rating
1	455	277	441	288	220	2.73
2	395	359	665	463	317	2.98
3	583	547	928	760	567	3.05
4	552	325	517	385	328	2.82
5	271	222	340	262	182	2.89
6	133	106	185	127	98	2.92
7	68	42	85	41	29	2.7
Total	2457	1878	3161	2326	1741	2.91

Angler satisfaction ratings were also summarized by the 40 major drainages (Table 20). The average ratings ranged from a high of 4.3 for the St. Mary and Belly Rivers in Region 4, though only three ratings were reported. The South Fork of the Flathead River, Beaverhead River, Sun River, and Powder River followed with an average of 3.3. The lowest satisfaction ratings were for the Upper Milk River (2.1), and the Teton and Tongue Rivers (2.2).

Table 20. Fishing Satisfaction Rating by Region, Drainage and Residency for License Year 2020

REGION: 1																		
Total	1	2	3	4	5	Avg.	1	2	3	4	5	Avg .	1	2	3	4	5	
Avg.	(poor)-----(excellent)					Res	(poor)-----(excellent)					Nonres	(poor)-----(excellent)					
<b>Flathead River</b>																		
2.8	195	137	181	133	127	2.8	118	106	131	76	78	2.9	77	31	50	57	49	
<b>Kootenai River</b>																		
2.6	81	51	80	38	32	2.6	63	32	55	26	24	2.7	18	19	25	12	8	
<b>Lower Clark Fork River</b>																		
2.5	94	47	91	48	18	2.5	62	37	70	29	11	2.5	32	10	21	19	7	
<b>NA</b>																		
2.7	13	2	9	8	4	2.6	12	2	9	5	4	3.3	1			3		
<b>South Fork Flathead River</b>																		
3.3	14	13	27	29	19	3.0	10	12	17	17	9	3.6	4	1	10	12	10	
<b>Swan River</b>																		
2.4	34	9	20	13	7	2.4	20	8	14	5	6	2.4	14	1	6	8	1	
REGION: 2																		
Total	1	2	3	4	5	Avg.	1	2	3	4	5	Avg .	1	2	3	4	5	
Avg.	(poor)-----(excellent)					Res	(poor)-----(excellent)					Nonres	(poor)-----(excellent)					
<b>Bitterroot River</b>																		
3.0	87	100	160	126	85	2.9	57	68	96	72	33	3.3	30	32	64	54	52	
<b>Blackfoot River</b>																		
2.8	126	101	208	107	76	2.8	89	70	152	79	47	2.9	37	31	56	28	29	
<b>Clark Fork River - Flint / Rock</b>																		
3.2	81	81	157	130	100	3.1	43	54	114	75	56	3.2	38	27	43	55	44	
<b>Middle Clark Fork River</b>																		
2.8	59	51	93	66	27	2.7	37	34	53	35	13	3.0	22	17	40	31	14	
<b>Upper Clark Fork River</b>																		
2.9	34	20	38	24	24	2.9	27	15	30	20	18	2.9	7	5	8	4	6	

REGION: 3

Total Avg.	1 (poor)	2	3	4	5 (excellent)	Avg. Res	1 (poor)	2	3	4	5 (excellent)	Avg. Nonres	1 (poor)	2	3	4	5 (excellent)	
<b>Beaverhead River</b>																		
3.3	19	21	44	38	32	3.1	10	12	23	20	8	3.5	9	9	21	18	24	
<b>Big Hole River</b>																		
2.9	75	75	139	79	52	2.9	44	52	86	51	31	2.9	31	23	53	28	21	
<b>Boulder River</b>																		
3.0	8	4	9	6	7	2.9	7	3	8	5	5	3.3	1	1	1	1	2	
<b>Gallatin River</b>																		
3.0	115	104	169	128	102	3.0	45	52	96	78	36	3.0	70	52	73	50	66	
<b>Jefferson River</b>																		
2.7	35	18	25	23	15	2.7	27	11	20	16	11	2.7	8	7	5	7	4	
<b>Madison River</b>																		
3.1	174	184	301	263	212	3.0	61	75	116	84	64	3.2	113	109	185	179	148	
<b>Red Rock River</b>																		
2.7	35	16	27	23	16	2.7	22	6	16	15	8	2.8	13	10	11	8	8	
<b>Ruby River</b>																		
3.1	17	11	22	19	18	3.1	9	6	11	11	8	3.2	8	5	11	8	10	
<b>Upper Missouri River</b>																		
2.8	21	13	23	23	8	2.7	20	11	21	16	6	3.5	1	2	2	7	2	
<b>Upper Yellowstone River</b>																		
3.1	79	90	148	131	79	3.0	33	60	77	70	24	3.2	46	30	71	61	55	

REGION: 4

Total Avg.	1 (poor)	2	3	4	5 (excellent)	Avg. Res	1 (poor)	2	3	4	5 (excellent)	Avg. Nonres	1 (poor)	2	3	4	5 (excellent)	
<b>Belt Creek</b>																		
3.2	5	6	4	11	6	3.3	3	5	3	10	5	2.7	2	1	1	1	1	
<b>Marias River</b>																		
2.7	29	23	31	20	13	2.6	27	21	28	18	10	3.2	2	2	3	2	3	
<b>Missouri River - Dearborn</b>																		
3.2	88	60	135	126	116	3.0	67	47	93	70	55	3.6	21	13	42	56	61	
<b>Missouri River - Judith</b>																		
2.9	35	19	38	39	21	3.0	29	18	34	35	20	2.6	6	1	4	4	1	
<b>Musselshell River</b>																		
2.6	27	10	22	15	8	2.6	24	9	22	11	8	2.6	3	1		4		
<b>NA</b>																		
1.0	1					1.0	1											
<b>NA - St. Mary and Belly Rivers</b>																		
4.3			1		2	5.0					1	4.0			1		1	
<b>Smith River</b>																		
2.9	38	29	42	33	26	2.8	25	20	32	19	17	2.9	13	9	10	14	9	
<b>Sun River</b>																		
3.3	23	17	32	24	36	3.2	20	17	29	21	29	3.7	3		3	3	7	
<b>Teton River</b>																		
2.2	18	7	6	2	5	2.2	14	7	6	1	4	2.2	4			1	1	
<b>Upper Milk River</b>																		
2.0	2	1		1		2.5	1			1		1.5	1	1				
<b>Upper Missouri River</b>																		
2.5	278	152	204	108	89	2.4	246	137	176	95	62	2.9	32	15	28	13	27	

**REGION: 5**

Total	1	2	3	4	5	Avg.	1	2	3	4	5	Avg .	1	2	3	4	5	
Avg.	(poor)-----(excellent)					Res	(poor)-----(excellent)					Nonres	(poor)-----(excellent)					
<b>Bighorn River</b>																		
3.1	48	41	70	59	55	2.7	30	25	33	18	16	3.4	18	16	37	41	39	
<b>Middle Yellowstone River</b>																		
2.7	40	31	41	29	17	2.7	34	29	37	29	15	2.3	6	2	4		2	
<b>Musselshell River</b>																		
3.0	12	5	7	7	12	2.9	11	5	6	7	9	3.8	1		1		3	
<b>Upper Yellowstone River</b>																		
2.8	168	143	219	165	94	2.9	118	105	171	126	68	2.8	50	38	48	39	26	

**REGION: 6**

Total	1	2	3	4	5	Avg.	1	2	3	4	5	Avg .	1	2	3	4	5	
Avg.	(poor)-----(excellent)					Res	(poor)-----(excellent)					Nonres	(poor)-----(excellent)					
<b>Fort Peck Reservoir</b>																		
3.1	70	62	110	93	73	3.1	51	43	78	69	46	3.2	19	19	32	24	27	
<b>Lower Milk River</b>																		
2.7	2	3	4		2	2.9	1	3	4		2	1.0	1					
<b>Lower Missouri River</b>																		
3.1	4	2	7	3	4	3.1	4	2	5	3	4	3.0			2			
<b>Middle Milk River</b>																		
2.8	27	18	36	24	12	2.7	25	15	35	22	8	3.3	2	3	1	2	4	
<b>Missouri River - Judith</b>																		
3.5			3		1	3.7			2		1	3.0			1			
<b>Missouri River - Poplar</b>																		
2.6	11	7	18	4	3	2.5	10	6	14	3	3	2.7	1	1	4	1		
<b>Upper Milk River</b>																		
2.1	19	14	7	3	3	2.1	18	13	7	3	3	1.5	1	1				

REGION: 7

Total	1	2	3	4	5	Avg.	1	2	3	4	5	Avg .	1	2	3	4	5
Avg.	(poor)-----(excellent)					Res	(poor)-----(excellent)					Nonres	(poor)-----(excellent)				
<b>Fort Peck Reservoir</b>																	
3.5			1	1		4.0				1		3.0				1	
<b>Little Missouri River</b>																	
3.0	1	1	3	1	1	2.7	1	1	3	1		5.0					1
<b>Lower Yellowstone River</b>																	
3.0	22	28	46	24	26	3.0	20	26	41	21	23	3.2	2	2	5	3	3
<b>Powder River</b>																	
3.3	1		2	2	1	3.2	1		2	1	1	4.0					1
<b>Tongue River</b>																	
2.244	13	33	13	1	2.1	35	10	24	8	1	2.4	9	3	9	5		

### 3.9 ANGLER CROWDING RATINGS

Questions were included to ask the angler to rate the crowding from one (sparse) to five (crowded) and also to ascertain how many other recreationalists they encountered. The “Crowding Ratings” columns lists the number of responses under each rating (1-5) while the “Average Number of People Seen” columns list the average number of other people seen. The ratings were summarized for the seven Fish, Wildlife & Parks regions and are listed in Table 21. The ratings were also summarized by the 40 major drainages in the state and are listed in Table 22. The crowding ratings for individual waters can be found in Appendix H of this report, while Appendix I shows crowding ratings by drainage for summer and winter months.

The statewide average crowding rating was 2.03 for all trips on all waterbodies. When broken down by region, Region 4 had the highest crowding rating of 2.21. Region 1 had the lowest average crowding rating of 1.77. The weighted average number of people seen was 6.91 for all regions combined. The highest average number of other people seen was 10.29 in Region 6, while Region 2 had the lowest average number of people seen 6.22.

The Little Missouri River and Powder River drainages had the lowest crowding rating (1.0) while the Missouri River – Dearborn drainage had the highest average rating at 2.66 (Table 22). The Little Missouri River and Powder River drainages also had the lowest average number of people seen (0.71 and 0.83) while the Gallatin River had the highest (61.17), though this number is skewed by one angler response of seeing 10,000 other people during their trip. The next highest average number of people seen was the Missouri River – Dearborn drainage (27.55).

Table. 21 Angler crowding ratings by region

Region	1-sparse (count)	2 (count)	3 (count)	4 (count)	5-crowded (count)	Avg. Crowding Rating	Avg. People Seen
1	984	321	223	94	63	1.77	6.69
2	1063	479	333	175	151	2.03	6.22
3	1622	640	565	317	235	2.08	6.63
4	915	389	410	205	182	2.21	6.34
5	642	279	180	107	76	1.98	7.49
6	347	145	100	34	24	1.84	10.29
7	143	57	31	21	12	1.87	9.71
Total	5742	2311	1846	954	744	2.02	6.91

Table 22. Angler Crowding Ratings sorted by Region, Drainage and by Residency for the Entire License Year 2020

REGION: 1																				
Total	1	2	3	4	5	Avg.	1	2	3	4	5	Avg.	1	2	3	4	5	Avg. People Seen		
Avg.	(sparse)------(crowded)					Res	(sparse)------(crowded)					NonRes	(sparse)------(crowded)					Total	Res	NRes
<b>Flathead River</b>																				
2.0	407	146	122	61	42	2.1	238	96	84	54	36	1.6	169	50	38	7	6	17.3	19.4	13.5
<b>Kootenai River</b>																				
1.5	202	44	23	6	7	1.5	144	30	15	5	5	1.5	58	14	8	1	2	9.5	8.4	12.2
<b>Lower Clark Fork River</b>																				
1.7	182	60	34	13	7	1.7	120	46	24	11	7	1.5	62	14	10	2		14.0	15.0	11.8
<b>NA</b>																				
1.6	23	9	2	1	1	1.6	21	7	2	1	1	1.5	2	2				5.0	4.9	6.3
<b>South Fork Flathead River</b>																				
1.9	52	20	22	4	3	2.0	31	12	15	3	3	1.7	21	8	7	1		10.4	12.3	7.1
<b>Swan River</b>																				
1.6	54	16	7	7	1	1.7	31	12	6	4	1	1.5	23	4	1	3		8.0	8.9	6.6
REGION: 2																				
Total	1	2	3	4	5	Avg.	1	2	3	4	5	Avg.	1	2	3	4	5	Avg. People Seen		
Avg.	(sparse)------(crowded)					Res	(sparse)------(crowded)					NonRes	(sparse)------(crowded)					Total	Res	NRes
<b>Bitterroot River</b>																				
1.9	281	122	89	36	29	2.2	134	73	61	30	27	1.6	147	49	28	6	2	8.8	9.8	7.3
<b>Blackfoot River</b>																				
2.1	291	123	89	54	62	2.2	192	91	65	43	44	2.0	99	32	24	11	18	14.3	13.7	15.5
<b>Clark Fork River - Flint / Rock</b>																				
2.2	211	140	105	49	46	2.4	114	84	67	41	37	1.9	97	56	38	8	9	15.7	18.0	12.3
<b>Middle Clark Fork River</b>																				
1.9	152	64	36	30	13	2.2	70	41	24	24	12	1.6	82	23	12	6	1	10.0	10.6	9.2
<b>Upper Clark Fork River</b>																				
1.4	107	21	8	3	1	1.4	83	16	8	2	1	1.3	24	5	1			3.6	2.9	6.3



REGION: 3																				
Total	1	2	3	4	5	Avg.	1	2	3	4	5	Avg.	1	2	3	4	5	Avg. People Seen		
Avg.	(sparse)------(crowded)					Res	(sparse)------(crowded)					NonRes	(sparse)------(crowded)					Total	Res	NRes
<b>Beaverhead River</b>																				
2.2	73	21	31	17	13	2.0	39	10	11	7	5	2.4	34	11	20	10	8	10.4	7.0	13.5
<b>Big Hole River</b>																				
2.1	210	76	70	33	32	2.2	115	48	52	21	29	1.7	95	28	18	12	3	11.3	11.5	11.0
<b>Boulder River</b>																				
1.3	27	5	2			1.3	22	4	2			1.2	5	1				2.0	1.7	3.3
<b>Gallatin River</b>																				
2.0	308	128	104	45	33	2.3	117	61	71	31	26	1.7	191	67	33	14	7	61.2	117.6	7.7
<b>Jefferson River</b>																				
1.7	74	19	14	5	4	1.9	47	15	14	5	4	1.1	27	4				7.7	9.4	3.2
<b>Madison River</b>																				
2.4	437	213	227	143	109	2.6	123	65	91	61	55	2.2	314	148	136	82	54	18.0	21.3	16.2
<b>Red Rock River</b>																				
1.6	77	25	7	6	3	1.8	40	15	4	6	3	1.3	37	10	3			10.5	12.9	7.3
<b>Ruby River</b>																				
1.5	59	19	7	1	2	1.6	28	11	5	2		1.4	31	8	2	1		4.3	5.7	2.8
<b>Upper Missouri River</b>																				
1.6	58	11	10	3	3	1.7	49	8	9	3	3	1.4	9	3	1			7.9	8.4	5.1
<b>Upper Yellowstone River</b>																				
2.1	245	101	86	62	32	2.5	79	60	51	47	26	1.7	166	41	35	15	6	14.8	18.9	10.8
REGION: 4																				
Total	1	2	3	4	5	Avg.	1	2	3	4	5	Avg.	1	2	3	4	5	Avg. People Seen		
Avg.	(sparse)------(crowded)					Res	(sparse)------(crowded)					NonRes	(sparse)------(crowded)					Total	Res	NRes
<b>Belt Creek</b>																				
1.6	22	5	1	3	1	1.6	19	3	1	2	1	1.8	3	2	1			3.0	2.8	4.2
<b>Marias River</b>																				
1.7	73	21	16	3	5	1.7	64	20	14	3	5	1.4	9	1	2			16.5	17.3	9.4
<b>Missouri River - Dearborn</b>																				
2.7	147	99	133	76	69	2.8	82	58	97	44	51	2.5	65	41	36	32	18	27.5	22.5	36.3

**Missouri River - Judith**

1.8 99 19 15 11 9 1.8 86 18 14 10 9 1.4 13 1 1 1 9.4 9.6 7.5

**Musselshell River**

1.7 55 9 14 3 2 1.7 48 9 13 3 2 1.3 7 1 9.3 10.0 3.1

**NA - St. Mary and Belly Rivers**

1.3 2 1 1.0 1 1.5 1 1 1.7 3.0 1.0

**Smith River**

1.9 88 31 29 10 10 2.0 59 17 20 8 9 1.8 29 14 9 2 1 15.4 16.5 13.1

**Sun River**

1.7 79 27 17 6 3 1.8 66 24 17 6 3 1.2 13 3 8.9 8.9 9.4

**Teton River**

1.3 34 1 1 2 1.3 29 1 1 1 1.7 5 1 5.0 3.5 12.5

**Upper Milk River**

1.0 4 1.0 2 1.0 2 8.3 4.0 10.5

**Upper Missouri River**

2.4 291 172 184 93 81 2.5 234 148 163 86 78 1.9 57 24 21 7 3 27.0 28.3 18.4

REGION: 5																				
Total	1	2	3	4	5	Avg. Res	1	2	3	4	5	Avg. NonRes	1	2	3	4	5	Avg. People Seen		
Avg.	(sparse)------(crowded)					Res	(sparse)------(crowded)					NonRes	(sparse)------(crowded)					Total	Res	NRes

**Bighorn River**

2.2 112 70 46 30 16 2.2 47 34 15 17 9 2.1 65 36 31 13 7 18.1 17.1 18.8

**Middle Yellowstone River**

2.2 71 31 29 13 14 2.2 62 29 27 12 14 1.6 9 2 2 1 10.8 11.2 6.3

**Musselshell River**

1.5 31 6 5 1 1.5 27 6 4 1 1.4 4 1 7.9 6.3 20.2

**Upper Yellowstone River**

1.9 425 167 96 63 44 2.0 284 133 84 52 41 1.5 141 34 12 11 3 10.6 11.0 9.6

REGION: 6																				
Total	1	2	3	4	5	Avg.	1	2	3	4	5	Avg.	1	2	3	4	5	Avg. People Seen		
Avg.	(sparse)------(crowded)					Res	(sparse)------(crowded)					NonRes	(sparse)------(crowded)					Total	Res	NRes
<b>Fort Peck Reservoir</b>																				
1.9	210	98	60	21	18	1.9	141	70	45	16	15	1.7	69	28	15	5	3	27.4	27.7	26.7
<b>Lower Milk River</b>																				
1.3	8	3				1.3	7	3				1.0	1					2.9	2.6	6.0
<b>Lower Missouri River</b>																				
1.7	13	3	2	1	1	1.8	11	3	2	1	1	1.0	2					8.7	9.1	5.5
<b>Middle Milk River</b>																				
1.8	66	19	25	7	2	1.8	61	19	19	6	2	2.3	5	6		1		10.7	8.4	30.3
<b>Missouri River - Judith</b>																				
3.0	1	1	1		1	2.7	1	1	1			4.0	1					21.5	18.7	30.0
<b>Missouri River - Poplar</b>																				
1.7	23	14	5	1		1.7	18	12	5	1		1.3	5	2				10.9	11.8	6.2
<b>Upper Milk River</b>																				
1.8	26	7	8	4	1	1.9	24	7	8	4	1	1.0	2					10.2	10.4	6.0
REGION: 7																				
Total	1	2	3	4	5	Avg.	1	2	3	4	5	Avg.	1	2	3	4	5	Avg. People Seen		
Avg.	(sparse)------(crowded)					Res	(sparse)------(crowded)					NonRes	(sparse)------(crowded)					Total	Res	NRes
<b>Fort Peck Reservoir</b>																				
1.5	1	1				1.0	1					2.0	1					26.0	2.0	50.0
<b>Little Missouri River</b>																				
1.0	7					1.0	6					1.0	1					0.7	0.8	0.0
<b>Lower Yellowstone River</b>																				
1.8	85	29	17	10	4	1.8	74	27	15	10	4	1.4	11	2	2			9.0	8.9	9.9
<b>Powder River</b>																				
1.0	6					1.0	5					1.0	1					0.8	0.6	2.0
<b>Tongue River</b>																				
2.2	44	27	14	11	8	2.2	34	18	11	7	8	2.0	10	9	3	4		24.9	26.2	21.4

## **4.0 DISCUSSION AND ANALYSIS**

### **4.1 SCOPE OF ANGLING PRESSURE**

The statewide angling pressure survey was conducted from March 2020 through February 2021. Estimates of pressure by residents and nonresidents were for licensed anglers only. This would encompass anglers 12 years of age and older. Spence (1971) found that the unlicensed angler (ages 2- 14) comprised 9% of the pressure on Rock Creek near Missoula. Peterson (1970) found that the unlicensed anglers accounted for 21% and 19% of the total number of anglers on Big Spring Creek near Lewistown during 1968 and 1969 respectively. On the Bighorn River near Hardin, Stevenson (1975) found that the unlicensed angler accounted for 14.2% and 15.8% of the total number of anglers during 1972 and 1973 respectively. Fredenberg (1984) found that 10% of the anglers on Bighorn Lake and 13% of the anglers on the Yellowtail Afterbay were unlicensed. It appears that the unlicensed angler makes up between 9% and 21% of the fishing pressure depending on the type of water being fished.

Some angling pressure was obtained on Indian reservations and National Parks within Montana. This pressure was incidental to other fishing trips and only included those anglers that had purchased a Montana fishing license. Since national parks and reservations require different licensing, a complete pressure estimate of waters within those regions was not obtained.

### **4.2 ACCURACY**

#### **4.2.1 SAMPLE**

Samples were drawn and questionnaires sent to the selected anglers as soon as possible. This was usually 1-2 days after the wave being sampled had ended (see discussion under Methods for details). The use of ALS allows for samples to be drawn right after the month has ended which minimizes inaccurate responses resulting from memory loss over time, or recall bias.

### **4.3 RETURN RATES**

Return rates ( $\# \text{ of respondents} / [\# \text{ of surveys sent} - \text{nondeliverables}] * 100$ ) were calculated for every wave by residency (Table 2). The overall return rate was 31.4%. The weighted average total return rates for residents and nonresidents were 32.8% and 30.4% respectively. These are the lowest rates since the surveys first began in 1983, and reflect a consistent downward trend over that time period (Figure 19). Low return rates reduce the number of trips reported for individual waterbodies, and increase the associated error surrounding the pressure estimate. Even more problematic is the possibility that the lower return rates are causing or a result of a non-response bias, in which license holders with certain common traits are disproportionately choosing to not participate in the survey. If these non-respondents are more or less likely to be fishing than are the respondents, then it may be affecting the accuracy of the pressure estimates. Section 3.0

demonstrated the average age of survey respondents was 53 years old, compared to the average age of the licenced angler population of 44 years old. Thus, anglers ages 51 and up are disproportionately responding to the mail survey, while anglers 50 and under are less likely to respond. For example, Figure 1 shows that 26% of survey respondents were between the ages of 61 to 70, yet just 15% of licenced anglers are in that age demographic.

Due to the trend of lower response rates among all respondents, especially among the younger demographic for the angler pressure mail survey, it may be worth looking into alternative survey modes. A recent study by Pew Research (2022) reveals 93% of the US uses the internet, compared to 80% just 10 years ago. When broken down by age, 96% to 99% of the US ages 18-64 use the internet, while 75% of those 65+ are online (Pew Research 2022). A recent study by Seil et al. (2021) compared response rates of web-based versus mail-in surveys, and found respondents were 7 times more likely to complete the web-based survey, compared to mail-in. Another study found comparable research findings across survey modes (online versus paper-and-pencil surveys), meaning the survey mode did not affect how people responded to the questions (Rübsamen et al. 2017). Thus, a mixed-method approach combining both email/web-based and mail-in surveys may best target all age groups and decrease non-response bias in future surveys (Seil 2021; Kelfve et al. 2020; Rübsamen et al. 2017).

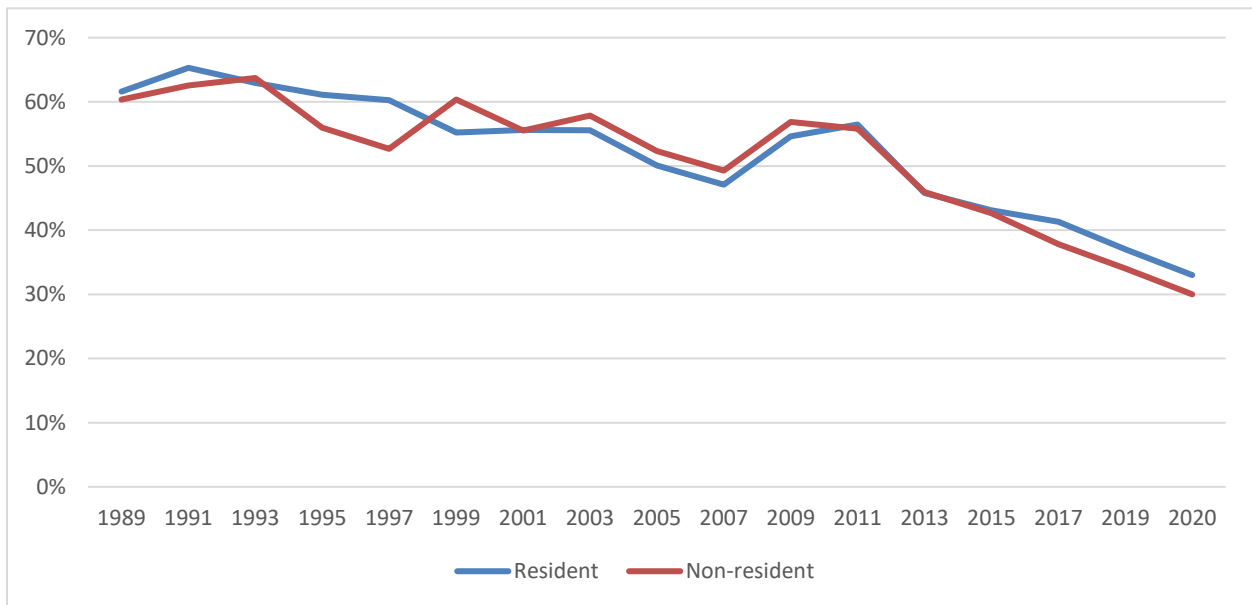


Figure 19. Return rate of mail questionnaires for residents and non-residents from 1989 to 2020.

#### **4.4 NUMBER OF LICENSED ANGLERS VS PRESSURE**

The number of licensed resident anglers showed steady increases from 1967 to 1985 (Figure 20, Table 23). Since 1985 when there were 236,455 licensed anglers, the number has generally remained within 10%, reaching a low of 216,412 in 1989. In 2020, there was a 13.8% increase in resident anglers compared to 2019, reaching an all-time high of 273,077 unique resident licenses. This increase is likely attributed to Montana residents desire to get outdoors during the Covid pandemic. Nonresident licensed angler numbers showed strong growth between 1965 and peak numbers in 2002 (Figure 21), increasing from 51,798 to 220,946 during the period. Nonresident license sales then dropped markedly from 2002 through 2011, when 126,617 unique anglers purchased licenses, but has rebounded and increased to 195,941 in 2020, just a 2.7% increase over 2019 licenses.

Comparing statewide angling use from the mail survey versus number of licensed anglers shows general agreement between the two variables, at least in terms of long-term trends. The relationship between angler use and number of anglers has remained consistent for resident anglers (Figure 20). The trend for non-resident anglers is much different. The number of licensed non-resident anglers peaked in 2002 and then declined to a 21-year low in 2011. Since then, the number of licensed non-resident anglers increased almost every year reaching 195,941 in 2020. Non-resident angling pressure however, has increased by almost 113% since 2007 (Figure 21) and indicates a trend toward non-residents spending more days fishing in Montana.

Table 23. - Number of licensed anglers from 1982 through 2020 by residency.

Year	Resident Anglers	Nonresident Anglers
1982	216,689	119,293
1983	217,483	116,875
1984	232,485	102,843
1985	236,455	106,304
1986	235,403	100,456
1987	233,111	103,936
1988	219,299	108,471
1989	216,412	114,254
1990	217,370	119,611
1991	221,723	138,243
1992	222,186	134,212
1993	226,992	151,192
1994	233,630	164,841
1995	227,849	153,887
1996	227,282	150,881
1997	222,442	151,244
1998	222,329	162,067
1999	228,419	162,572
2000	219,282	152,158
2001	216,858	164,470
2002	222,510	220,946
2003	227,562	200,647
2004	223,560	200,562
2005	233,295	185,689
2006	224,526	159,846
2007	228,415	163,088
2008	240,030	155,858
2009	248,945	159,032
2010	238,942	154,184
2011	228,589	126,617
2012	241,519	157,763
2013	254,473	170,415
2014	258,846	178,290
2015	267,846	189,916
2016	254,016	192,364
2017	244,012	184,495
2018	233,597	185,045
2019	240,062	190,764
2020	273,077	195,941

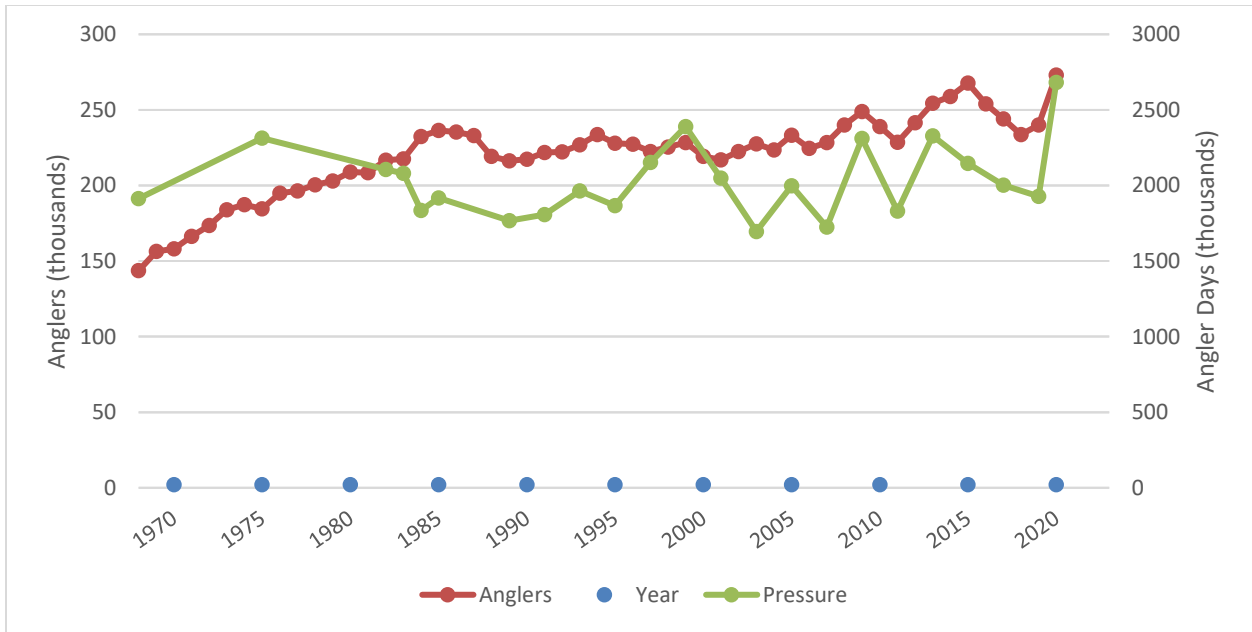


Figure 20. Angling pressure versus number of anglers for residents from 1968 to 2020

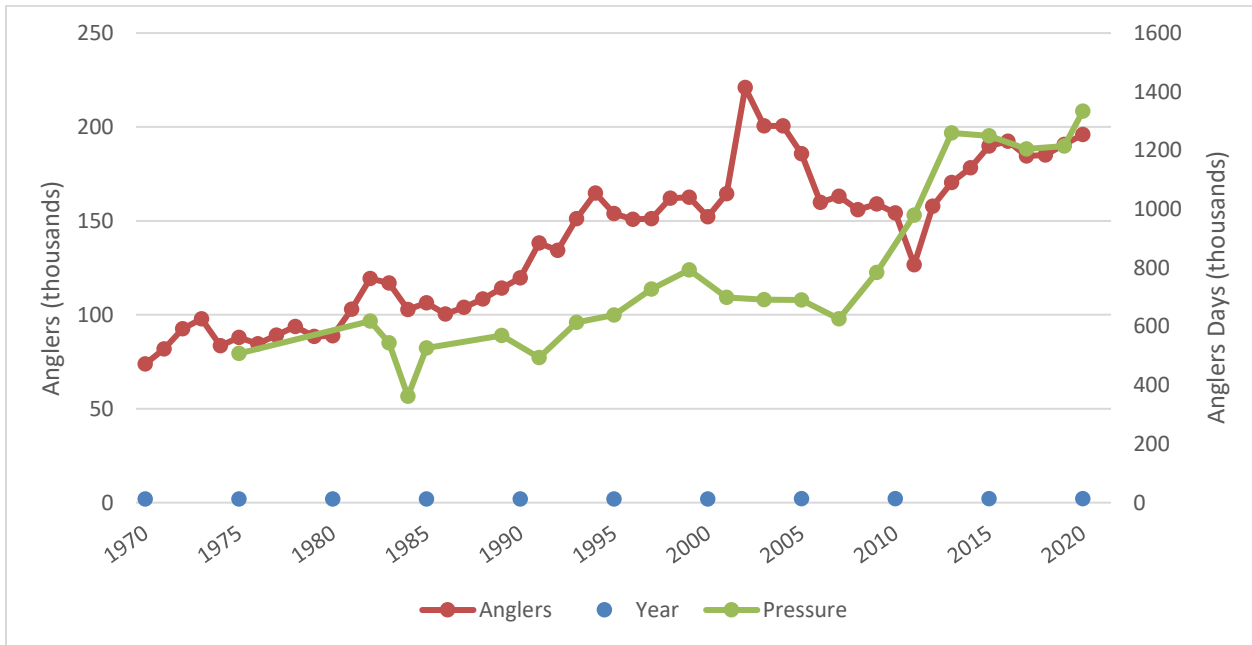


Figure 21. Angling pressure versus number of anglers for non-residents from 1970 to 2020





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# 6.0 EXAMPLES OF QUESTIONNAIRES

The August 2020 questionnaire is an example of an initial mail form, while the February 2021 questionnaire is an example of a re-mail form. The map page is printed on the back side of each survey.



## Angler Survey - August 2020



Dear Angler,

We are conducting a monthly survey of a random sample of fishing license holders and those with fishing privileges as part of their combination license. This survey provides important data to help determine fishing pressure on ALL the lakes and streams of Montana. **This survey requests only:**

- YOUR OWN fishing activities
- ALL waters fished by you
- Fished only in the month of August

- If you fished one of the rivers on provided maps (see both front and back of this page), please include the section number to aid us in identifying the portion of the river.  
 - We need information on ALL waters fished in Montana, not just the rivers with sections provided on these maps.

**EVEN IF YOU DID NOT FISH OR CATCH ANY FISH, PLEASE COMPLETE THIS QUESTIONNAIRE**

Prompt return is appreciated. We send reminders to those who have not returned this within a few weeks.

**Do you use a boat? NO  YES**   
**If yes, do you pull the drain plug when taking out of water? NO  YES**

**Did you fish in Montana during the month of August:**  
 NO  Please return the survey. Thank you.  
 YES  Total # of days fished in August, 2020: \_\_\_\_\_ days  
 Please continue below.

Name(s) of Lake or Stream Fished during August	Section Number	Nearest Town or Landmark	Number of Days Fished during August ONLY	Rate your FISHING on this water:	How many other people PER DAY did you see recreating on this water?	Rate the CROWDING on this water:	What ONE Species You Primarily Fish For?	Most of your Fishing on this water was by:
				5 = excellent to 1 = poor	5 = not at all crowded to 1 = crowded			1 = Boat 2 = Shore & Boat 3 = Shore & Boat 4 = Ice

List each individual waterbody (and section number if applicable) on a separate line below.

MORE MAPS ON BACK

### Angler Survey - FEBRUARY 2021

Dear Angler,



We recently mailed you a request for your FEBRUARY fishing in Montana. If you returned the survey and our mail crossed paths, please disregard this second request. If you have not mailed in your survey, please complete this questionnaire and return it in the provided envelope. We appreciate your time!

This survey requests only:

- YOUR OWN fishing activities
- ALL waters fished by you
- Fished only in the month of FEBRUARY

- If you fished one of the rivers on provided maps (see both front and back of this page), please include the section number to aid us in identifying the portion of the river.  
 - We need information on ALL waters fished in Montana, not just the rivers with sections provided on these maps.

**EVEN IF YOU DID NOT FISH OR CATCH ANY FISH, PLEASE COMPLETE THIS QUESTIONNAIRE**

Prompt return is appreciated. We send reminders to those who have not returned this within a few weeks.

**Do you use a boat?** NO  YES

**If yes, do you pull the drain plug when taking out of water?** NO  YES

**Did you fish in Montana during the month of FEBRUARY?**

NO  YES

Total # of days fished in FEBRUARY, 2021: \_\_\_\_\_ days

Please continue below.

Name(s) of Lake or Stream Fished during FEBRUARY		Section Number	Nearest Town or Landmark	Rate your FISHING on this water:	How many other people PER DAY did you see recreating on this water?	Rate the CROWDING on this water:	What ONE Species You Primarily Fish For?	Most of your Fishing on this water was by:
				3=excellent 1=poor		5=very crowded 1=not at all crowded		1=Shore 2=Boat 3=Shore & Boat 4=Ice

List each individual waterbody (and section number if applicable) on a separate line below.

**MORE MAPS ON BACK**





## 7.0 BOUNDARIES OF WATERS BROKEN INTO SECTIONS

<u>STREAM NAME</u>	<u>WATER CODE</u>	<u>DOWNSTREAM POINT</u>	<u>UPSTREAM POINT</u>	
BEAVER CREEK	SEC 01	15-0280	MOUTH	BEAVER CREEK RES.
	SEC 02	15-0320	BEAVER CREEK RES	BEAR PAW LAKE
	SEC 03	15-0340	BEAR PAW LAKE	ROCKY BOY INDIAN R
	SEC 04	15-0360	ROCKY BOY INDIAN RES	HEADWATERS
BIG HOLE R.	SEC 01	02-0425	MOUTH	DIVIDE CREEK
	SEC 02	02-0450	DIVIDE CREEK	PINTLAR CREEK
	SEC 03	02-0475	PINTLAR CREEK	HEADWATERS
BIG SPRING CR.	SEC 01	16-0301	JUDITH RIVER (MOUTH)	COTTONWOOD CREEK
	SEC 02	16-0310	COTTONWOOD CREEK	HEADWATERS
BIGHORN RIVER	SEC 01	22-0490	MOUTH	LITTLE BIGHORN RIVER
	SEC 02	22-0495	L.BIGHORN R	BIG HORN FAS (ACCESS CR)
	SEC 03	22-0496	BIG HORN FAS (ACCESS CR)	AFTERBAY
BITTERROOT R.	SEC 01	03-0475	MOUTH	BIG CREEK
	SEC 02	03-0500	BIG CREEK	HEADWATERS
BLACKFOOT R.	SEC 01	04-0600	MOUTH	CLEARWATER RIVER
	SEC 02	04-0630	CLEARWATER RIVER	N FK BLACKFOOT RIVER
	SEC 03	04-0645	N FK BLACKFOOT RIVER	ARRASTRA CREEK
	SEC 04	04-0660	ARRASTRA CREEK	HEADWATERS
BOULDER RIVER	SEC 01	22-0742	MOUTH	BOULDER FALLS (NAT BRDG)
	SEC 02	22-0756	BOULDER FALLS (NAT BRDG)	BRIDGE CREEK
	SEC 03	22-0770	BRIDGE CREEK	HEADWATERS
CLARK FORK R.	SEC 01	05-1440	THOMPSON RIVER	FLATHEAD RIVER
	SEC 02	05-1456	FLATHEAD RIVER	BITTERROOT RIVER
	SEC 03	06-1118	BITTERROOT RIVER	ROCK CREEK
	SEC 04	06-1121	ROCK CREEK	LITTLE BLACKFOOT R
	SEC 05	06-1140	LITTLE BLACKFOOT R	HEADWATERS
CLARKS FK YELLOWSTONE RIVER	SEC 01	22-1162	MOUTH	BRIDGER
	SEC 02	22-1176	BRIDGER	WYOMING BORDER
	SEC 03	22-1190	WYOMING BORDER	HEADWATERS
CROW CREEK	SEC 01	07-1000	MOUTH	LOWER CROW RESERVOIR
	SEC 02	07-1020	LOWER CROW RESERVOIR	HEADWATERS
CUT BANK CREEK	SEC 01	14-1080	MOUTH	CUT BANK
	SEC 02	14-1120	CUT BANK	GLACIER PARK
FLATHEAD RIVER	SEC 01	07-1540	MOUTH	FLATHEAD LAKE
	SEC 02	07-1560	FLATHEAD LAKE	S FK FLATHEAD R
GALLATIN RIVER	SEC 01	09-2090	MOUTH	E GALLATIN RIVER
	SEC 02	09-6878	E GALLATIN RIVER	SPANISH CREEK
	SEC 03	09-6916	SPANISH CREEK	HEADWATERS

<u>STREAM NAME</u>	<u>WATER CODE</u>	<u>DOWNSTREAM POINT</u>	<u>UPSTREAM POINT</u>	
HYALITE CREEK	SEC 01	09-2546	MOUTH	HYALITE RESERVOIR
	SEC 02	09-6802	HYALITE RESERVOIR	HYALITE LAKE
JUDITH RIVER	SEC 01	16-1800	MOUTH	PLUM CREEK
	SEC 02	16-1820	PLUM CREEK	HEADWATERS
LITTLE BIGHORN RIVER				
	SEC 01	22-3654	MOUTH	LODGE GRASS CREEK
	SEC 02	22-3668	LODGE GRASS CREEK	HEADWATERS
LITTLE BLACKFOOT R				
	SEC 01	06-3772	MOUTH	ELLISTON
	SEC 02	06-3591	ELLISTON	HEADWATERS
MADISON RIVER				
	SEC 01	13-3400	MOUTH	ENNIS DAM
	SEC 2A	13-3440	ENNIS LAKE	LYONS BRIDGE
	SEC 2B	13-3440	LYONS BRIDGE	HEBGEN DAM
	SEC 03	13-3520	HEBGEN LAKE	YELLOWSTONE PARK
MARIAS RIVER				
	SEC 01	14-3240	MOUTH	TIBER DAM
	SEC 02	14-3280	LAKE ELWELL	CUT BANK CREEK
MILK RIVER	SEC 01	15-2680	MOUTH	HINSDALE
	SEC 02	15-2720	HINSDALE	MALTA
	SEC 03	15-2760	MALTA	HAVRE
	SEC 04	15-2800	HAVRE	FRESNO DAM
	SEC 05	15-2840	FRESNO RESERVOIR	CANADA
	SEC 06	15-2880	CANADA	MIDDLE & SOUTH FORKS
MISSOURI RIVER				
	SEC 01A	16-2420	N DAKOTA BORDER	POPLAR RIVER
	SEC 01B	16-2421	POPLAR RIVER	MILK RIVER
	SEC 05	16-2500	MILK RIVER	FORT PECK DAM
	SEC 06A	16-2521	FT PECK RES	BLAIN/CHOUT CO LINE
	SEC 06B	16-2522	BLAIN/CHOUT CO LINE	MARIAS RIVER
	SEC 07	17-4864	MARIAS RIVER	MORONY DAM
	SEC 08	17-4880	MORONY DAM	CASCADE BRIDGE
	SEC 09	17-4896	CASCADE BRIDGE	HOLTER DAM
	SEC 10A	17-4913	HOLTER LAKE	HAUSER DAM
	SEC 10B	17-4914	HAUSER LAKE	CANYON FERRY DAM
	SEC 11	17-4928	CANYON FERRY RES	TOSTON DAM
	SEC 12	17-4944	TOSTON DAM	HEADWATERS
MUSSELSHELL RIVER				
	SEC 01	18-4320	MOUTH	RT 3 BRIDGE NEAR LAVINA
	SEC 02	18-4350	RT 3 BRIDGE NEAR LAVINA	HEADWATERS
POPLAR RIVER	SEC 01	16-2820	MOUTH	E FK POPLAR RIVER
	SEC 02	16-2375	E FK POPLAR RIVER	CANADA
PRYOR CREEK	SEC 01	22-4802	MOUTH	PRYOR
	SEC 02	22-4816	PRYOR	HEADWATERS

<u>STREAM NAME</u>	<u>WATER CODE</u>	<u>DOWNSTREAM POINT</u>	<u>UPSTREAM POINT</u>	
RED ROCK RIVER				
	SEC 01	01-6140	MOUTH	LIMA DAM
	SEC 02	01-6160	LIMA RESERVOIR	UPPER RED ROCK LK
ROCK CREEK	SEC 01	06-5263	MOUTH	HOGBACK CREEK
	SEC 02	06-5282	HOGBACK CREEK	HEADWATERS
ROCK CREEK	SEC 01	22-4928	MOUTH	W FK (CHROME CAMP)
	SEC 02	22-4956	W FK (CHROME CAMP)	HEADWATERS
RUBY RIVER	SEC 01	01-6360	MOUTH	RUBY RESERVOIR
	SEC 02	01-6380	RUBY RESERVOIR	HEADWATERS
SHIELDS RIVER				
	SEC 01	22-5334	MOUTH	CLYDE PARK
	SEC 02	22-5348	CLYDE PARK	WILSALL
	SEC 03	22-5362	WILSALL	HEADWATERS
SMITH RIVER	SEC 01	17-6816	MOUTH	HOUND CREEK
	SEC 02	17-6832	HOUND CREEK	CAMP BAKER
	SEC 03	17-6833	CAMP BAKER	HEADWATERS
STILLWATER R	SEC 01	22-6104	MOUTH	WEST FORK (NYE)
	SEC 02	22-6118	WEST FORK (NYE)	HEADWATERS
SUN RIVER	SEC 01	20-6050	MOUTH	MUDDY CREEK
	SEC 02	20-6100	MUDDY CREEK	GIBSON DAM
SWAN RIVER	SEC 01	07-4560	MOUTH	SWAN LAKE
	SEC 02	07-4580	SWAN LAKE	HEADWATERS
TETON RIVER	SEC 01	14-6000	MOUTH	CHOTEAU
	SEC 02	14-6040	CHOTEAU	HEADWATERS
THOMPSON RIVER				
	SEC 01	05-7248	MOUTH	BEND RANGER STATION
	SEC 02	05-7264	BEND RANGER STATION	HEADWATERS
TONGUE RIVER				
	SEC 01	21-1150	MOUTH	BEAVER CREEK
	SEC 02	21-1200	BEAVER CREEK	TONGUE RIVER DAM
	SEC 03	21-1250	TONGUE RIVER RES	WYOMING BORDER
W FK STILLWATER RIVER				
	SEC 01	22-6664	MOUTH	IRON CREEK
	SEC 02	22-6678	IRON CREEK	HEADWATERS
YAAK RIVER	SEC 01	11-7740	MOUTH	FALLS
	SEC 02	11-7760	FALLS	HEADWATERS

<u>STREAM NAME</u>	<u>WATER CODE</u>	<u>DOWNSTREAM POINT</u>	<u>UPSTREAM POINT</u>
YELLOWSTONE RIVER			
SEC 01	21-1350	N DAKOTA BORDER	POWDER RIVER
SEC 02	21-1400	POWDER RIVER	BIGHORN RIVER
SEC 03	22-7001	BIGHORN RIVER	HUNTLEY DIVERSION
SEC 04	22-7015	HUNTLEY DIVERSION	CLARKS FORK RIVER
SEC 05	22-7028	CLARKS FORK RIVER	STILLWATER RIVER
SEC 06A	22-7043	STILLWATER RIVER	REED POINT BRIDGE
SEC 06B	22-7044	REED POINT BRIDGE	BOULDER RIVER
SEC 07A	22-7057	BOULDER RIVER	SPRINGDALE
SEC 07B	22-7058	SPRINGDALE	SHIELDS RIVER
SEC 08	22-7071	SHIELDS RIVER	PINE CREEK
SEC 09A	22-7072	PINE CREEK	EMIGRANT BRIDGE
SEC 09B	22-7073	EMIGRANT BRIDGE	TOM MINER CREEK
SEC 10	22-7084	TOM MINER CREEK	GARDINER