

# Montana Statewide Angling Pressure 2021



*Rainbow Trout*



*Brown Trout*



*Brook Trout*

# Montana Statewide Angling Pressure 2021

Prepared by:

Cedar League  
Bethany Caball

September 2023

Cover Art: Angela Smith





# Montana Statewide Angling Pressure 2021

Summary Report



**MONTANA FISH,  
WILDLIFE & PARKS**



# Angler Pressure 2021 Summary Report

## TABLE OF CONTENTS

1.0	INTRODUCTION.....	7
2.0	METHODS .....	9
2.1	MAIL SURVEYS.....	9
3.0	RESULTS.....	13
3.1	DEMOGRAPHICS.....	13
3.2	ANGLER PRESSURE ESTIMATES ANNUAL.....	16
3.3	ANGLER PRESSURE ESTIMATES SUMMER.....	30
3.4	ANGLER PRESSURE ESTIMATES WINTER.....	38
3.5	PRIMARY SPECIES FISHED FOR.....	46
3.6	BOAT USE – Aquatic Invasive Species.....	48
3.7	ANGLER ACCESS.....	61
3.8	ANGLER SATISFACTION RATINGS.....	63
3.9	ANGLER CROWDING RATINGS.....	69
4.0	DISCUSSION AND ANALYSIS.....	75
4.1	SCOPE OF ANGLING PRESSURE.....	75
4.2	ACCURACY.....	76
	4.2.1 SAMPLE.....	76
4.3	RETURN RATES.....	76
4.4	NUMBER OF LICENSED ANGLERS VS PRESSURE.....	78
5.0	LITERATURE CITED.....	81
6.0	EXAMPLES OF QUESTIONNAIRES.....	85
7.0	BOUNDARIES OF WATERS BROKEN INTO SECTIONS.....	88



## 1.0 INTRODUCTION

The 2021 biennial angling pressure survey was conducted between March 1, 2021 and February 28, 2022. Results reveal estimated angling pressure in Montana remained above the 10-year average, despite a slight decrease in pressure compared to the 2020 survey license year, a year which saw record angler days in Montana at the start of the COVID-19 pandemic. Montana's lakes and streams experienced an estimated 3.64 million angler days during the 2021 license year (resident and non-resident combined), a 9.3% decrease in pressure from 2020 which saw just over four million anglers. The percentage of resident pressure dropped from 67% in 2020 back down to 60% in 2021, closer to 2019 residency estimates. As non-residents began travelling again as certain travel restrictions lifted nationally, estimated non-resident pressure was a record high 1,470,705 angler days in 2021, and non-residents purchased a record number of angling licenses in 2021 with 240,257 unique licenses sold, compared to 195,941 in 2020. The drive to get outside was also seen at Montana State Parks with nearly 3.4 million individuals visiting a state park in 2021, almost matching record high numbers in 2020 (Montana FWP, 2022). The following report summarizes the results of the 2021 angling pressure survey, emphasizing changes in angling pressure from the prior 2019 and 2020 survey license years.

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. From 2019 to 2021 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.

Contents of the questionnaire were identical to the 2020 survey. 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. 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. Maps with section numbers were included on the survey for certain waterbodies. 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.

## 2.0 METHODS

### 2.1 MAIL SURVEYS

The 2021 statewide angling mail pressure survey was conducted during the license year beginning March 1, 2021 and ending February 28, 2022. The methods used by R. McFarland for surveys conducted from 1989 through 2009 provided the framework for the 2021 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 2021-22 Statewide Angling Survey

<b>Wave</b>	<b>Time Period Covered</b>	<b>Season Designation</b>
1	March 2021	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 2022	Winter
12	February	Winter

The sample size for the 2021 survey was the same as the 2015, 2019 and 2020 survey totalling 67,600 surveys. 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 2021 (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 2021 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	297	95	99	25	33.33%	26.32%
02	3150	1050	3086	1022	973	318	31.53%	31.12%
03	6300	2100	6099	2023	1809	563	29.66%	27.83%
04	6300	2100	6000	2016	1782	581	29.70%	28.82%
05	6300	2100	6010	2043	1818	573	30.25%	28.05%
06	6300	2100	6002	2023	1843	589	30.71%	29.12%
07	6300	2100	5933	1997	1787	618	30.12%	30.95%
08	3150	1050	2972	1006	848	321	28.53%	31.91%
09	3150	1050	2974	997	932	305	31.34%	30.59%
10	3150	1050	2997	995	926	243	30.90%	24.42%
11	3150	1050	2986	988	881	278	29.50%	28.14%
12	3150	1050	2953	968	854	267	28.92%	27.58%

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 2021, 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 19,233 anglers responded to the survey, of which 32.8% (n=6,287) reported going on at least one fishing trip during the month/wave they were surveyed, while 67.2% (n=12,946) said they did not fish that month. Respondents ranged in age from 9 to 95 years old. The average age of all respondents was 55. The average age of the sample population is 45 years old. Figure 1 shows mail survey respondents between the ages 51-90 are overrepresented (especially in the age bracket 61-70), while respondents ages 11-50 are underrepresented when compared to the sample population of the angling public. For example, 44% of survey respondents were between the ages of 61 to 80, yet just 24% of licensed anglers are within that age range. About 77% of all respondents were male, and 23% female, representative of the sample population of licensed anglers (76% male and 24% female).

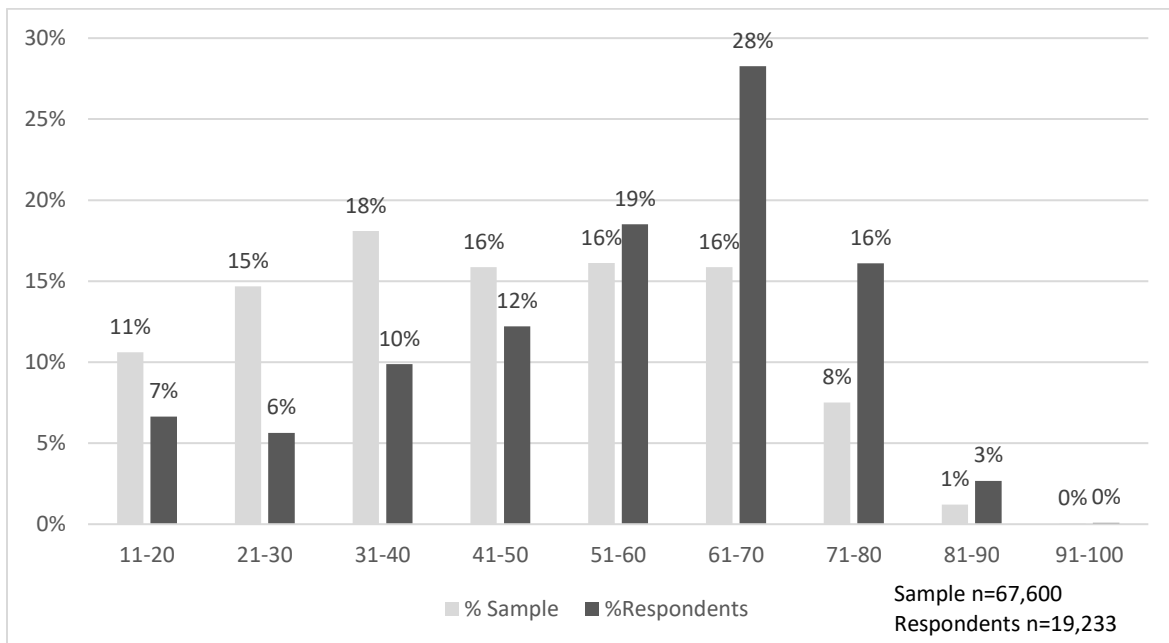


Figure 1. Percent of mail survey respondents versus sample population by age range

Out of 6,297 respondents who reported a fishing trip, 60% were residents and 40% were non-residents. Non-residents came from all states within the U.S. including the District of Columbia (Figure 2). Non-residents were mostly from the western U.S., especially Washington and California. Foreign residents only from Canada were included in the sample. Only one Canadian reported a fishing trip, 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 3 and 4).

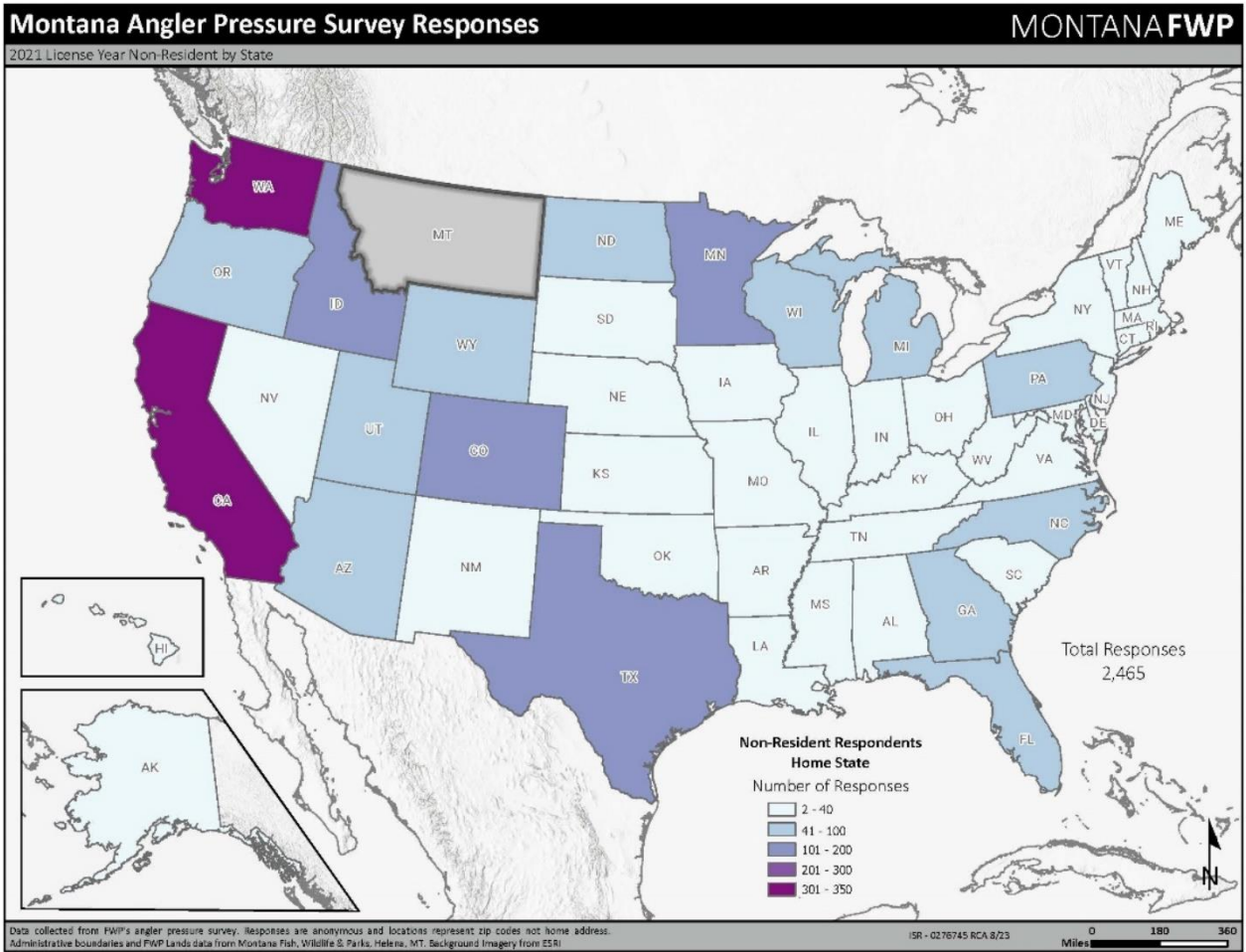
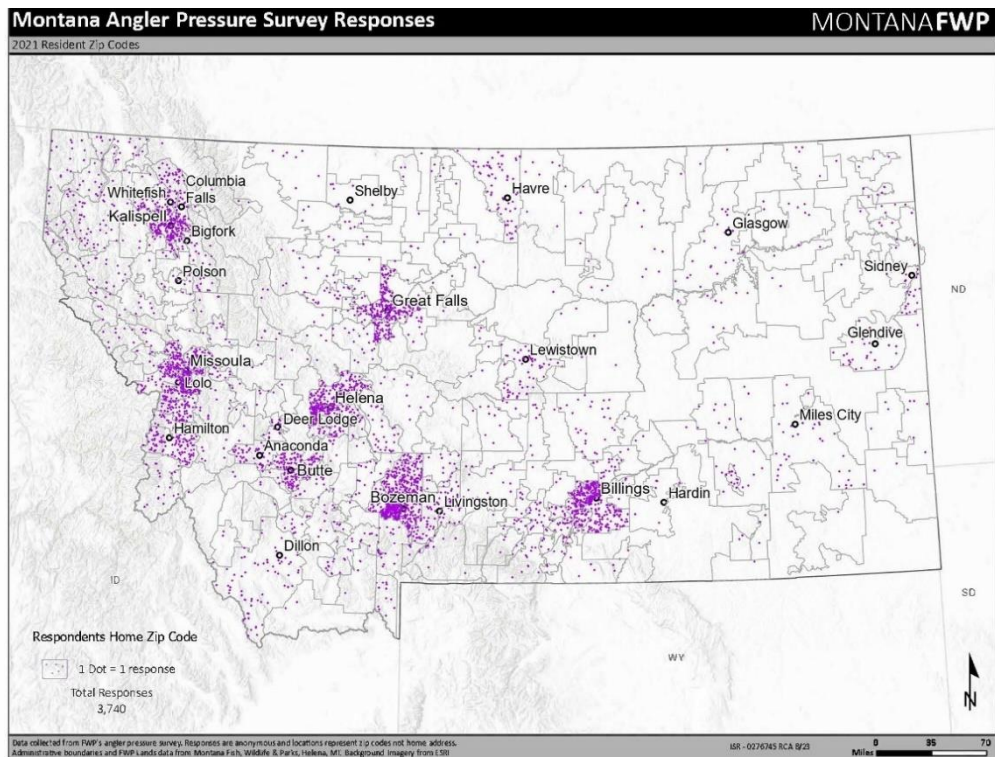
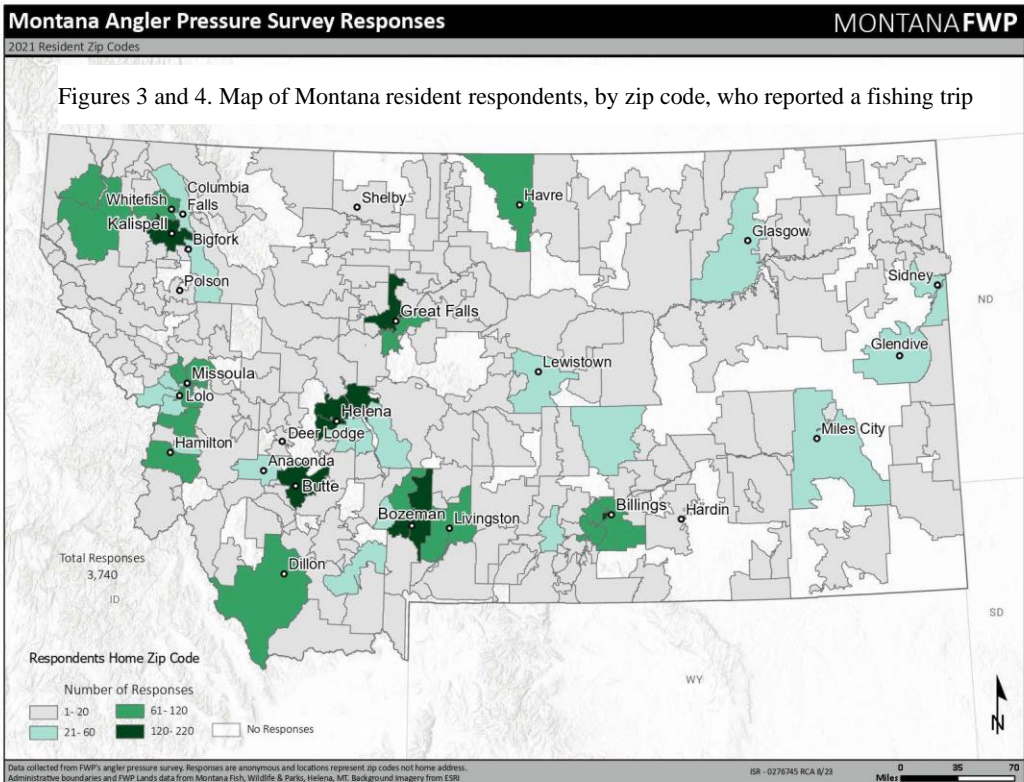


Figure 2. Map of non-residents' home states who fished in Montana





### 3.2 ANGLER PRESSURE ESTIMATES ANNUAL (MARCH 2021-FEBRUARY 2022)

Licensed anglers fishing on Montana waters were estimated to have exerted 3,640,063 angler days of pressure for the 2021 license year (Table 3). This represents a 9.3% decrease in pressure compared to the 2020 license year. Prior to 2020, estimated angling pressure had been slowly declining each year since 2013 (Figure 5). Despite the slight decrease from the prior year, 2021 was still above the 10-year average pressure of 3,383,452 and represented a 16% increase over 2019 estimated pressure. Estimates for individual waters were sorted alphabetically and are presented in Appendix A of this report.

Table 3. Statewide Pressure Estimates by 2021 Survey License Year

	---- Totals ----			---- Resident ----		---- Non-Resident ----	
	Pressure	Trips	Error	Pressure	Trips	Pressure	Trips
Undesig	48,700	297	9127	26,401	185	22,299	112
Lake	1,256,224	8,022	43202	940,490	6,546	315,735	1,476
Stream	2,335,138	14,377	61896	1,202,466	8,384	1,132,671	5,993
<b>Statewide Total</b>	<b>3,640,063</b>	<b>22,696</b>	<b>114,225</b>	<b>2,169,357</b>	<b>15,115</b>	<b>1,470,705</b>	<b>7,581</b>

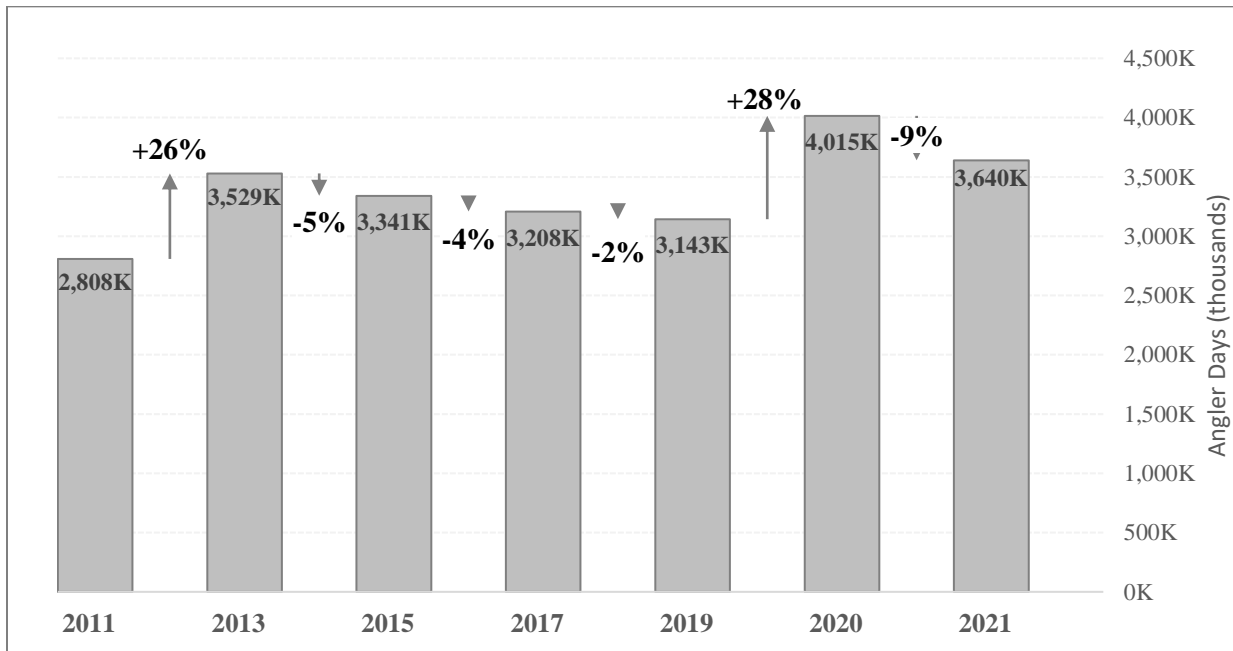


Figure 5. Percent change of annual angling pressure between the years 2011-2021 for residents and non-residents combined.

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 956,173 angler days (26.5%), followed by Region 4 with 714,327 angler days (19.8%). Regions 2, 1 and 5 were next in order with 646,998 (17.9%), 511,759 (14.2%), and 410,210 (11.3%) angler days respectively. The easternmost regions of 6 and 7 were the lowest in pressure with 275,431 (7.7%) and 97,446 (2.7%) angler days respectively. Each region experienced a decrease in pressure compared to the previous 2020 survey year (Figure 7).

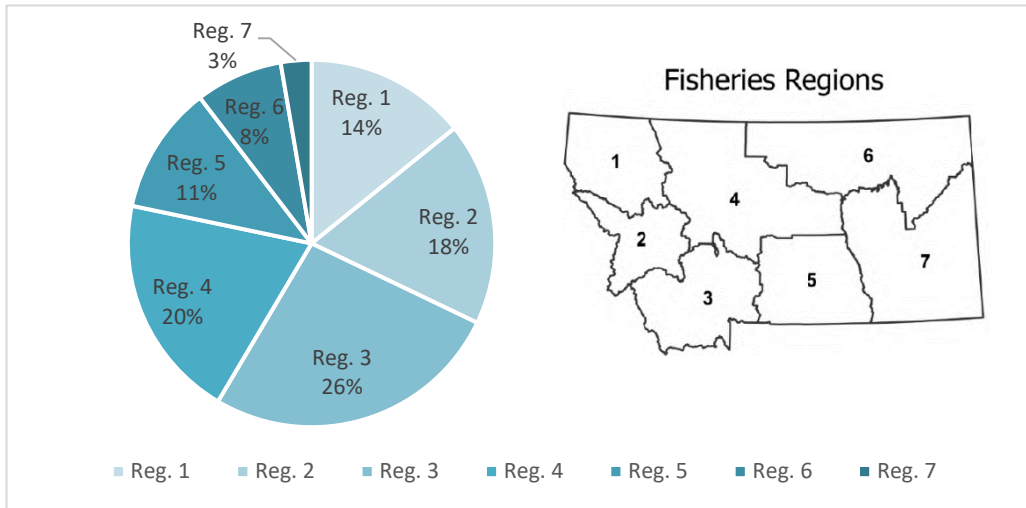


Figure 6. Distribution of annual pressure by FWP Fisheries region

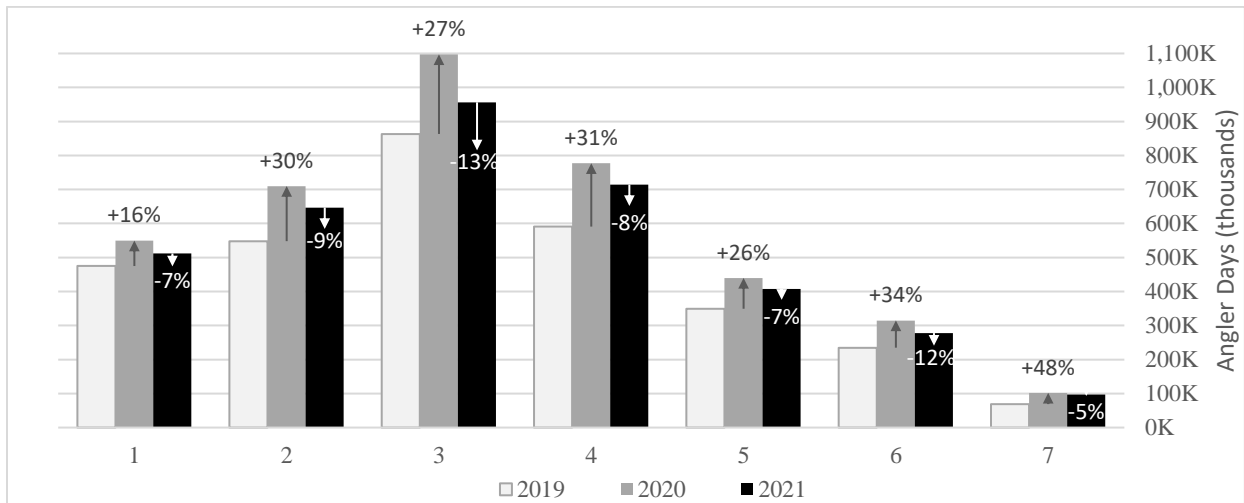


Figure 7. Percent change of annual angling pressure by region between 2019-2021 (residents and non-residents)

Montana residents made up 60% of the annual pressure (n=2,169,357) compared to 40% non-residents (n=1,470,705) (Table 3), which is similar to license year 2019. Statewide resident pressure decreased 19% compared to 2020 (which had 2,631,139 resident angler days) while non-

resident pressure increased 10% compared to 2020 (which had 1,333,664 non-resident angler days). Pressure estimates for non-residents reached an all-time record in 2021.

Residents (Table 4, Figure 8) exerted the majority of angling pressure in 2021 in all regions, except Region 3. All regions had a decrease in resident pressure compared to 2020. The percent of angling pressure by residents for each region was:

Region 1 = 67.5% resident (2020=72.6%)	Region 5 = 53.3% resident (2020=69.6%)
Region 2 = 56.0% resident (2020=66.8%)	Region 6 = 66.2% resident (2020=68.9%)
Region 3 = 46.6% resident (2020=50.7%)	Region 7 = 81.3% resident (2020=83.9%)
Region 4 = 72.6% resident (2020=80.5%)	

Angling on lotic waters (streams/rivers) accounted for 64.2% (2,335,138 angler days) of the statewide pressure while lentic waters (lakes/ponds/reservoirs) accounted for 34.5% (1,256,224 angler days) of the pressure (Table 3). A small percent (1.3%) of surveys were returned where the waterbody was undesignated as stream or lake. These percentages are consistent with the 2020 survey results.

Regions 1 and 6 were the two regions in which lake angling pressure exceeded stream pressure (59% and 77%, respectively), primarily due to angling on Flathead Lake and Fort Peck Reservoir (Table 4, Figure 9). Region 4 had the greatest number of lake angling pressure of any region with 322,670 angler days. Region 4 was relatively balanced between stream (54%) and lake angling (45%), due to lake angling on Canyon Ferry Reservoir. Regions 2, 3, 5 were dominated by stream anglers, and Region 3 had the highest number and percent of stream anglers for any region (814,997 angler days or 85%).

Table 4. Angling pressure in angler days by region and lake or stream for 2021 survey license year.

	----- Totals -----		----- Resident -----		----- Non-Resident -----	
	Pressure	Trips	Pressure	Trips	Pressure	Trips
<b>Region 1</b>						
Undesig	5,539	32	1,824	14	3,715	18
Lake	302,165	1,906	224,562	1,529	77,603	377
Stream	204,055	1,310	118,990	870	85,065	440
<b>Total:</b>	<b>511,759</b>	<b>3,248</b>	<b>345,376</b>	<b>2,413</b>	<b>166,383</b>	<b>835</b>
<b>Region 2</b>						
Undesig	2,969	17	1,925	12	1,044	5
Lake	168,261	1,066	119,676	840	48,586	226
Stream	475,768	2,835	240,803	1,638	234,965	1,197
<b>Total:</b>	<b>646,998</b>	<b>3,918</b>	<b>362,404</b>	<b>2,490</b>	<b>284,595</b>	<b>1,428</b>
<b>Region 3</b>						
Undesig	6,293	39	1,866	15	4,428	24
Lake	134,882	813	88,039	587	46,843	226
Stream	814,997	4,912	355,830	2,477	459,167	2,435
<b>Total:</b>	<b>956,173</b>	<b>5,764</b>	<b>445,735</b>	<b>3,079</b>	<b>510,438</b>	<b>2,685</b>
<b>Region 4</b>						
Undesig	3,168	20	1,715	13	1,453	7
Lake	322,670	2,129	285,887	1,949	36,783	180
Stream	388,489	2,497	230,666	1,588	157,823	909
<b>Total:</b>	<b>714,327</b>	<b>4,646</b>	<b>518,268</b>	<b>3,550</b>	<b>196,059</b>	<b>1,096</b>
<b>Region 5</b>						
Undesig	543	4	212	2	331	2
Lake	75,660	525	61,575	455	14,086	70
Stream	334,007	1,958	157,010	1,057	176,996	901
<b>Total:</b>	<b>410,210</b>	<b>2,487</b>	<b>218,797</b>	<b>1,514</b>	<b>191,413</b>	<b>973</b>
<b>Region 6</b>						
Undesig	1,194	8	577	5	617	3
Lake	212,000	1,335	128,105	973	83,896	362
Stream	62,237	479	53,855	432	8,382	47
<b>Total:</b>	<b>275,431</b>	<b>1,836</b>	<b>182,537</b>	<b>1,410</b>	<b>92,895</b>	<b>412</b>
<b>Region 7</b>						
Undesig	1,276	7	1,276	7		
Lake	40,585	248	32,647	213	7,938	35
Stream	55,585	386	45,312	322	10,273	64
<b>Total:</b>	<b>97,446</b>	<b>641</b>	<b>79,235</b>	<b>542</b>	<b>18,211</b>	<b>99</b>

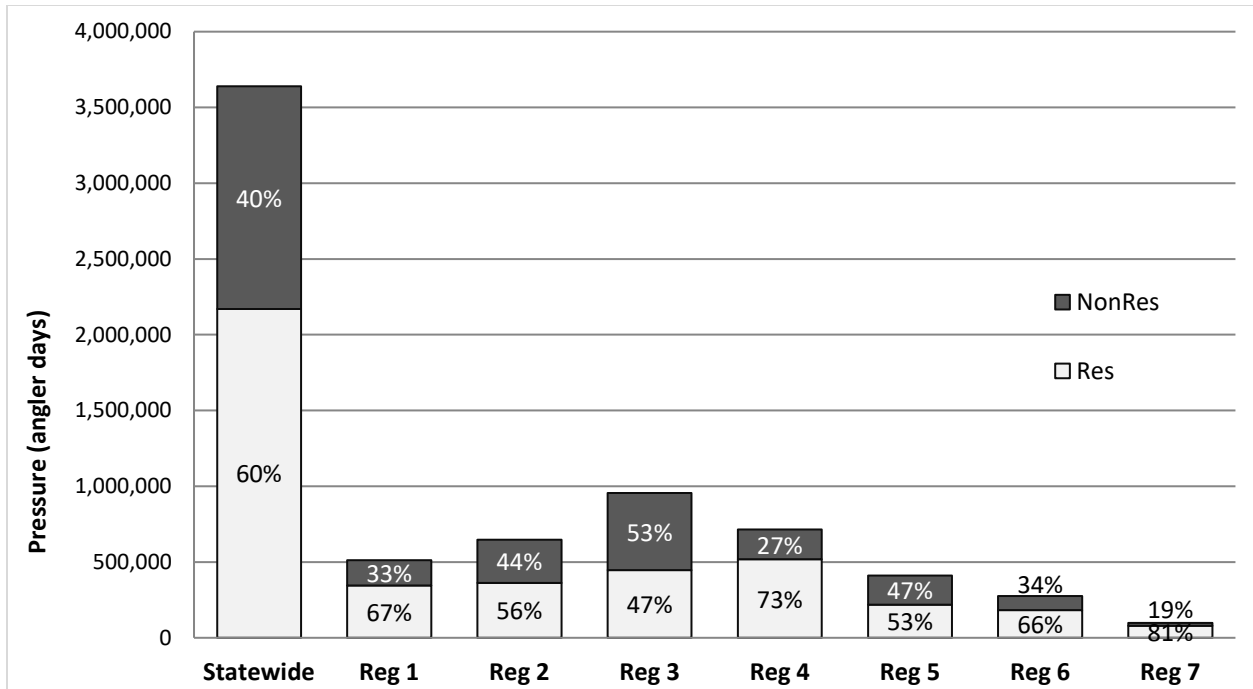


Figure 8. Statewide angling pressure comparing region and residency 2021-22

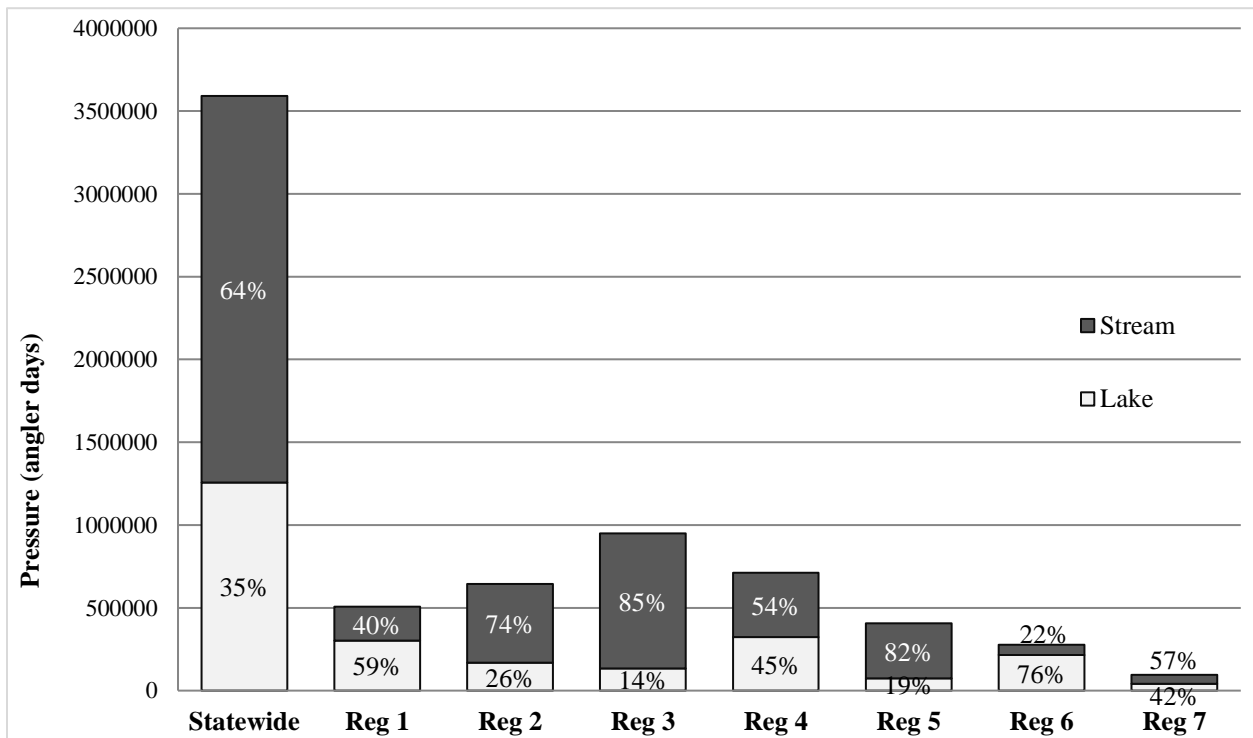


Figure 9. Statewide angling pressure comparing region and water type 2021-22

July (wave 5) was, overall, the peak fishing period for both residents and non-residents with an estimated 610,200 angler days (Table 5). December (wave 10) was the least fished period during the year with 86,925 angler days, representing a 40% decrease from 2020 (Figure 10). Residents fished least in December with 44,293 angler days while nonresidents fished least in March (wave 1) with 17,403 days. The month of June had the second greatest number of angler days in 2021 (n=555,205) and had the highest percent increase (20%) compared to the prior year. Hoot Owl restrictions enacted during the month of August may have influenced fishing pressure.

Table 5. Pressure in angler days by wave for the 2021 survey license year

Wave	Month	Total	Resident	Nonresident
01	March	112,814	95,411	17,403
02	April	215,998	137,347	78,651
03	May	310,423	208,711	101,712
04	June	555,205	363,312	191,893
05	July	610,200	348,782	261,418
06	August	536,447	319,276	217,171
07	September	416,265	231,569	184,696
08	October	281,366	134,342	147,024
09	November	175,589	92,869	82,720
10	December	86,925	44,293	42,632
11	January	174,422	109,845	64,577
12	February	164,407	83,600	80,807

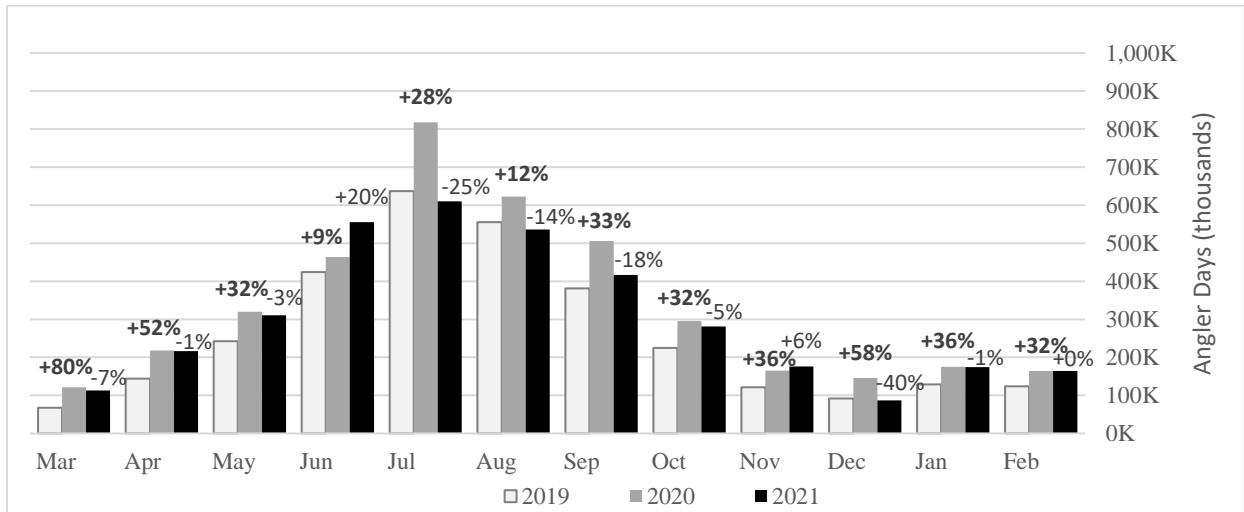


Figure 10. Percent change of statewide monthly angling pressure between license years 2019 to 2021 for residents and non-residents combined

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 6a and 6b). The pressure by drainage ranged from a high of 357,381 for the Madison River and 356,867 angler days for the Upper Yellowstone River drainage, to a low of 3,307 angler days for the NA - St. Mary and Belly Rivers. No trips were reported for the Powder River drainage this year. The drainages with the highest percent of resident anglers were the Little Missouri, Lower Milk, and Teton River which reported 100% resident days. The drainage with the highest percent of non-residents was the Bighorn River (72% non-resident), followed by the Madison River (66% non-resident) and the Beaverhead River (59% non-resident).

The Fort Peck Reservoir drainage had the highest percentage of lake anglers (89.1%) due to the influence of Fort Peck Reservoir, followed by the Lower Missouri River (88.8% lake angling), and the Marias and Red Rock River (86% lake angling each). Drainages with the lowest percentage of lake anglers were Belt Creek (0%), Missouri River-Dearborn (0.3%), and the Lower Milk River (3.2%).

Table 6a. Top 10 drainages for annual pressure in angler days

Drainage	Total Pressure
Madison River	357,381
Upper Yellowstone River	356,867
Upper Missouri River	315,576
Flathead River	227,069
Missouri River - Dearborn	205,151
Fort Peck Reservoir	196,865
Clark Fork River - Flint/Rock	190,581
Gallatin River	183,283
Bitterroot River	179,382
Bighorn River	170,779

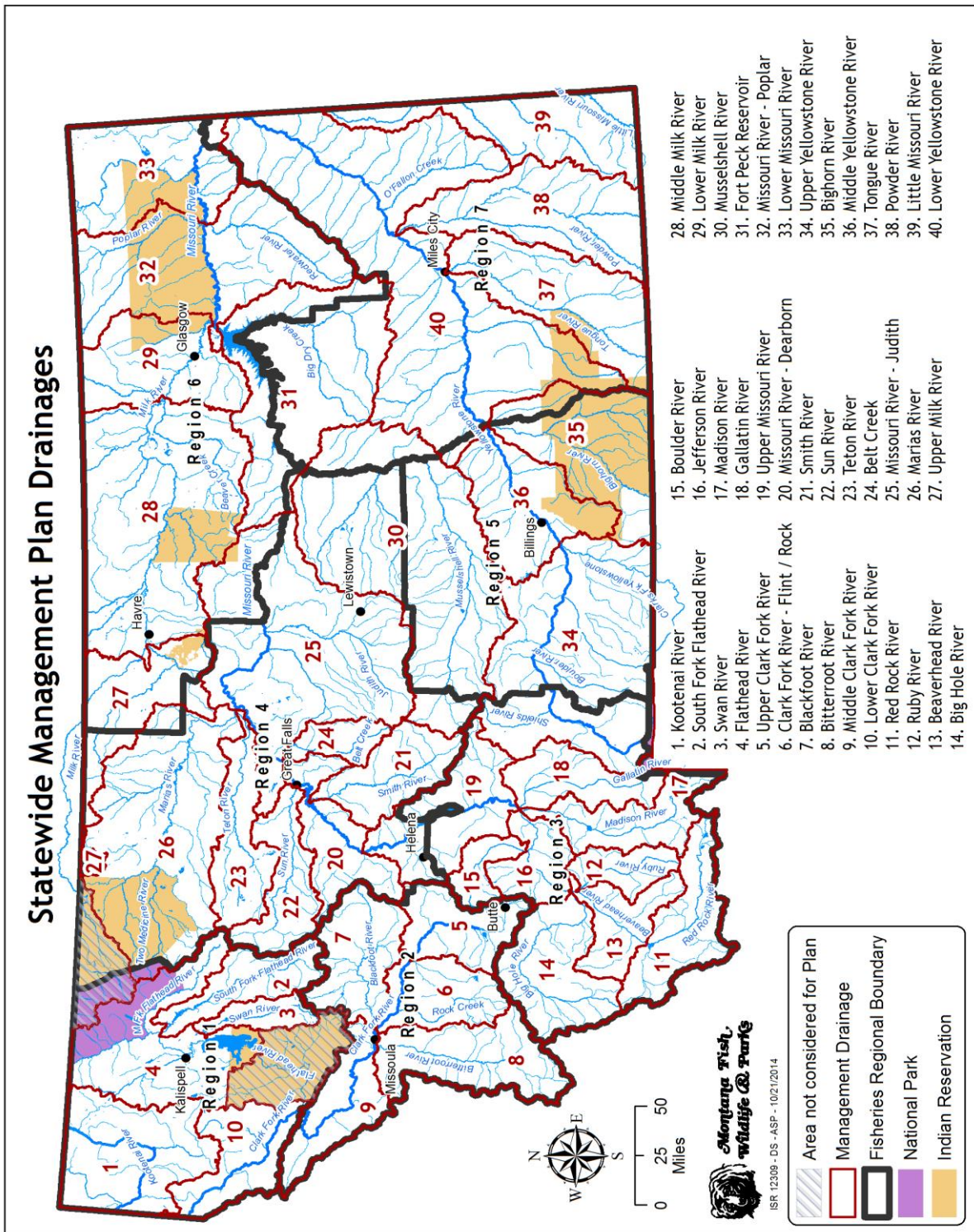


Figure 11. Statewide Management Plan Drainages



Table 6b. Angling Pressure in angler days by Drainage by Lake or Stream for the 2021 survey license year

	--- Totals ---		--- Resident ---		--- Non-Resident ---	
	Pressure	Trips	Pressure	Trips	Pressure	Trips
<b>Beaverhead River</b>						
Lake	1,733	13	1,733	13		
Stream	40,513	249	15,594	113	24,920	136
<b>Total:</b>	<b>42,246</b>	<b>262</b>	<b>17,327</b>	<b>126</b>	<b>24,920</b>	<b>136</b>
<b>Belt Creek</b>						
Stream	6,703	56	5,818	51	885	5
<b>Total:</b>	<b>6,703</b>	<b>56</b>	<b>5,818</b>	<b>51</b>	<b>885</b>	<b>5</b>
<b>Big Hole River</b>						
Lake	6,006	45	4,407	38	1,600	7
Stream	76,704	528	39,681	316	37,023	212
<b>Total:</b>	<b>82,710</b>	<b>573</b>	<b>44,088</b>	<b>354</b>	<b>38,623</b>	<b>219</b>
<b>Bighorn River</b>						
Lake	14,955	110	10,287	87	2,276	22
Stream	155,824	823	36,749	219	119,075	604
<b>Total:</b>	<b>170,779</b>	<b>933</b>	<b>47,551</b>	<b>307</b>	<b>123,228</b>	<b>626</b>
<b>Bitterroot River</b>						
Lake	16,228	113	11,341	87	4,888	26
Stream	163,153	971	86,996	591	76,158	380
<b>Total:</b>	<b>179,382</b>	<b>1,084</b>	<b>98,337</b>	<b>678</b>	<b>81,046</b>	<b>406</b>
<b>Blackfoot River</b>						
Lake	57,540	400	42,786	324	14,754	76
Stream	98,476	593	45,278	326	53,198	267
<b>Total:</b>	<b>156,016</b>	<b>993</b>	<b>88,064</b>	<b>650</b>	<b>67,952</b>	<b>343</b>
<b>Boulder River</b>						
Lake	405	4	405	4		
Stream	7,417	58	6,102	51	1,315	7
<b>Total:</b>	<b>7,821</b>	<b>62</b>	<b>6,507</b>	<b>55</b>	<b>1,315</b>	<b>7</b>
<b>Clark Fork River - Flint / Rock</b>						
Lake	85,625	491	58,203	376	27,422	115
Stream	104,956	610	42,830	281	62,126	329
<b>Total:</b>	<b>190,581</b>	<b>1,101</b>	<b>101,033</b>	<b>657</b>	<b>89,548</b>	<b>444</b>
<b>Flathead River</b>						
Lake	148,689	905	109,165	710	39,524	195
Stream	78,380	508	48,879	357	29,500	151
<b>Total:</b>	<b>227,069</b>	<b>1,413</b>	<b>158,044</b>	<b>1,067</b>	<b>69,024</b>	<b>346</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	175,352	1,068	95,881	733	79,471	335
Stream	21,513	176	17,610	154	3,903	22
<b>Total:</b>	<b>196,865</b>	<b>1,244</b>	<b>113,491</b>	<b>887</b>	<b>83,374</b>	<b>357</b>
<b>Gallatin River</b>						
Lake	15,627	108	11,054	84	4,573	24
Stream	167,655	991	79,769	546	87,886	445
<b>Total:</b>	<b>183,283</b>	<b>1,099</b>	<b>90,823</b>	<b>630</b>	<b>92,459</b>	<b>469</b>
<b>Jefferson River</b>						
Lake	10,915	57	10,663	56	251	1
Stream	10,567	64	6,488	44	4,079	20
<b>Total:</b>	<b>21,482</b>	<b>121</b>	<b>17,151</b>	<b>100</b>	<b>4,330</b>	<b>21</b>
<b>Kootenai River</b>						
Lake	49,298	332	37,873	277	11,425	55
Stream	45,265	287	28,413	197	16,852	90
<b>Total:</b>	<b>94,563</b>	<b>619</b>	<b>66,286</b>	<b>474</b>	<b>28,277</b>	<b>145</b>
<b>Little Missouri River</b>						
Lake	5,882	21	5,882	21		
Stream	1,446	5	1,446	5		
<b>Total:</b>	<b>7,328</b>	<b>26</b>	<b>7,328</b>	<b>26</b>		
<b>Lower Clark Fork River</b>						
Lake	78,704	476	56,268	374	22,437	102
Stream	47,452	307	26,312	198	21,140	109
<b>Total:</b>	<b>126,156</b>	<b>783</b>	<b>82,580</b>	<b>572</b>	<b>43,577</b>	<b>211</b>
<b>Lower Milk River</b>						
Lake	126	1	126	1		
Stream	3,791	28	3,791	28		
<b>Total:</b>	<b>3,917</b>	<b>29</b>	<b>3,917</b>	<b>29</b>		
<b>Lower Missouri River</b>						
Lake	2,317	19	2,093	17	224	2
Stream	594	6	482	5	112	1
<b>Total:</b>	<b>2,911</b>	<b>25</b>	<b>2,575</b>	<b>22</b>	<b>336</b>	<b>13</b>
<b>Lower Yellowstone River</b>						
Lake	11,815	82	11,542	81	274	1
Stream	42,913	304	35,424	251	7,489	53
<b>Total:</b>	<b>54,729</b>	<b>386</b>	<b>46,966</b>	<b>332</b>	<b>7,763</b>	<b>54</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	48,940	294	24,018	168	24,922	126
Stream	308,441	1,848	96,329	706	212,111	1,142
<b>Total:</b>	<b>357,381</b>	<b>2,142</b>	<b>120,347</b>	<b>874</b>	<b>237,033</b>	<b>1,268</b>
<b>Marias River</b>						
Lake	38,210	248	36,971	240	1,239	8
Stream	5,910	39	4,404	31	1,506	8
<b>Total:</b>	<b>44,120</b>	<b>287</b>	<b>41,375</b>	<b>271</b>	<b>2,745</b>	<b>16</b>
<b>Middle Clark Fork River</b>						
Lake	4,879	36	3,689	29	1,190	7
Stream	72,842	437	40,787	279	32,055	158
<b>Total:</b>	<b>77,721</b>	<b>473</b>	<b>44,476</b>	<b>308</b>	<b>33,245</b>	<b>165</b>
<b>Middle Milk River</b>						
Lake	21,513	153	18,204	135	3,309	18
Stream	11,512	93	10,230	83	1,282	10
<b>Total:</b>	<b>33,025</b>	<b>246</b>	<b>28,434</b>	<b>218</b>	<b>4,591</b>	<b>28</b>
<b>Middle Yellowstone River</b>						
Lake	12,610	96	11,925	93	685	3
Stream	32,970	237	30,148	222	2,822	15
<b>Total:</b>	<b>45,581</b>	<b>333</b>	<b>42,073</b>	<b>315</b>	<b>3,507</b>	<b>18</b>
<b>Missouri River - Dearborn</b>						
Lake	634	5	440	4	195	1
Stream	204,516	1,266	103,421	695	101,095	571
<b>Total:</b>	<b>205,151</b>	<b>1,271</b>	<b>103,861</b>	<b>699</b>	<b>101,290</b>	<b>572</b>
<b>Missouri River - Judith</b>						
Lake	13,010	72	7,885	51	5,125	21
Stream	38,041	283	29,914	241	8,126	42
<b>Total:</b>	<b>51,051</b>	<b>355</b>	<b>37,799</b>	<b>292</b>	<b>13,251</b>	<b>63</b>
<b>Missouri River - Poplar</b>						
Lake	747	6	747	6		
Stream	20,895	145	18,083	132	2,811	13
<b>Total:</b>	<b>21,641</b>	<b>151</b>	<b>18,830</b>	<b>138</b>	<b>2,811</b>	<b>13</b>
<b>Musselshell River</b>						
Lake	14,858	107	14,124	102	735	5
Stream	5,162	40	3,849	31	1,314	9
<b>Total:</b>	<b>20,021</b>	<b>147</b>	<b>17,973</b>	<b>133</b>	<b>2,049</b>	<b>14</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	6,318	45	6,318	45		
Stream	4,188	27	3,109	22	1,079	5
<b>Total:</b>	10,506	72	9,427	67	1,079	5
<b>NA - St. Mary and Belly Rivers</b>						
Lake	3,307	22	2,006	16	1,301	6
<b>Total:</b>	3,307	22	2,006	16	1,301	6
<b>Powder River</b>						
Lake	-	-	-	-	-	-
Stream	-	-	-	-	-	-
<b>Total:</b>	0	0	0	0	0	0
<b>Red Rock River</b>						
Lake	32,335	177	22,059	132	10,276	45
Stream	5,316	30	1,279	10	4,036	20
<b>Total:</b>	37,651	207	23,338	142	14,312	65
<b>Ruby River</b>						
Lake	8,133	41	5,760	31	2,373	10
Stream	20,689	104	7,700	41	12,989	63
<b>Total:</b>	28,822	145	13,460	72	15,362	73
<b>Smith River</b>						
Lake	10,971	68	9,156	58	1,816	10
Stream	35,433	263	12,993	109	22,440	154
<b>Total:</b>	46,404	331	22,149	167	24,256	164
<b>South Fork Flathead River</b>						
Lake	6,587	52	5,594	46	993	6
Stream	21,404	134	9,526	74	11,878	60
<b>Total:</b>	27,991	186	15,120	120	12,871	66
<b>Sun River</b>						
Lake	27,292	187	21,154	159	6,138	28
Stream	8,062	55	4,665	36	3,397	19
<b>Total:</b>	35,354	242	25,819	195	9,535	47
<b>Swan River</b>						
Lake	13,696	103	10,472	84	3,225	19
Stream	7,366	47	2,751	22	4,616	25
<b>Total:</b>	21,063	150	13,223	106	7,841	44

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	4,869	32	4,869	32		
Stream	2,546	19	2,546	19		
<b>Total:</b>	<b>7,415</b>	<b>51</b>	<b>7,415</b>	<b>51</b>		
<b>Tongue River</b>						
Lake	23,003	146	15,339	112	7,664	34
Stream	11,225	77	8,441	66	2,784	11
<b>Total:</b>	<b>34,229</b>	<b>223</b>	<b>23,780</b>	<b>178</b>	<b>10,448</b>	<b>45</b>
<b>Undesignated Central District</b>						
Undesig	142	1	142	1		
<b>Total:</b>	<b>142</b>	<b>1</b>	<b>142</b>	<b>1</b>		
<b>Undesignated R1</b>						
Undesig	5,539	32	1,824	14	3,715	18
<b>Total:</b>	<b>5,539</b>	<b>32</b>	<b>1,824</b>	<b>14</b>	<b>3,715</b>	<b>18</b>
<b>Undesignated R2</b>						
Undesig	2,969	17	1,925	12	1,044	5
<b>Total:</b>	<b>2,969</b>	<b>17</b>	<b>1,925</b>	<b>12</b>	<b>1,044</b>	<b>5</b>
<b>Undesignated R3</b>						
Undesig	6,293	39	1,866	15	4,428	24
<b>Total:</b>	<b>6,293</b>	<b>39</b>	<b>1,866</b>	<b>15</b>	<b>4,428</b>	<b>24</b>
<b>Undesignated R4</b>						
Undesig	3,168	20	1,715	13	1,453	7
<b>Total:</b>	<b>3,168</b>	<b>20</b>	<b>1,715</b>	<b>13</b>	<b>1,453</b>	<b>7</b>
<b>Undesignated R5</b>						
Undesig	543	4	212	2	331	2
<b>Total:</b>	<b>543</b>	<b>4</b>	<b>212</b>	<b>2</b>	<b>331</b>	<b>2</b>
<b>Undesignated R6</b>						
Undesig	1,194	8	577	5	617	3
<b>Total:</b>	<b>1,194</b>	<b>8</b>	<b>577</b>	<b>5</b>	<b>617</b>	<b>3</b>
<b>Undesignated R7</b>						
Undesig	1,276	7	1,276	7		
<b>Total:</b>	<b>1,276</b>	<b>7</b>	<b>1,276</b>	<b>7</b>		
<b>Undesignated Statewide</b>						
Undesig	27,302	167	16,741	115	10,561	52
<b>Total:</b>	<b>27,302</b>	<b>167</b>	<b>16,741</b>	<b>115</b>	<b>10,561</b>	<b>52</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>Upper Clark Fork River</b>						
Lake	3,860	25	3,529	23	331	2
Stream	36,598	226	25,169	163	11,428	63
<b>Total:</b>	<b>40,458</b>	<b>251</b>	<b>28,698</b>	<b>186</b>	<b>11,759</b>	<b>65</b>
<b>Upper Milk River</b>						
Lake	11,830	87	10,939	80	891	7
Stream	3,659	30	3,659	30		
<b>Total:</b>	<b>15,489</b>	<b>117</b>	<b>14,598</b>	<b>110</b>	<b>891</b>	<b>7</b>
<b>Upper Missouri River</b>						
Lake	212,779	1,414	191,767	1,309	21,012	105
Stream	102,797	586	82,430	477	20,367	109
<b>Total:</b>	<b>315,576</b>	<b>2,000</b>	<b>274,197</b>	<b>1,786</b>	<b>41,379</b>	<b>214</b>
<b>Upper Yellowstone River</b>						
Lake	54,624	361	43,303	307	11,320	54
Stream	302,244	1,827	173,370	1,162	128,873	665
<b>Total:</b>	<b>356,867</b>	<b>2,188</b>	<b>216,673</b>	<b>1,469</b>	<b>140,193</b>	<b>719</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 2021, 2,428,540 (66%) days of angling pressure occurred during this period (Table 7). Residents accounted for 1,471,648 summer angler days (60.6%) and nonresidents made up the remaining 956,891 summer angler days (39.4%). Resident summer pressure dropped 22% compared to 2020 (n=1,875,891 angler days), while non-resident summer pressure increased 12% compared to 2020 (n=853,716 angler days).

Angling on lotic waters (streams/rivers) accounted for 66% (1,609,639 angler days) of the statewide pressure during the summer season, which is a 7.8% decrease from 2020 (n=1,745,748 angler days). Lentic waters (lakes/ponds/reservoirs) accounted for 32.4% (787,035 angler days) of the summer pressure, which is a 18% decrease from 2020 (n=961,293 angler days). Undesignated waters accounted for 1.3% (31,866 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 2021 Survey License Year

	----- Totals -----		----- Resident -----		----- Non-Resident -----	
	Pressure	Trips	Pressure	Trips	Pressure	Trips
Undesig	31,866	226	17,764	145	14,102	81
Lake	787,035	6,215	635,393	5,352	151,641	863
Stream	1,609,639	11,432	818,491	6,892	791,148	4,540
<b>Statewide Total</b>	<b>2,428,540</b>	<b>17,873</b>	<b>1,471,648</b>	<b>12,389</b>	<b>956,891</b>	<b>5,484</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 summer angling pressure with 664,219 angler days (28%), followed by Region 4 with 448,656 angler days (19%). Regions 2, 1 and 5 were next in order and close to each other, with 429,552 (18%), 367,074 (15%), and 268,382 (11%) angler days respectively. The easternmost regions of 6 and 7 were the lowest in pressure with 175,970 (7%) and 57,540 (2%) angler days respectively.

Residents (Figure 13, Table 8) exerted the majority of angling pressure during the 2021 summer season in all regions except Region 3. Resident pressure dropped in all regions, except in Region 6 compared to the 2020 summer season. The percent of summer angling pressure by residents for each region was:

- |                                       |                                       |
|---------------------------------------|---------------------------------------|
| Region 1 = 66% residents (2020 = 70%) | Region 5 = 56% residents (2020 = 73%) |
| Region 2 = 58% residents (2020 = 68%) | Region 6 = 85% residents (2020 = 82%) |
| Region 3 = 45% residents (2020 = 53%) | Region 7 = 83% residents (2020 = 86%) |
| Region 4 = 72% residents (2020 = 81%) |                                       |

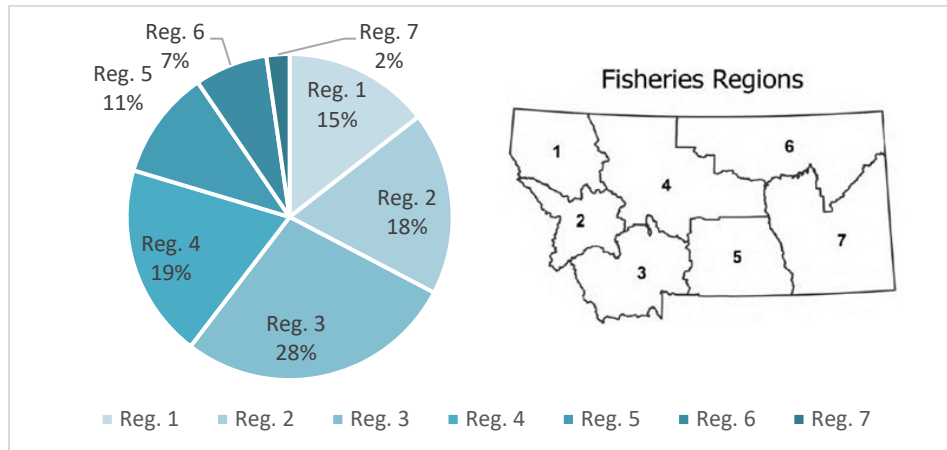


Figure 12. Percent of summer angling pressure by region

Regions 1 and 6 both saw lake angling pressure exceed stream pressure during the 2021 summer season (53% and 71%, respectively, primarily from Flathead Lake and Fort Peck Reservoir), though both regions saw declines in lake angling pressure compared to 2020 (Table 8, Figure 14). Region 4 was closely balanced between stream and lake angling (56 and 44%, 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 (579,000 angler days) and the highest percentage (87%) 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 262,318 for the Upper Yellowstone River drainage, followed by 251,845 angler days for the Madison River drainage to a low of 0 angler days for the Powder River drainage and 96 angler days for the Little Missouri River drainage. The drainages with the highest percentage of resident anglers were the Lower Milk River, Teton River, and Little Missouri River at 100% residents, while the Madison had the lowest percentage of resident anglers (34.1%). Marias River had the highest percentage of lake anglers (87.2%) mainly due to the influence of Tiber Reservoir, followed by Fort Peck Reservoir (83.8%), Red Rock River (80%), and the Upper Milk River Drainage (74.6%).



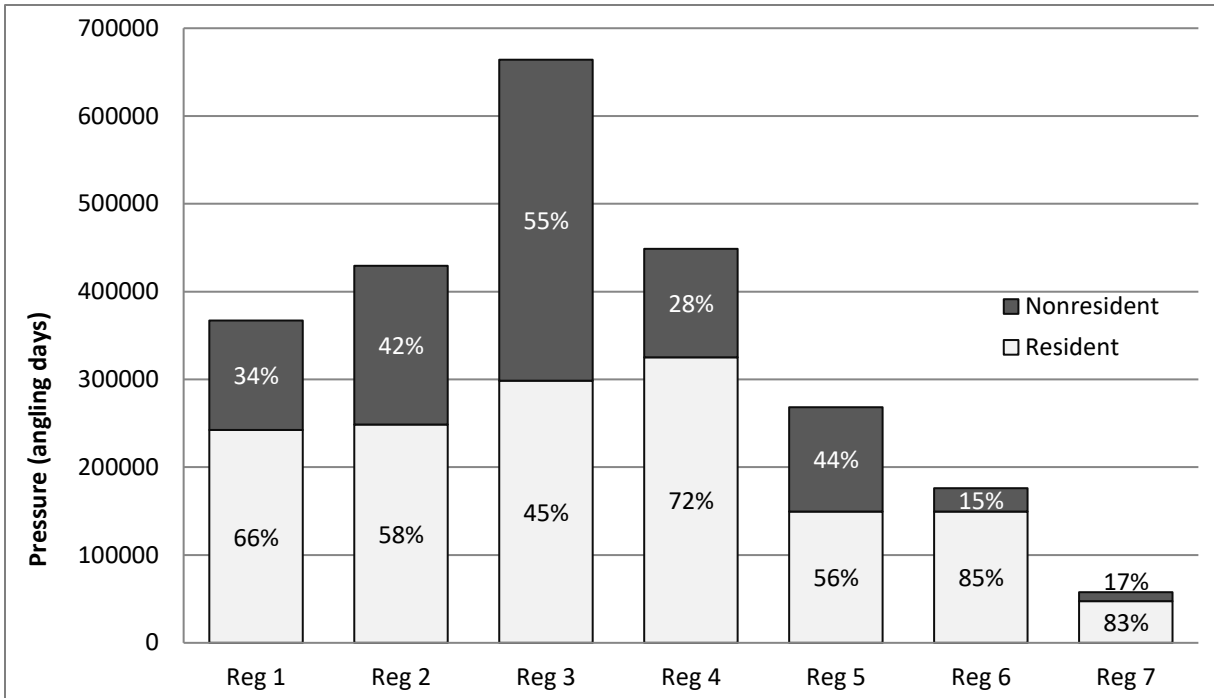


Figure 13. Statewide Angling Pressure Comparing Region and Residency - Summer Months 2021

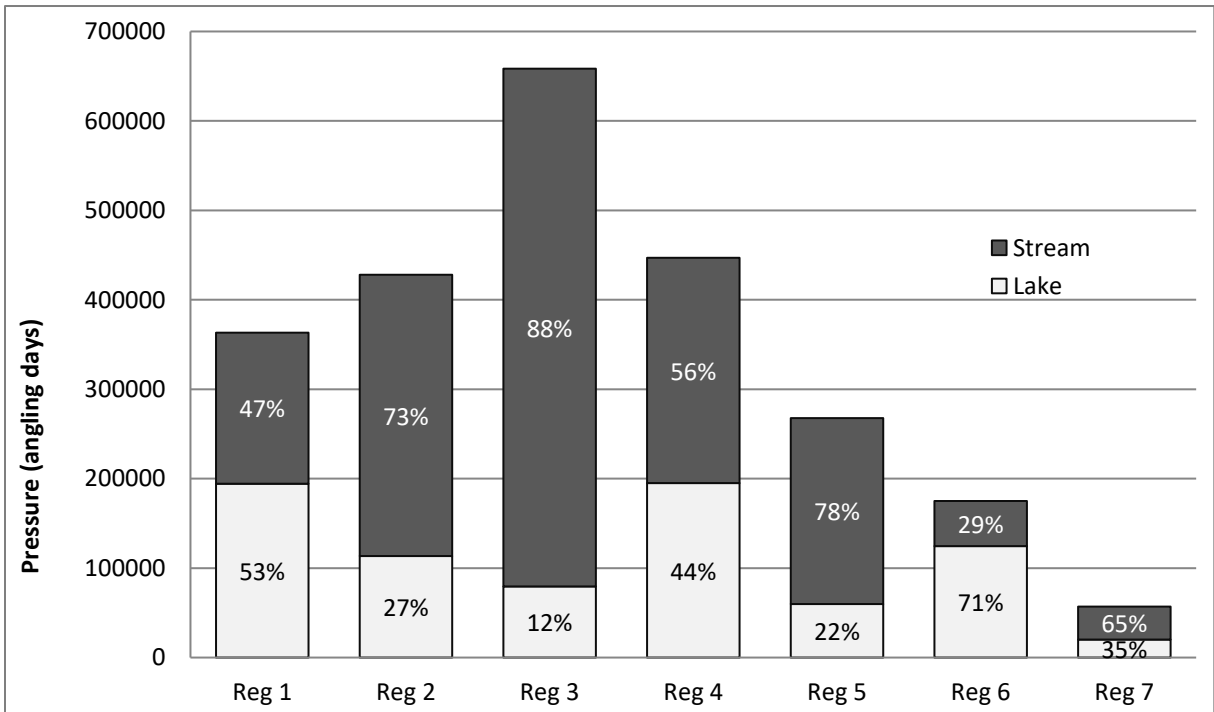


Figure 14. Angling Pressure by Region and Water Type - Summer Months 2021

Table 8. Regional angling pressure in angler days by lake or stream for the 2021 summer season May - September

	----- Totals -----		----- Resident -----		----- Non-Resident -----	
	Pressure	Trips	Pressure	Trips	Pressure	Trips
<b>Region 1</b>						
Undesig	3,689	24	1,540	12	2,149	12
Lake	194,291	1,500	147,068	1,235	47,224	265
Stream	169,093	1,166	93,715	764	75,378	402
<b>Total:</b>	<b>367,074</b>	<b>2,690</b>	<b>242,323</b>	<b>2,011</b>	<b>124,751</b>	<b>679</b>
<b>Region 2</b>						
Undesig	1,632	12	1,136	9	496	3
Lake	113,615	866	84,351	707	29,264	159
Stream	314,305	2,198	163,140	1,352	151,165	846
<b>Total:</b>	<b>429,552</b>	<b>3,076</b>	<b>248,627</b>	<b>2,068</b>	<b>180,925</b>	<b>1,008</b>
<b>Region 3</b>						
Undesig	5,790	37	1,866	15	3,925	22
Lake	79,429	605	54,793	464	24,636	141
Stream	579,000	3,949	241,920	2,041	337,080	1,908
<b>Total:</b>	<b>664,219</b>	<b>4,591</b>	<b>298,579</b>	<b>2,520</b>	<b>365,641</b>	<b>2,071</b>
<b>Region 4</b>						
Undesig	1,678	13	1,288	10	390	3
Lake	195,114	1,604	179,865	1,515	15,249	89
Stream	251,863	1,922	143,873	1,235	107,991	687
<b>Total:</b>	<b>448,656</b>	<b>3,539</b>	<b>325,026</b>	<b>2,760</b>	<b>123,630</b>	<b>779</b>
<b>Region 5</b>						
Undesig	543	4	212	2	331	2
Lake	59,687	463	48,066	403	11,621	60
Stream	208,152	1,466	101,268	857	106,885	609
<b>Total:</b>	<b>268,382</b>	<b>1,933</b>	<b>149,546</b>	<b>1,262</b>	<b>118,837</b>	<b>671</b>
<b>Region 6</b>						
Undesig	907	7	577	5	330	2
Lake	124,694	1,013	103,417	877	21,277	136
Stream	50,369	431	45,388	397	4,981	34
<b>Total:</b>	<b>175,970</b>	<b>1,451</b>	<b>149,382</b>	<b>1,279</b>	<b>26,588</b>	<b>172</b>
<b>Region 7</b>						
Undesig	480	4	480	4		
Lake	20,204	164	17,835	151	2,370	13
Stream	36,856	300	29,187	246	7,668	54
<b>Total:</b>	<b>57,540</b>	<b>468</b>	<b>47,502</b>	<b>401</b>	<b>10,038</b>	<b>67</b>

Table 9. Angling pressure in angler days by drainage, lake or stream for the 2021 summer season May - September

	--- Totals ---		--- Resident ---		--- Non-Resident ---	
	Pressure	Trips	Pressure	Trips	Pressure	Trips
<b>Beaverhead River</b>						
Lake	1,733	13	1,733	13		
Stream	30,388	201	10,517	87	19,871	114
<b>Total:</b>	<b>32,120</b>	<b>214</b>	<b>12,250</b>	<b>100</b>	<b>19,871</b>	<b>114</b>
<b>Belt Creek</b>						
Stream	6,703	56	5,818	51	885	5
<b>Total:</b>	<b>6,703</b>	<b>56</b>	<b>5,818</b>	<b>51</b>	<b>885</b>	<b>5</b>
<b>Big Hole River</b>						
Lake	5,433	43	4,407	38	1,027	5
Stream	67,353	483	33,586	289	33,767	194
<b>Total:</b>	<b>72,786</b>	<b>526</b>	<b>37,993</b>	<b>327</b>	<b>34,794</b>	<b>199</b>
<b>Bighorn River</b>						
Lake	13,426	102	9,802	82	3,624	20
Stream	72,974	502	16,953	155	56,020	347
<b>Total:</b>	<b>86,399</b>	<b>604</b>	<b>26,755</b>	<b>237</b>	<b>59,644</b>	<b>367</b>
<b>Bitterroot River</b>						
Lake	14,415	105	10,108	81	4,307	24
Stream	97,060	699	56,401	471	40,659	228
<b>Total:</b>	<b>111,475</b>	<b>804</b>	<b>66,509</b>	<b>552</b>	<b>44,966</b>	<b>252</b>
<b>Blackfoot River</b>						
Lake	44,583	349	33,697	287	10,886	62
Stream	69,237	478	34,913	288	34,325	190
<b>Total:</b>	<b>113,820</b>	<b>827</b>	<b>68,610</b>	<b>575</b>	<b>45,211</b>	<b>252</b>
<b>Boulder River</b>						
Lake	405	4	405	4		
Stream	6,161	50	5,249	45	912	5
<b>Total:</b>	<b>6,566</b>	<b>54</b>	<b>5,654</b>	<b>49</b>	<b>912</b>	<b>5</b>
<b>Clark Fork River - Flint / Rock</b>						
Lake	47,905	358	35,355	294	12,550	64
Stream	73,037	490	28,184	233	44,853	257
<b>Total:</b>	<b>120,942</b>	<b>848</b>	<b>63,539</b>	<b>527</b>	<b>57,403</b>	<b>321</b>
<b>Flathead River</b>						
Lake	89,141	688	65,015	550	24,126	138
Stream	65,080	453	38,665	314	26,414	139
<b>Total:</b>	<b>154,221</b>	<b>1,141</b>	<b>103,680</b>	<b>864</b>	<b>50,540</b>	<b>277</b>
<b>Fort Peck Reservoir</b>						
Lake	97,686	786	78,644	669	19,042	117
Stream	18,943	165	16,462	149	2,481	16
<b>Total:</b>	<b>116,630</b>	<b>951</b>	<b>95,106</b>	<b>818</b>	<b>21,523</b>	<b>133</b>

Table 9 Continued. Angling pressure in angler days by drainage, lake or stream for the 2021 summer season May – September

	--- Totals ---		--- Resident ---		--- Non-Resident ---	
	Pressure	Trips	Pressure	Trips	Pressure	Trips
<b>Gallatin River</b>						
Lake	12,428	97	9,100	77	3,328	20
Stream	115,503	788	52,409	442	63,093	346
<b>Total:</b>	<b>127,931</b>	<b>885</b>	<b>61,509</b>	<b>519</b>	<b>66,421</b>	<b>366</b>
<b>Jefferson River</b>						
Lake	3,426	29	3,426	29		
Stream	6,761	49	4,354	36	2,407	13
<b>Total:</b>	<b>10,187</b>	<b>78</b>	<b>7,780</b>	<b>65</b>	<b>2,407</b>	<b>13</b>
<b>Kootenai River</b>						
Lake	34,364	265	26,716	224	7,648	41
Stream	37,537	259	21,493	172	16,044	87
<b>Total:</b>	<b>71,901</b>	<b>524</b>	<b>48,209</b>	<b>396</b>	<b>23,692</b>	<b>128</b>
<b>Little Missouri River</b>						
Lake	96	1	96	1		
<b>Total:</b>	<b>96</b>	<b>1</b>	<b>96</b>	<b>1</b>		
<b>Lower Clark Fork River</b>						
Lake	48,596	369	37,077	307	11,519	62
Stream	36,306	258	19,846	167	16,461	91
<b>Total:</b>	<b>84,902</b>	<b>627</b>	<b>56,923</b>	<b>474</b>	<b>27,980</b>	<b>153</b>
<b>Lower Milk River</b>						
Lake	126	1	126	1		
Stream	2,078	18	2,078	18		
<b>Total:</b>	<b>2,204</b>	<b>19</b>	<b>2,204</b>	<b>19</b>		
<b>Lower Missouri River</b>						
Lake	1,748	15	1,524	13	224	2
Stream	594	6	482	5	112	1
<b>Total:</b>	<b>2,342</b>	<b>21</b>	<b>2,006</b>	<b>18</b>	<b>336</b>	<b>3</b>
<b>Lower Yellowstone River</b>						
Lake	7,242	63	7,242	63		
Stream	29,526	238	22,188	186	7,338	52
<b>Total:</b>	<b>36,768</b>	<b>301</b>	<b>29,430</b>	<b>249</b>	<b>7,338</b>	<b>52</b>
<b>Madison River</b>						
Lake	30,334	224	17,197	145	13,138	79
Stream	221,511	1,467	68,784	589	152,727	878
<b>Total:</b>	<b>251,845</b>	<b>1,691</b>	<b>85,981</b>	<b>734</b>	<b>165,865</b>	<b>957</b>
<b>Marias River</b>						
Lake	24,778	201	24,445	199	333	2
Stream	3,644	30	2,676	24	968	6
<b>Total:</b>	<b>28,422</b>	<b>231</b>	<b>27,121</b>	<b>223</b>	<b>1,301</b>	<b>8</b>

Table 9 Continued. Angling pressure in angler days by drainage, lake or stream for the 2021 summer season May - September

	--- Totals ---		--- Resident ---		--- Non-Resident ---	
	Pressure	Trips	Pressure	Trips	Pressure	Trips
<b>Middle Clark Fork River</b>						
Lake	4,353	34	3,163	27	1,190	7
Stream	51,710	357	29,289	239	22,421	118
<b>Total:</b>	<b>56,063</b>	<b>391</b>	<b>32,452</b>	<b>266</b>	<b>23,611</b>	<b>125</b>
<b>Middle Milk River</b>						
Lake	14,346	124	13,226	114	1,120	10
Stream	10,134	88	9,125	79	1,008	9
<b>Total:</b>	<b>24,480</b>	<b>212</b>	<b>22,351</b>	<b>193</b>	<b>2,128</b>	<b>19</b>
<b>Middle Yellowstone River</b>						
Lake	10,431	89	10,319	88	112	1
Stream	23,470	194	21,452	183	2,018	11
<b>Total:</b>	<b>33,901</b>	<b>283</b>	<b>31,771</b>	<b>271</b>	<b>2,130</b>	<b>12</b>
<b>Missouri River - Dearborn</b>						
Lake	634	5	440	4	195	1
Stream	127,714	941	59,531	511	68,182	430
<b>Total:</b>	<b>128,348</b>	<b>946</b>	<b>59,971</b>	<b>515</b>	<b>68,377</b>	<b>431</b>
<b>Missouri River - Judith</b>						
Lake	4,625	39	4,295	37	330	2
Stream	28,311	233	23,382	204	4,928	29
<b>Total:</b>	<b>32,935</b>	<b>272</b>	<b>27,677</b>	<b>241</b>	<b>5,258</b>	<b>31</b>
<b>Missouri River - Poplar</b>						
Lake	747	6	747	6		
Stream	15,242	125	13,862	117	1,380	8
<b>Total:</b>	<b>15,988</b>	<b>131</b>	<b>14,609</b>	<b>123</b>	<b>1,380</b>	<b>8</b>
<b>Musselshell River</b>						
Lake	9,371	82	8,923	78	448	4
Stream	4,297	35	3,135	27	1,163	8
<b>Total:</b>	<b>13,668</b>	<b>117</b>	<b>12,058</b>	<b>105</b>	<b>1,611</b>	<b>12</b>
<b>Powder River</b>						
Lake	-	-	-	-	-	-
Stream	-	-	-	-	-	-
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Red Rock River</b>						
Lake	13,573	105	10,028	85	3,545	20
Stream	3,402	22	874	8	2,528	14
<b>Total:</b>	<b>16,975</b>	<b>127</b>	<b>10,902</b>	<b>93</b>	<b>6,073</b>	<b>34</b>
<b>Ruby River</b>						
Lake	3,141	23	2,117	18	1,023	5
Stream	8,811	56	2,382	20	6,429	36
<b>Total:</b>	<b>11,952</b>	<b>79</b>	<b>4,499</b>	<b>38</b>	<b>7,452</b>	<b>41</b>

Table 9 Continued. Angling pressure in angler days by drainage, lake or stream for the 2021 summer season May - September

	--- Totals ---		--- Resident ---		--- Non-Resident ---	
	Pressure	Trips	Pressure	Trips	Pressure	Trips
<b>Smith River</b>						
Lake	5,566	44	4,020	35	1,546	9
Stream	31,740	242	11,867	105	19,873	137
<b>Total:</b>	<b>37,307</b>	<b>286</b>	<b>15,887</b>	<b>140</b>	<b>21,419</b>	<b>146</b>
<b>South Fork Flathead River</b>						
Lake	6,015	49	5,022	43	993	6
Stream	20,036	128	8,427	69	11,609	59
<b>Total:</b>	<b>26,051</b>	<b>177</b>	<b>13,449</b>	<b>112</b>	<b>12,602</b>	<b>65</b>
<b>Sun River</b>						
Lake	15,718	130	14,325	119	1,392	11
Stream	7,239	51	4,093	33	3,146	18
<b>Total:</b>	<b>22,956</b>	<b>181</b>	<b>18,418</b>	<b>152</b>	<b>4,538</b>	<b>29</b>
<b>Swan River</b>						
Lake	11,851	94	8,913	76	2,938	18
Stream	6,521	43	2,751	22	3,771	21
<b>Total:</b>	<b>18,372</b>	<b>137</b>	<b>11,664</b>	<b>98</b>	<b>6,709</b>	<b>39</b>
<b>Teton River</b>						
Lake	2,725	23	2,725	23		
Stream	2,020	17	2,020	17		
<b>Total:</b>	<b>4,744</b>	<b>40</b>	<b>4,745</b>	<b>40</b>		
<b>Tongue River</b>						
Lake	12,982	101	10,612	88	2,370	13
Stream	7,330	62	7,000	60	330	2
<b>Total:</b>	<b>20,312</b>	<b>163</b>	<b>17,612</b>	<b>148</b>	<b>2,700</b>	<b>15</b>
<b>Upper Clark Fork River</b>						
Lake	2,230	19	1,899	17	331	2
Stream	23,518	176	14,610	123	8,908	53
<b>Total:</b>	<b>25,748</b>	<b>195</b>	<b>16,509</b>	<b>140</b>	<b>9,239</b>	<b>55</b>
<b>Upper Milk River</b>						
Lake	9,925	80	9,034	73	891	7
Stream	3,379	29	3,379	29		
<b>Total:</b>	<b>13,304</b>	<b>109</b>	<b>12,413</b>	<b>102</b>	<b>891</b>	<b>7</b>
<b>Upper Missouri River</b>						
Lake	131,933	1,087	121,453	1,029	10,480	58
Stream	49,685	396	40,226	337	9,459	59
<b>Total:</b>	<b>181,618</b>	<b>1,483</b>	<b>161,679</b>	<b>1,366</b>	<b>19,939</b>	<b>117</b>
<b>Upper Yellowstone River</b>						
Lake	41,244	310	31,559	263	9,685	47
Stream	221,074	1,522	117,494	968	103,580	554
<b>Total:</b>	<b>262,318</b>	<b>1,832</b>	<b>149,053</b>	<b>1,231</b>	<b>113,265</b>	<b>601</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 2021, 1,211,523 angler days (33%) of the annual fishing pressure occurred during this period, which represents a 5.7% decrease in winter angler days compared to the 2020 season (n=1,285,196) (Table 10). Residents accounted for 697,708 angler days (57.6%) and nonresidents made up the remaining 513,816 angler days (42.4%). 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	16,835	71	8,637	40	8,198	31
Lake	469,190	1,807	305,096	1,194	164,094	613
Stream	725,498	2,945	383,975	1,492	341,524	1,453
<b>Statewide Total</b>	<b>1,211,523</b>	<b>4,823</b>	<b>697,708</b>	<b>2,726</b>	<b>513,816</b>	<b>2,097</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 291,953 angler days (24%), followed by Region 4 with 265,671 angler days (22%). Regions 2, 1 and 5 were next in order and close to each other, with 217,446 (18%), 144,685 (12%), and 141,828 (12%) angler days respectively. The easternmost regions of 6 and 7 were the lowest in pressure with 99,461 (8%) and 39,906 (3%) angler days respectively.

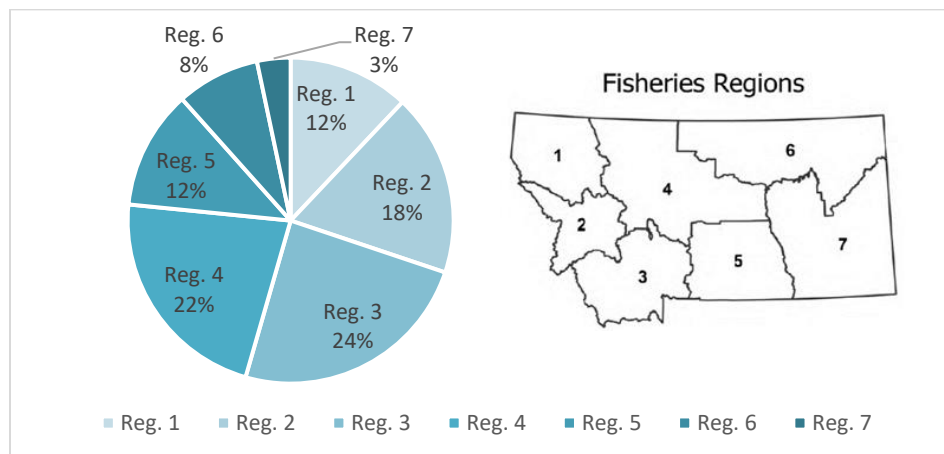


Figure 15. Percent of winter angling pressure by region

Residents (Figure 16, Table 11) exerted the majority of angling pressure during the winter season in 2021 in all regions but Regions 3 and 6. Compared to the 2020-21 winter season, all regions except 3 had an decrease in the percentage of resident anglers.

Region 1 = 71.2% residents (2020-21=81%)

Region 5 = 48.8% residents (2020-21=63%)

Region 2 = 52.3% residents (2020-21=63%)

Region 6 = 33.3% residents (2020-21=46%)

Region 3 = 50.4% residents (2020-21=47%)

Region 7 = 79.5% residents (2020-21=80%)

Region 4 = 72.7% residents (2020-21=80%)

Angling on lotic waters (streams/rivers) accounted for 59.9% (725,498 angler days) of the statewide pressure during the winter season. Angling on lentic waters (lakes/ponds/reservoirs) accounted for 38.7% (469,190 angler days) of the pressure. Undesignated waters accounted for less than 1.4% (16,835 angler days) of the pressure (Table 10).

Regions 1 and 6 had the highest percentage of winter lake angling pressure (75% and 88%). Regions 4 and 7 were almost split between lake and stream angling pressure (48% lake fishing in R1 and 51% lake fishing in R7). Region 4 had the highest number of lake anglers (127,556) (Table 11, Figure 17). Regions 2, 3, and 5 were dominated by stream anglers, and Region 3 had the highest number of stream anglers for any region (235,997 angler days) while Region 5 had the highest percentage (89%) of anglers that were stream anglers.

Angling pressure during winter was summarized within the 40 major drainages (Figure 11, Table 12). The highest winter pressure by drainage was 133,958 angler days for the Upper Missouri River, followed by 105,535 for the Madison River drainage, and 94,550 for the Upper Yellowstone River drainage. The lowest pressure by drainage was 569 angler days for the Lower Missouri River drainage, followed by 1,255 for the Boulder River, and 1,713 for the Lower Milk River Drainage. The drainages with the highest percentage of resident anglers were the Lower Missouri, Lower Milk, Upper Milk, Teton, and Little Missouri Rivers at 100% resident, followed by Lower Yellowstone (98%), Musselshell 93%, and Marias River at 91%. The lowest percentage of resident anglers were Fort Peck Reservoir at 23% resident, followed by the Bighorn River at 25%, and Madison River at 33%. The Lower Missouri River (100%), Red Rock River (91%), and Fort Peck Reservoir (97%) had the highest percentage of lake anglers. The Boulder, Beaverhead, Missouri River-Dearborn, Missouri River – Poplar drainages had 100% winter stream fishing, followed by the Bighorn (98%), Middle Clark Fork (98%) and Bitterroot River (97%).



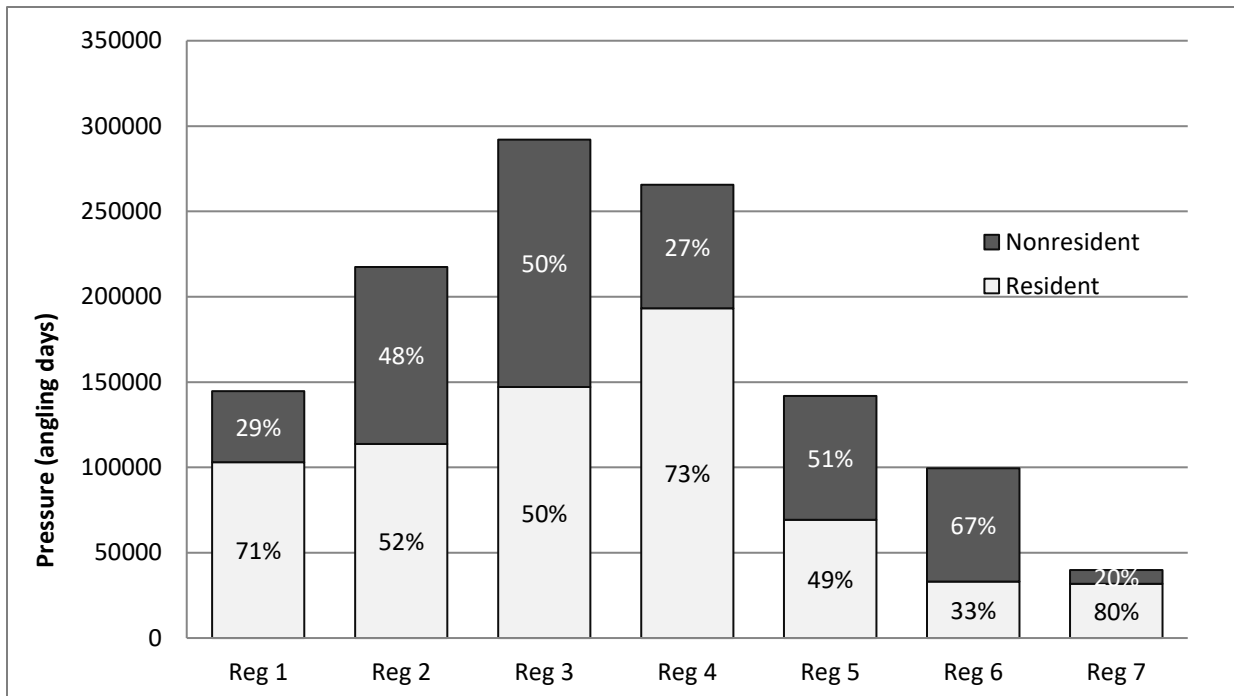


Figure 16. Statewide Angling Pressure by Region and Residency - Winter Months 2020-21

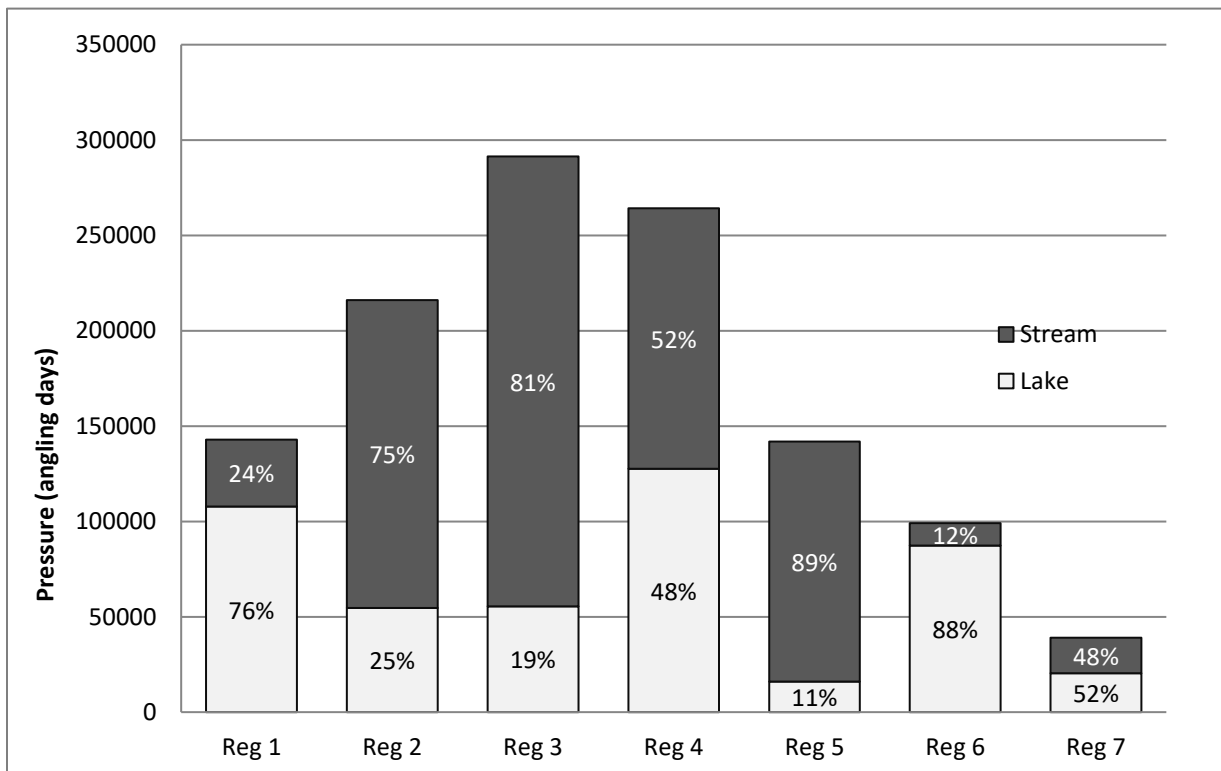


Figure 17. Statewide Angling Pressure Comparing Region and Water Type - Winter Months 2021

Table 11. Regional angling pressure in angler days by lake or stream for the 2021 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	1,850	8	284	2	1,565	6
Lake	107,874	406	77,494	294	30,380	112
Stream	34,962	144	25,275	106	9,687	38
<b>Total:</b>	144,685	558	103,053	402	41,632	156
<b>Region 2</b>						
Undesig	1,337	5	789	3	547	2
Lake	54,646	200	35,325	133	19,321	67
Stream	161,463	637	77,663	286	83,800	351
<b>Total:</b>	217,446	842	113,777	422	103,668	420
<b>Region 3</b>						
Undesig	503	2			503	2
Lake	55,453	208	33,246	123	22,208	85
Stream	235,997	963	113,910	436	122,087	527
<b>Total:</b>	291,953	1,173	147,156	559	144,798	614
<b>Region 4</b>						
Undesig	1,490	7	427	3	1,064	4
Lake	127,556	525	106,022	434	21,534	91
Stream	136,626	575	86,793	353	49,832	222
<b>Total:</b>	265,671	1,107	193,242	790	72,430	317
<b>Region 5</b>						
Lake	15,973	62	13,509	52	2,464	10
Stream	125,854	492	55,743	200	70,112	292
<b>Total:</b>	141,828	554	69,252	252	72,576	302
<b>Region 6</b>						
Undesig	287	1			287	1
Lake	87,306	322	24,688	96	62,618	226
Stream	11,868	48	8,466	35	3,401	13
<b>Total:</b>	99,461	371	33,154	131	66,306	240
<b>Region 7</b>						
Undesig	796	3	796	3		
Lake	20,380	84	14,812	62	5,568	22
Stream	18,729	86	16,124	76	2,605	10
<b>Total:</b>	39,906	173	31,732	141	8,173	32

Table 12. Angling pressure in angler days by drainage, lake or stream for the 2021 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>						
Stream	10,126	48	5,077	26	5,049	22
<b>Total:</b>	10,126	48	5,077	26	5,049	22
<b>Big Hole River</b>						
Lake	573	2			573	2
Stream	9,351	45	6,095	27	3,255	18
<b>Total:</b>	9,924	47	6,095	27	3,828	20
<b>Bighorn River</b>						
Lake	1,529	8	1,000	6	529	2
Stream	82,850	321	19,796	64	63,054	257
<b>Total:</b>	84,380	329	20,796	70	63,583	259
<b>Bitterroot River</b>						
Lake	1,813	8	1,233	6	580	2
Stream	66,093	272	30,594	120	35,499	152
<b>Total:</b>	67,907	280	31,827	126	36,079	154
<b>Blackfoot River</b>						
Lake	12,957	51	9,088	37	3,869	14
Stream	29,239	115	10,366	38	18,873	77
<b>Total:</b>	42,196	166	19,454	75	22,742	91
<b>Boulder River</b>						
Stream	1,255	8	853	6	402	2
<b>Total:</b>	1,255	8	853	6	402	2
<b>Clark Fork River - Flint / Rock</b>						
Lake	37,720	133	22,848	82	14,872	51
Stream	31,919	120	14,646	48	17,273	72
<b>Total:</b>	69,639	253	37,494	130	32,145	123
<b>Flathead River</b>						
Lake	59,548	217	44,149	160	15,398	57
Stream	13,300	55	10,214	43	3,086	12
<b>Total:</b>	72,848	272	54,363	203	18,484	69
<b>Fort Peck Reservoir</b>						
Lake	77,666	282	17,237	64	60,429	218
Stream	2,570	11	1,147	5	1,422	6
<b>Total:</b>	80,236	293	18,384	69	61,851	224

Table 12 Continued. Angling pressure in angler days by drainage, lake or stream for the 2021 winter season (March - April and October - February of the survey license year)

	--- Totals ---		--- Resident ---		--- Non-Resident ---	
	Pressure	Trips	Pressure	Trips	Pressure	Trips
<b>Gallatin River</b>						
Lake	3,199	11	1,954	7	1,245	4
Stream	52,153	203	27,360	104	24,793	99
<b>Total:</b>	<b>55,351</b>	<b>214</b>	<b>29,314</b>	<b>111</b>	<b>26,038</b>	<b>103</b>
<b>Jefferson River</b>						
Lake	7,489	28	7,238	27	251	1
Stream	3,806	15	2,134	8	1,672	7
<b>Total:</b>	<b>11,295</b>	<b>43</b>	<b>9,372</b>	<b>35</b>	<b>1,923</b>	<b>8</b>
<b>Kootenai River</b>						
Lake	14,934	67	11,157	53	3,777	14
Stream	7,728	28	6,921	25	808	3
<b>Total:</b>	<b>22,662</b>	<b>95</b>	<b>18,078</b>	<b>78</b>	<b>4,585</b>	<b>17</b>
<b>Little Missouri River</b>						
Lake	5,785	20	5,785	20		
Stream	1,446	5	1,446	5		
<b>Total:</b>	<b>7,232</b>	<b>25</b>	<b>7,231</b>	<b>25</b>		
<b>Lower Clark Fork River</b>						
Lake	30,108	107	19,191	67	10,918	40
Stream	11,145	49	6,466	31	4,679	18
<b>Total:</b>	<b>41,254</b>	<b>156</b>	<b>25,657</b>	<b>98</b>	<b>15,597</b>	<b>58</b>
<b>Lower Milk River</b>						
Stream	1,713	10	1,713	10		
<b>Total:</b>	<b>1,713</b>	<b>10</b>	<b>1,713</b>	<b>10</b>		
<b>Lower Missouri River</b>						
Lake	569	4	569	4		
<b>Total:</b>	<b>569</b>	<b>4</b>	<b>569</b>	<b>4</b>		
<b>Lower Yellowstone River</b>						
Lake	4,573	19	4,300	18	274	1
Stream	13,388	66	13,237	65	151	1
<b>Total:</b>	<b>17,961</b>	<b>85</b>	<b>17,537</b>	<b>83</b>	<b>425</b>	<b>2</b>
<b>Madison River</b>						
Lake	18,606	70	6,822	23	11,784	47
Stream	86,930	381	27,545	117	59,384	264
<b>Total:</b>	<b>105,535</b>	<b>451</b>	<b>34,367</b>	<b>140</b>	<b>71,168</b>	<b>311</b>
<b>Marias River</b>						
Lake	13,432	47	12,527	41	906	6
Stream	2,266	9	1,728	7	539	2
<b>Total:</b>	<b>15,699</b>	<b>56</b>	<b>14,255</b>	<b>48</b>	<b>1,445</b>	<b>8</b>

Table 12 Continued. Angling pressure in angler days by drainage, lake or stream for the 2021 winter season (March - April and October - February of the survey license year)

	--- Totals ---		--- Resident ---		--- Non-Resident ---	
	Pressure	Trips	Pressure	Trips	Pressure	Trips
<b>Middle Clark Fork River</b>						
Lake	526	2	526	2		
Stream	21,132	80	11,498	40	9,634	40
<b>Total:</b>	<b>21,658</b>	<b>82</b>	<b>12,024</b>	<b>42</b>	<b>9,634</b>	<b>40</b>
<b>Middle Milk River</b>						
Lake	7,167	29	4,978	21	2,189	8
Stream	1,378	5	1,105	4	274	1
<b>Total:</b>	<b>8,545</b>	<b>34</b>	<b>6,083</b>	<b>25</b>	<b>2,463</b>	<b>9</b>
<b>Middle Yellowstone River</b>						
Lake	2,179	7	1,606	5	573	2
Stream	9,500	43	8,696	39	805	4
<b>Total:</b>	<b>11,679</b>	<b>50</b>	<b>10,302</b>	<b>44</b>	<b>1,378</b>	<b>6</b>
<b>Missouri River - Dearborn</b>						
Stream	76,802	325	43,889	184	32,913	141
<b>Total:</b>	<b>76,802</b>	<b>325</b>	<b>43,889</b>	<b>184</b>	<b>32,913</b>	<b>141</b>
<b>Missouri River - Judith</b>						
Lake	8,386	33	3,591	14	4,795	19
Stream	9,730	50	6,532	37	3,198	13
<b>Total:</b>	<b>18,115</b>	<b>83</b>	<b>10,123</b>	<b>51</b>	<b>7,993</b>	<b>32</b>
<b>Missouri River - Poplar</b>						
Stream	5,653	20	4,221	15	1,432	5
<b>Total:</b>	<b>5,653</b>	<b>20</b>	<b>4,221</b>	<b>15</b>	<b>1,432</b>	<b>5</b>
<b>Musselshell River</b>						
Lake	5,487	25	5,201	24	287	1
Stream	865	5	714	4	151	1
<b>Total:</b>	<b>6,352</b>	<b>30</b>	<b>5,915</b>	<b>28</b>	<b>438</b>	<b>2</b>
<b>Red Rock River</b>						
Lake	18,763	72	12,031	47	6,731	25
Stream	1,914	8	405	2	1,509	6
<b>Total:</b>	<b>20,676</b>	<b>80</b>	<b>12,436</b>	<b>49</b>	<b>8,240</b>	<b>31</b>
<b>Ruby River</b>						
Lake	4,992	18	3,643	13	1,350	5
Stream	11,878	48	5,317	21	6,561	27
<b>Total:</b>	<b>16,871</b>	<b>66</b>	<b>8,960</b>	<b>34</b>	<b>7,911</b>	<b>32</b>
<b>Smith River</b>						
Lake	5,405	24	5,136	23	269	1
Stream	3,692	21	1,126	4	2,566	17
<b>Total:</b>	<b>9,097</b>	<b>45</b>	<b>6,262</b>	<b>27</b>	<b>2,835</b>	<b>18</b>

Table 12 Continued. Angling pressure in angler days by drainage, lake or stream for the 2021 winter season (March - April and October - February of the survey license year)

	--- Totals ---		--- Resident ---		--- Non-Resident ---	
	Pressure	Trips	Pressure	Trips	Pressure	Trips
<b>South Fork Flathead River</b>						
Lake	572	3	572	3		
Stream	1,367	6	1,098	5	269	1
<b>Total:</b>	<b>1,940</b>	<b>9</b>	<b>1,670</b>	<b>8</b>	<b>269</b>	<b>1</b>
<b>Sun River</b>						
Lake	11,574	57	6,829	40	4,746	17
Stream	823	4	572	3	251	1
<b>Total:</b>	<b>12,398</b>	<b>61</b>	<b>7,401</b>	<b>43</b>	<b>4,997</b>	<b>18</b>
<b>Swan River</b>						
Lake	1,846	9	1,559	8	287	1
Stream	845	4			845	4
<b>Total:</b>	<b>2,690</b>	<b>13</b>	<b>1,559</b>	<b>8</b>	<b>1,132</b>	<b>5</b>
<b>Teton River</b>						
Lake	2,144	9	2,144	9		
Stream	526	2	526	2		
<b>Total:</b>	<b>2,670</b>	<b>11</b>	<b>2,670</b>	<b>11</b>		
<b>Tongue River</b>						
Lake	10,021	45	4,727	24	5,294	21
Stream	3,895	15	1,441	6	2,454	9
<b>Total:</b>	<b>13,917</b>	<b>60</b>	<b>6,168</b>	<b>30</b>	<b>7,748</b>	<b>30</b>
<b>Upper Clark Fork River</b>						
Lake	1,630	6	1,630	6		
Stream	13,080	50	10,559	40	2,521	10
<b>Total:</b>	<b>14,710</b>	<b>56</b>	<b>12,189</b>	<b>46</b>	<b>2,521</b>	<b>10</b>
<b>Upper Milk River</b>						
Lake	1,905	7	1,905	7		
Stream	280	1	280	1		
<b>Total:</b>	<b>2,185</b>	<b>8</b>	<b>2,185</b>	<b>8</b>		
<b>Upper Missouri River</b>						
Lake	80,846	327	70,314	280	10,532	47
Stream	53,112	190	42,204	140	10,908	50
<b>Total:</b>	<b>133,958</b>	<b>517</b>	<b>112,518</b>	<b>420</b>	<b>21,440</b>	<b>97</b>
<b>Upper Yellowstone River</b>						
Lake	13,379	51	11,744	44	1,635	7
Stream	81,170	305	55,877	194	25,294	111
<b>Total:</b>	<b>94,550</b>	<b>356</b>	<b>67,621</b>	<b>238</b>	<b>26,929</b>	<b>118</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” (39.52%), followed by rainbow trout (14.45%), walleye (9.57%), brown trout (7.53%), cutthroat trout (5.54%), and bass (2.19%) (Table 13). Salmonids (trout, salmon, char, whitefish and grayling) collectively are indicated as the primary species by 73.56% of anglers.

Table 13. Percent of trips for each primary species fished for statewide in 2021 license year

Trout	39.52%	Burbot	0.16%
Rainbow Trout	14.45%	Arctic Grayling	0.16%
Walleye	9.57%	Rainbow Trout X Cutthroat	0.16%
Brown Trout	7.53%	Bull Trout	0.13%
Cutthroat Trout	5.54%	Bluegill	0.11%
Bass	2.19%	Sturgeon	0.07%
Yellow Perch	1.98%	Golden Trout	0.07%
Lake Trout	1.94%	Chinook Salmon	0.05%
Channel Catfish	1.59%	Freshwater Drum	0.04%
Salmon	1.36%	Mountain Whitefish	0.04%
Brook Trout	1.26%	Lake Whitefish	0.04%
Northern Pike	1.26%	Brook Trout X Brown Trout	0.04%
Smallmouth Bass	0.95%	Shovelnose Sturgeon	0.03%
Kokanee salmon	0.85%	Goldeye	0.03%
Paddlefish	0.45%	Sunfish	0.03%
Whitefish	0.42%	Minnnow	0.02%
Largemouth Bass	0.37%	Rainbow Smelt	0.01%
Sauger	0.26%	Sucker	0.01%
Common Carp	0.23%	Golden Shiner	0.00%
Crappie	0.17%	Black Crappie	0.00%

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 (smallmouth and largemouth bass) (28.86%), walleye (5.49%), and yellow perch (7.66%).

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. Cutthroat trout constitute the majority of angling interest in the South Fork Flathead drainage (67%). Cutthroat trout is also the dominant species (outside of “trout”), Blackfoot River drainage (13.39%) and the Bitterroot River drainage (14.30%). Salmon fishing (Kokanee plus “salmon”) is most prominent in the Kootenai River drainage (19.72%), 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 75.21% in the Jefferson River drainage to 98.86% in the Beaverhead 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. Trout and rainbow trout were the primary species fished for in the Upper Missouri River drainage (48.23%) which contains Canyon Ferry, Hauser and Holter reservoirs, although walleye represent a significant component (39.2%). Downstream in the Missouri-Dearborn drainage, “trout,” rainbow trout and brown trout are the overwhelming favorite species and make up close to 93.94% 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 (13.56%) and yellow perch (2%), as well as warm-water species such as channel catfish (17.8%) and sturgeon (2%) 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 (69%).

The lower Missouri River mainstem drainages within Region 6 are dominated by walleye and northern pike fishing. Combined, these two species comprise 53.05% of angler preference in Fort Peck Reservoir, 58.94% in the Missouri River-Poplar, and 73.5% in the Upper Milk drainage. Channel catfish is the primary target species on the Lower Milk River (72.41%), and the Musselshell (26.47%) in Region 5.

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 91.14% of angler preferences. Further downstream in Region 5, but still within the Upper Yellowstone drainage, these same species make up over 85.71% of preferences. The Middle Yellowstone River drainage still has a substantial component of anglers seeking trout (33.63% for “trout,” rainbow trout and brown trout), but warm-water species also dominate, led by channel catfish (25.53%), bass (9.61%) and bass (7.21%). The Lower Yellowstone River drainage in Region 7 is dominated by fishing for walleye (22.86%), channel catfish (21.56%), followed by sauger (14.55%), paddlefish (12.21) and bass (5.97%). Notable tributary drainages to the Yellowstone include the Bighorn River drainage (81.39% for “trout,” rainbow trout and brown trout), and the Tongue River drainage which is popular for walleye fishing (24.66), bass (17.94%), and crappie (11.21%) based primarily on fishing in the Tongue River Reservoir.



Table 14. Percent of trips for each primary species fished for by region and drainage during 2021 survey year

<b>Drainage</b>	<b>Primary Species Fished for</b>	<b>Percent of days for species</b>
<b>Region: 1</b>		
Flathead River (43.50% of days fished in this Region.)		
	Trout	18.54%
	Lake Trout	16.21%
	Cutthroat Trout	15.36%
	Yellow Perch	6.65%
	Bass	5.94%
	Kokanee salmon	5.59%
	Rainbow Trout	5.02%
	Whitefish	4.95%
	Smallmouth Bass	3.54%
	Salmon	3.26%
	Northern Pike	2.12%
	Arctic Grayling	0.99%
	Crappie	0.64%
	Lake Whitefish	0.64%
	Brook Trout	0.57%
	Bluegill	0.42%
	Largemouth Bass	0.35%
	Minnnow	0.35%
	Brown Trout	0.21%
	Rainbow Trout X Cutthroat Trout Hybrid	0.14%
	Sucker	0.07%
Kootenai River (19.06% of days fished in this Region.)		
	Rainbow Trout	30.69%
	Trout	25.69%
	Salmon	10.99%
	Kokanee salmon	8.72%
	Bass	5.65%
	Yellow Perch	5.17%
	Bull Trout	1.94%
	Cutthroat Trout	1.78%
	Largemouth Bass	1.13%
	Smallmouth Bass	0.65%
	Northern Pike	0.65%
	Golden Trout	0.65%
	Whitefish	0.48%
	Bluegill	0.32%
	Brown Trout	0.32%
	Brook Trout	0.32%
	Rainbow Smelt	0.16%

Table 14 Continued. Percent of trips for each primary species fished for by region and drainage during 2021 survey year

<b>Drainage</b>	<b>Primary Species Fished for</b>	<b>Percent of days for species</b>
Lower Clark Fork River (24.11% of days fished in this Region.)		
	Bass	17.11%
	Trout	15.33%
	Yellow Perch	7.66%
	Smallmouth Bass	7.28%
	Walleye	5.49%
	Brown Trout	4.85%
	Northern Pike	4.73%
	Largemouth Bass	4.47%
	Rainbow Trout	3.45%
	Salmon	2.55%
	Cutthroat Trout	2.55%
	Kokanee salmon	1.28%
	Lake Trout	0.77%
	Brook Trout	0.26%
	Sunfish	0.26%
Middle Clark Fork River (0.03% of days fished in this Region.)		
	Bass	100.00%
South Fork Flathead River (5.73% of days fished in this Region.)		
	Cutthroat Trout	66.67%
	Trout	21.51%
	Bull Trout	6.45%
	Kokanee salmon	1.08%
	Rainbow Trout	0.54%
Swan River (4.62% of days fished in this Region.)		
	Trout	39.33%
	Rainbow Trout	16.67%
	Cutthroat Trout	7.33%
	Northern Pike	7.33%
	Bass	2.67%
	Brook Trout	2.00%
	Yellow Perch	1.33%
	Lake Trout	1.33%
<b>Region: 2</b>		
Bitterroot River (27.67% of days fished in this Region.)		
	Trout	59.78%
	Cutthroat Trout	14.30%
	Rainbow Trout	10.06%
	Brown Trout	6.37%
	Brook Trout	0.74%
	Whitefish	0.37%
	Northern Pike	0.37%
	Bull Trout	0.18%
	Rainbow Trout X Cutthroat Trout Hybrid	0.09%

Table 14 Continued. Percent of trips for each primary species fished for by region and drainage during 2021 survey year

<b>Drainage</b>	<b>Primary Species Fished for</b>	<b>Percent of days for species</b>
Blackfoot River (25.34% of days fished in this Region.)		
	Trout	47.23%
	Cutthroat Trout	13.39%
	Rainbow Trout	12.99%
	Brown Trout	4.83%
	Yellow Perch	3.22%
	Northern Pike	2.72%
	Salmon	1.51%
	Kokanee salmon	0.91%
	Bass	0.60%
	Whitefish	0.30%
	Largemouth Bass	0.30%
	Brook Trout	0.30%
	Smallmouth Bass	0.20%
	Lake Trout	0.20%
Clark Fork River - Flint / Rock (28.10% of days fished in this Region.)		
	Trout	48.05%
	Rainbow Trout	25.25%
	Cutthroat Trout	8.45%
	Brown Trout	7.90%
	Rainbow Trout X Cutthroat Trout Hybrid	1.63%
	Kokanee salmon	1.45%
	Brook Trout	1.27%
	Lake Trout	1.00%
	Salmon	0.82%
	Whitefish	0.36%
	Bull Trout	0.36%
	Yellow Perch	0.18%
	Brook Trout X Brown Trout Hybrid	0.09%
Middle Clark Fork River (12.05% of days fished in this Region.)		
	Trout	49.58%
	Rainbow Trout	19.28%
	Cutthroat Trout	13.35%
	Brown Trout	5.93%
	Brook Trout	1.69%
	Mountain Whitefish	1.06%
	Bass	0.64%
	Smallmouth Bass	0.42%
	Yellow Perch	0.42%
	Rainbow Trout X Cutthroat Trout Hybrid	0.21%
Upper Clark Fork River (6.36% of days fished in this Region.)		
	Trout	48.19%
	Brown Trout	21.29%
	Cutthroat Trout	13.25%
	Rainbow Trout	9.64%
	Brook Trout	4.02%

Table 14 Continued. Percent of trips for each primary species fished for by region and drainage during 2021 survey year

<b>Drainage</b>	<b>Primary Species Fished for</b>	<b>Percent of days for species</b>
<b>Region: 3</b>		
Beaverhead River (4.55% of days fished in this Region.)		
	Trout	50.00%
	Brown Trout	35.88%
	Rainbow Trout	12.98%
	Brook Trout	0.76%
	Cutthroat Trout	0.38%
Big Hole River (9.94% of days fished in this Region.)		
	Trout	45.55%
	Brown Trout	23.21%
	Rainbow Trout	9.77%
	Brook Trout	6.81%
	Cutthroat Trout	3.14%
	Arctic Grayling	2.27%
Boulder River (1.08% of days fished in this Region.)		
	Trout	50.00%
	Rainbow Trout	17.74%
	Brown Trout	16.13%
	Brook Trout	11.29%
	Cutthroat Trout	3.23%
Gallatin River (19.07% of days fished in this Region.)		
	Trout	51.05%
	Rainbow Trout	27.21%
	Brown Trout	9.37%
	Cutthroat Trout	5.91%
	Brook Trout	0.82%
	Rainbow Trout X Cutthroat Trout Hybrid	0.36%
	Golden Trout	0.27%
	Largemouth Bass	0.18%
	Channel Catfish	0.18%
	Lake Trout	0.09%
	Whitefish	0.09%
	Arctic Grayling	0.09%
	Bluegill	0.09%
	Bass	0.09%
Jefferson River (2.10% of days fished in this Region.)		
	Trout	44.63%
	Brown Trout	26.45%
	Cutthroat Trout	10.74%
	Brook Trout	10.74%
	Rainbow Trout	4.13%
	Brook Trout X Brown Trout Hybrid	0.83%

Table 14 Continued. Percent of trips for each primary species fished for by region and drainage during 2021 survey year

<b>Drainage</b>	<b>Primary Species Fished for</b>	<b>Percent of days for species</b>
Madison River (37.16% of days fished in this Region.)		
	Trout	55.79%
	Brown Trout	20.07%
	Rainbow Trout	18.11%
	Cutthroat Trout	2.43%
	Brook Trout	0.61%
	Bluegill	0.28%
	Bass	0.23%
	Whitefish	0.23%
	Walleye	0.23%
	Brook Trout X Brown Trout Hybrid	0.09%
	Largemouth Bass	0.05%
	Yellow Perch	0.05%
	Mountain Whitefish	0.05%
	Common Carp	0.05%
Red Rock River (3.59% of days fished in this Region.)		
	Trout	37.68%
	Rainbow Trout	33.82%
	Burbot	10.63%
	Cutthroat Trout	7.25%
	Brown Trout	6.28%
	Brook Trout	1.45%
	Arctic Grayling	0.97%
	Rainbow Trout X Cutthroat Trout Hybrid	0.48%
	Common Carp	0.48%
Ruby River (2.52% of days fished in this Region.)		
	Trout	61.38%
	Brown Trout	16.55%
	Rainbow Trout	13.10%
	Brook Trout	4.14%
	Cutthroat Trout	2.76%
Upper Clark Fork River (0.03% of days fished in this Region.)		
	Cutthroat Trout	100.00%
Upper Missouri River (1.86% of days fished in this Region.)		
	Trout	28.04%
	Rainbow Trout	21.50%
	Walleye	17.76%
	Common Carp	9.35%
	Brook Trout	7.48%
	Brown Trout	3.74%
	Arctic Grayling	2.80%
	Yellow Perch	0.93%
	Cutthroat Trout	0.93%

Table 14 Continued. Percent of trips for each primary species fished for by region and drainage during 2021 survey year

<b>Drainage</b>	<b>Primary Species Fished for</b>	<b>Percent of days for species</b>
Upper Yellowstone River (17.44% of days fished in this Region.)		
	Trout	57.41%
	Rainbow Trout	12.24%
	Cutthroat Trout	11.84%
	Brown Trout	9.65%
	Yellow Perch	2.19%
	Walleye	1.79%
	Brook Trout	0.60%
	Brook Trout X Brown Trout Hybrid	0.50%
	Whitefish	0.40%
	Rainbow Trout X Cutthroat Trout Hybrid	0.30%
	Smallmouth Bass	0.10%
<b>Region: 4</b>		
Belt Creek (1.21% of days fished in this Region.)		
	Trout	44.64%
	Brown Trout	23.21%
	Brook Trout	14.29%
	Cutthroat Trout	10.71%
	Rainbow Trout	1.79%
Marias River (6.18% of days fished in this Region.)		
	Walleye	68.99%
	Rainbow Trout	11.50%
	Trout	5.23%
	Brown Trout	2.09%
	Northern Pike	1.05%
	Yellow Perch	1.05%
	Cutthroat Trout	0.35%
Missouri River - Dearborn (27.36% of days fished in this Region.)		
	Trout	54.92%
	Rainbow Trout	30.84%
	Brown Trout	8.18%
	Walleye	1.97%
	Bass	0.47%
	Brook Trout	0.39%
	Channel Catfish	0.31%
	Golden Trout	0.24%
	Yellow Perch	0.24%
	Rainbow Trout X Cutthroat Trout Hybrid	0.24%
	Bluegill	0.08%
	Whitefish	0.08%

Table 14 Continued. Percent of trips for each primary species fished for by region and drainage during 2021 survey year

<b>Drainage</b>	<b>Primary Species Fished for</b>	<b>Percent of days for species</b>
Missouri River - Judith (7.62% of days fished in this Region.)		
	Trout	35.03%
	Channel Catfish	17.80%
	Walleye	13.56%
	Rainbow Trout	6.50%
	Freshwater Drum	2.82%
	Brown Trout	2.26%
	Sturgeon	1.98%
	Brook Trout	1.98%
	Yellow Perch	1.98%
	Cutthroat Trout	1.98%
	Bass	1.69%
	Smallmouth Bass	0.85%
	Goldeye	0.85%
	Shovelnose Sturgeon	0.56%
Musselshell River (2.43% of days fished in this Region.)		
	Trout	62.83%
	Rainbow Trout	16.81%
	Walleye	7.08%
	Bass	4.42%
	Yellow Perch	4.42%
	Golden Trout	1.77%
	Brown Trout	0.88%
NA - St. Mary and Belly Rivers (0.47% of days fished in this Region.)		
	Trout	45.45%
	Rainbow Trout	27.27%
	Lake Trout	13.64%
	Brook Trout	4.55%
Smith River (7.12% of days fished in this Region.)		
	Trout	55.29%
	Rainbow Trout	17.82%
	Brown Trout	13.60%
	Burbot	3.93%
	Brook Trout	3.93%
	Salmon	2.11%
	Cutthroat Trout	1.81%
	Kokanee salmon	0.60%
Sun River (5.21% of days fished in this Region.)		
	Trout	45.87%
	Rainbow Trout	28.10%
	Northern Pike	5.37%
	Cutthroat Trout	1.65%
	Kokanee salmon	1.65%
	Arctic Grayling	1.24%
	Yellow Perch	0.41%
	Rainbow Trout X Cutthroat Trout Hybrid	0.41%
	Largemouth Bass	0.41%

Brook Trout	0.41%
Teton River (1.10% of days fished in this Region.)	
Trout	52.94%
Rainbow Trout	29.41%
Yellow Perch	7.84%
Northern Pike	1.96%
Bass	1.96%
Upper Missouri River (40.74% of days fished in this Region.)	
Walleye	39.20%
Trout	32.59%
Rainbow Trout	15.64%
Yellow Perch	4.01%
Brown Trout	1.06%
Common Carp	0.85%
Bass	0.69%
Salmon	0.69%
Kokanee salmon	0.63%
Brook Trout	0.26%
Smallmouth Bass	0.11%
Largemouth Bass	0.11%
Lake Trout	0.11%
Sturgeon	0.11%
Cutthroat Trout	0.05%
Burbot	0.05%
Bluegill	0.05%

**Region: 5**

Bighorn River (37.52% of days fished in this Region.)	
Trout	54.77%
Brown Trout	13.93%
Rainbow Trout	11.47%
Walleye	5.25%
Smallmouth Bass	4.72%
Bass	3.32%
Channel Catfish	1.39%
Crappie	0.32%
Northern Pike	0.32%
Rainbow Smelt	0.21%
Salmon	0.11%
Burbot	0.11%
Middle Yellowstone River (13.47% of days fished in this Region.)	
Trout	30.03%
Channel Catfish	25.53%
Bass	9.61%
Largemouth Bass	5.41%
Common Carp	4.50%
Rainbow Trout	2.40%
Walleye	1.80%
Smallmouth Bass	1.80%
Bluegill	1.50%
Yellow Perch	1.50%



Table 14 Continued. Percent of trips for each primary species fished for by region and drainage during 2021 survey year

<b>Drainage</b>	<b>Primary Species Fished for</b>	<b>Percent of days for species</b>
	Brown Trout	1.20%
	Sunfish	0.90%
	Mountain Whitefish	0.90%
	Cutthroat Trout	0.90%
	Sauger	0.30%
	Goldeye	0.30%
Musselshell River (1.37% of days fished in this Region.)		
	Channel Catfish	26.47%
	Trout	20.59%
	Smallmouth Bass	17.65%
	Rainbow Trout	5.88%
	Brook Trout	2.94%
	Common Carp	2.94%
	Walleye	2.94%
	Brown Trout	2.94%
Upper Yellowstone River (47.84% of days fished in this Region.)		
	Trout	55.03%
	Rainbow Trout	17.24%
	Brown Trout	7.44%
	Cutthroat Trout	6.00%
	Brook Trout	5.07%
	Walleye	2.87%
	Yellow Perch	1.27%
	Bass	0.59%
	Common Carp	0.42%
	Goldeye	0.25%
	Lake Trout	0.17%
	Bluegill	0.17%
	Golden Trout	0.08%
<b>Region: 6</b>		
Fort Peck Reservoir (67.76% of days fished in this Region.)		
	Walleye	46.14%
	Lake Trout	14.15%
	Salmon	10.37%
	Northern Pike	6.91%
	Paddlefish	3.86%
	Channel Catfish	3.86%
	Bass	2.89%
	Smallmouth Bass	1.77%
	Trout	0.96%
	Chinook Salmon	0.88%
	Sauger	0.24%
	Golden Shiner	0.08%
	Black Crappie	0.08%
Lower Milk River (1.58% of days fished in this Region.)		
	Channel Catfish	72.41%
	Walleye	13.79%

Table 14 Continued. Percent of trips for each primary species fished for by region and drainage during 2021 survey year

<b>Drainage</b>	<b>Primary Species Fished for</b>	<b>Percent of days for species</b>
	Bass	6.90%
	Northern Pike	3.45%
Lower Missouri River (1.37% of days fished in this Region.)		
	Northern Pike	36.00%
	Rainbow Trout	24%
	Shovelnose Sturgeon	20.00%
	Yellow Perch	4.00%
Lower Yellowstone River (0.05% of days fished in this Region.)		
	Yellow Perch	100.00%
Middle Milk River (13.40% of days fished in this Region.)		
	Walleye	39.43%
	Trout	18.70%
	Yellow Perch	10.98%
	Channel Catfish	5.28%
	Northern Pike	4.88%
	Rainbow Trout	4.07%
	Brook Trout	4.07%
	Bass	1.63%
	Brown Trout	0.81%
	Sucker	0.41%
Missouri River - Judith (0.05% of days fished in this Region.)		
	Lake Trout	100.00%
Missouri River - Poplar (8.22% of days fished in this Region.)		
	Walleye	49.01%
	Northern Pike	9.93%
	Brown Trout	6.62%
	Channel Catfish	5.30%
	Paddlefish	4.64%
	Trout	4.64%
	Bass	2.65%
	Rainbow Trout	1.99%
	Lake Trout	1.32%
	Sunfish	0.66%
Upper Milk River (6.37% of days fished in this Region.)		
	Walleye	71.79%
	Bass	4.27%
	Trout	2.56%
	Northern Pike	1.71%

Table 14 Continued. Percent of trips for each primary species fished for by region and drainage during 2021 survey year

<b>Drainage</b>	<b>Primary Species Fished for</b>	<b>Percent of days for species</b>
<b>Region: 7</b>		
Little Missouri River (4.06% of days fished in this Region.)		
	Rainbow Trout	76.92%
	Northern Pike	3.85%
Lower Yellowstone River (60.06% of days fished in this Region.)		
	Walleye	22.86%
	Channel Catfish	21.56%
	Sauger	14.55%
	Paddlefish	12.21%
	Bass	5.97%
	Yellow Perch	4.94%
	Trout	2.34%
	Smallmouth Bass	1.82%
	Sturgeon	1.56%
	Northern Pike	1.04%
	Largemouth Bass	0.78%
	Bluegill	0.52%
	Crappie	0.26%
Tongue River (34.79% of days fished in this Region.)		
	Walleye	24.66%
	Bass	17.94%
	Crappie	11.21%
	Northern Pike	8.52%
	Yellow Perch	6.28%
	Channel Catfish	5.38%
	Smallmouth Bass	3.59%
	Trout	1.35%
	Common Carp	1.35%

### 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 and responded to the question, 64% (n=10,341) indicated they do not use a boat, while 36% (n=5,765) use a boat, (Figure 18, Table 15). Out of the respondents who used a boat, 89% (n=4,660) said they pull the drain plug when taking out of water, while 11% (n=595) do not pull the drain plug. 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. The survey did not include a “not applicable” option to capture these responses, thus it is difficult to distinguish between the not applicables and those who do not pull the plug.

Table 15 breaks down all responses by residency and according to whether they reported a fishing trip or did not fish. 55% of residents who reported going fishing during the month surveyed said they use a boat, while just 29% of residents who did not go fishing during the month surveyed use a boat. A chi-square test of independence showed a significant association between resident anglers reporting a fishing trip during the month surveyed and using a boat  $X^2 (1, N = 12339) = 730.6691, p < 0.00001$ . It appears there is an association between avid anglers, those who fished the prior month, and boat use where those who fished are more likely to use a boat compared to those who did not fish in the previous month surveyed. 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.

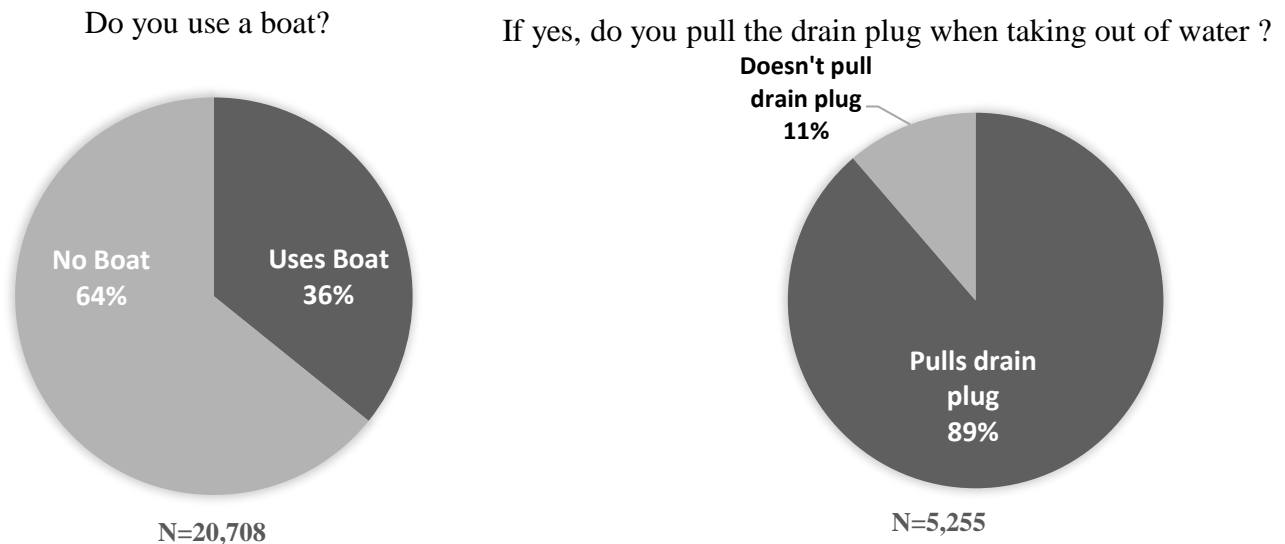


Figure 18. Responses to the questions “Do you use a boat” and “If yes, do you drain the plug when taking out of water?”

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

	<b>Total n</b>	<b># Uses Boat</b>	<b># No boat</b>	<b>% No Boat</b>	<b>% Uses Boat</b>	<b>#Yes Pulls Plug</b>	<b>#No Pulls Plug</b>	<b>%Yes Pulls Plug</b>	<b>%No Pulls Plug</b>
<b>DID NOT FISH</b>									
NonResident	1586	298	1288	81%	<b>19%</b>	242	37	87%	13%
Resident	9026	2619	6407	71%	<b>29%</b>	2301	218	91%	9%
<b>FISHED</b>									
NonResident	2181	1013	1168	54%	46%	598	146	<b>80%</b>	20%
Resident	3313	1835	1478	45%	55%	1519	194	<b>89%</b>	11%
<b>COMBINED Fished / Did not fish</b>									
NonResident	3767	1311	2456	65%	35%	840	183	82%	18%
Resident	12339	4454	7885	64%	36%	3820	412	90%	10%
<b>TOTAL</b>	16106	5765	10341	<b>64%</b>	<b>36%</b>	4660	595	<b>89%</b>	<b>11%</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. Region 6 had the lowest percentage of anglers fishing from shore (23%), and likewise the highest percentage of boat fishing (55%) and ice fishing (15%) primarily due to lake fishing on Fort Peck Reservoir. Regions 2, 3, 5 and 7 had the greatest percent of shore fishing (55%, 60%, 51%, 51% respectively) (Table 16). Region 5 had the highest percentage of combined shore/boat fishing (17%) and the lowest percentage of ice anglers (1%).

Residents and nonresidents were evenly split when it comes to shore fishing. Residents were slightly more likely to fish from a boat (41%) than were nonresidents (36%) (Table 17). residents fished from a boat (37.41%) compared to non-residents (33.57%). A greater percentage of non-residents (6.5%) ice fished compared to residents (3.8%). Appendix F provides percentage of anglers accessing the water by each of these types for individual waterbodies.

When considered on a drainage basis (Table 18), the Fort Peck Reservoir had the lowest percentage (12%) fishing from shore. Belt Creek and the Boulder River drainage had the most fishing from shore (100%), followed by the Gallatin River (92%), and Upper Clark Fork (81%). The Little Missouri River had the highest combined shore/boat fishing with 96%. The drainages with the highest percentage of boat fishing were the Upper Milk River (67%), Marias (66%, and Fort Peck Reservoir (62%). For those drainages where there was ice fishing, the drainages with the highest percentages of ice fishing included Red Rock River (23%), Ruby River (21%) and Fort Peck Reservoir (18%).

Table 16. Angler types of fishing by region (days fished and percentages). Total includes null responses.

Region (Year)	Shore	Boat	Shore/ Boat	Ice	Total Trips
1	1060 (33.63%)	1538 (48.79%)	325 (10.31%)	215 (6.82%)	3152
2	2154 (55.24%)	1276 (32.73%)	301 (7.72%)	135 (3.46%)	3899
3	3413 (59.62%)	1660 (29%)	480 (8.38%)	156 (2.72%)	5725
4	1729 (37.6%)	2339 (50.87%)	318 (6.92%)	166 (3.61%)	4598
5	1268 (51.07%)	758 (30.3%)	412 (16.59%)	29 (1.17%)	2483
6	420 (23.15%)	988 (54.47%)	123 (6.78%)	269 (14.83%)	1814
7	322 (50.79%)	183 (28.86%)	53 (8.36%)	76 (11.99%)	634

Table 17. Angler types of fishing by residency (days fished and percentages). Total includes null responses.

Residency	Shore	Boat	Shore/ Boat	Ice	Total Days
R	6840 (46.07%)	6093 (41.04%)	1243 (8.37%)	561 (3.78%)	14847
N	3526 (47.28%)	2649 (35.52%)	769 (10.31%)	485 (6.5%)	7458

Table 18. Angler types of fishing by drainage (total days fished and percentages). Total includes null responses.

<b>Drainage Name</b>	<b>Shore</b>	<b>Boat</b>	<b>Shore/ Boat</b>	<b>Ice</b>	<b>Total</b>
Beaverhead River	129 (49.24%)	90 (34.35%)	43 (16.41%)		262
Belt Creek	56 (100%)				56
Big Hole River	277 (48.34%)	238 (41.54%)	56 (9.77%)	2 (0.35%)	573
Bighorn River	153 (16.4%)	466 (49.95%)	303 (32.97%)	4 (0.44%)	933
Bitterroot River	618 (57.01%)	341 (31.46%)	111 (10.24%)	2 (0.18%)	1084
Blackfoot River	373 (37.56%)	454 (45.72%)	122 (12.29%)	37 (3.73%)	993
Boulder River	62 (100%)				62
Clark Fork River - Flint / Rock	713 (64.76%)	259 (23.52%)	22 (2%)	93 (8.45%)	1101
Flathead River	400 (28.31%)	750 (53.08%)	142 (10.05%)	121 (8.56%)	1413
Fort Peck Reservoir	146 (11.74%)	770 (61.9%)	88 (7.07%)	226 (18.17%)	1244
Gallatin River	1013 (92.17%)	57 (5.19%)	18 (1.64%)	10 (0.91%)	1099
Jefferson River	62 (51.24%)	36 (29.75%)	5 (4.13%)	18 (14.88%)	121
Kootenai River	252 (40.71%)	286 (46.2%)	52 (8.4%)	22 (3.55%)	619
Little Missouri River	1 (3.85%)			25 (96.15%)	26
Lower Clark Fork River	249 (31.8%)	376 (48.02%)	82 (10.47%)	69 (8.81%)	783
Lower Milk River	15 (51.72%)		14 (48.28%)		29
Lower Missouri River	18 (72%)	7 (28%)			25
Lower Yellowstone River	258 (66.84%)	89 (23.06%)	25 (6.48%)	14 (3.63%)	386
Madison River	1160 (54.15%)	735 (34.31%)	202 (9.43%)	44 (2.05%)	2142
Marias River	68 (23.69%)	188 (65.51%)	6 (2.09%)	15 (5.23%)	287
Middle Clark Fork River	249 (52.64%)	183 (38.69%)	41 (8.67%)		473
Middle Milk River	149 (60.57%)	69 (28.05%)	13 (5.28%)	15 (6.1%)	246
Middle Yellowstone River	240 (72.07%)	74 (22.22%)	16 (4.8%)	2 (0.6%)	333
Missouri River - Dearborn	391 (30.76%)	717 (56.41%)	149 (11.72%)	4 (0.31%)	1271
Missouri River - Judith	251 (70.7%)	91 (25.63%)	6 (1.69%)	5 (1.41%)	355
Missouri River - Poplar	62 (41.06%)	63 (41.72%)	6 (3.97%)	20 (13.25%)	151
Musselshell River	97 (65.99%)	29 (19.73%)	5 (3.4%)	14 (9.52%)	147
Red Rock River	68 (32.85%)	72 (34.78%)	19 (9.18%)	48 (23.19%)	207
Ruby River	102 (70.34%)	10 (6.9%)	3 (2.07%)	30 (20.69%)	145
Smith River	114 (34.44%)	153 (46.22%)	50 (15.11%)	14 (4.23%)	331
South Fork Flathead River	94 (50.54%)	52 (27.96%)	40 (21.51%)		186
Sun River	158 (65.29%)	42 (17.36%)	25 (10.33%)	16 (6.61%)	242
Swan River	64 (42.67%)	74 (49.33%)	9 (6%)	3 (2%)	150
Teton River	32 (62.75%)	10 (19.61%)	3 (5.88%)	6 (11.76%)	51
Tongue River	63 (28.25%)	95 (42.6%)	28 (12.56%)	37 (16.59%)	223
Upper Clark Fork River	204 (81.27%)	39 (15.54%)	5 (1.99%)	3 (1.2%)	251
Upper Milk River	30 (25.64%)	78 (66.67%)	2 (1.71%)	7 (5.98%)	117
Upper Missouri River	666 (33.3%)	1135 (56.75%)	80 (4%)	93 (4.65%)	2000
Upper Yellowstone River	1309 (59.83%)	614 (28.06%)	221 (10.1%)	27 (1.23%)	2188

### 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 2021 license year. The average satisfaction rating overall for all trips on all waterbodies was 3.00 (a 3% increase from 2020 which had an average satisfaction rating of 2.91) (Table 19). Region 5 had the highest overall satisfaction rating of 3.10 while Region 7 had the lowest satisfaction rating of 2.73. 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 by count

Region	1-poor (count)	2 (count)	3 (count)	4 (count)	5-excellent (count)	Avg. Satisfaction Rating
1	337	243	361	231	217	2.82
2	315	309	528	348	306	3.01
3	413	453	767	546	464	3.07
4	374	279	490	316	353	3.00
5	211	156	283	230	227	3.10
6	105	73	152	101	87	2.98
7	67	35	59	39	33	2.73
Total	1822	1548	2640	1811	1687	3.00

Angler satisfaction ratings were also summarized by the 40 major drainages (Table 20). The average ratings ranged from a low of 1 to a high of 5, though only 1 trip was reported. For drainages with more than one trip reported, the highest rated were Lower Milk River (4.2), St. Mary and Belly Rivers (3.9), Bighorn River, South Fork of the Flathead River, and Missouri River - Dearborn (all 3.4), Beaverhead River, Little Missouri, and Lower Missouri River (all 3.3). The lowest satisfaction ratings were for the Tongue River (2.1), Musselshell River in Region 4 (2.2), and the Upper Milk River (2.4).



Table 20. Fishing Satisfaction Rating by Region, Drainage and Residency for License Year 2021

<b>REGION: 1</b>																		
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>																		
2.7	167	118	173	107	94	2.7	111	85	110	82	53	2.8	56	33	63	25	41	
<b>Kootenai River</b>																		
2.9	54	42	61	44	45	2.9	38	32	41	34	34	2.8	16	10	20	10	11	
<b>Lower Clark Fork River</b>																		
2.7	73	64	72	49	40	2.7	53	46	48	32	28	2.8	20	18	24	17	12	
<b>Middle Clark Fork River</b>																		
4.0				1		4.0				1								
<b>NA</b>																		
3.2	4	3	6	7	4	3.2	4	3	4	7	4	3.0			2			
<b>South Fork Flathead River</b>																		
3.4	11	5	26	10	27	3.2	7	5	19	7	14	3.8	4		7	3	13	
<b>Swan River</b>																		
2.5	28	11	23	13	7	2.6	18	8	18	10	4	2.2	10	3	5	3	3	
<b>REGION: 2</b>																		
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>																		
2.9	84	93	157	69	76	2.9	36	62	85	30	42	2.9	48	31	72	39	34	
<b>Blackfoot River</b>																		
2.9	99	80	132	101	83	2.8	67	53	85	53	42	3.2	32	27	47	48	41	
<b>Clark Fork River - Flint / Rock</b>																		
3.1	78	60	121	108	87	3.1	36	43	67	60	45	3.1	42	17	54	48	42	

<b>REGION: 2 Cont.</b>																		
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>Middle Clark Fork River</b>																		
2.9	38	51	77	42	37	2.8	25	39	28	23	19	3.2	13	12	49	19	18	
<b>NA</b>																		
5.0						1						1						
<b>Upper Clark Fork River</b>																		
3.1	16	25	41	28	22	3.0	11	17	31	21	11	3.3	5	8	10	7	11	
<b>REGION: 3</b>																		
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>Beaverhead River</b>																		
3.3	13	11	25	28	21	3.2	6	3	10	5	8	3.4	7	8	15	23	13	
<b>Big Hole River</b>																		
2.9	55	46	67	54	34	2.8	33	32	38	29	16	3.0	22	14	29	25	18	
<b>Boulder River</b>																		
3.0	7	2	10	4	6	3.2	3	2	9	3	5	2.3	4		1	1	1	
<b>Gallatin River</b>																		
3.2	71	95	136	111	113	3.1	33	50	75	59	50	3.2	38	45	61	52	63	
<b>Jefferson River</b>																		
3.0	14	15	16	12	14	2.8	13	12	10	6	12	3.3	1	3	6	6	2	
<b>Madison River</b>																		
3.1	128	152	303	199	175	3.0	40	67	117	60	54	3.2	88	85	186	139	121	
<b>Red Rock River</b>																		
2.7	25	15	18	13	14	2.8	11	7	14	9	5	2.6	14	8	4	4	9	
<b>Ruby River</b>																		
3.0	14	12	18	14	12	3.2	2	7	8	6	6	2.8	12	5	10	8	6	

**REGION: 3 Cont.**

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>Upper Clark Fork River</b>																		
3.5			1	1		3.5			1	1								
<b>Upper Missouri River</b>																		
2.6	13	13	14	8	6	2.5	13	9	13	7	5	2.9		4	1	1	1	
<b>Upper Yellowstone River</b>																		
3.0	73	92	159	102	69	2.9	37	51	85	46	34	3.0	36	41	74	56	35	

**REGION: 4**

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>Belt Creek</b>																		
2.9	5	2	8	3	3	2.7	5	2	5	3	2	3.5			3			1
<b>Marias River</b>																		
2.9	25	14	30	15	20	2.8	24	13	28	10	18	3.5	1	1	2	5	2	
<b>Missouri River - Dearborn</b>																		
3.4	53	55	150	113	139	3.2	40	40	75	55	56	3.7	13	15	75	58	83	
<b>Missouri River - Judith</b>																		
2.7	31	23	47	19	15	2.6	27	19	36	17	10	3.0	4	4	11	2	5	
<b>Musselshell River</b>																		
2.2	21	9	13	3	7	2.1	21	9	8	2	7	3.2			5	1		
<b>NA</b>																		
5.0					2	5.0						2						
<b>NA - St. Mary and Belly Rivers</b>																		
3.9	1	1		1	4	3.6	1	1				3	4.5			1	1	

<b>REGION: 4 Cont.</b>																		
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>Smith River</b>																		
2.9	23	27	25	20	22	2.9	13	16	12	16	12	2.9	10	11	13	4	10	
<b>Sun River</b>																		
3.0	35	15	21	23	28	2.8	32	13	15	23	19	3.5	3	2	6		9	
<b>Teton River</b>																		
2.7	8	5	3	2	6	2.7	8	5	3	2	6							
<b>Upper Missouri River</b>																		
2.8	172	128	193	117	107	2.7	150	117	170	97	68	3.4	22	11	23	20	39	
<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	

<b>REGION: 5</b>																		
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>																		
3.4	50	37	96	95	99	3.1	18	18	44	27	25	3.5	32	19	52	68	74	
<b>Middle Yellowstone River</b>																		
2.7	33	27	37	18	18	2.7	30	25	32	16	17	2.7	3	2	5	2	1	
<b>Musselshell River</b>																		
2.4	10	4	2	4	3	2.4	9	4	2	3	3	2.5	1			1		
<b>Upper Yellowstone River</b>																		
3.0	118	88	148	113	107	2.9	91	60	114	78	75	3.1	27	28	34	35	32	

<b>REGION: 6</b>																	
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>																	
3.0	56	47	98	59	59	3.0	37	33	57	44	36	3.1	19	14	41	15	23
<b>Lower Milk River</b>																	
4.2			2	5	4	4.2			2	5	4						
<b>Lower Missouri River</b>																	
3.3	3	2	1	4	4	3.6	1	2		3	3	2.8	2		1	1	1
<b>Lower Yellowstone River</b>																	
1.0	1					1.0	1										
<b>Middle Milk River</b>																	
2.8	22	10	28	18	12	2.8	21	8	24	18	9	3.2	1	2	4		3
<b>Missouri River - Judith</b>																	
5.0					1							5.0					1
<b>Missouri River - Poplar</b>																	
2.8	12	8	16	10	5	2.7	11	7	14	10	2	3.4	1	1	2		3
<b>Upper Milk River</b>																	
2.4	11	6	7	5	2	2.3	10	6	7	5	1	3.0	1				1
<b>REGION: 7</b>																	
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>Little Missouri River</b>																	
3.3			2	1		3.3			2	1							
<b>Lower Yellowstone River</b>																	
3.0	28	26	41	31	26	3.0	24	25	36	23	22	3.3	4	1	5	8	4
<b>Tongue River</b>																	
2.1	39	9	16	7	7	2.1	29	7	11	6	5	2.2	10	2	5	1	2

### 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 1.96 for all trips on all waterbodies, a 3% decrease from 2020 (2.02). When broken down by region, Region 4 had the highest crowding rating of 2.14, followed by Region 3 (2.08). Region 6 had the lowest average crowding rating of 1.66, though surprisingly one of the highest average number of people seen of 7.39 people. This could be due to the popularity of Fort Peck Reservoir, where a high number of other recreationalists are seen, through spread out. The weighted average number of people seen was 5.52 for all regions combined (compared to 6.91 in 2020). The highest average number of other people seen was 7.57 in Region 7, while Region 3 had the lowest average number of people seen of 4.75. This is counterintuitive given that Region 3 received the highest angler pressure, and second highest average crowding rating. As a crowding rating is based on an angler’s own perception, perhaps seeing even just a few anglers “feels” more crowded in Region 3, compared to Region 6 where seeing a greater number of anglers did not increase the crowding score.

The Little Missouri River and St. Mary and Belly Rivers drainages had the lowest crowding rating (1.0), followed by the Lower Milk River (1.18) and Belt Creek (1.19) drainages. The Missouri River – Dearborn drainage had the highest average rating at 2.65, followed by the Bighorn River (2.55) and the Beaverhead River (2.49) (Table 22). The Little Missouri River and Belt Creek drainages also had the lowest average number of people seen (1.3 and 2.1) while the Bighorn River had the highest average number of people seen (31.2), followed by the Missouri River – Dearborn drainage (30.6), and Fort Peck Reservoir (24.5).

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	990	248	197	64	52	1.67	5.95
2	1011	373	281	129	90	1.89	4.84
3	1403	509	465	263	214	2.08	4.75
4	853	342	322	177	144	2.14	5.31
5	572	194	180	104	60	2.00	6.21
6	321	98	71	26	6	1.66	7.39
7	140	38	28	22	10	1.84	7.57
Total	5290	1802	1544	785	576	1.96	5.52

Table 22. Angler Crowding Ratings sorted by Region, Drainage and by Residency for the Entire License Year 2021

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>																				
1.8	379	107	105	35	34	2.0	227	71	83	29	32	1.5	152	36	22	6	2	14.9	12.9	15.9
<b>Kootenai River</b>																				
1.4	185	32	21	7	4	1.5	127	26	17	7	3	1.3	58	6	4	1		6.9	7.7	6.6
<b>Lower Clark Fork River</b>																				
1.7	186	53	35	14	10	1.8	117	44	30	8	9	1.5	69	9	5	6	1	8.8	6.0	10.0
<b>Middle Clark Fork River</b>																				
1.0	1					1.0	1													
<b>NA</b>																				
1.3	19	3	1	1		1.4	17	3	1	1		1.0	2					6.9	1.8	7.4
<b>South Fork Flathead River</b>																				
1.5	58	10	11	1		1.6	34	8	10	1		1.1	24	2	1			8.9	5.6	10.7
<b>Swan River</b>																				
1.4	62	13	5	2	2	1.5	41	9	4	2	2	1.2	21	4	1			5.1	4.0	5.6
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	259	106	67	28	23	2.1	117	53	44	24	18	1.6	142	53	23	4	5	6.6	6.1	7.1
<b>Blackfoot River</b>																				
2.0	255	90	73	46	31	2.2	138	53	46	36	26	1.7	117	37	27	10	5	12.8	8.8	15.4
<b>Clark Fork River - Flint / Rock</b>																				
2.1	199	104	88	38	26	2.2	95	60	62	23	10	2.0	104	44	26	15	16	13.3	11.8	14.5
<b>Middle Clark Fork River</b>																				
1.8	137	57	35	12	6	2.0	60	33	27	11	5	1.4	77	24	8	1	1	6.3	5.3	7.2
<b>NA</b>																				
1.0	1	1.0					1	0.0												
<b>Upper Clark Fork River</b>																				
1.3	111	10	7	2	2	1.3	80	4	3	2	2	1.3	31	6	4			3.8	4.2	3.6

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>																				
2.5	38	11	24	13	12	2.5	14	3	6	3	6	2.5	24	8	18	10	6	12.7	15.3	7.1
<b>Big Hole River</b>																				
1.8	155	34	32	28	8	2.1	73	23	20	25	7	1.4	82	11	12	3	1	8.4	7.0	9.5
<b>Boulder River</b>																				
1.3	22	5	1	1		1.5	15	5	1	1		1.0	7					2.4	2.5	2.3
<b>Gallatin River</b>																				
1.9	272	102	83	49	21	2.2	118	53	47	32	18	1.7	154	49	36	17	3	8.1	7.4	8.8
<b>Jefferson River</b>																				
1.4	52	9	8	2		1.6	35	8	8	2		1.1	17	1				5.1	3.7	5.6
<b>Madison River</b>																				
2.4	373	180	188	104	113	2.7	100	68	68	46	56	2.2	273	112	120	58	57	16.4	16.1	17.1
<b>Red Rock River</b>																				
1.5	57	13	12	1	1	1.6	27	8	9	1		1.4	30	5	3	1		13.7	15.7	11.9
<b>Ruby River</b>																				
1.7	46	10	7	4	3	1.9	17	5	3	2	2	1.6	29	5	4	2	1	5.4	5.3	5.7
<b>Upper Clark Fork River</b>																				
1.0	2					1.0	2											1.0		1.0
<b>Upper Missouri River</b>																				
1.8	31	11	7	5	1	1.9	24	11	7	5	1	1.0	7					7.2	2.6	8.0
<b>Upper Yellowstone River</b>																				
2.2	214	98	78	56	46	2.6	86	44	48	39	34	1.9	128	54	30	17	12	16.2	15.1	17.4



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>																				
1.2	17	4				1.2	13	4				1.0	4					2.1	1.0	2.3
<b>Marias River</b>																				
1.6	65	21	10	2	4	1.6	56	20	10	1	4	1.4	9	1	1		1	3.2	4.3	14.4
<b>Missouri River - Dearborn</b>																				
2.7	156	89	114	78	73	2.9	81	32	50	45	58	2.4	75	57	64	33	15	30.6	32.4	28.9
<b>Missouri River - Judith</b>																				
1.4	101	21	11	2	1	1.4	82	16	10	1	1	1.4	19	5	1	1		5.8	12.5	4.3
<b>Musselshell River</b>																				
1.6	37	8	6	2	2	1.6	34	7	6	2		2.2	3	1	2			7.1	5.7	7.3
<b>NA</b>																				
1.0	1					1.0	1											1.0	1.0	
<b>NA - St. Mary and Belly Rivers</b>																				
1.0	7					1.0	5					1.0	2					3.5	4.5	3.0
<b>Smith River</b>																				
1.7	73	16	20	5	3	1.7	44	9	10	3	3	1.7	29	7	10	2		12.0	12.7	11.5
<b>Sun River</b>																				
1.4	85	24	13			1.5	67	22	13			1.1	18	2				7.3	9.2	7.0
<b>Teton River</b>																				
1.4	17	2	4			1.4	17	2	4									5.8		5.8
<b>Upper Missouri River</b>																				
2.3	269	156	144	86	61	2.4	212	137	125	70	59	2.0	57	19	19	16	2	22.7	22.9	22.6

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	Total	Res	NRes
Avg.	(sparse)	-----			(crowded)		(sparse)	-----			(crowded)		(sparse)	-----			(crowded)		Total	Res	NRes
<b>Bighorn River</b>																					
2.6	112	74	94	59	36	2.6	45	22	27	15	22	2.5	67	52	67	44	14	31.2	30.5	32.7	
<b>Middle Yellowstone River</b>																					
1.7	78	28	16	7	4	1.7	71	25	13	7	4	1.7	7	3	3			9.2	10.8	9.1	
<b>Musselshell River</b>																					
1.3	18	3	2			1.2	17	3	1			2.0	1		1			3.3	2.0	3.4	
<b>Upper Yellowstone River</b>																					
1.7	366	89	67	38	19	1.8	260	58	57	27	18	1.6	106	31	10	11	1	8.0	8.4	7.8	

REGION: 6																					
Total	1	2	3	4	5	Avg. Res	1	2	3	4	5	Avg. NonRes	1	2	3	4	5	Avg. People Seen	Total	Res	NRes
Avg.	(sparse)	-----			(crowded)		(sparse)	-----			(crowded)		(sparse)	-----			(crowded)		Total	Res	NRes
<b>Fort Peck Reservoir</b>																					
1.8	178	63	55	18	3	1.9	102	44	43	14	2	1.5	76	19	12	4	1	24.5	21.1	26.4	
<b>Lower Milk River</b>																					
1.2	9	2				1.2	9	2										2.3	2.3		
<b>Lower Missouri River</b>																					
1.4	11	2		1		1.1	8	1				1.8	3	1		1		7.1	9.0	6.3	
<b>Lower Yellowstone River</b>																					
1.0	1					1.0	1														
<b>Middle Milk River</b>																					
1.5	63	14	6	5	2	1.6	57	12	5	5	2	1.4	6	2	1			8.6	34.3	5.7	
<b>Missouri River - Judith</b>																					
1.0	1					1.0							1					4.0		4.0	
<b>Missouri River - Poplar</b>																					
1.6	31	13	6	1		1.6	25	12	6	1		1.1	6	1				9.5	13.4	8.8	
<b>Upper Milk River</b>																					
1.5	22	3	4	2		1.6	20	3	4	2		1.0	2					9.0	1.5	9.6	

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)-----						(sparse)-----						(sparse)-----						Total	Res	NRes
	(crowded)					Res	(crowded)					NonRes	(crowded)								
<b>Little Missouri River</b>																					
1.0	3					1.0	3												1.3	1.3	
<b>Lower Yellowstone River</b>																					
1.7	97	23	12	10	8	1.6	90	20	9	7	4	2.7	7	3	3	3	4		9.2	23.6	7.0
<b>Tongue River</b>																					
2.2	34	15	16	12	2	2.2	26	10	13	8	2	2.2	8	5	3	4			23.2	16.6	25.5

## **4.0 DISCUSSION AND ANALYSIS**

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

The statewide angling pressure survey was conducted from March 2021 through February 2022. 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 ( $\#$  of respondents / [ $\#$  of surveys sent – nondeliverables] \* 100) were calculated for every wave by residency (Table 2). The overall return rate was 29.8%. The weighted average total return rates for residents and nonresidents were 30.1% and 28.9% 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 55 years old, compared to the average age of the licenced angler population of 45 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. Are anglers aged 50 and younger more likely to report going on a fishing trip? A chi-square test of independence was performed to examine the relation between age and the likeliness to go fishing (responding yes to fishing one or more days during the survey month). The relation between these variables was significant.  $X^2(1, N = 19216) = 3.5, p = .058$  meaning anglers ages 50 and under were slightly more likely to report they fished. When comparing the average number of days fished of those aged 50 and under to those aged 51 plus, there was no significant effect for these two age groups,  $t(81) = 0.00923, p = .4963$ , meaning the average number of days fished does not significantly differ for those aged 50 and under and those aged 51 plus.

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). 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).

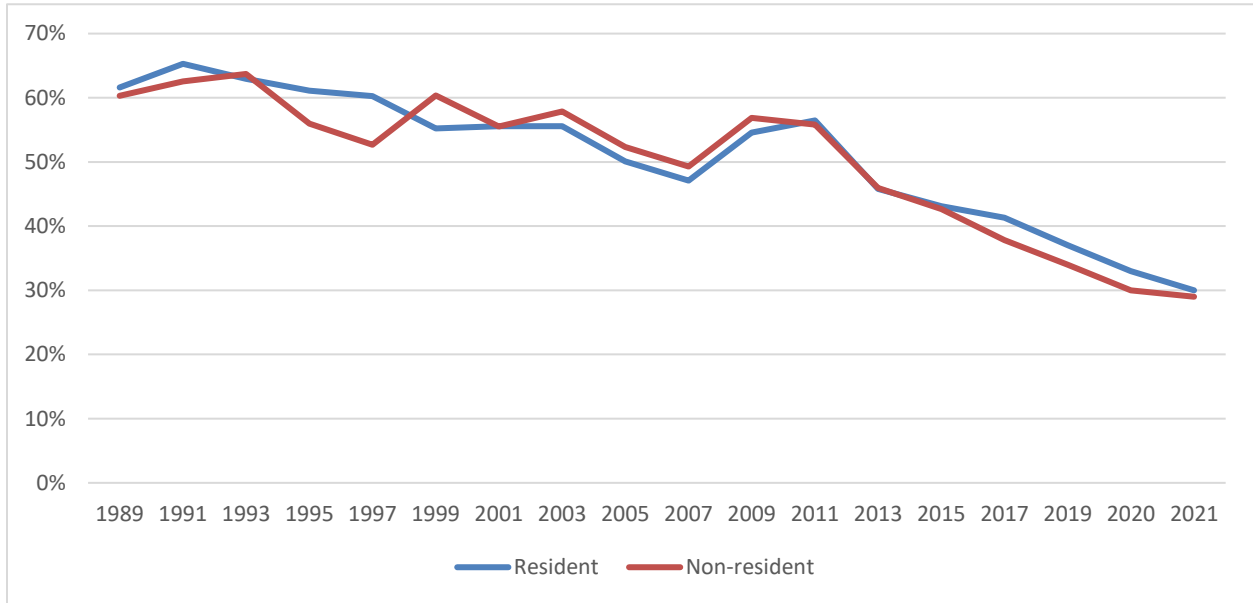


Figure 19. Return rate of mail questionnaires for residents and non-residents from 1989 to 2021.

#### **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. After a record number of resident anglers in 2020 (n=273,077), 2021 saw a 7.4% decrease in the number of unique licensed resident anglers (n=252,835), which is still above average. Nonresident licensed angler numbers showed strong growth between 1965 and peak numbers in 2002 (Figure 21), increasing from 51,798 to 220,946 during that period. Nonresident license sales then dropped markedly from 2002 through 2011, when just 126,617 unique anglers purchased licenses. In the last ten years, non-resident licenses have slowly rebounded, and in 2021, a record number of non-resident licenses were sold (n=240,257) representing a 22.6% increase over the 2020 license year.

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 (in angler days) 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 240,257 in 2021. Non-resident angling pressure however, has increased by almost 136% 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 2021 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
2021	252,835	240,257



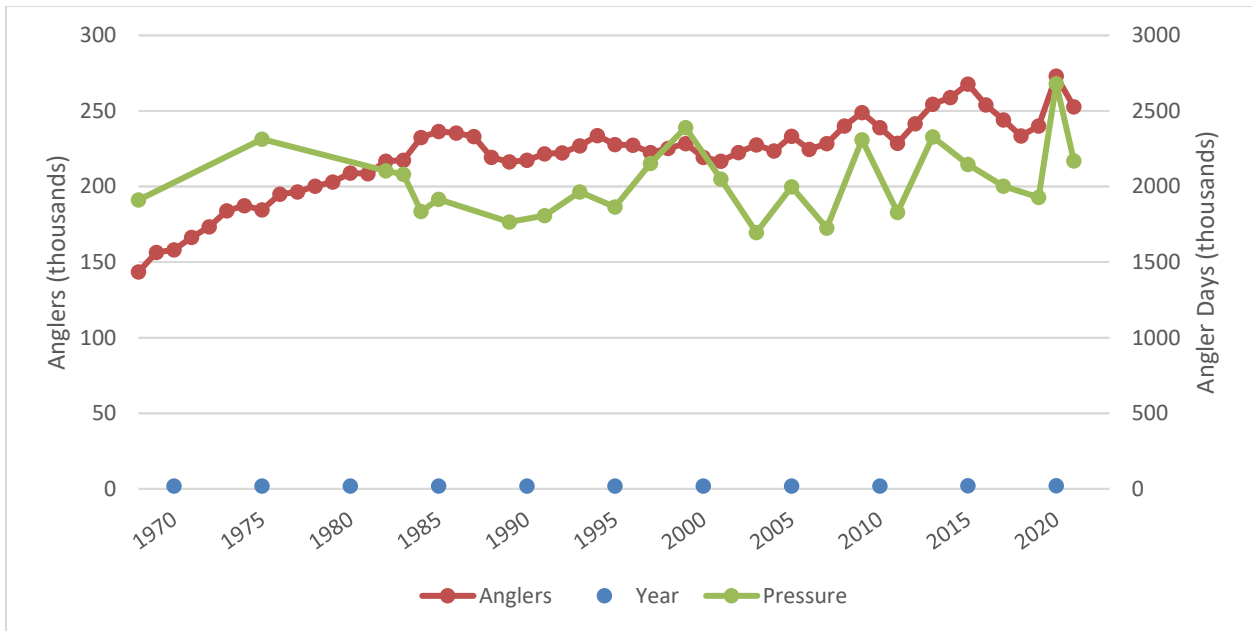


Figure 20. Angling pressure versus number of anglers for residents from 1968 to 2021

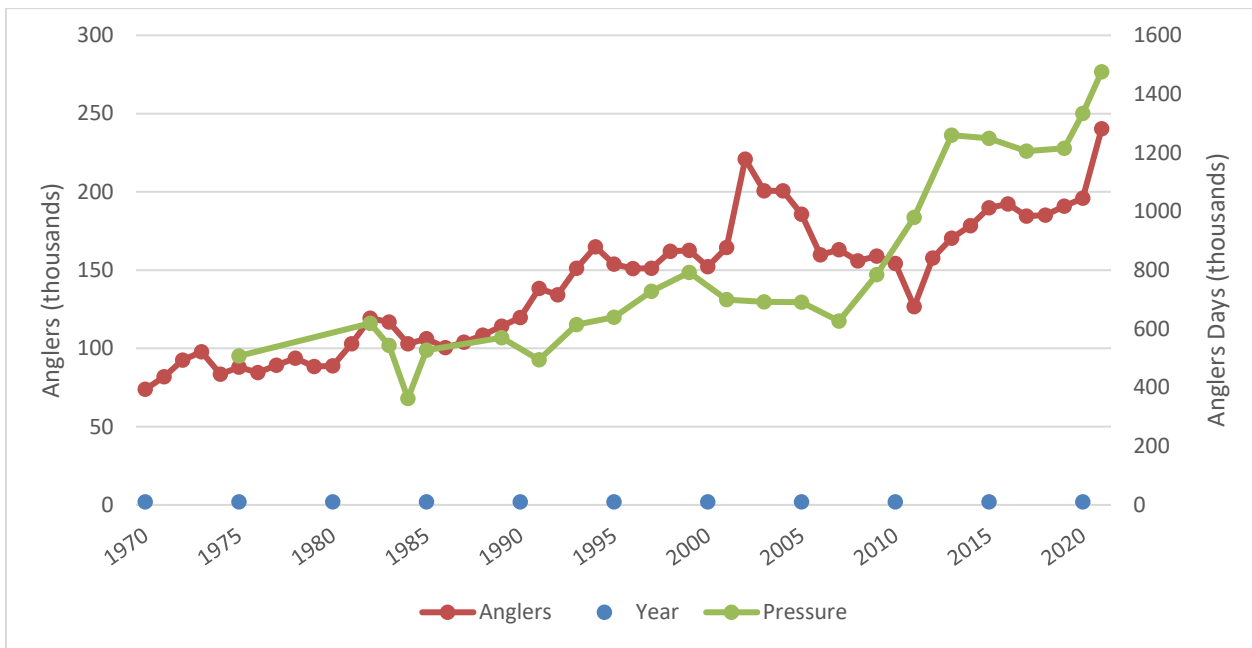


Figure 21. Angling pressure versus number of anglers for non-residents from 1970 to 2021

## 5.0 LITERATURE CITED

- Bishop, Clinton G. 1959. Statewide creel census, census of fisherman's creel. Job completion Rept. Fed Aid in Fish and Wild. Rest. Acts. Prog. Rept. F-4-R-8, Job III. 9 pp.
- \_\_\_\_\_. 1960. Statewide creel census, census of fisherman's creel. Job completion Rept. Fed Aid in Fish and Wild. Rest. Acts. Prog. Rept. F-4-R-9, Job III. 9 pp.
- \_\_\_\_\_. 1961. Statewide creel census, census of fisherman's creel. Job completion Rept. Fed Aid in Fish and Wild. Rest. Acts. Prog. Rept. F-4-R-10, Job III. 11 pp.
- Fredenberg, Wade. 1984. South Central Montana fisheries investigations, Bighorn Lake and Bighorn River post-impoundment study. Job completion Rept. Fed Aid in Fish and Wild. Rest. Acts. Prog. Rept. F-20-R-27, Job IV-a. 46 pp.
- Gaffney, John J. 1975. Unpublished data. Montana Department of Fish, Wildlife and Parks. Bozeman, Mt.
- Holton, George D. 1970. Statewide creel census and statistical services, statewide creel census. Job Prog. Rept. Fed Aid in Fish and Wild. Rest. Acts. Prog. Rept. F-4-R-18, Job I. 16 pp.
- \_\_\_\_\_. 1971. Statewide creel census and statistical services, statewide creel census. Job Prog. Rept. Fed Aid in Fish and Wild. Rest. Acts. Prog. Rept. F-4-R-19, Job I-a. 3 pp.
- \_\_\_\_\_. 1974. Statewide creel census and statistical services, statewide creel census. Job Prog. Rept. Fed Aid in Fish and Wild. Rest. Acts. Prog. Rept. F-4-R-22, Job I-a. 2 pp.
- McFarland, Robert C. 1989. Montana Statewide Angling Pressure Mail Survey 1982-1985. Montana Department of Fish, Wildlife and Parks. Bozeman, Mt. 205 pp.
- \_\_\_\_\_. 1991. Montana Statewide Angling Pressure Mail Survey 1989. Montana Department of Fish, Wildlife and Parks. Bozeman, Mt. 43 pp.
- McFarland, Robert C. and Janet E. Hughes. 1994. Montana Statewide Angling Mail Survey 1991. Montana Fish, Wildlife and Parks. Bozeman, MT. 55 pp.
- \_\_\_\_\_. 1995. Montana Statewide Angling Mail Survey 1993. Montana Fish, Wildlife and Parks. Bozeman, MT. 58pp.
- \_\_\_\_\_. 1997. Montana Statewide Angling Mail Survey 1995. Montana Fish, Wildlife and Parks. Bozeman, MT. 58pp.

- McFarland, Robert C. and Deanna Meredith. 1999. Montana Statewide Angling Mail Survey 1997. Montana Fish, Wildlife & Parks. Bozeman, MT. 90pp.
- \_\_\_\_\_. 2000. Montana Statewide Angling Mail Survey 1999. Montana Fish, Wildlife & Parks. Bozeman, MT. 89 pp.
- \_\_\_\_\_. 2002. Montana Statewide Angling Mail Survey 2001. Montana Fish, Wildlife & Parks. Bozeman, MT. 155 pp.
- \_\_\_\_\_. 2005. Montana Statewide Angling Mail Survey 2003. Montana Fish, Wildlife & Parks. Bozeman, MT. 117 pp.
- McFarland, Robert C. and Jennifer Dykstra. 2007. Montana Statewide Angling Mail Survey 2005. Montana Fish, Wildlife & Parks. Bozeman, MT. 158 pp.
- \_\_\_\_\_. 2008. Montana Statewide Angling Mail Survey 2007. Montana Fish, Wildlife & Parks. Bozeman, MT. 128 pp.
- \_\_\_\_\_. 2010. Montana Statewide Angling Mail Survey 2009. Montana Fish, Wildlife & Parks. Bozeman, MT. 170 pp.
- Montana FWP. 2021. Aquatic Invasive Species Prevention Program Watercraft Inspection Report. Available from [https://fwp.mt.gov/binaries/content/assets/fwp/conservation/ais/reports/watercraft-inspection-final-report-2021\\_final.pdf](https://fwp.mt.gov/binaries/content/assets/fwp/conservation/ais/reports/watercraft-inspection-final-report-2021_final.pdf)
- Montana FWP. 2022. 2021 Montana State Parks Annual Visitation Update. Montana Fish Wildlife & Parks Report, Feb, 2022. Available from <https://fwp.mt.gov/binaries/content/assets/fwp/stateparks/documents/2021-montana-state-parks-annual-visitation-report.pdf>
- Peterson, Norman W. 1970. The yield of wild and hatchery trout from Big Spring Creek, Montana. M.S. thesis, Mont. State Univ., 35 pp.
- Pew Research 2022. Share of those 65 and older who are tech users has grown in the past decade. Available from <https://www.pewresearch.org/fact-tank/2022/01/13/share-of-those-65-and-older-who-are-tech-users-has-grown-in-the-past-decade/>
- Rübsamen, N., Akmatov, M. K., Castell, S., Karch, A., & Mikolajczyk, R. T. 2017. Comparison of response patterns in different survey designs: a longitudinal panel with mixed-mode and online-only design. *Emerging themes in epidemiology*, 14(1), 1-11.

- Selby, Corinne, Hinz, Candy and Don Skaar. Montana Statewide Angling Pressure 2015. Montana Fish, Wildlife & Parks. Bozeman, MT. 68 pp.
- Selby, Corinne and Don Skaar. Montana Statewide Angling Pressure 2017. Montana Fish, Wildlife & Parks. Bozeman, MT. 70 pp.
- Selby, Corinne, Skaar, Don and Bethany Caball. Montana Statewide Angling Pressure 2019. Montana Fish, Wildlife & Parks. Bozeman, MT. 72 pp.
- Seil, Kacie, Shengchao Yu, Robert Brackbill, and Lennon Turner. 2021. "Web and Paper Survey Mode Patterns and Preferences, Health & Employment Survey, World Trade Center Health Registry." Survey Practice, June. <https://doi.org/10.29115/SP-2021-0006>.
- Spence, Liter. 1971. Rock Creek creel census, summer census Final report. Job Prog. Rept. Fed. Aid in Fish and Wild. Rest. Acts. Prog. Rept. F-27-R, Job I, 64 pp.
- Stevenson, H. R. 1975. The trout fishery of the Bighorn River below Yellowtail Dam, Montana. M.S. thesis, Mont. State Univ., 67 pp.
- U. S. Fish and Wildlife Service. 1977. 1975 national survey of hunting, fishing and wildlife-associated recreation. U. S. Dept. of Interior, Washington D. C., 99 pp.
- Wade, D.L., C.M. Jones, D.S. Robson and K.H. Pollock. 1991. Computer simulation techniques to assess bias in the roving-creel-survey estimator. In American Fisheries Society Symposium 12: 40-46.



# 6.0 EXAMPLES OF QUESTIONNAIRES

The August 2021 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 2021



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, 2021: \_\_\_ days  
Please continue below.

**PROTECT OUR WATERS**

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

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

MORE MAPS ON BACK

**Angler Survey - August 2021**



Dear Angler,  
We recently mailed you a request for your August 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 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.

**EVER 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.

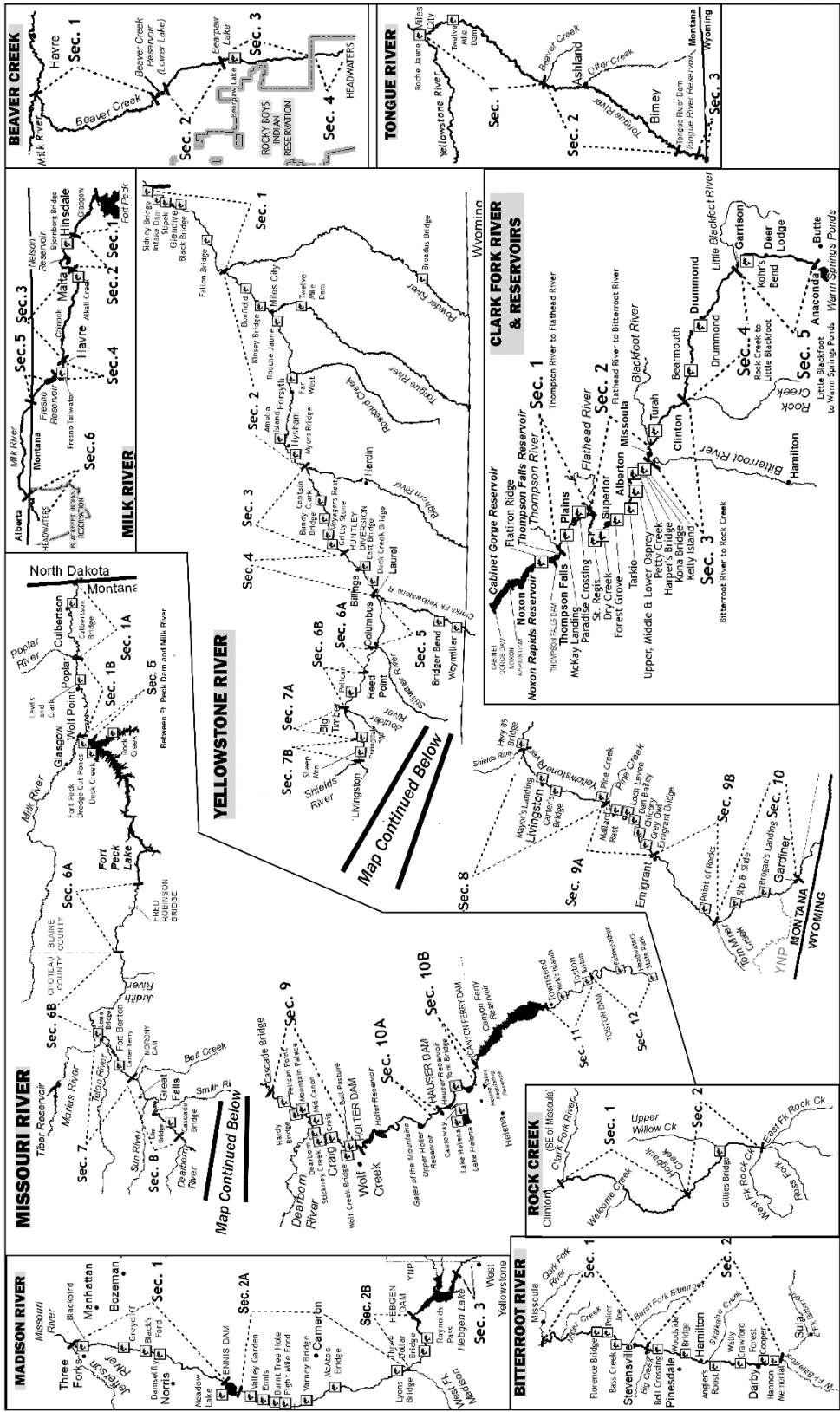
**Do you use a boat?** NO  YES   
If yes, do you pull the drain plug when taking out of water? NO  YES

**Did you fish in Montana during the month of August:**  
NO  Please return the survey. Thank you.  
YES  Total # of days fished in August, 2021: \_\_\_\_\_ days  
Please continue below.

Name(s) of Lake or Stream Fished during August	Section Number	Nearest Town or Landmark and/or Fishing Access Site (FAS)	Number of Days Fished during August ONLY	Rate your FISHING on each water: 5=excellent to 1=poor	How many other people PER DAY did you see recreating on this water?	Rate the CROWDING on each water: 5= very crowded to 1= not at all crowded	What ONE Species You Primarily Fished For?	Most of your Fishing on this water was by: 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
	SEC 02	01-6160	LIMA RESERVOIR
			LIMA DAM
			UPPER RED ROCK LK
ROCK CREEK	SEC 01	06-5263	MOUTH
	SEC 02	06-5282	HOGBACK CREEK
			HEADWATERS
ROCK CREEK	SEC 01	22-4928	MOUTH
	SEC 02	22-4956	W FK (CHROME CAMP)
			HEADWATERS
RUBY RIVER	SEC 01	01-6360	MOUTH
	SEC 02	01-6380	RUBY RESERVOIR
			RUBY RESERVOIR
			HEADWATERS
SHIELDS RIVER			
	SEC 01	22-5334	MOUTH
	SEC 02	22-5348	CLYDE PARK
	SEC 03	22-5362	WILSALL
			CLYDE PARK
			WILSALL
			HEADWATERS
SMITH RIVER	SEC 01	17-6816	MOUTH
	SEC 02	17-6832	HOUND CREEK
	SEC 03	17-6833	CAMP BAKER
			HOUND CREEK
			CAMP BAKER
			HEADWATERS
STILLWATER R	SEC 01	22-6104	MOUTH
	SEC 02	22-6118	WEST FORK (NYE)
			WEST FORK (NYE)
			HEADWATERS
SUN RIVER	SEC 01	20-6050	MOUTH
	SEC 02	20-6100	MUDDY CREEK
			MUDDY CREEK
			GIBSON DAM
SWAN RIVER	SEC 01	07-4560	MOUTH
	SEC 02	07-4580	SWAN LAKE
			SWAN LAKE
			HEADWATERS
TETON RIVER	SEC 01	14-6000	MOUTH
	SEC 02	14-6040	CHOTEAU
			CHOTEAU
			HEADWATERS
THOMPSON RIVER			
	SEC 01	05-7248	MOUTH
	SEC 02	05-7264	BEND RANGER STATION
			BEND RANGER STATION
			HEADWATERS
TONGUE RIVER			
	SEC 01	21-1150	MOUTH
	SEC 02	21-1200	BEAVER CREEK
	SEC 03	21-1250	TONGUE RIVER RES
			BEAVER CREEK
			TONGUE RIVER DAM
			WYOMING BORDER
W FK STILLWATER RIVER			
	SEC 01	22-6664	MOUTH
	SEC 02	22-6678	IRON CREEK
			IRON CREEK
			HEADWATERS
YAAK RIVER	SEC 01	11-7740	MOUTH
	SEC 02	11-7760	FALLS
			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