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### The Montana Expression 2018: MT Residents' Use of Fishing Access Sites & Public Lands and Waterways Values

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The Montana Expression 2018: MT Residents' Use  
of Fishing Access Sites & Public Lands and  
Waterways Values

2018

INSTITUTE FOR  
**TOURISM & RECREATION RESEARCH**  
UNIVERSITY OF MONTANA

The Montana Expression 2018: MT  
Residents' Use of Fishing Access Sites &  
Public Lands and Waterways Values

MT Expression Research Report 2018-3

Kara Grau and Megan Tanner Schultz

3/15/2018



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# The Montana Expression 2018: MT Residents' Use of Fishing Access Sites & Public Lands and Waterways Values

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# The Montana Expression 2018: MT Residents' Use of Fishing Access Sites & Public Lands and Waterways Values

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## Introduction

In response to fairly recent closures of waterways and fishing access sites due to both parasites and potential aquatic invasive mussels, there was interest in looking at Montanans' use of fishing access sites operated by Montana Fish, Wildlife, and Parks. Likewise, there is interest in knowing how Montanans value the state's public lands and waterways. Two consecutive surveys of Montana residents were completed during quarters 2 and 3, 2017 (April-June and July-September, 2017).

## Purpose

The purpose of one study was to assess how many Montanans used fishing access sites in Montana within the past year and how those sites were used. The second study was to assess how state residents feel about their public lands and waterways.

## Methods

Data were collected by a dedicated group of trained surveyors who asked a few questions to Montanans as they filled up their vehicle with fuel at gas stations or who stopped at rest areas around the state. ITRR has permission from over 100 gas stations to talk to residents in the amount of time it takes them to fill their gas tank. During quarter 2 and quarter 3, 2017, any Montanan who stopped at gas stations or rest areas had an opportunity to be surveyed about fishing access sites (quarter 2) or public lands and waterways (quarter 3) in Montana. The respondent data was weighted to represent the county of residence and gender from the US Census (2014 – quarter 2 data; 2016 – quarter 3 data) thus providing a representative sample reflecting the geographic population and gender of the state.

## Survey design

The survey was designed by ITRR personnel and loaded on iPads for the eleven surveyors located around the state. The survey was short by design (due to the amount of time available) with only five-six questions. See appendices A and B for survey questions.

## Limitations

This study was limited to Montana residents 18 and older who either drive or are passengers in vehicles.

## Response rate

The response rate was 84% or 7,140 Montana residents responding to the survey during the months of April, May, and June, 2017. For the July, August, and September data collection period, 4,948 residents responded to the survey, for an 82% response rate.

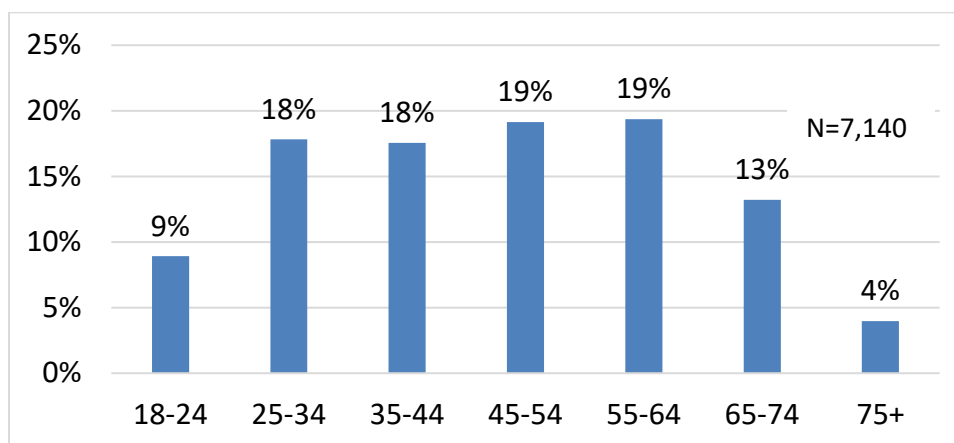
# The Montana Expression 2018: MT Residents' Use of Fishing Access Sites & Public Lands and Waterways Values

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## Study 1 Results: Residents' Use of Fishing Access Sites

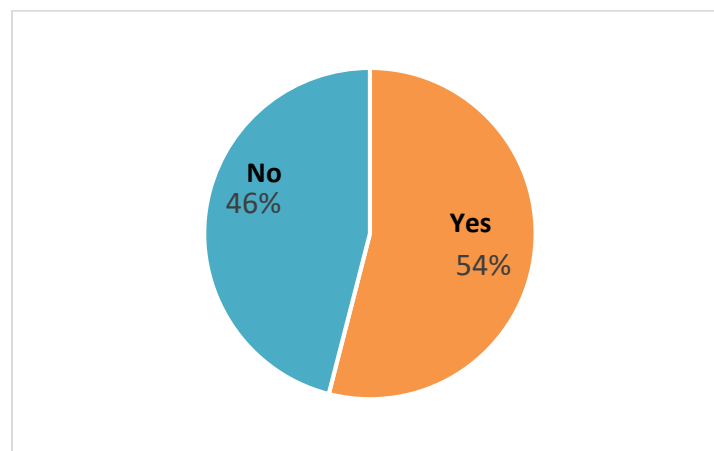
For this study, the gender breakdown represents Montana's population of approximately 50:50 female to male ratio. Respondent ages ranged from 18-95 with an average age of 47.29 years. The percent of respondents by age category shows relatively equal representation of categories within the sample with the exception of the youngest and oldest age categories (Figure 1).

**Figure 1: Percent of Respondents by Age Category**



At the time of the survey, 46% (n=3,206) of respondents had a fishing license, while 54% (n=3,734) did not have one at that time (Figure 2).

**Figure 2: Percent of Residents in Possession of a Fishing License at Time of Survey**

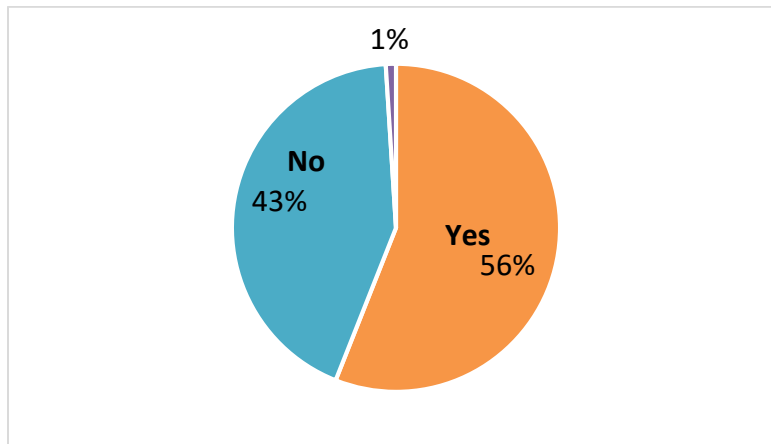


# The Montana Expression 2018: MT Residents' Use of Fishing Access Sites & Public Lands and Waterways Values

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All respondents were asked if they used any Montana fishing access sites during the past year. Figure 3 shows that just over half (56%, n=3,917) said yes, and 43% (n=2,986) said no, while only 1% were unsure whether they had or not.

**Figure 3: Percent Who Used a Fishing Access Site during Last Year**

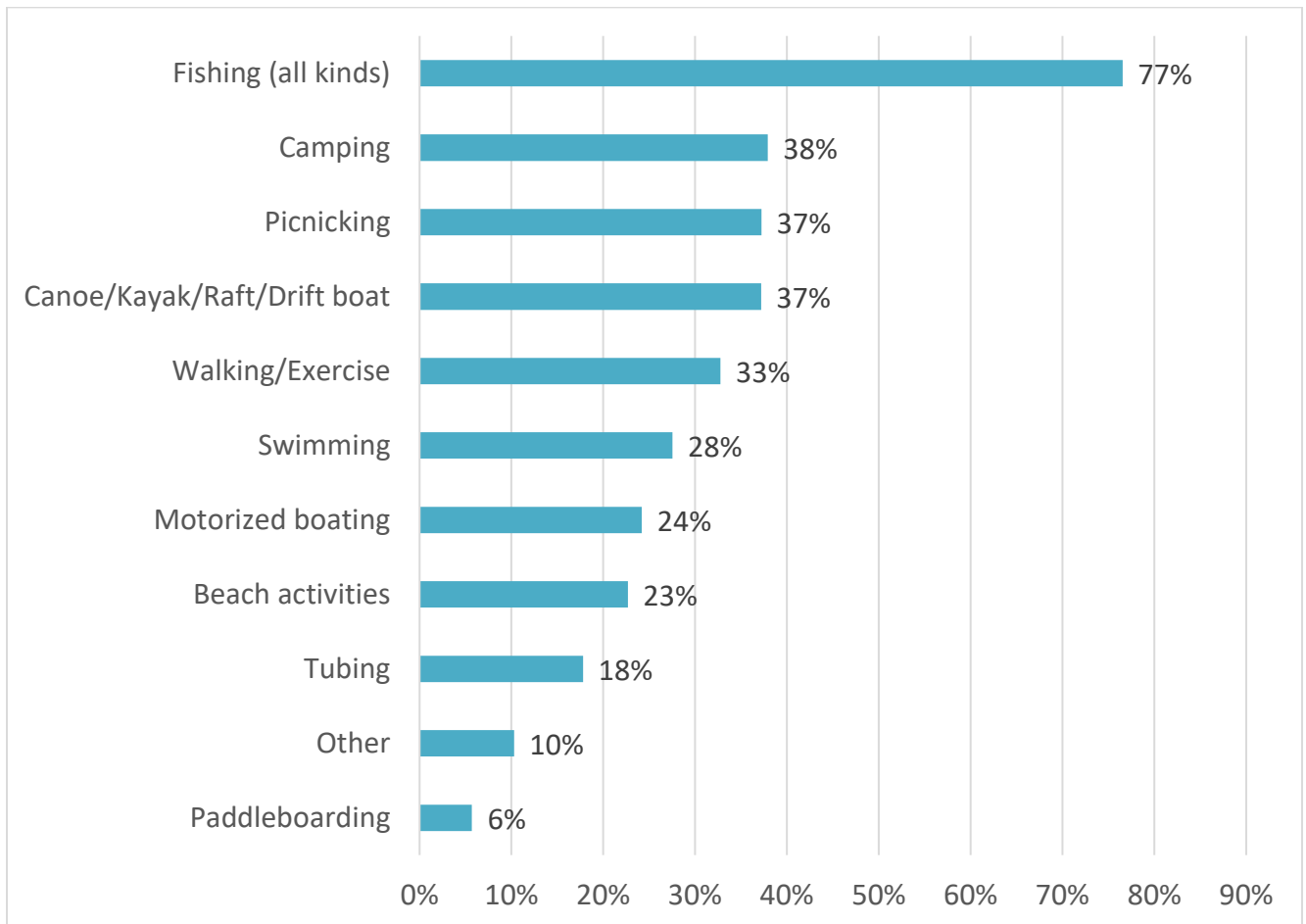


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Among Montanans (18 and older) who used fishing access sites, the variety of activities participated in during the last year at the FAS ranged widely. As many as 77% participated in fishing (all kinds) while only 6% participated in paddleboarding, with the popularity of many other activities falling somewhere in between (Figure 4).

**Figure 4: Activity Participation at Fishing Access Sites by Montanans (18 and older) who use FAS**

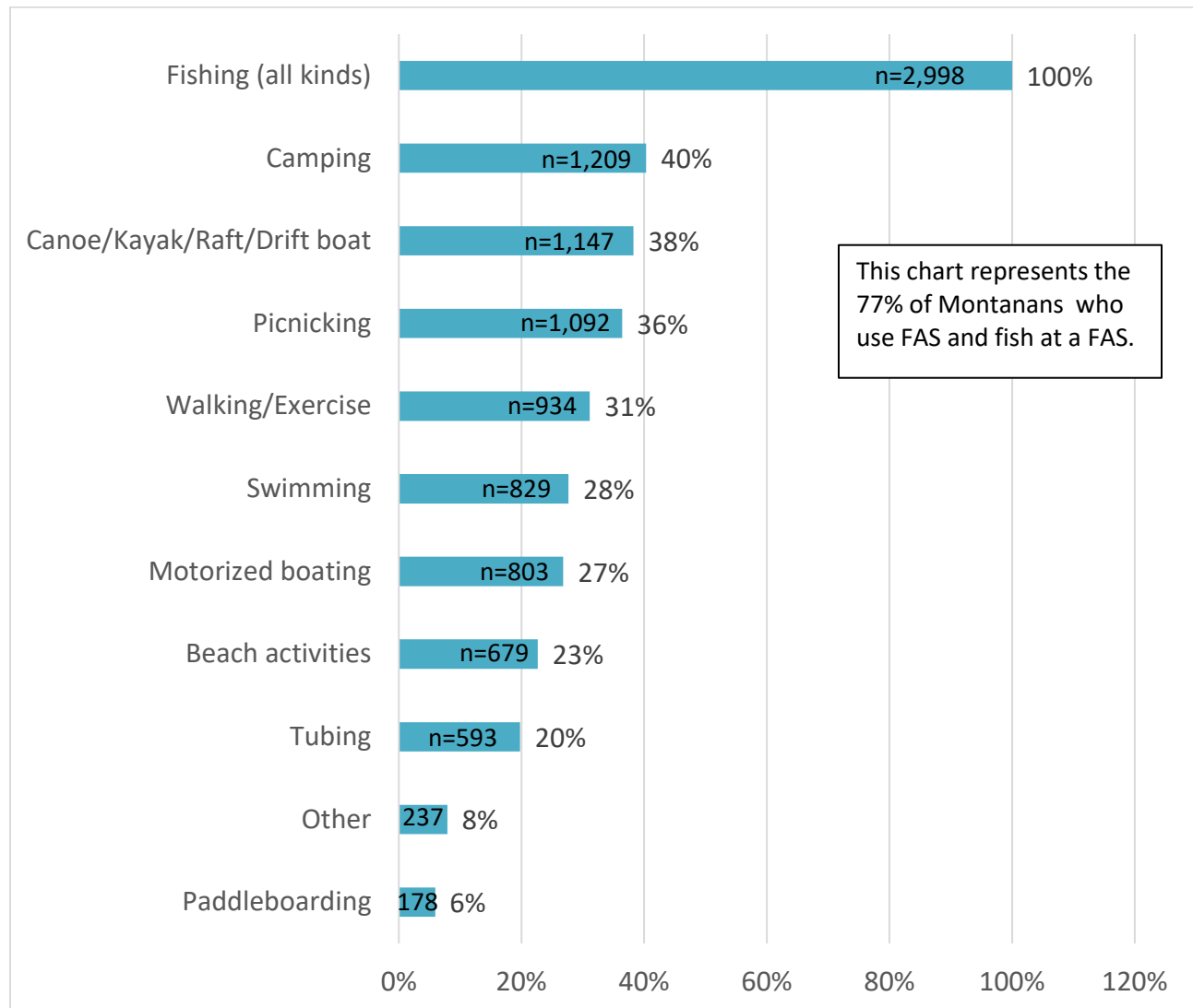


# The Montana Expression 2018: MT Residents' Use of Fishing Access Sites & Public Lands and Waterways Values

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When looking at responses for residents who not only use fishing access sites, but indicate that they have fished there (n=2,998), we see just minor differences from the full sample of Montanans who use FASs (Figure 5).

**Figure 5: Additional Activity Participation by Residents who Fish at FAS**



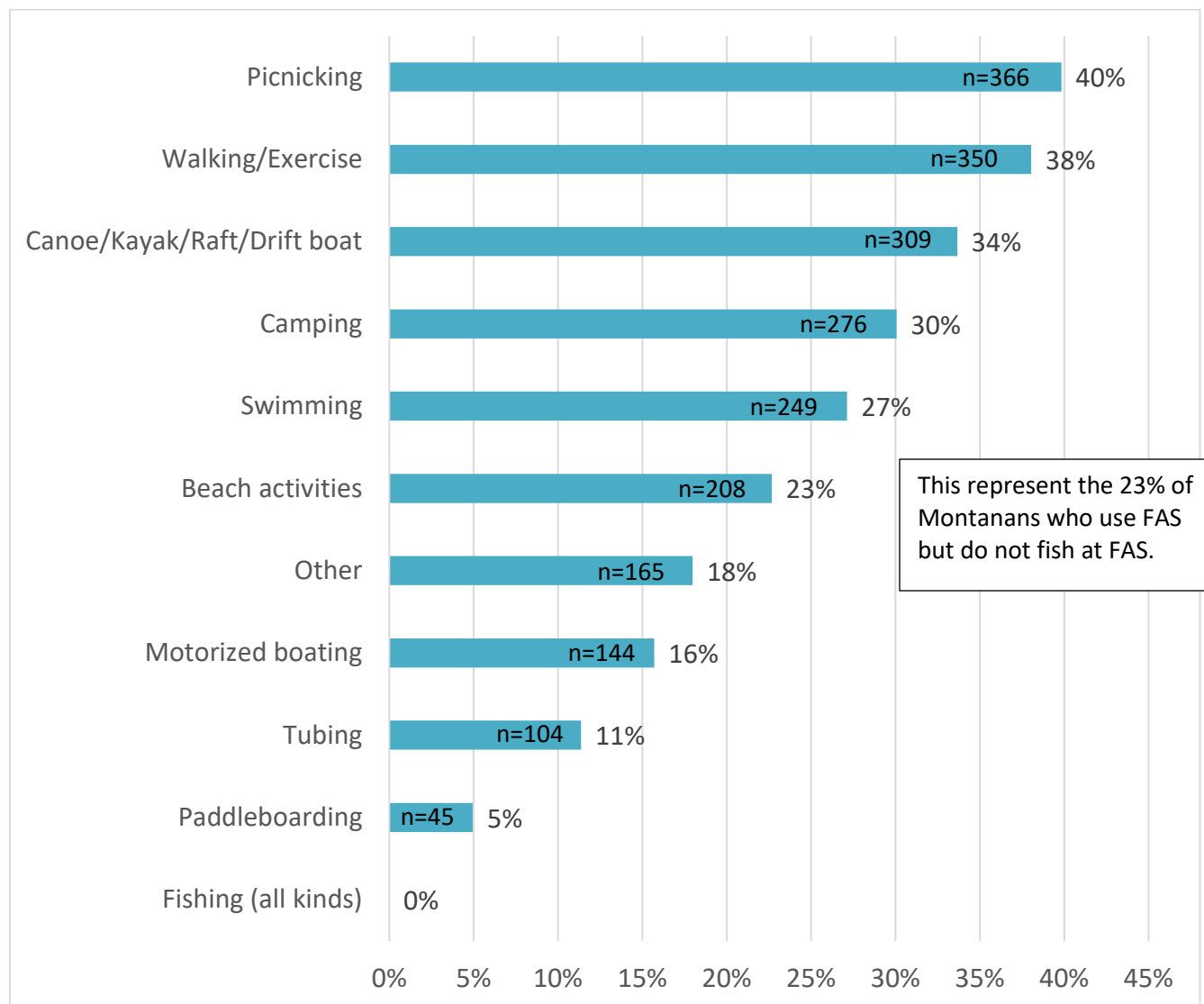


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While one generally associates fishing access sites with fishing, it is clear that residents participate in a variety of other activities as well. Figure 6 displays what activities residents who do not fish (n=919) participate in at FASs. Of those who use FASs, but not for fishing, picnicking and walking are the most popular activities.

**Figure 6: Activity Participation at FASs by Residents who do Not Fish**



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## Study 2 Results: Residents' Public Lands and Waterways Values

Respondents to this survey ranged from 18 to 91 years old, with an average age of 47.75, and a 50:50 female to male ratio. The age categories are represented well within the sample, with those 75+ being the lowest percentage (4% of the sample).

**Figure 7: Respondents by Age Category**

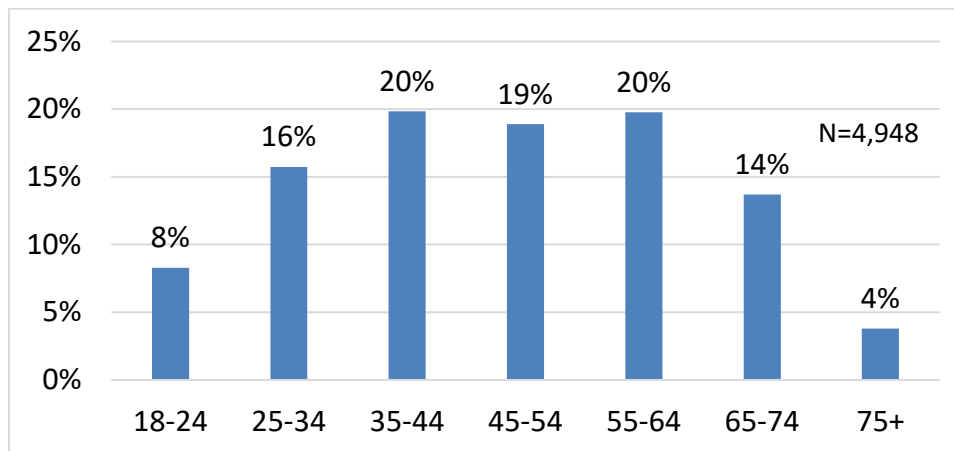


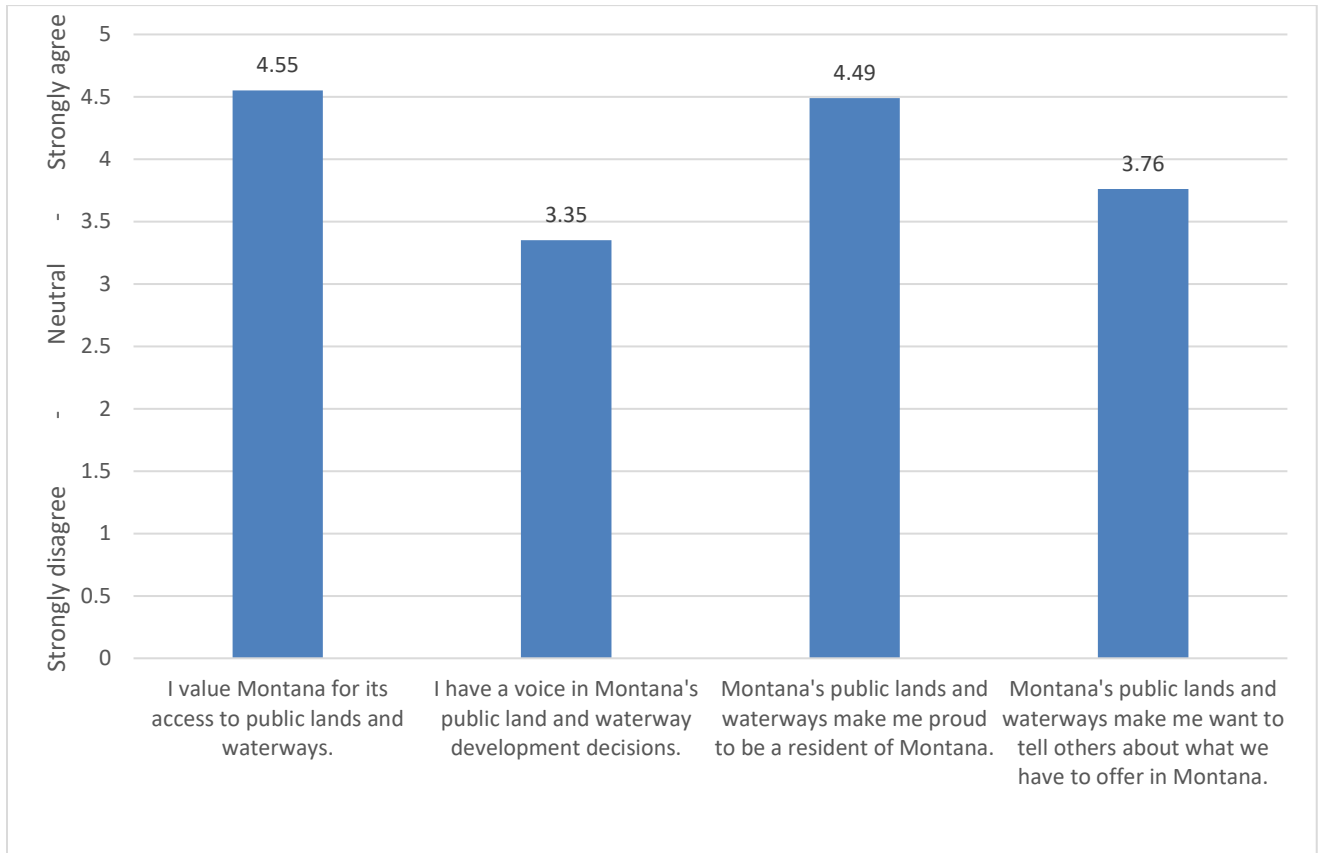
Figure 8 highlights the average responses, based on a 5-point scale (1, strongly disagree to 5, strongly agree) to each of 4 statements. Responses for 2 statements related to valuing Montana for its access to public lands and waterways and feeling proud to be a Montana resident because of those attributes averaged between agree and strongly agree on the response scale (4.55 and 4.49, respectively).

While still on the positive side of the 5-point scale, there is relatively little agreement with the statement regarding having a voice in development and decision making (3.35 out of 5). The fourth statement regarding telling others about what Montana has to offer also has somewhat less agreement (3.76--falling between "neutral" and "agree" on the response scale).

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Figure 8: Average Responses to Questions Regarding Residents' Views on Montana Public Lands and Waterways

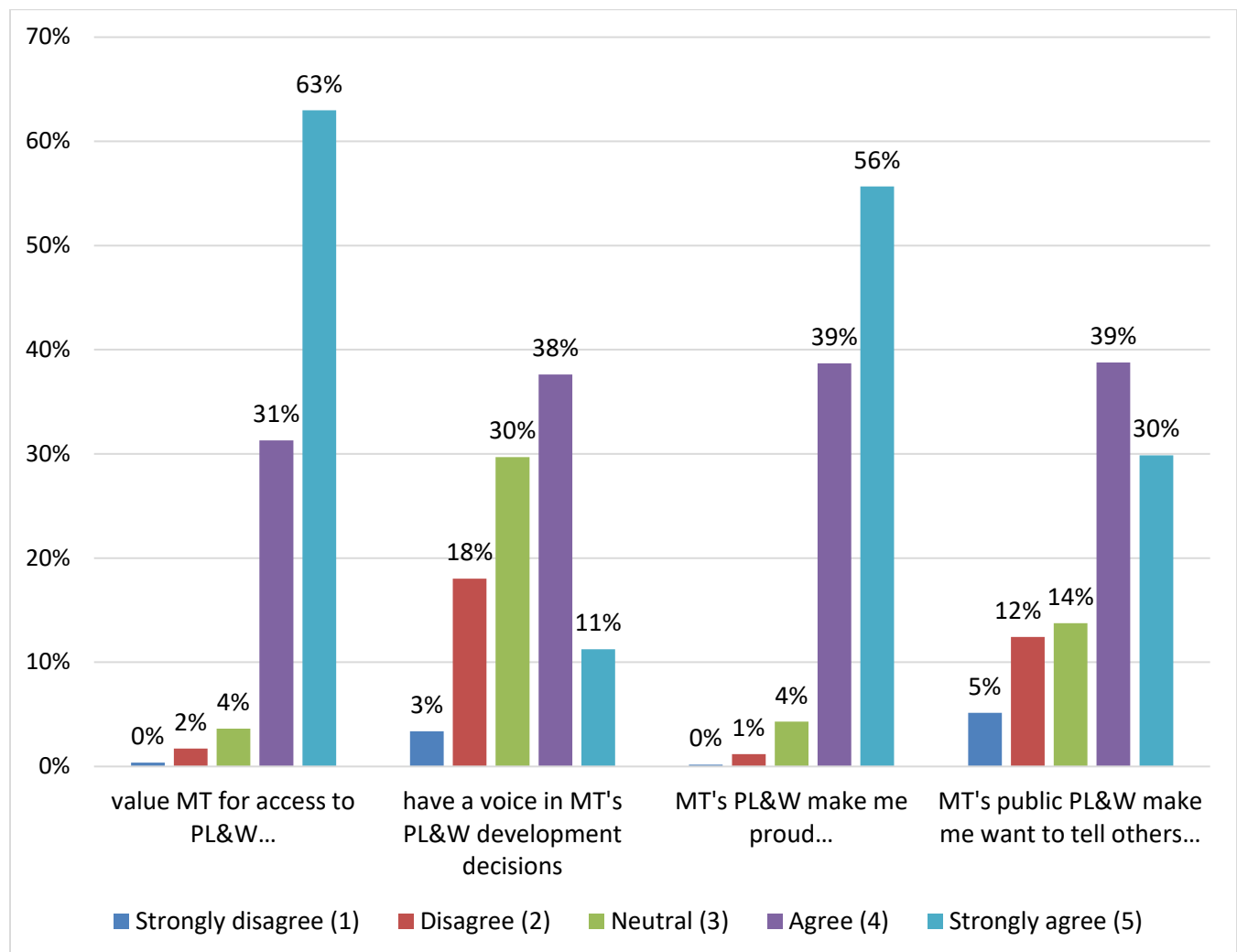


# The Montana Expression 2018: MT Residents' Use of Fishing Access Sites & Public Lands and Waterways Values

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There is a very high level of agreement with the first statement regarding valuing Montana for its public lands and waterways. Likewise, there is very high agreement among residents with the statement regarding feeling proud to be a Montana resident because of the state's public lands and waterways. As for feeling that they have a voice in development and decision making, it should be noted that this statement reflects the highest levels of disagreement among the four statements, without about 21% disagreement, overall. While generally speaking, residents agree that the public lands and waterways make them want to tell others about what the state has to offer, there are certainly those who disagree or feel ambivalent about it. While many Montanans value what the state offers, and are proud of it, they may want to keep it to themselves (Figure 9)!

**Figure 9: Montana Residents' Responses to Questions Regarding the State's Public Lands and Waterways**



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## Conclusions

In conclusion, Montanans of all ages utilize fishing access sites for a variety of activities. The majority of residents who use a FAS have fished at an FAS but have also participated in a diversity of other activities. In the event of closures of these sites due to invasive species and/or parasite issues, outdoor recreation participation will be impacted. There would be less of an impact if any closures affected only the waterway, and still allowed access for non-water uses.

Montana residents value the state's waterways and public lands. The fact that Montanans have access to their state's public lands and waterways is a point of pride, though not necessarily something they are all willing to tell others about. It is clear that some residents would like to have more of a voice in development and decision making regarding their public lands and waterways, something they may not care as much about if they did not value the access to them so much. Because they are proud of these areas, and their ability to access them is so valuable, having a voice in what happens to these public lands is clearly important to state residents.

# The Montana Expression 2018: MT Residents' Use of Fishing Access Sites & Public Lands and Waterways Values

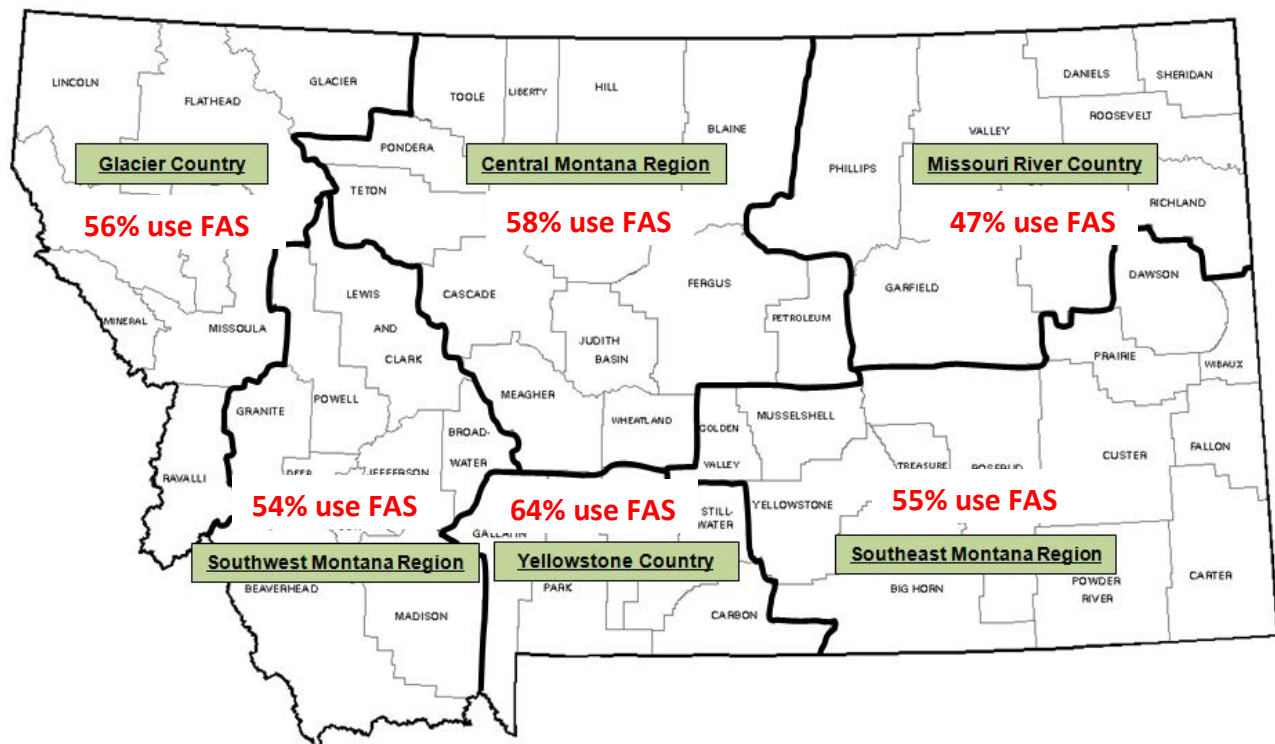
2018

## Appendix A: Use of Fishing Access Sites – Results by Travel Region

Montana is divided into six travel regions, which are not the same as the seven Fish, Wildlife & Parks regions. ITRR routinely considers these travel regions in its research and analysis, and therefore, a brief look at this study's results based on respondent travel region of residence is provided here.

Use of fishing access sites (FAS) is most common among residents of the Yellowstone Country travel region, located in the south-central part of the state, with 64% of the area residents indicating FAS use. FAS use is least common among residents of northeastern Montana's Missouri River Country travel region (47%). Figure 10 highlights the percentage of residents from each of Montana's six travel regions who use fishing access sites in the state.

Figure 10: Fishing Access Site Use by Region of Residence

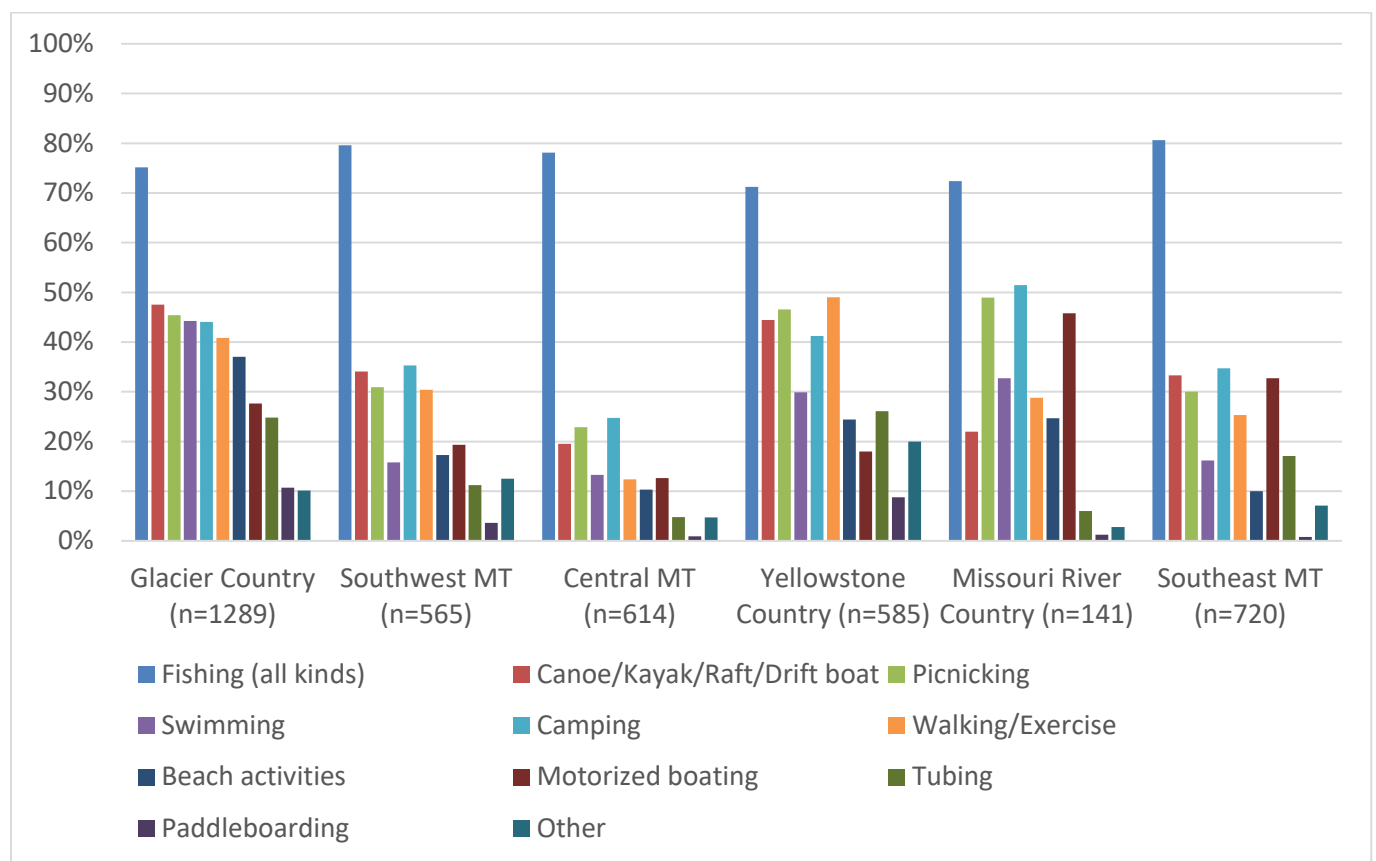


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When observed by region of residence, we see that, overall, Central Montana has the lowest participation rates in activities at fishing access sites, though among the highest rates of participation in fishing. Residents of Yellowstone Country and Glacier Country tend to participate in these activities more than residents of other travel regions (Figure 11).

**Figure 11: Activity Participation at Fishing Access Sites by Region Residence**

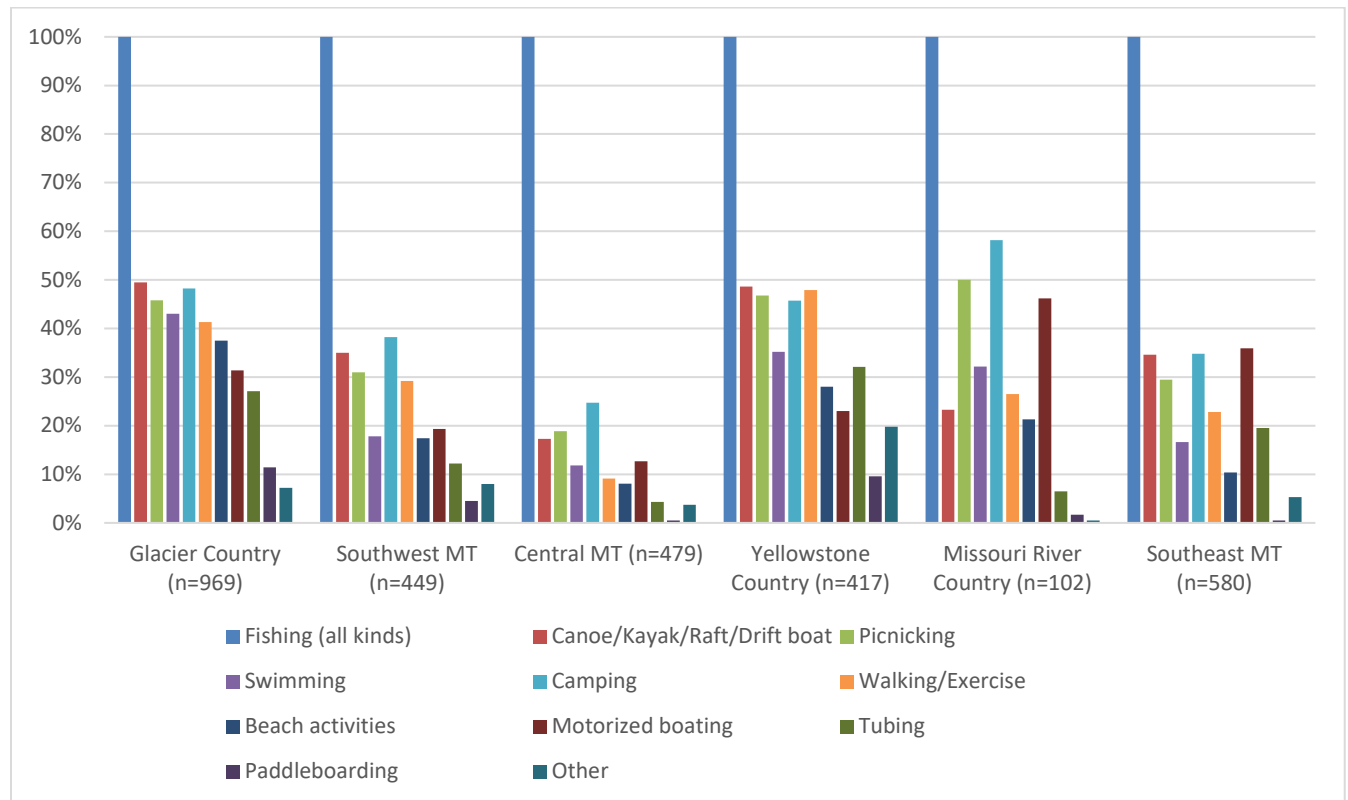


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Figure 12 highlights, by region of residence, the activities participated in by those who use FASs and fish at them. See axis for each region's sample size.

**Figure 12: Activity Participation by those who Fish at FASs, by Region of Residence**



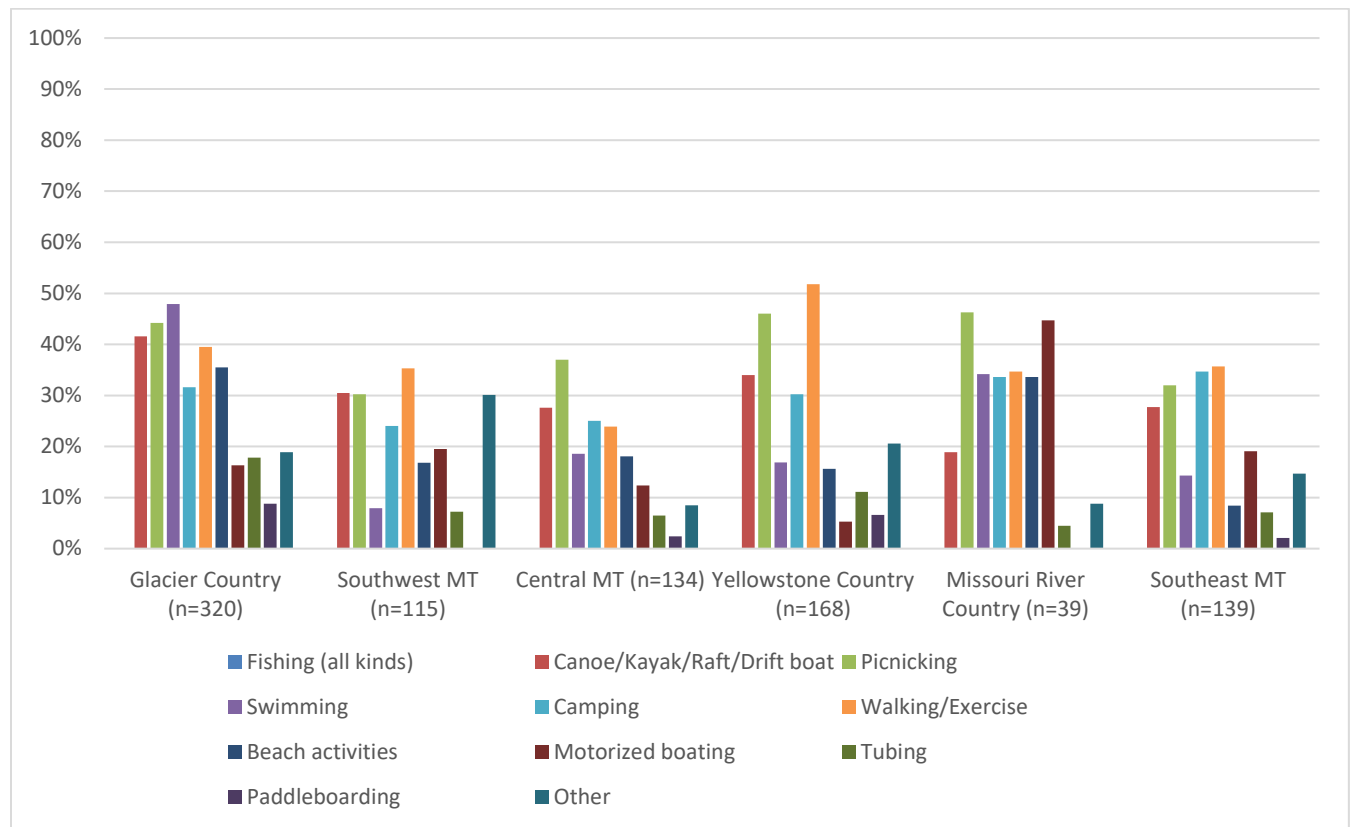


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Figure 13 displays participation in all activities, other than fishing, for those who use fishing access sites but do not fish at them. Data is broken out by region of residence; see axis for sample size in each region.

**Figure 13: Activity Participation by those who use FASs, but Do Not Fish there, by Region of Residence**



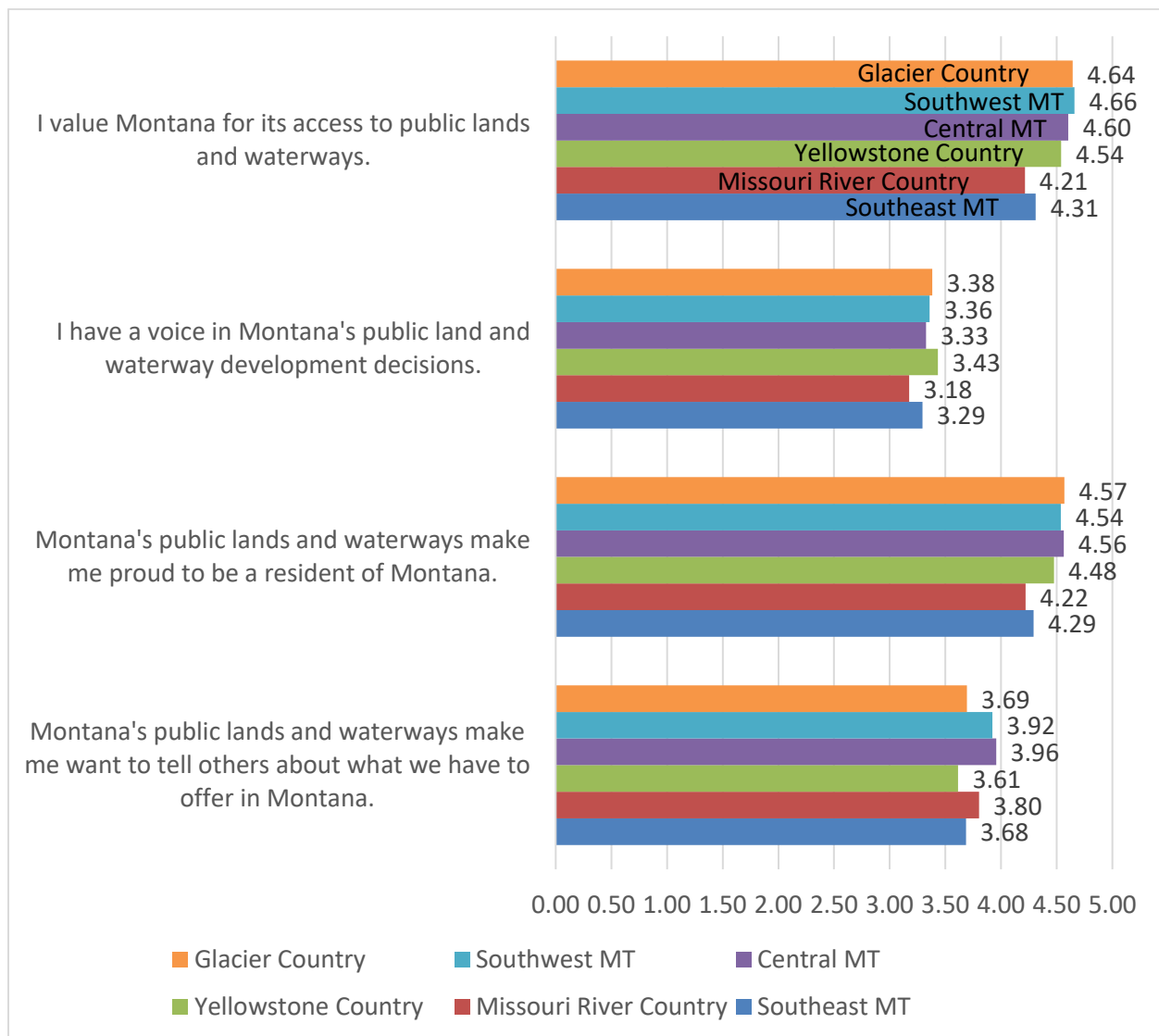
# The Montana Expression 2018: MT Residents' Use of Fishing Access Sites & Public Lands and Waterways Values

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## Appendix B: Residents' Public Lands and Waterways Values – Results by Travel Region

As in Appendix A, Appendix B covers results for this survey by travel region of residence. To see average responses by region of residence, see Figure 1. While there is some variation in mean responses by residents of each of the six regions, there seems to be relative agreement across the state.

Figure 14: Mean Response by Region of Residence (1, Strongly disagree to 5, Strongly agree)

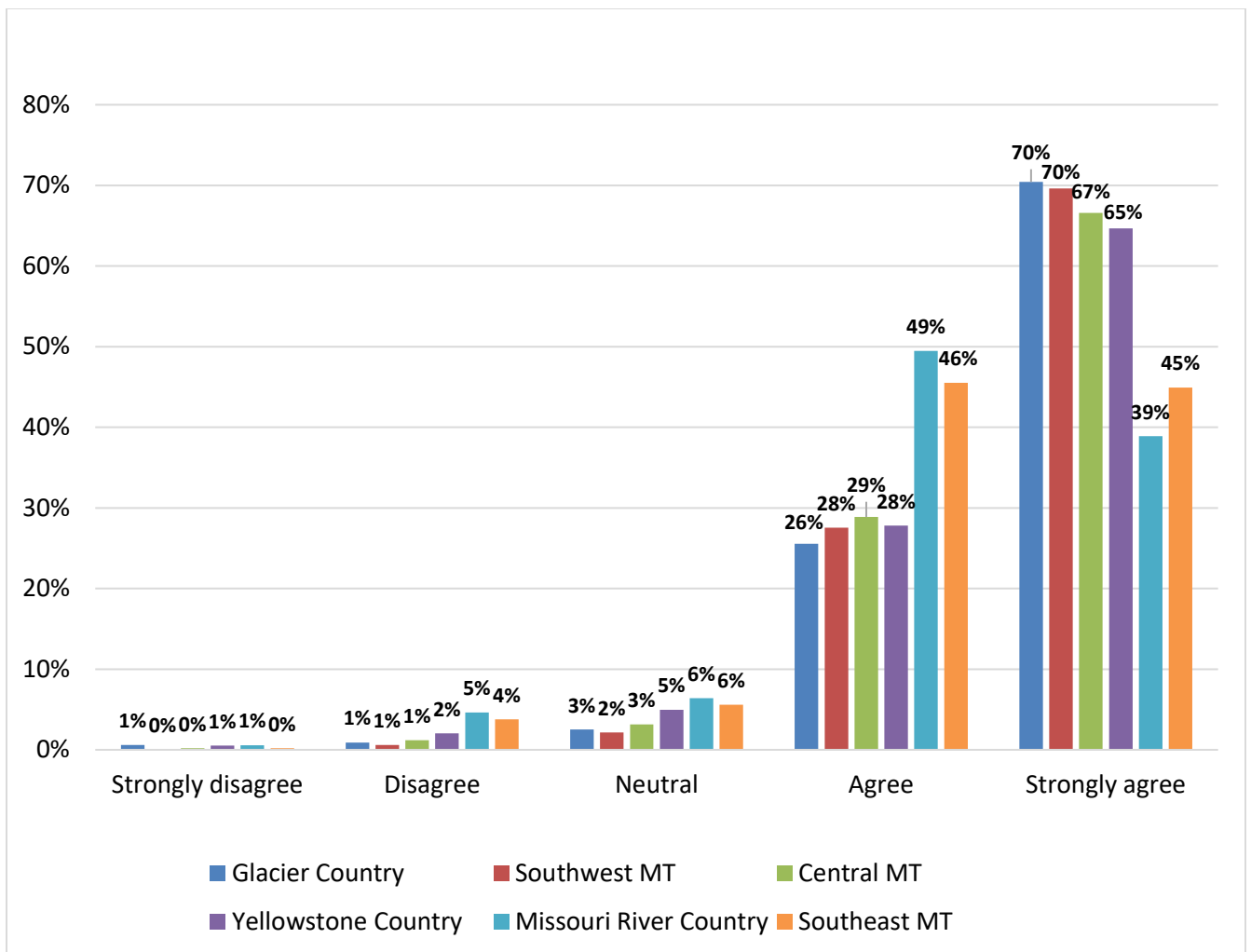


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Now, taking a look at each question individually, responses by region of residence show generally similar sentiments across the regions. In Figure 15, we can see that while most residents agree that they value Montana for its access to public lands and waterways, residents of Missouri River Country and Southeast Montana (essentially the eastern 1/3 of the state) are less likely to go so far as to say they “strongly agree” with the statement.

**Figure 15: Responses by Region of Residence - I value Montana for its access to public lands and waterways.**

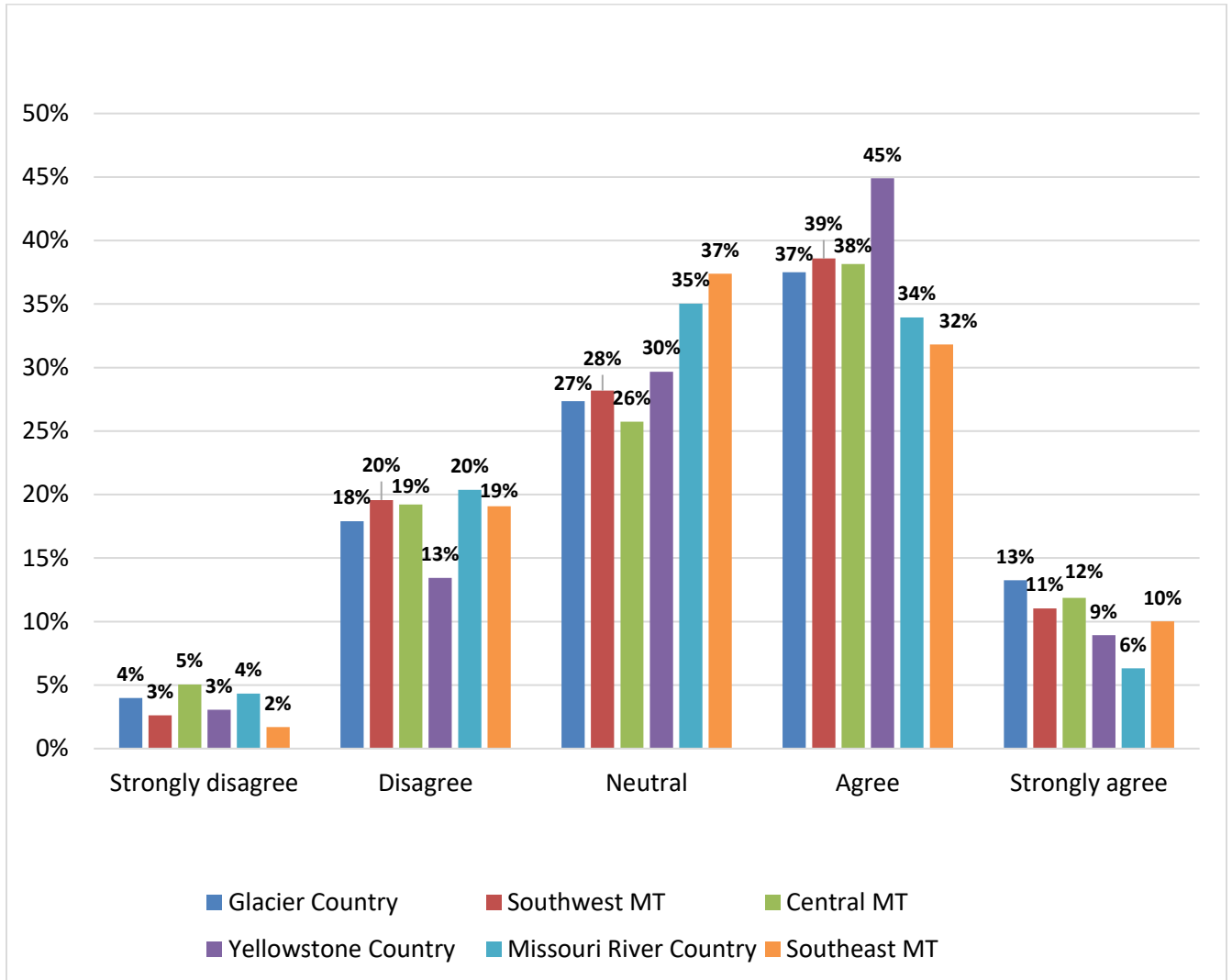


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Those in Yellowstone Country have the highest level of agreement with the statement regarding having a voice in development decisions, though approximately 1/3 of residents in all regions have a neutral opinion on this (Figure 16).

**Figure 16: Responses by Region of Residence - I have a voice in Montana's public land and waterway development decisions.**

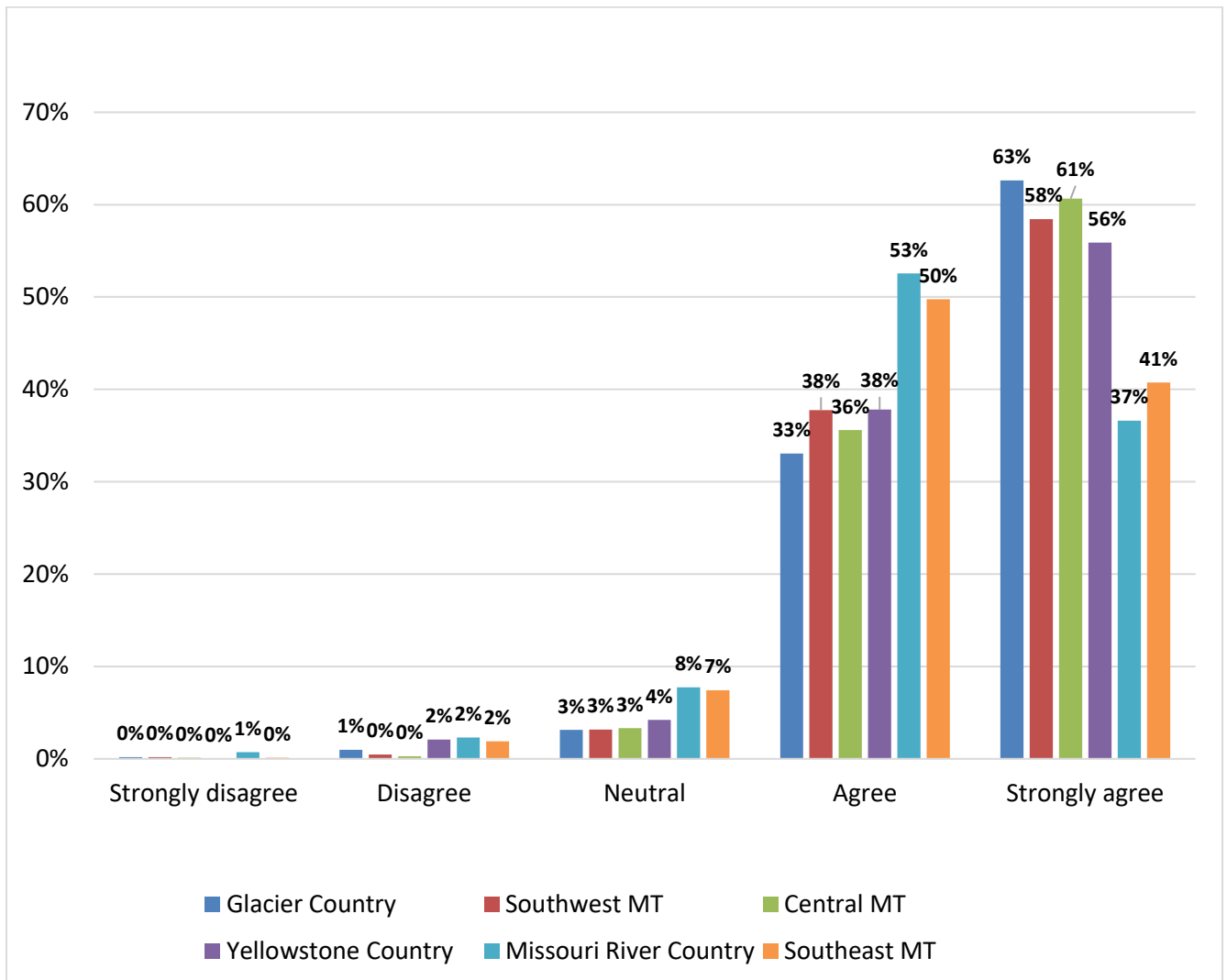


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Across the state, there is general agreement that Montana's public lands and waterways make residents proud. There is little disagreement with this statement, regardless of region of residence (Figure 17).

**Figure 17: Responses by Region of Residence - Montana's public lands and waterways make me proud to be a resident of Montana.**

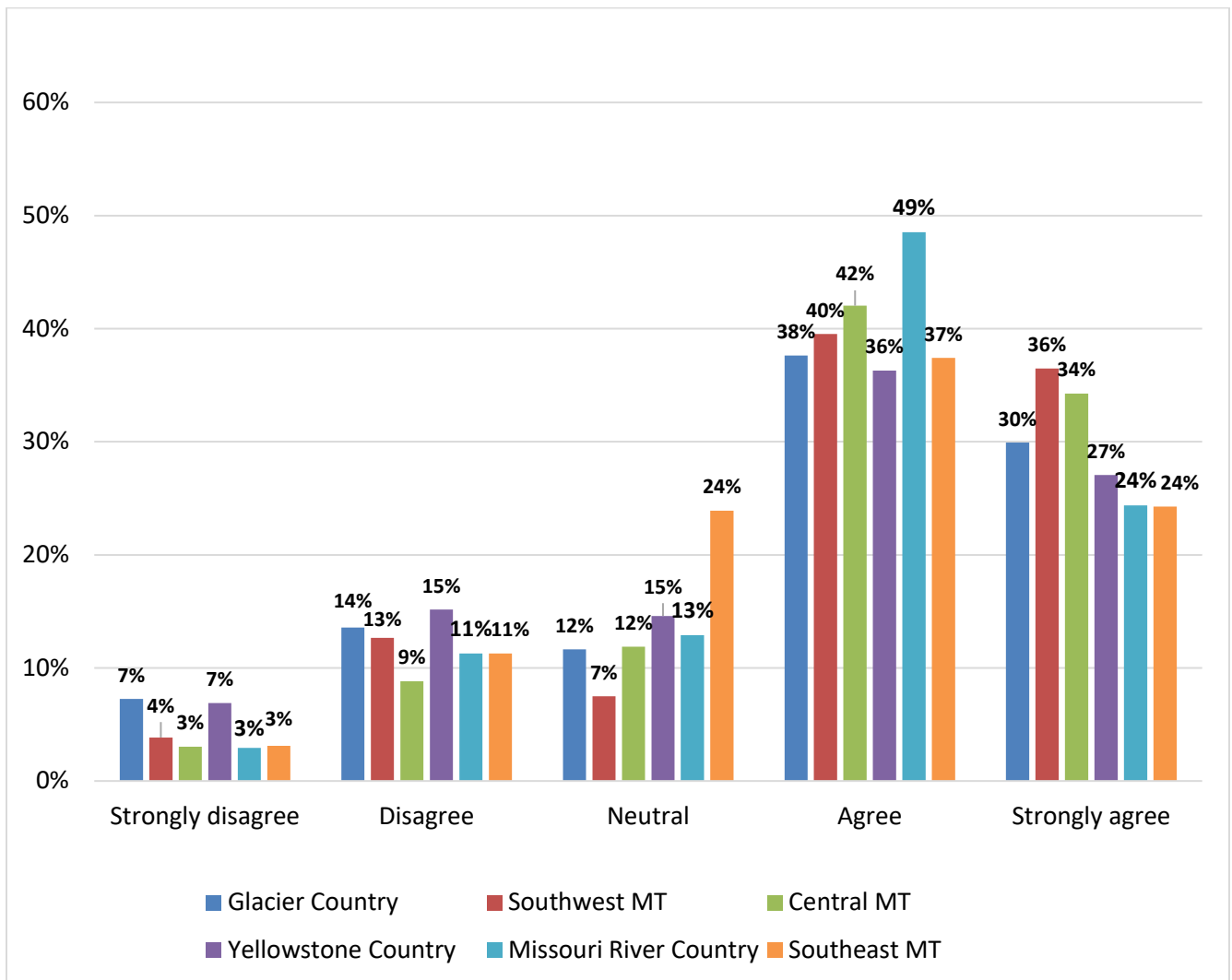


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Responses to the fourth statement, regarding telling others about what Montana has to offer, are more mixed, overall, with less agreement, in general. Residents of Yellowstone Country have higher levels of disagreement with this statement than residents of other areas, though Glacier Country residents are close behind (Figure 18).

**Figure 18: Responses by Region of Residence - Montana's public lands and waterways make me want to tell others about what we have to offer in Montana.**



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## Appendix C: Use of Fishing Access Sites - Survey Questions

1. In the past year have you used Fishing Access Sites in Montana for any purpose? (show the FAS sign)  
Yes   No   Don't know
  - a. If Yes, what purposes did you use these sites for? (Activities must have taken place at FAS!)
    - i. Fishing (all kinds)
    - ii. Swimming
    - iii. Tubing
    - iv. Motorized boating
    - v. Canoe/Kayak/Raft/Drift Boat
    - vi. Paddle boarding
    - vii. Beach activities
    - viii. Camping
    - ix. Picnicking
    - x. Walking/exercise
    - xi. Other
2. Do you have a fishing license? (Montana)  
Yes   No
3. What Montana County do you permanently reside in?
4. May I please ask your age?
5. Gender (observed)

# The Montana Expression 2018: MT Residents' Use of Fishing Access Sites & Public Lands and Waterways Values

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## Appendix D: Public Lands and Waterways Values – Survey Questions

1. I value Montana for its access to public lands & waterways  
Strongly disagree      Disagree      Neutral      Agree      Strongly Agree
2. I have a voice in Montana's public land & water development decisions  
Strongly disagree      Disagree      Neutral      Agree      Strongly Agree
3. Montana's public lands & waterways make me proud to be a resident of MT  
Strongly disagree      Disagree      Neutral      Agree      Strongly Agree
4. Montana's public lands & waterways make me want to tell others about what we have to offer  
in MT  
Strongly disagree      Disagree      Neutral      Agree      Strongly Agree
5. What Montana County do you permanently reside in?
6. May I please ask your age?
7. Gender (observed)