

Study Implementation Report Meeting

Study 12.7 River Recreation Flow and Access

March 30, 2016

Prepared by
ERM



Study 12.7 Status

ISR Documents (ISR Part D Overview):

- Initial Study Report Parts A, B, and C (June 3, 2014)
- 2014 Study Implementation Report (SIR) (November 4, 2015)

Status:

- River recreation internet survey completed in 2014.
- Executive interviews completed for river recreation and ice-dependent winter recreation; future interview supplements are planned.
- Focus group discussions are pending.

Study 12.7 Objectives

- **Documenting river recreation use and experience** for the respective river recreation and transportation opportunities on three mainstem Susitna river reaches
- **Describing the potential effects of altered river flows** on existing and potential boating activity and other river recreational uses of the Susitna River
- **Understanding river ice preferences** for the respective river ice-dependent winter recreation and transportation on the Susitna River
- **Describing new boating or other flow-dependent recreational opportunities** that may be created by Project construction and operation

151°W

150°W

149°W

148°W

147°W

146°W

63°30'N

63°N

62°30'N

62°N

N 63°

N 62°30'

N 62°

-  Recreation Reach 1 Denali Highway to Fog Creek; 114 miles
-  Recreation Reach 2 Fog Creek to Portage Creek - 28 miles
-  Recreation Reach 3 Portage Creek to Parks Highway; 66 miles

CLEARWATER MTNS

TALKEETNA MOUNTAINS

Denali Hwy Bridge
Project River Mile 291.6

Portage Creek
Project River Mile 152.3

Proposed Watana Dam Site
Project River Mile 187.2

DENALI NATIONAL PARK

DENALI STATE PARK

Devils Canyon - Project
River Mile 152.8 to 163.8

Fog Creek
Project River Mile 179.3

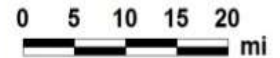
Petersville

Talkeetna

Parks Highway Bridge
Project River Mile 88.9



Data Sources: See Map References



Projection: Alaska Albers NAD 1983
Date Created: 8/29/2013
Map Author: ERM, Inc - Alex Kirk
File: SuWa_12-1_RecReaches3.mxd

Skwentna

Trapper Creek

Sherman

Gold Creek

Chulitna

Denali Hwy

Susitna River

Talkeetna River

Portage Creek

Parks Hwy

Study 12.7 Components

- River Recreation Surveys
 - www.susitnariversurvey.com (inactive)
 - SIR Table 4.1-1 (Section 9; pgs 18-20) lists survey distribution list
- River Ice-Dependent Winter Recreation
- Focus Group Discussions

Study 12.7 Variances

One variance occurred related to schedule:

- AEA did not convene the focus group discussions in 2013–2015.
- This component remains to be completed.

Study 12.7 Results—Internet Survey Reach 1 (Denali Highway to Fog Creek)

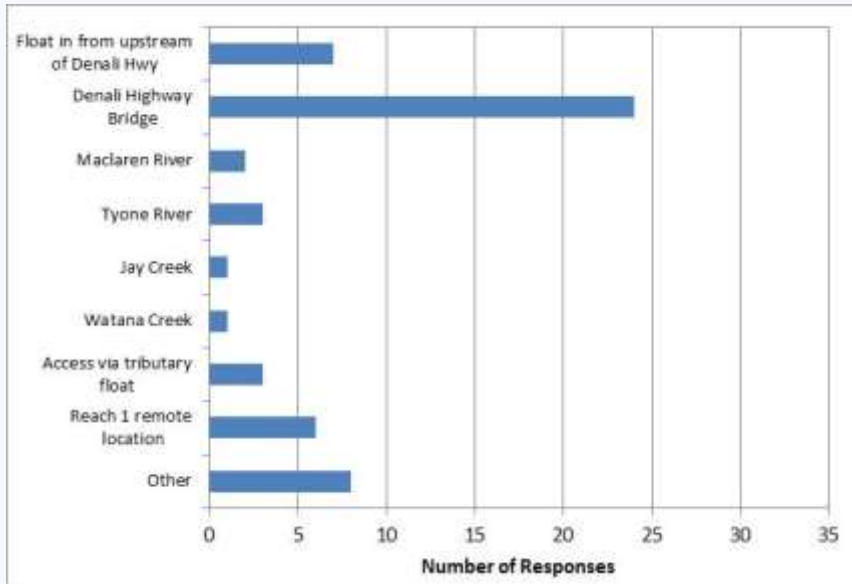
Table 5.1-1 Susitna River Reach 1 Internet Survey Participant Information

Age; Gender	Age: Mean (44), Median (42), Range (8-83); Gender: M(49) F (3)
Resident or Non-Resident	Non-Residents (10) Residents (42)
Type of Craft	Motorized (18), Non-Motorized (29), Airplane (5)
Specific Watercraft	Whitewater Kayak (10) Raft (8) Packraft (6) Closed deck canoe (1) Open canoe (1) Airboat (6) Prop Boat(6) Jetboat (6) Cataraft (1) Other (2)
Skill Level	Novice (4), Intermediate (13), Advanced (15), Expert (15)
Years Using the Craft	Mean (17), Median (15), Range (1-59)
How many days/year using this craft	<5 (3) 6-10 (4) 11-20 (11) >20 (34)
How many times have you recreated on this Reach	1 (11) 2-5 (16) 6-10 (9) >10 (16)
How many people were in your party	Mean (4) , Median (3), Range (1-25)
Use of Commercial Outfitter or Rental	25% Yes 75% No

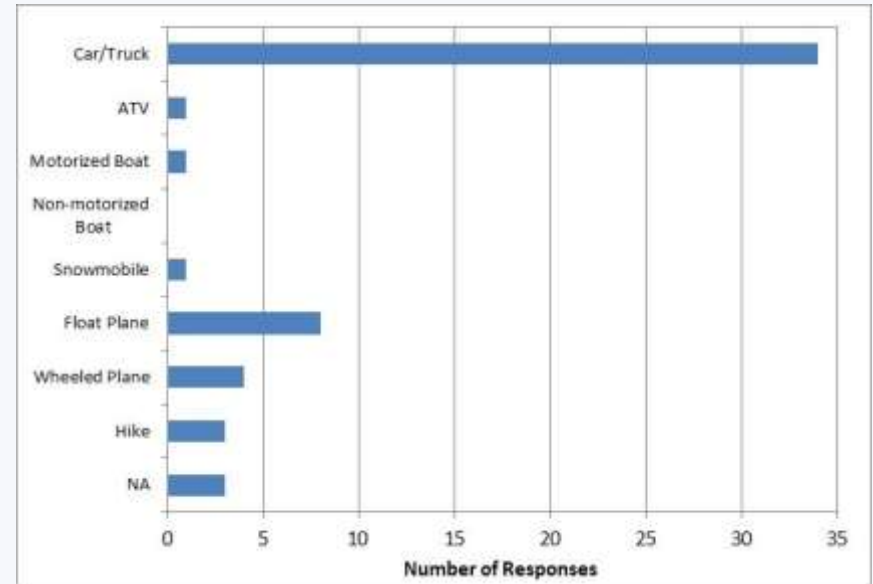
Study 12.7 Results—Internet Survey Reach 1

Susitna River Reach 1 Put-in Information

Reach 1 River Access Put-in Locations



Reach 1 River Access Put-in Method

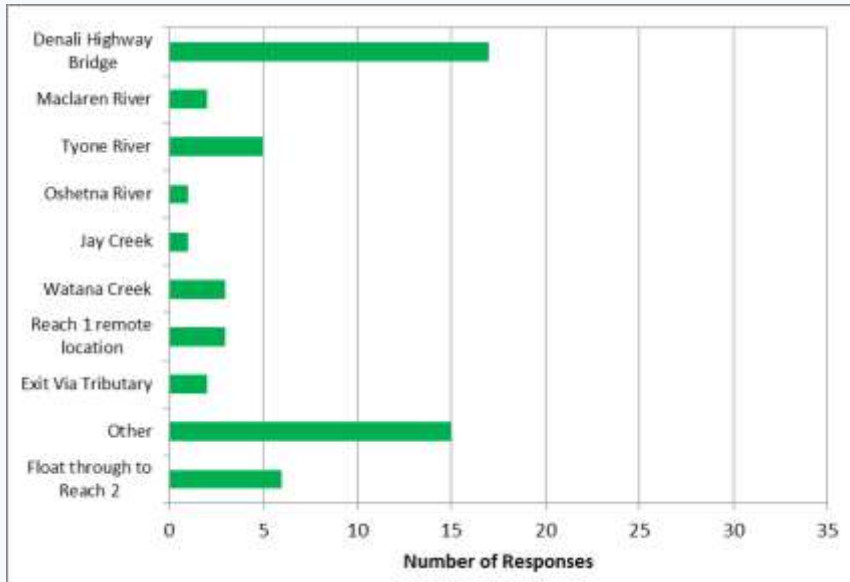


Data source—internet survey participant responses identifying how and where respondents access the Susitna River. See Table 5.1-2 Susitna River Reach 1 Put in and Take out Information.

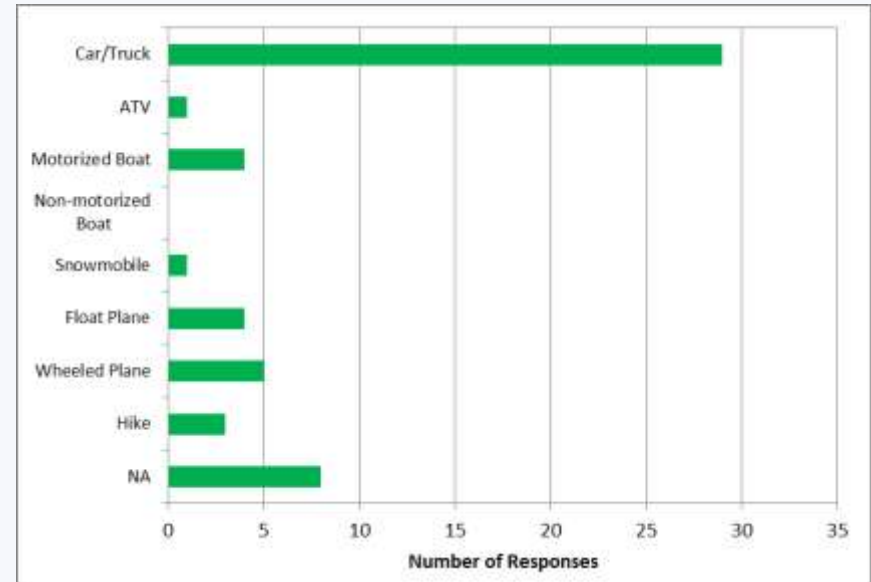
Study 12.7 Results—Internet Survey Reach 1

Susitna River Reach 1 Take-out Information

Reach 1 River Access Take-out Locations



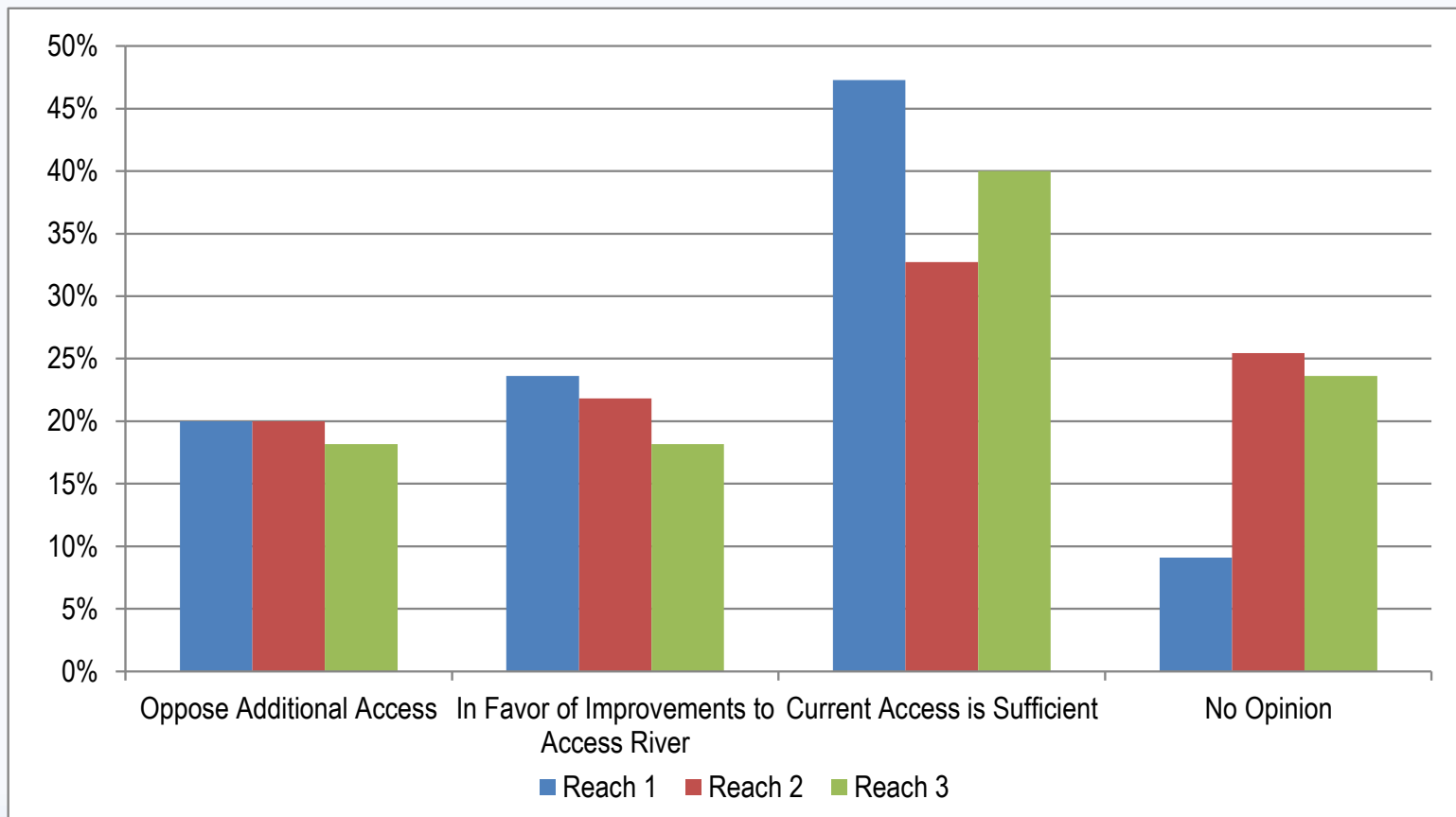
Reach 1 River Access Take-out Method



Data source—internet survey participant responses identifying how and where respondents access the Susitna River. See Table 5.1-2 Susitna River Reach 1 Put in and Take out Information.

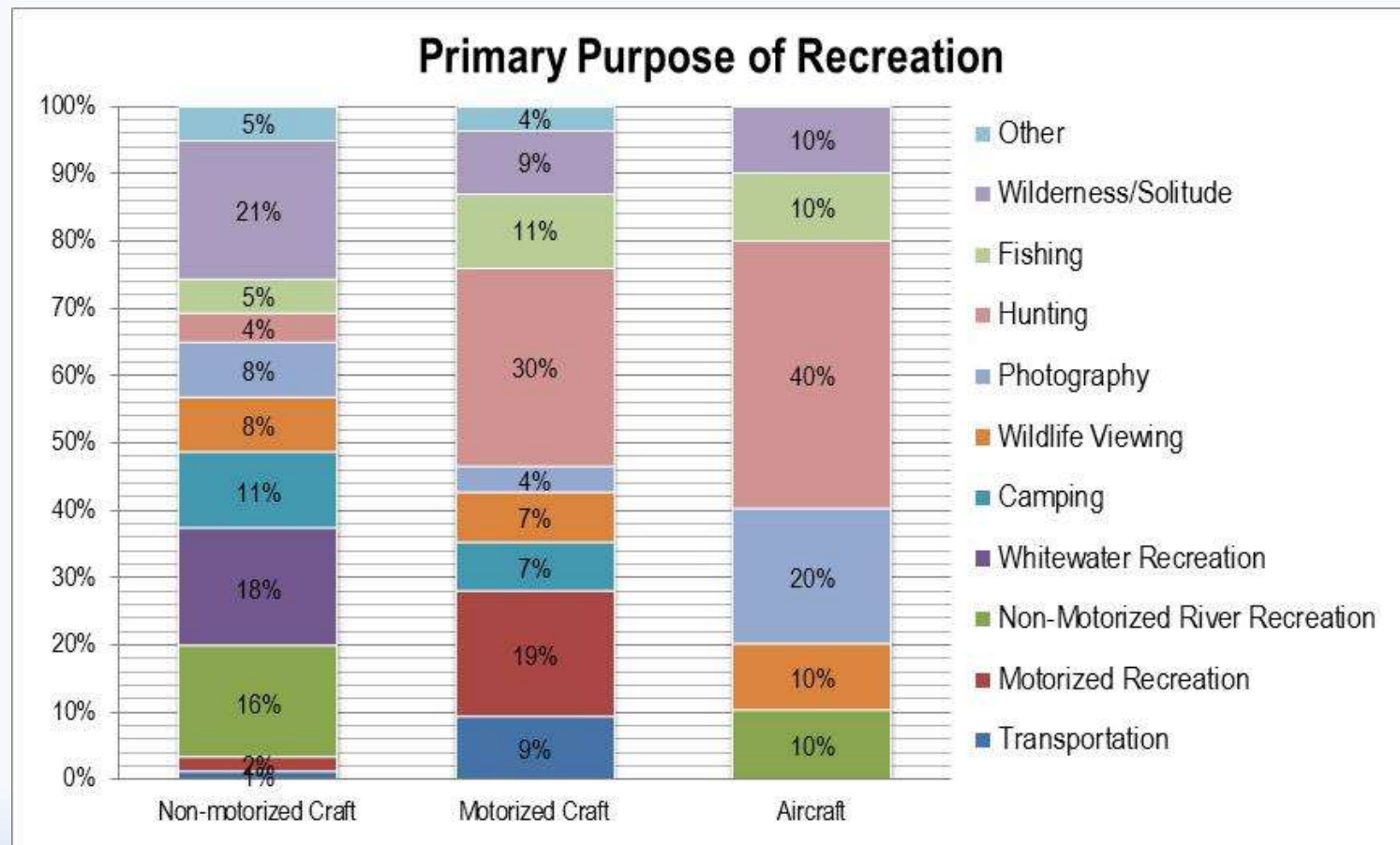
Study 12.7 Results—Internet Survey Reach 1

Figure 5.1-1. Reach 1 Responses Regarding River Access (n=55)



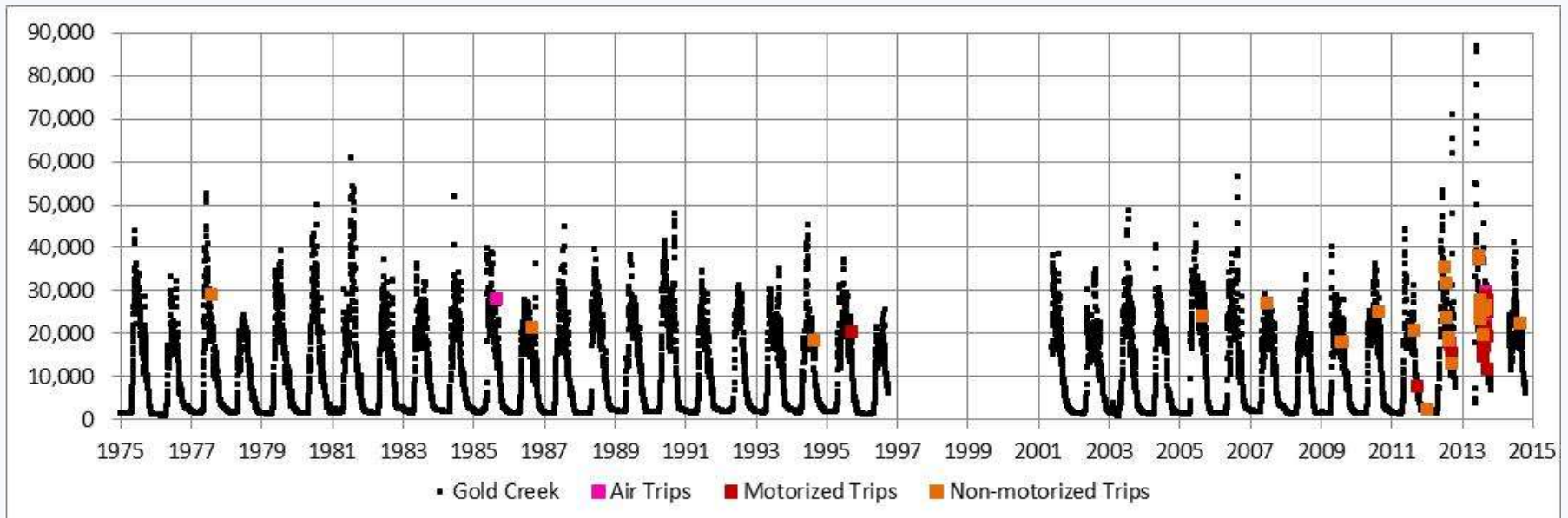
Study 12.7 Results—Internet Survey Reach 1

Figure 5.1-2. Primary Purposes of Recreation in Reach 1



Study 12.7 Results—Internet Survey Reach 1

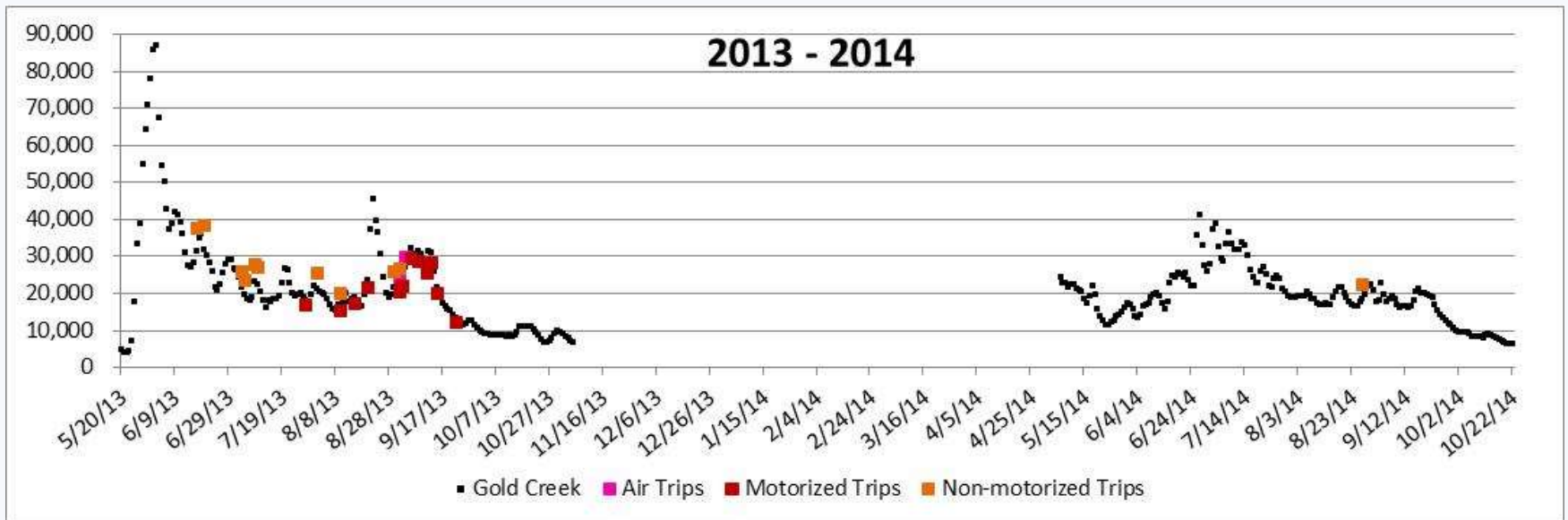
Figure 5.1-4. Timing of Air, Motorized, and Non-motorized Trips in Reach 1 (1975-2014)



Data source—internet survey participant responses identifying dates for river trips and craft. Y-axis represents discharge (cfs) at the USGS Gage at Gold Creek.

Study 12.7 Results—Internet Survey Reach 1

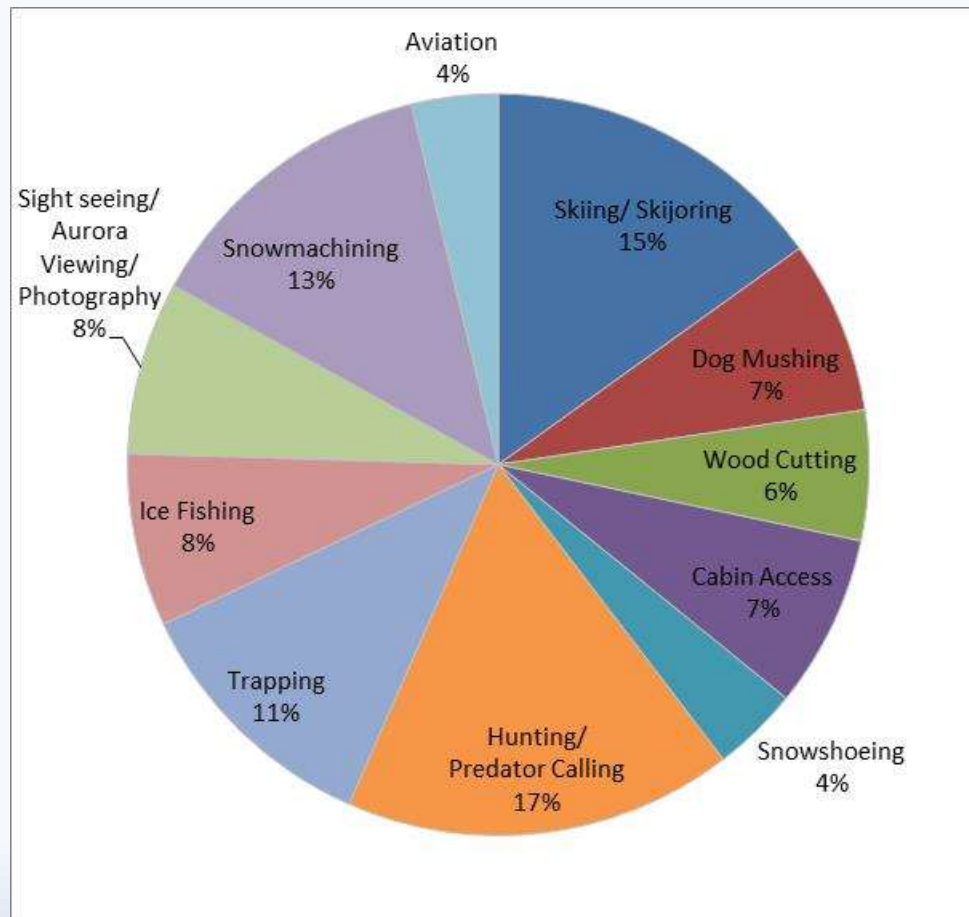
Figure 5.1-5. Timing of Air, Motorized, and Non-motorized Trips in Reach 1 (2013 - 2014)



Data source—internet survey participant responses identifying timeframe for river recreation trips and craft on Reach 1 in 2013 - 2014. Y-axis represents discharge (cfs) at the USGS Gage at Gold Creek.

Study 12.7 Results—Executive Interviews Reach 1

Figure 5.1-6. Reach 1 Executive Interviews Winter Activities (n=8)



Study 12.7 Results—Internet Survey Reach 2 (Fog Creek to Portage Creek)

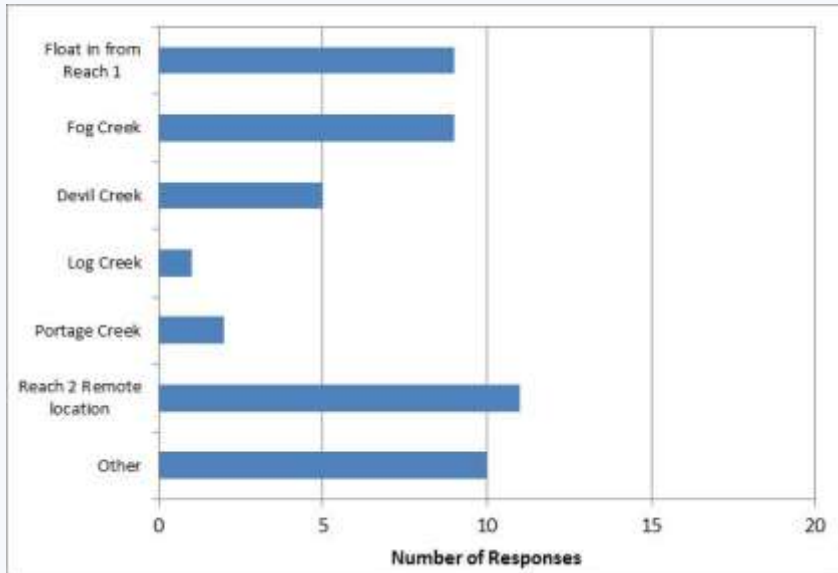
Table 5.2-1 Susitna River Reach 2 Internet Survey Participant Information

Age; Gender	Age: Mean (42), Median (37), Range (19-83); Gender: M(41) F (6)
Resident or Non-Resident	Non-Residents (27) Residents (20)
Type of Craft	Motorized (9), Non-Motorized (35), Airplane (3)
Specific Watercraft	Raft (1) Cataraft (1) Whitewater Kayak (28) Packraft (2) Closed deck canoe (1) Jetboat (6) Airboat (1) Prop boat (2) Other (2)
Skill Level	Novice (3) Intermediate (5), Advanced (7), Expert (29)
Years Using the Craft	Mean (21), Median (20), Range (0-59)
How many days/year using this craft	>5 (2) 6-10 (1) 11-20 (5) <20 (39)
How many times have you recreated on this Reach	1 (15) 2-5 (15) 6-10 (6) >10 (11)
How many people were in your party	Mean (5) , Median (4), Range (1-35)
Use of Commercial Outfitter or Rental	51% Yes 49% No

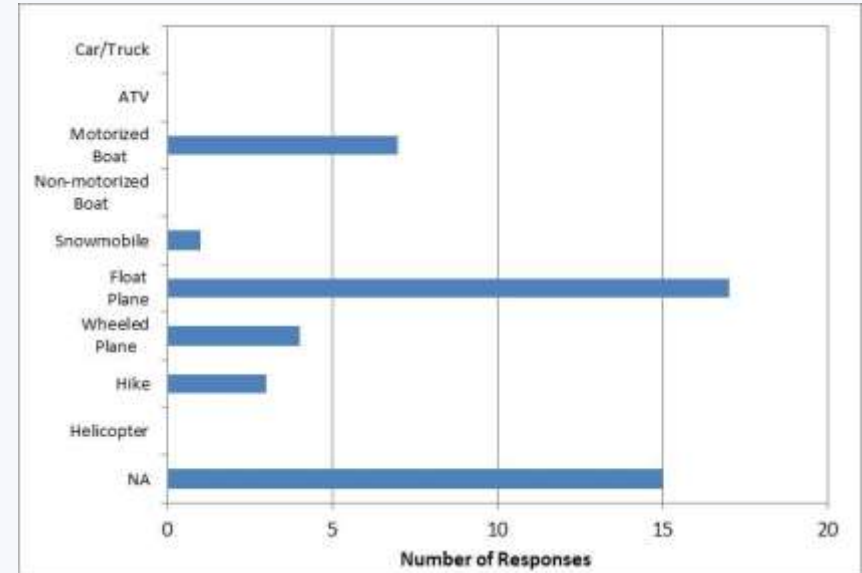
Study 12.7 Results—Internet Survey Reach 2

Susitna River Reach 2 Put-in Information

Reach 2 River Access Put-in Locations



Reach 2 River Access Put-in Method

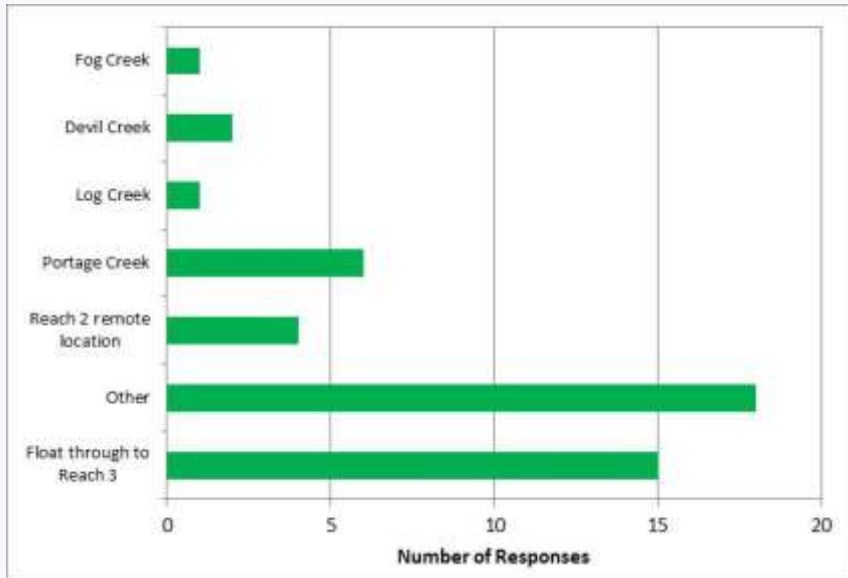


Data source—internet survey participant responses identifying how and where respondents access the Susitna River. See Table 5.2-2 Susitna River Reach 2 Put in and Take out Information.

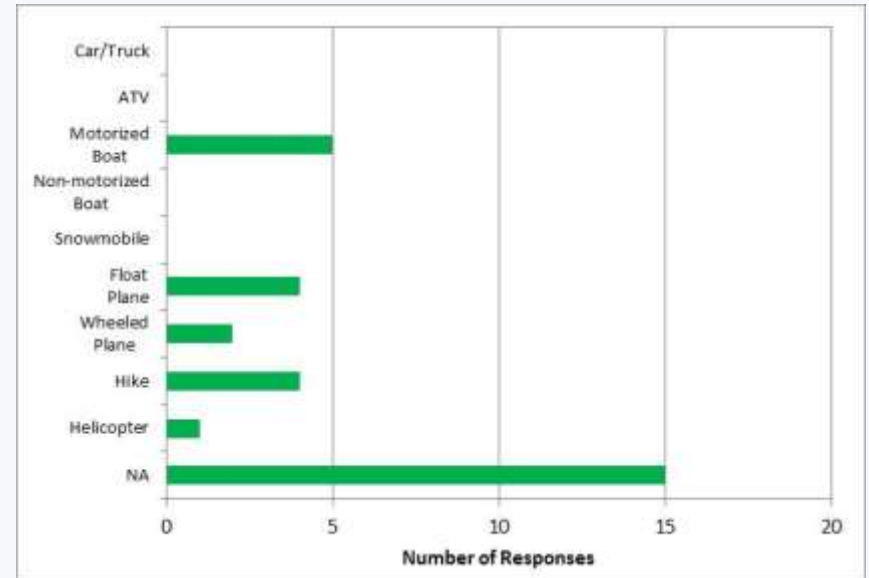
Study 12.7 Results—Internet Survey Reach 2

Susitna River Reach 2 Take-out Information

Reach 2 River Access Take-out Locations



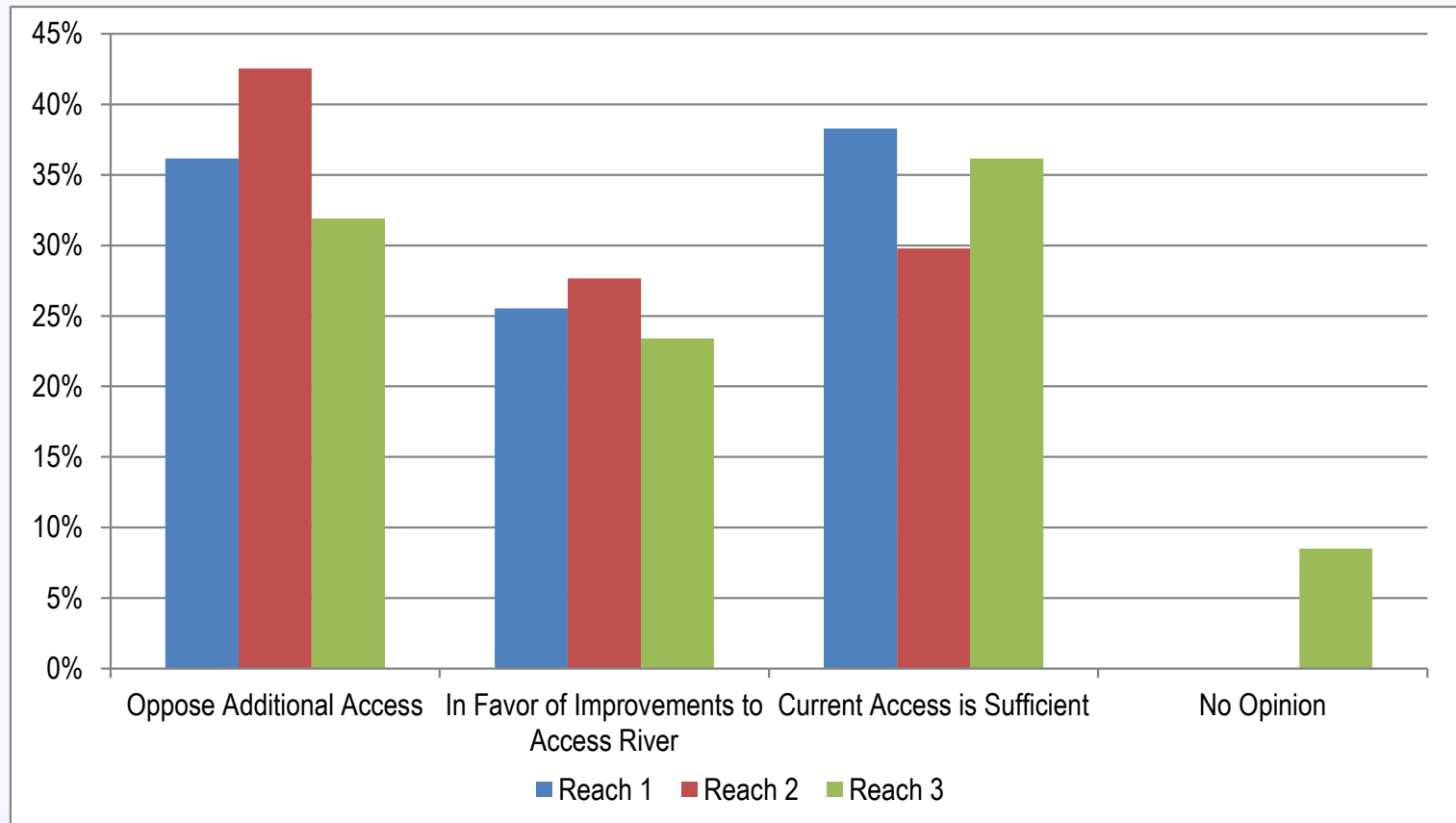
Reach 2 River Access Take-out Method



Data source—internet survey participant responses identifying how and where respondents access the Susitna River. See Table 5.2-2 Susitna River Reach 2 Put in and Take out Information.

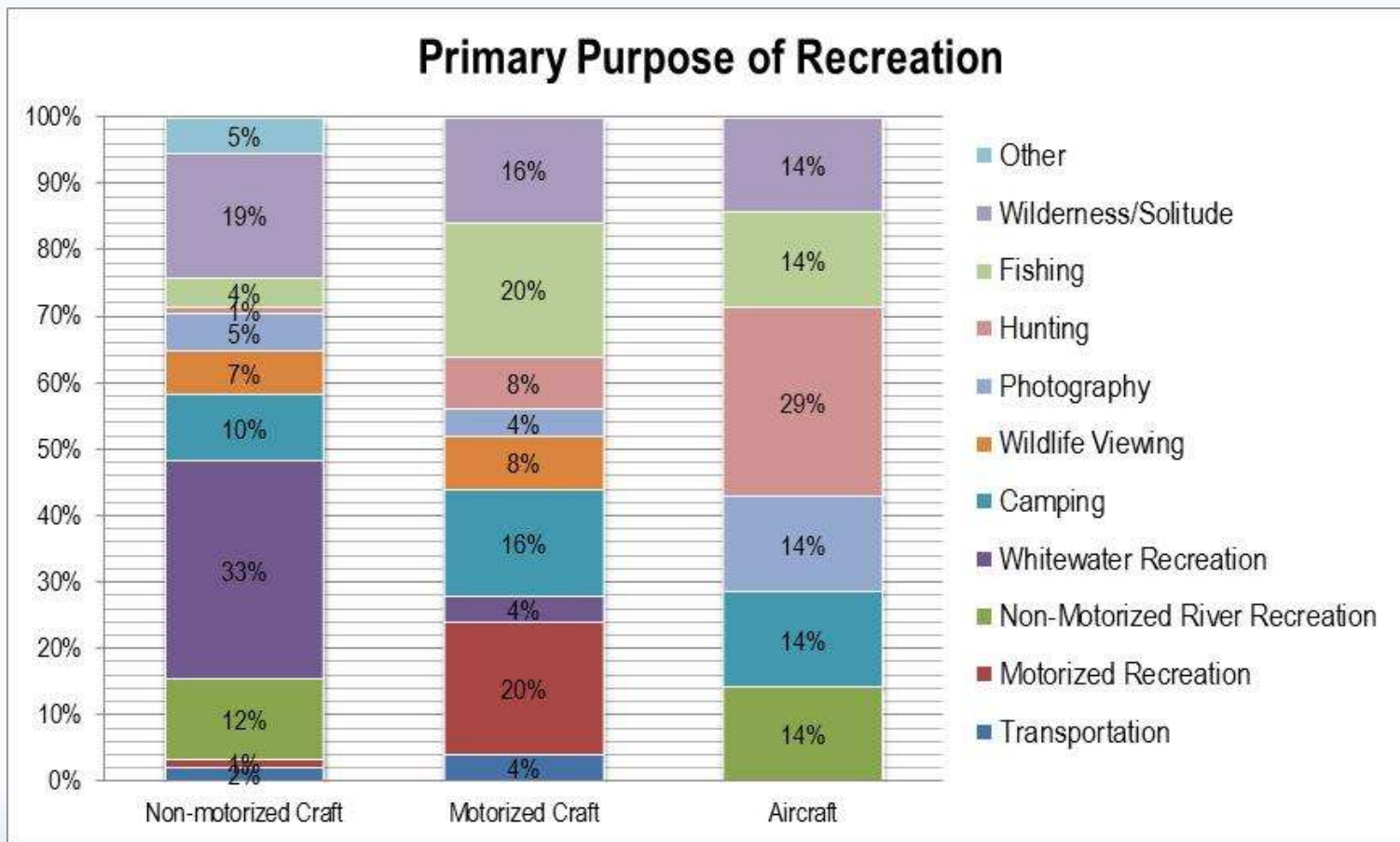
Study 12.7 Results—Internet Survey Reach 2

Figure 5.2-1. Reach 2 Responses Regarding River Access (n=47)



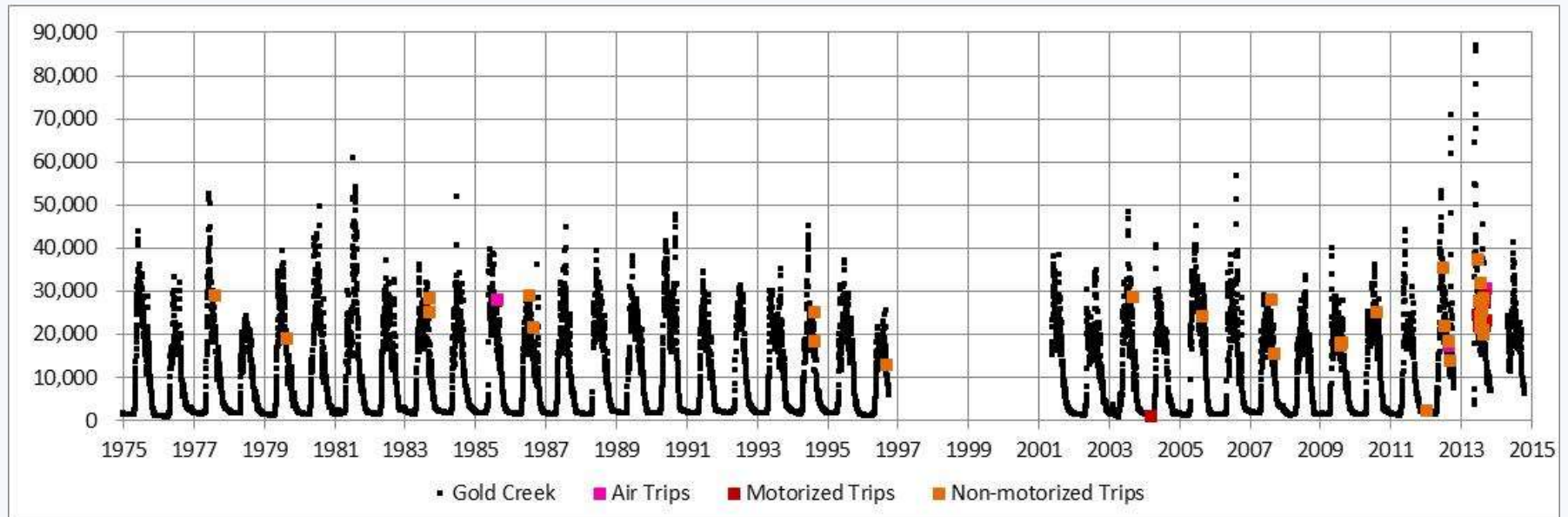
Study 12.7 Results—Internet Survey Reach 2

Figure 5.2-2. Primary Purposes of Recreation in Reach 2



Study 12.7 Results—Internet Survey Reach 2

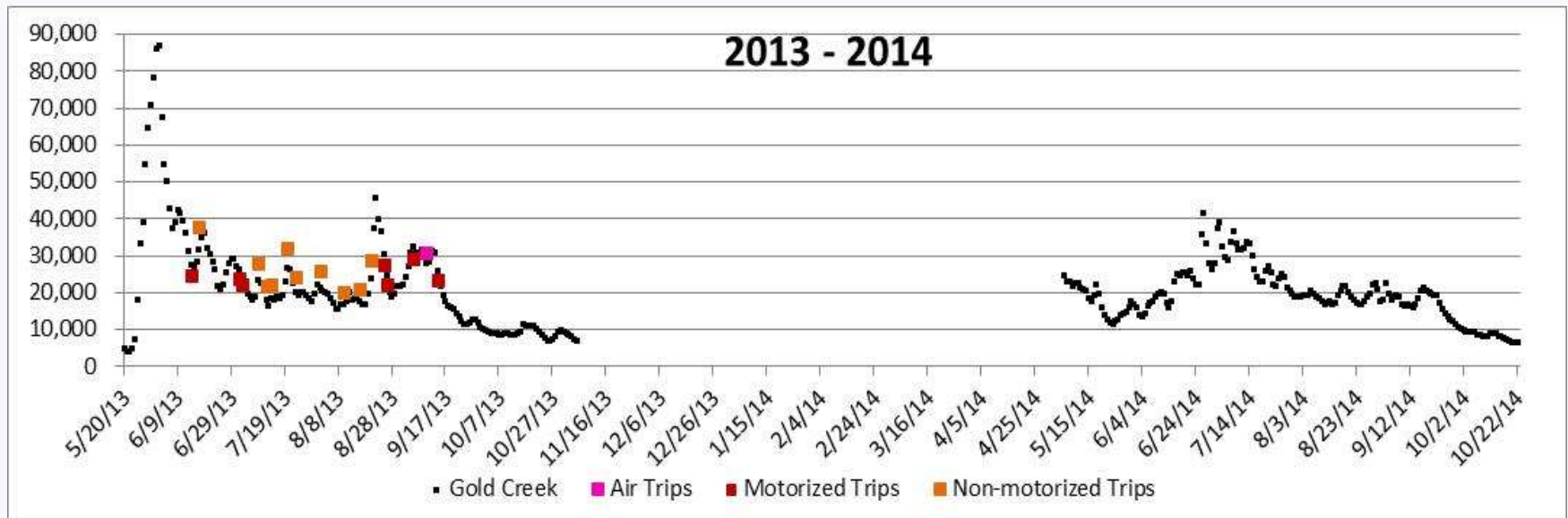
Figure 5.2-4. Timing of Air, Motorized, and Non-motorized Trips in Reach 2 (1975-2014)



Data source—internet survey participant responses identifying dates for river trips and craft. Y-axis represents discharge (cfs) at the USGS Gage at Gold Creek.

Study 12.7 Results—Internet Survey Reach 2

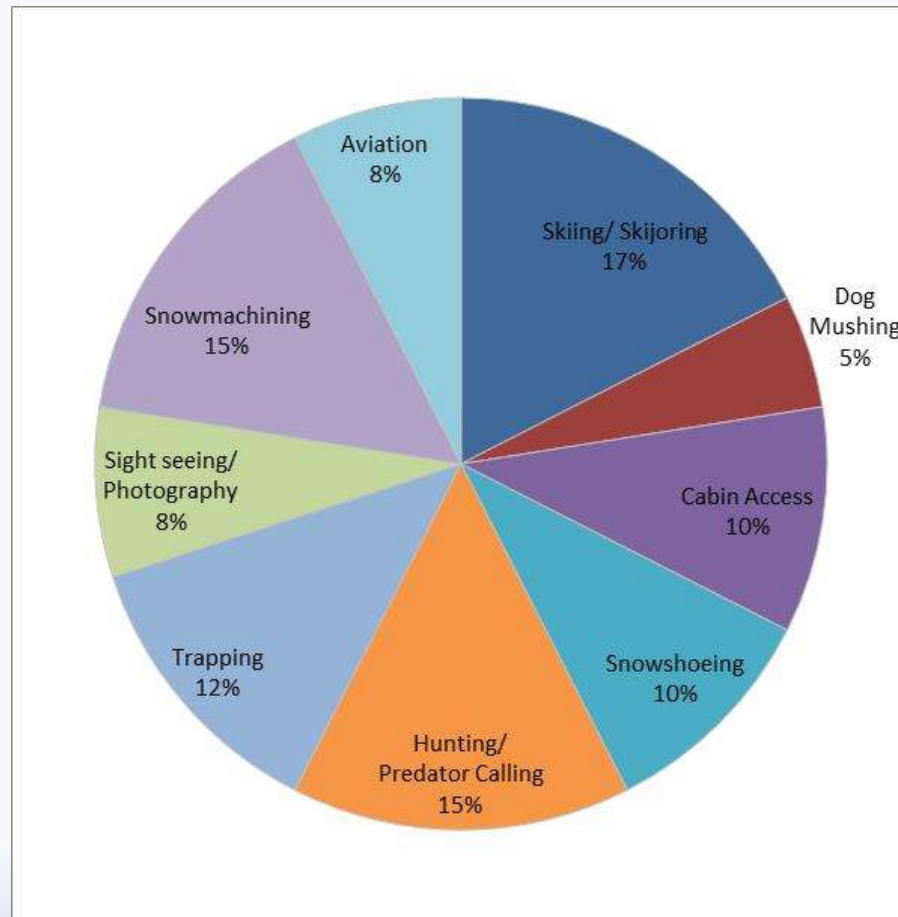
Figure 5.2-5. Timing of Air, Motorized, and Non-motorized Trips in Reach 2 (2013 - 2014)



Data source—internet survey participant responses identifying timeframe for river recreation trips and craft on Reach 2 in 2013 - 2014. Y-axis represents discharge (cfs) at the USGS Gage at Gold Creek.

Study 12.7 Results—Executive Interviews Reach 2

Figure 5.2-6. Reach 2 Executive Interviews Winter Activities (n=7)



Study 12.7 Results—Internet Survey Reach 3 (Portage Creek to Parks Highway Bridge)

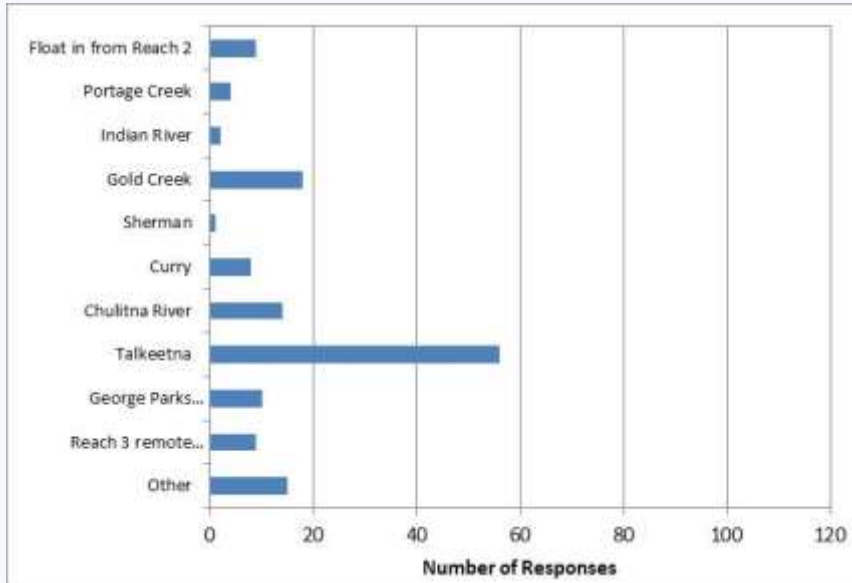
Table 5.3-1 Susitna River Reach 3 Internet Survey Participant Information

Age; Gender	Age: Mean (46), Median (45), Range (17-82); Gender: M(112) F (34)
Resident or Non-Resident	Non-Residents (14) Residents (132)
Type of Craft	Motorized (61), Non-Motorized (81), Airplane (4)
Specific Watercraft	Whitewater Kayak (21) Packraft (14) Jetboat (50) Airboat (3) Prop Boat (8) Raft (25) Cataract (3) Inflatable Kayak (7) Open Canoe (7) Other (4)
Skill Level	Novice (15) Intermediate (41), Advanced (53), Expert (33)
Years Using the Craft	Mean (16), Median (15), Range (0-54)
How many days/year using this craft	<5 (14) 6-10 (15) 11-20 (37) >20 (80)
How many times have you recreated on this Reach	1 (20) 2-5 (56) 6-10 (17) >10 (53)
How many people were in your party	Mean (5) , Median (4), Range (1-47)
Use of Commercial Outfitter or Rental	23% Yes 77% No

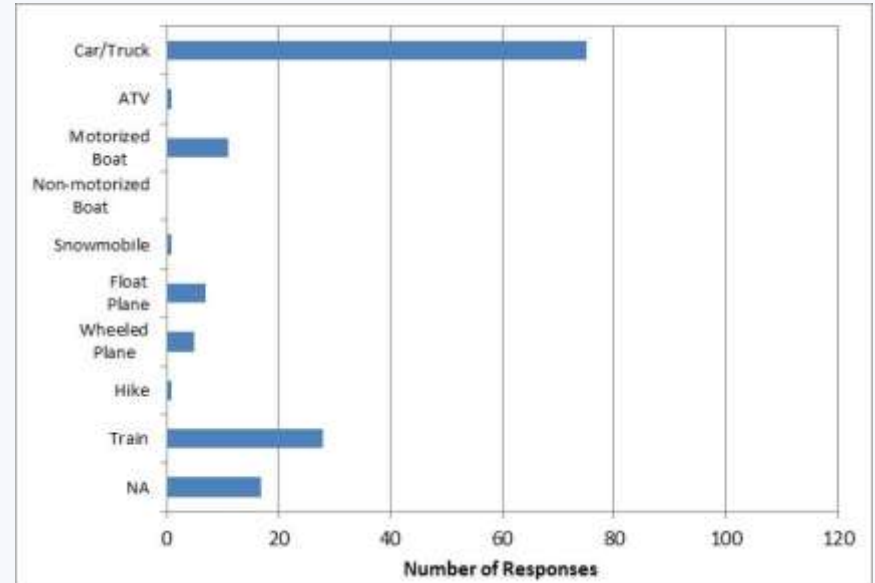
Study 12.7 Results—Internet Survey Reach 3

Susitna River Reach 3 Put-in Information

Reach 3 River Access Put-in Locations



Reach 3 River Access Put-in Method

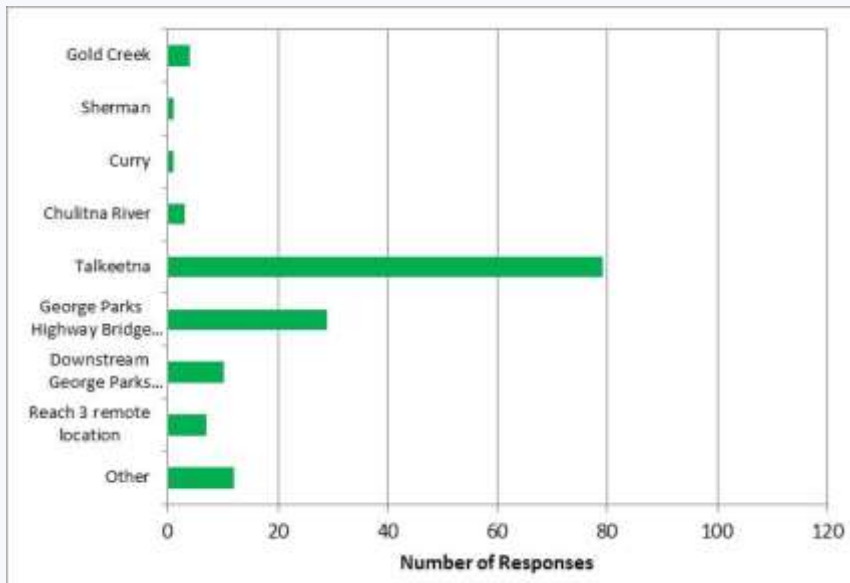


Data source—internet survey participant responses identifying how and where respondents access the Susitna River. See Table 5.3-2 Susitna River Reach 3 Put in and Take out Information.

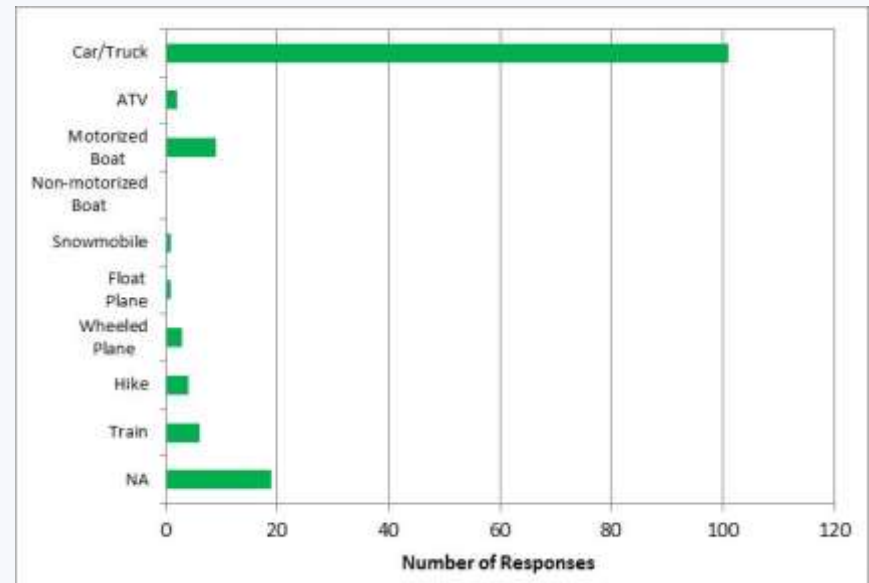
Study 12.7 Results—Internet Survey Reach 3

Susitna River Reach 3 Take-out Information

Reach 3 River Access Take-out Locations



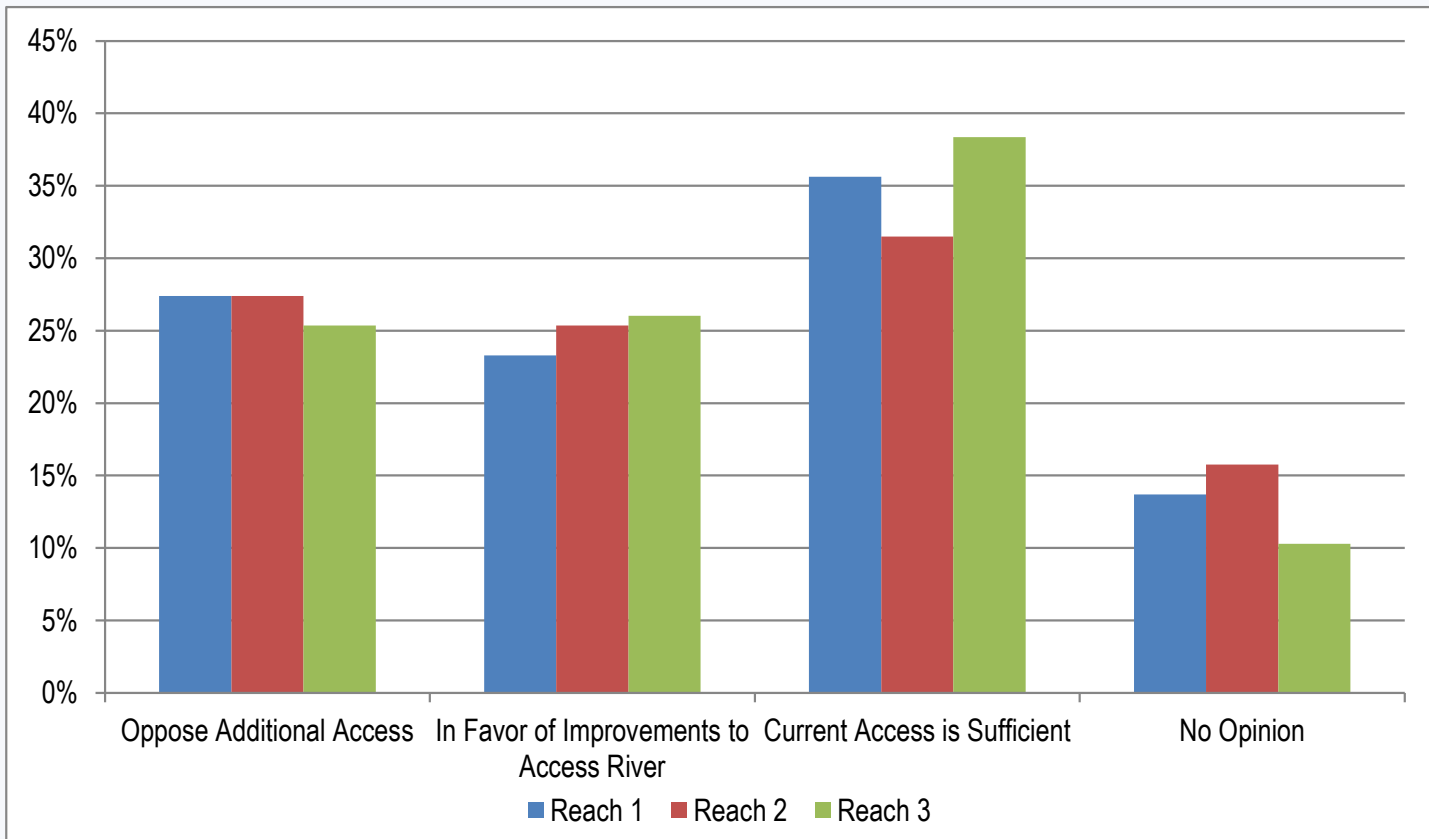
Reach 3 River Access Take-out Method



Data source—internet survey participant responses identifying how and where respondents access the Susitna River. See Table 5.3-2 Susitna River Reach 3 Put in and Take out Information.

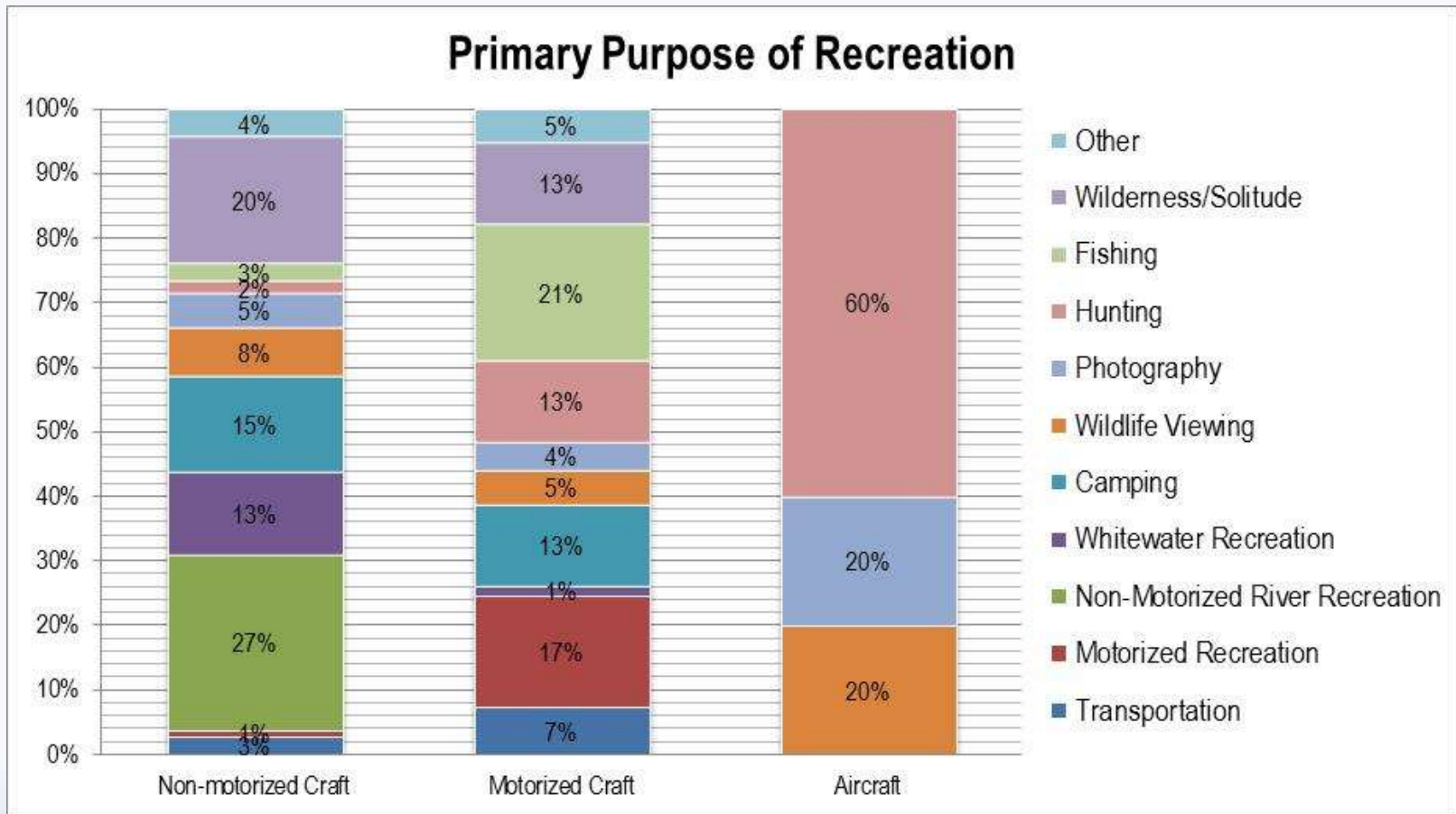
Study 12.7 Results—Internet Survey Reach 3

Figure 5.3-1. Reach 3 Responses Regarding River Access (n=146)



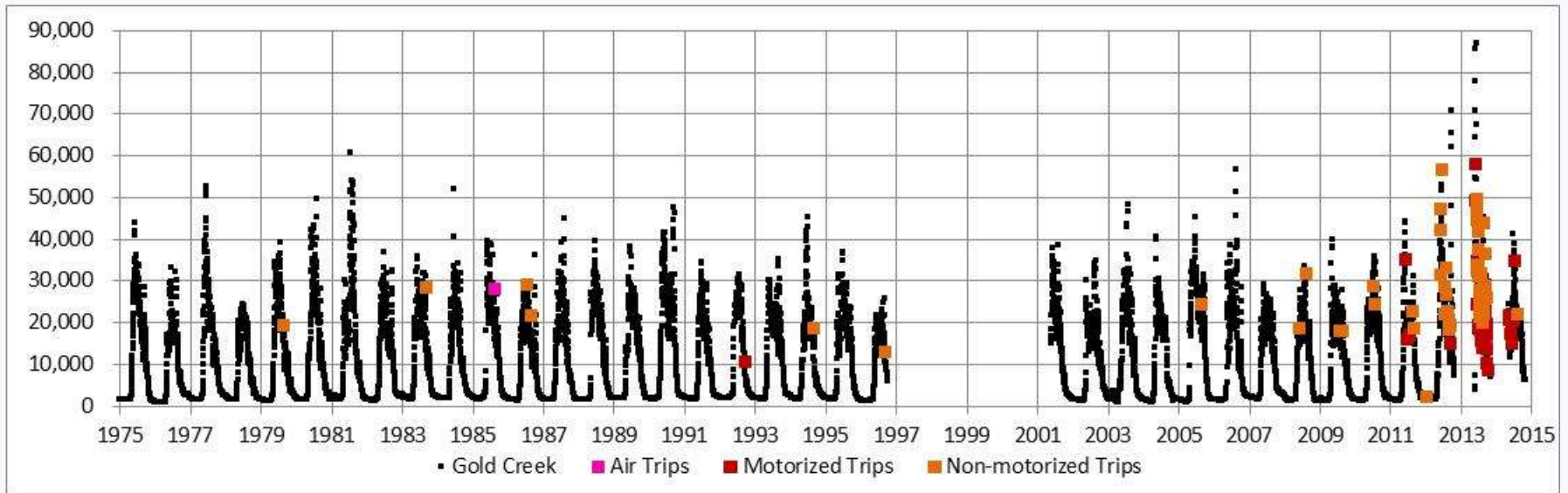
Study 12.7 Results—Internet Survey Reach 3

Figure 5.3-2. Primary Purposes of Recreation in Reach 3



Study 12.7 Results—Internet Survey Reach 3

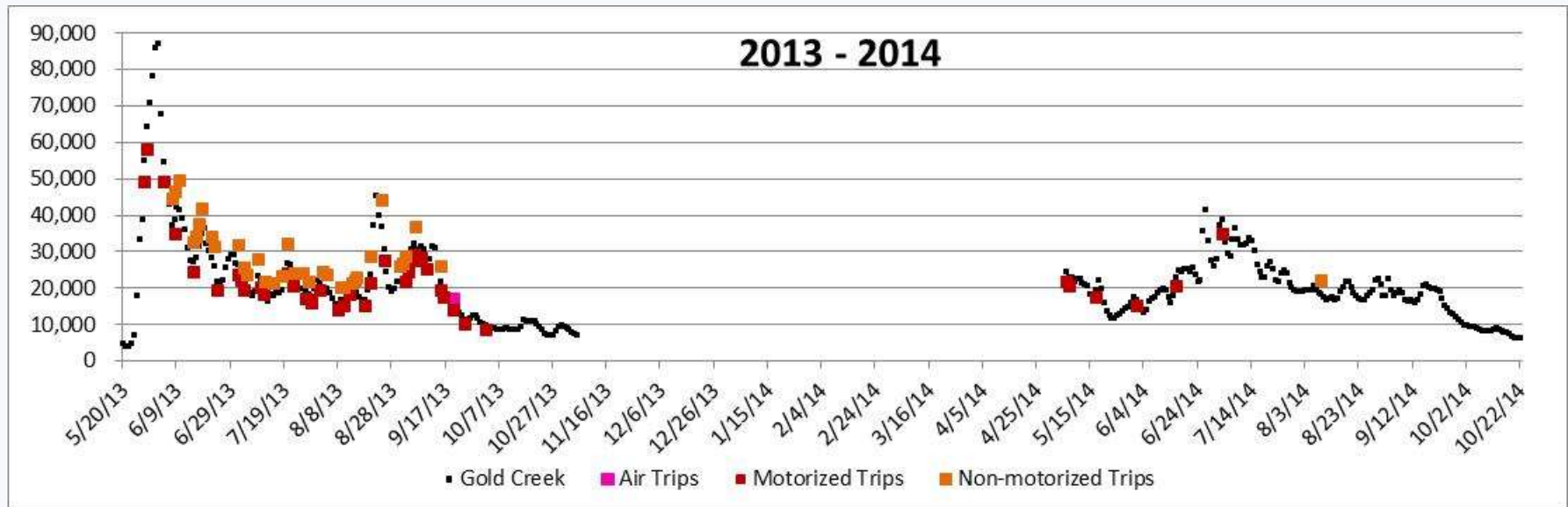
Figure 5.3-4. Timing of Air, Motorized, and Non-motorized Trips in Reach 3 (1975-2014)



Data source—internet survey participant responses identifying dates for river trips and craft. Y-axis represents discharge (cfs) at the USGS Gage at Gold Creek.

Study 12.7 Results—Internet Survey Reach 3

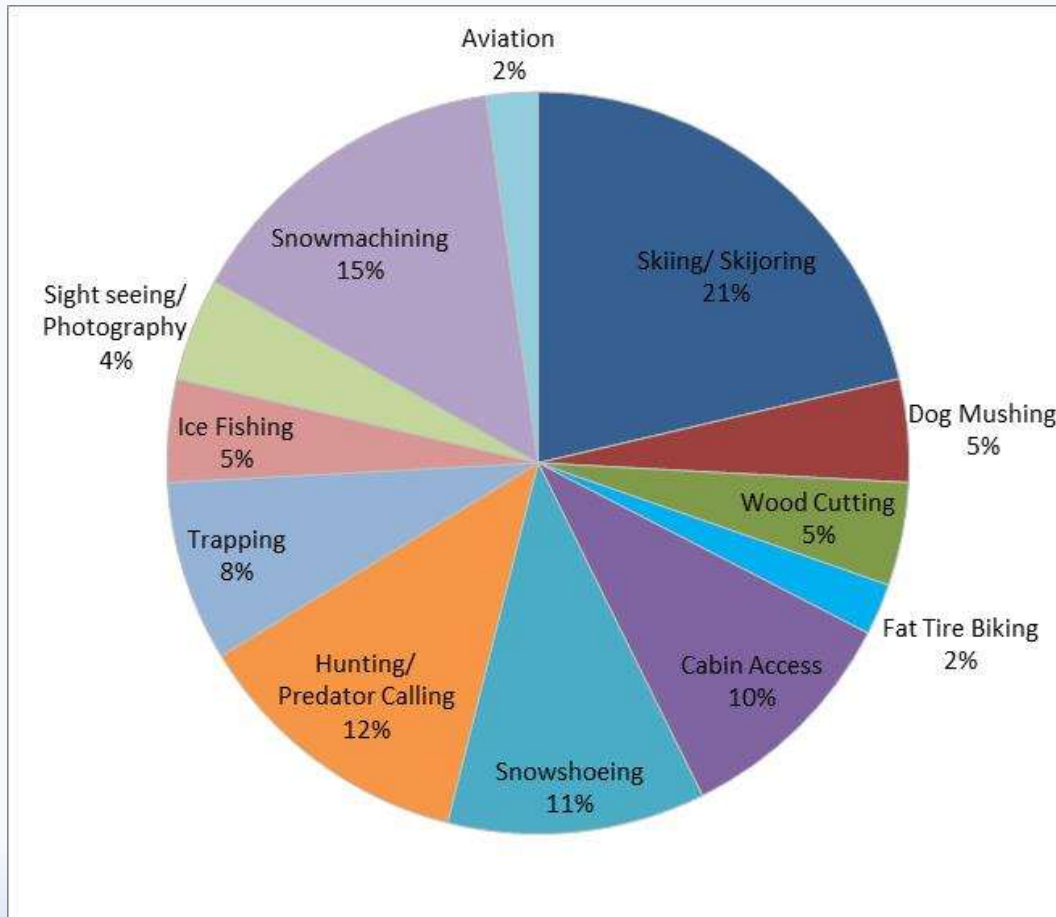
Figure 5.3-5. Timing of Air, Motorized, and Non-motorized Trips in Reach 3 (2013 - 2014)



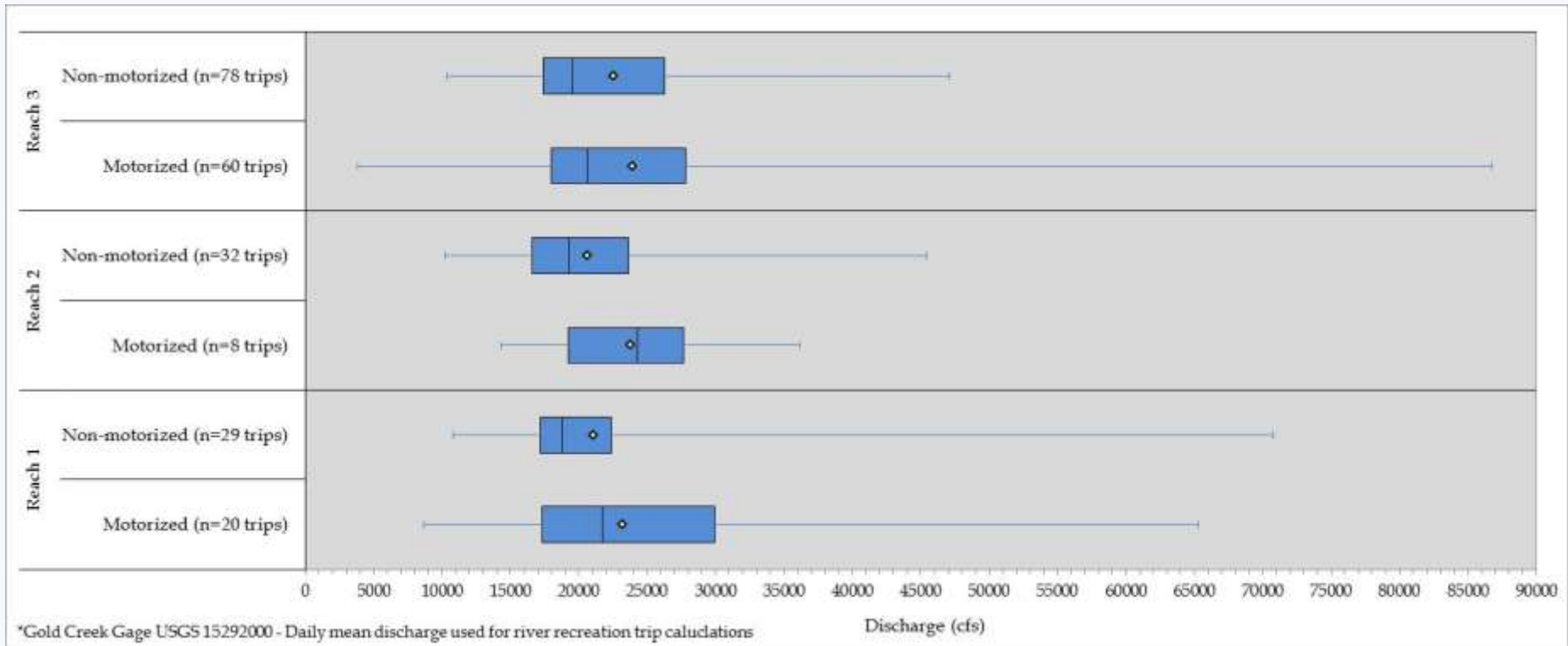
Data source—internet survey participant responses identifying timeframe for river recreation trips and craft on Reach 3 in 2013 - 2014. Y-axis represents discharge (cfs) at the USGS Gage at Gold Creek.

Study 12.7 Results—Executive Interviews Reach 3

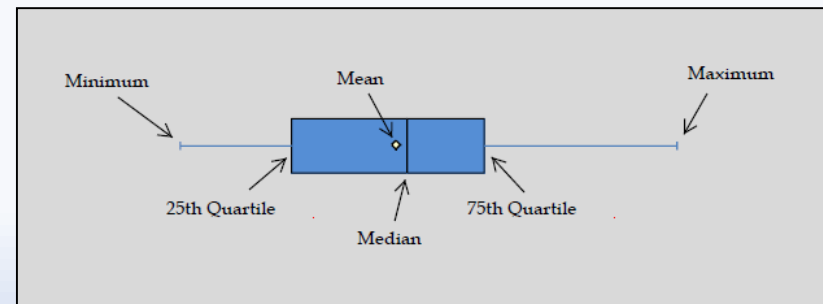
Figure 5.3-6. Reach 3 Executive Interviews Winter Activities (n=17)



Study 12.7 Recreational Flow Ranges by Reach



Box and Whisker Plot Legend



Study 12.7 Summary of Results

- **River recreation internet survey data collected during the 2013 through 2014 field seasons**
- **Data analysis is included in the SIR**

Decision Points from Study Plan

(ISR Part C, Section 7.1.1)

Extension of Study Area to Lower Susitna River

- Study 12.7 coordinated with Instream Flow Study (Study 8.5), Ice Processes in the Susitna River Study (Study 7.6), Geomorphology Study (Study 6.5), River Recreation Resources Study (Study 12.5), and Aesthetics Study (Study 12.6).
- Executive interviews with user groups and informal consultations have indicated low levels of flow dependent recreation use between the Parks Highway Bridge (PRM 88.9) and Susitna Landing. Summer users and operators cited the lack of access, safety considerations, cost, and availability of fish and game resources as reasons for low levels of flow-based recreation.
- Log books provided by Susitna Landing managers indicate that winter recreation users (primarily snowmachiners) were crossing the Susitna River to travel to Trapper Lake, Neil Lake, Lisa Lake, and Florine Lake.
- Assessment of changes to ice dependent river recreation are discussed in the Ice Processes in the Susitna River Study (Study 7.6).

AEA's Proposed Modifications to Study 12.7
(ISR Part D, Section 7)

No modifications to the Study Plan were needed to complete the study and meet Study Plan objectives.

Steps to Complete Study 12.7

(ISR Part D, Section 8)

- ***Focus Group Discussions:*** Conduct two focus group discussions for: (1) whitewater boating, and (2) winter ice and snow travel in the river corridor for motorized and non-motorized users
- **Describe new boating or other flow-dependent recreational opportunities** that may be created by Project construction and operation

Licensing Participants Proposed Modifications to Study 12.7?

- Agencies
- CIRWG members and Ahtna
- Public