



# Preliminary insights into angler response to the brown trout incentivized harvest program

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Glen Canyon Dam Adaptive Management Program Annual Reporting  
Meeting 2022  
January 11-12

U. S. Department of Interior  
U.S. Geological Survey

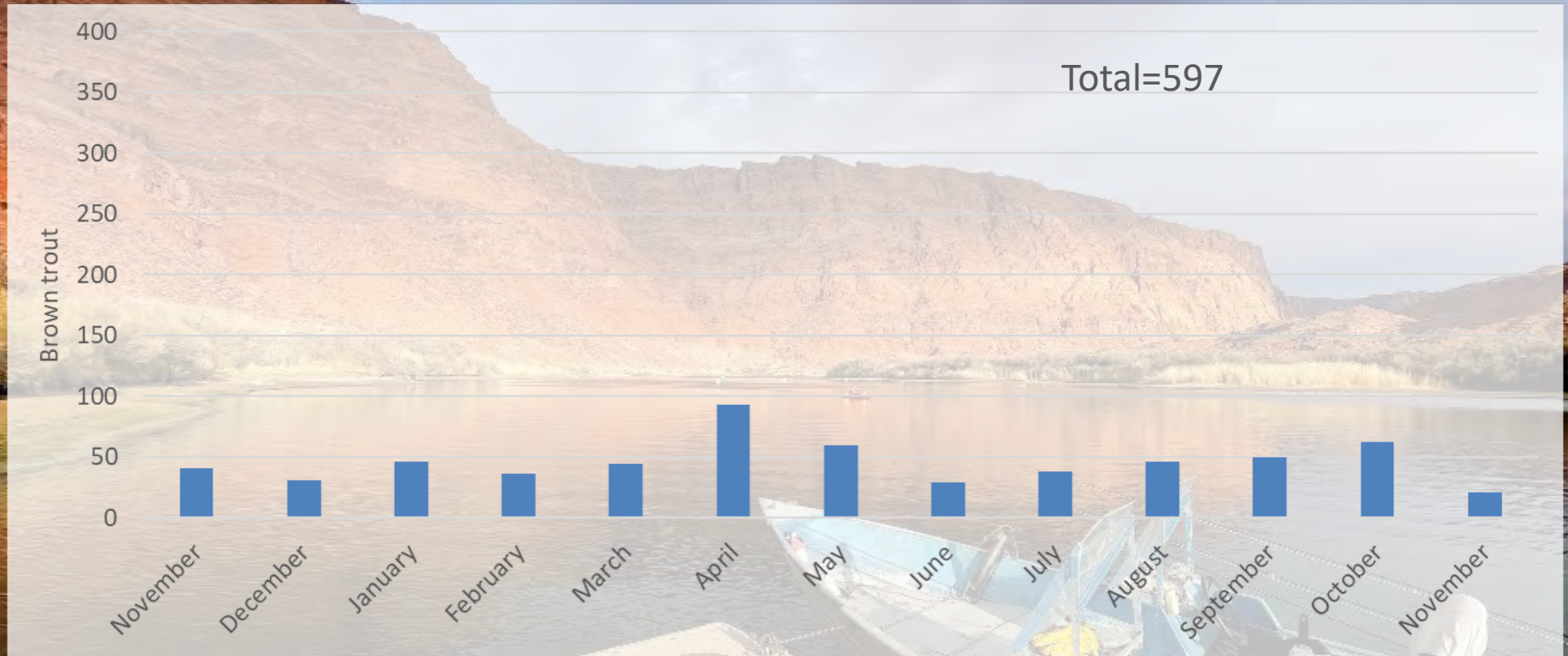
# Presentation Background

- Project Element J.2. Brown Trout Incentivized Harvest
  - Humpback Chub. Meet humpback chub recovery goals, including maintaining a self-sustaining population, spawning habitat, and aggregations in the Colorado River and its tributaries below the Glen Canyon Dam.



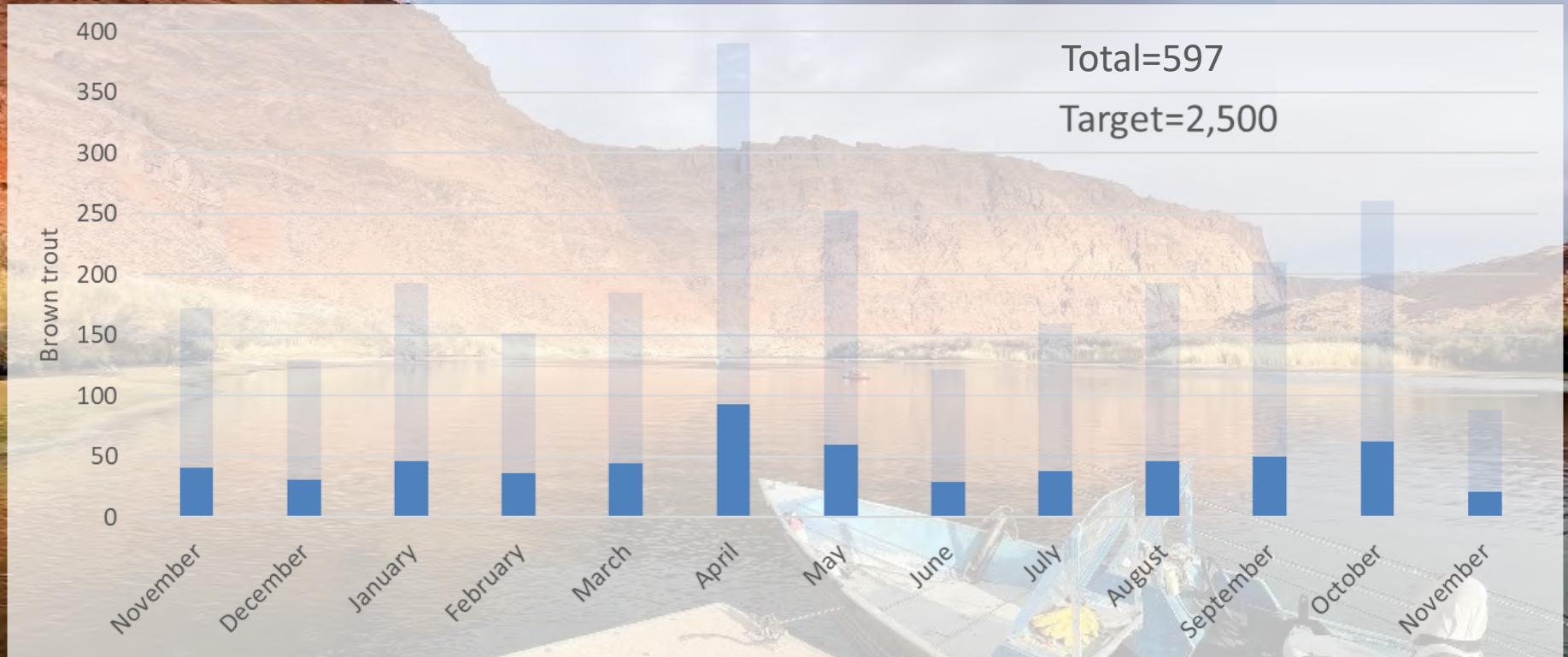


# Monthly brown trout submitted





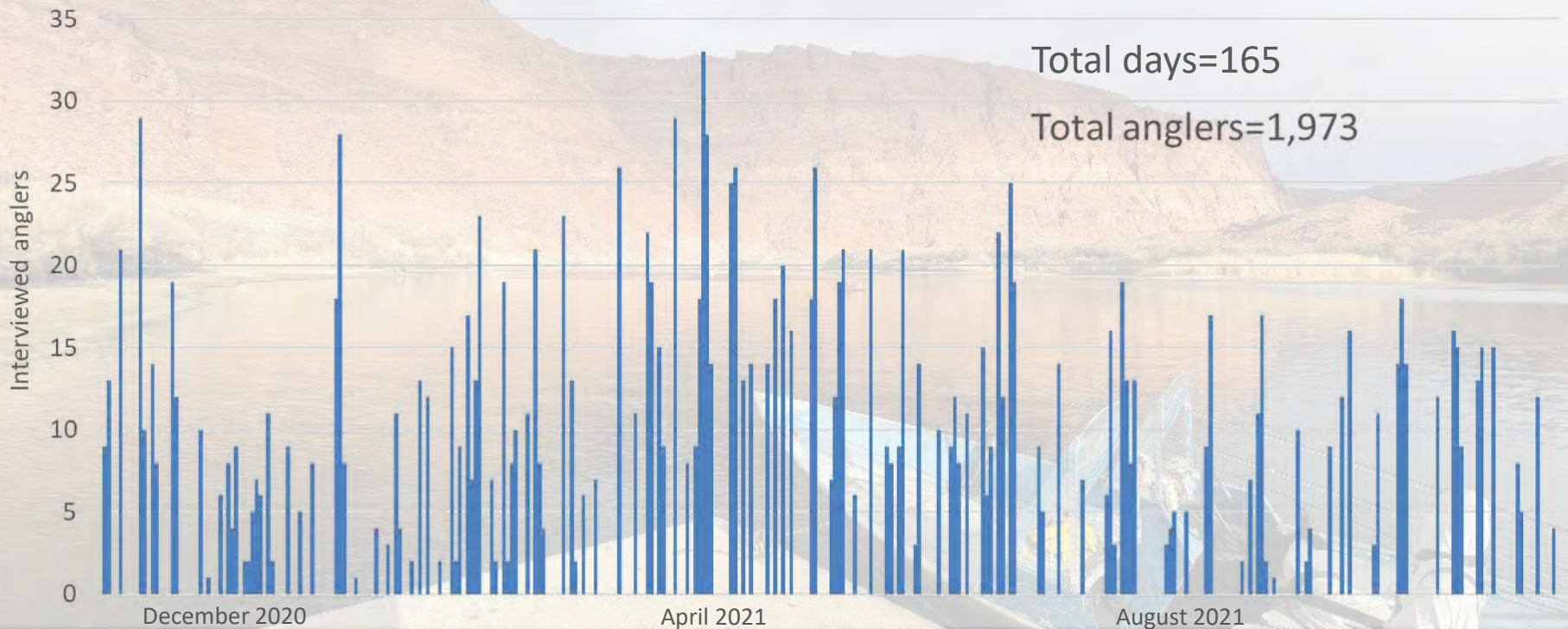
# Monthly brown trout submitted





# Creel data collection

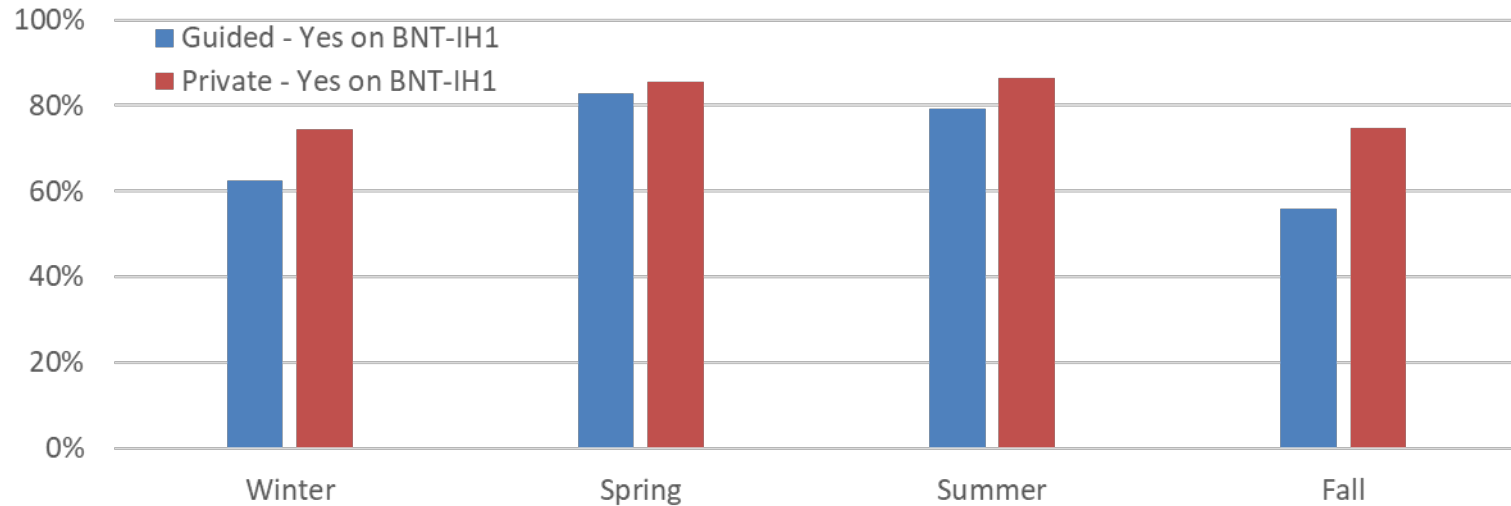
- Awareness
- Participation
- Success



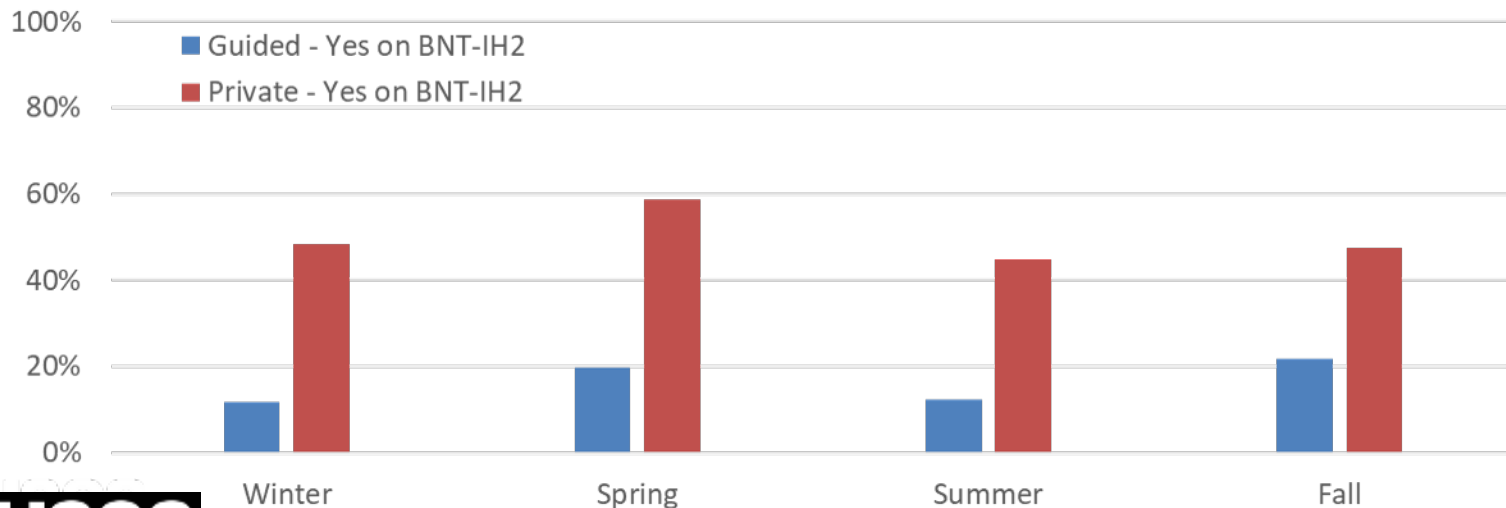
Preliminary data, do not cite



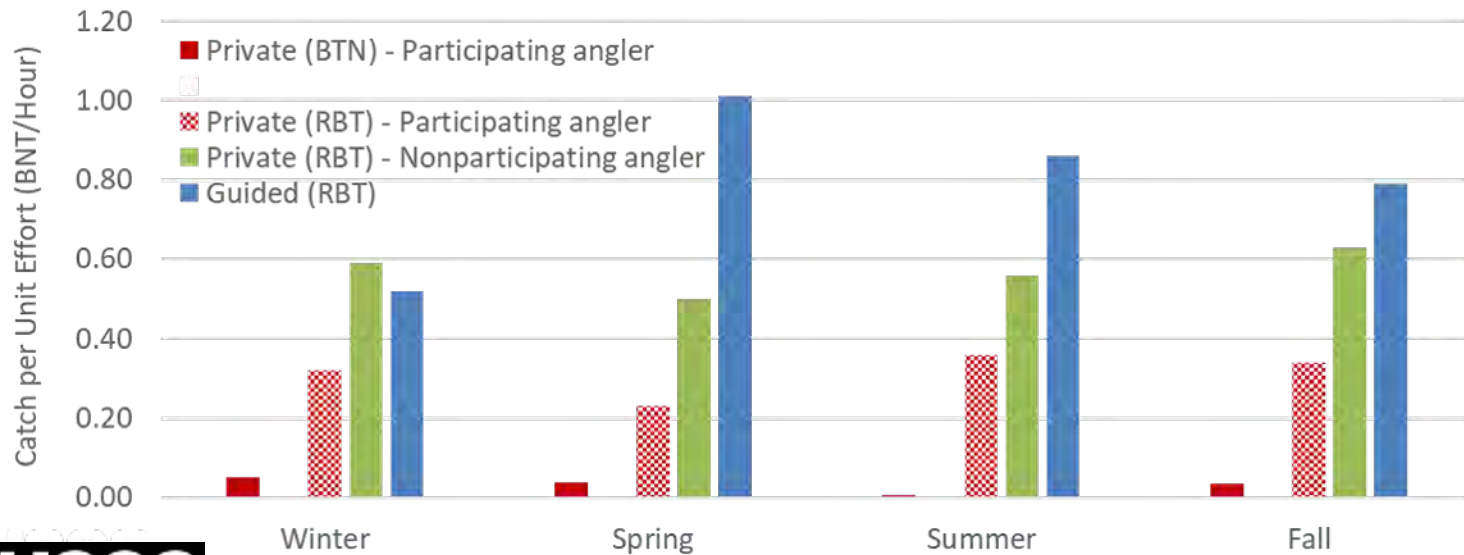
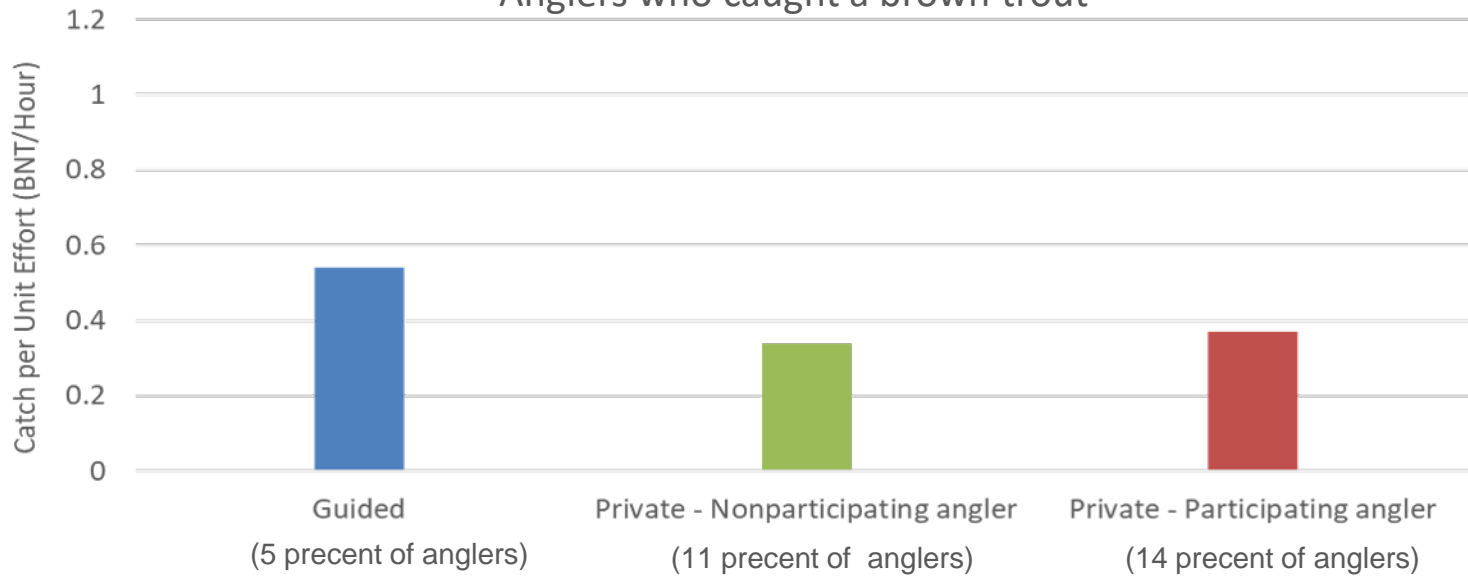
## Were you aware of the incentivized harvest program when planning your trip?



## Were you intending to participate in the incentivized harvest program when you started your trip?



## Anglers who caught a brown trout



Preliminary data, do not cite



# Incentivized harvest data collection

\_\_\_\_\_ name \_\_\_\_\_ phone number \_\_\_\_\_

\_\_\_\_\_ address/PO box \_\_\_\_\_

\_\_\_\_\_ city, state, zip code (or foreign equivalent) \_\_\_\_\_

Can we contact you for future research?  Yes  No

Please describe each brown trout

Bag #	Fish length (inches or millimeters)	River R (map on b)
1	_____	_____
2	_____	_____
3	_____	_____
4	_____	_____

(please use another card for additional fish)

Fish lengths based on (circle one)

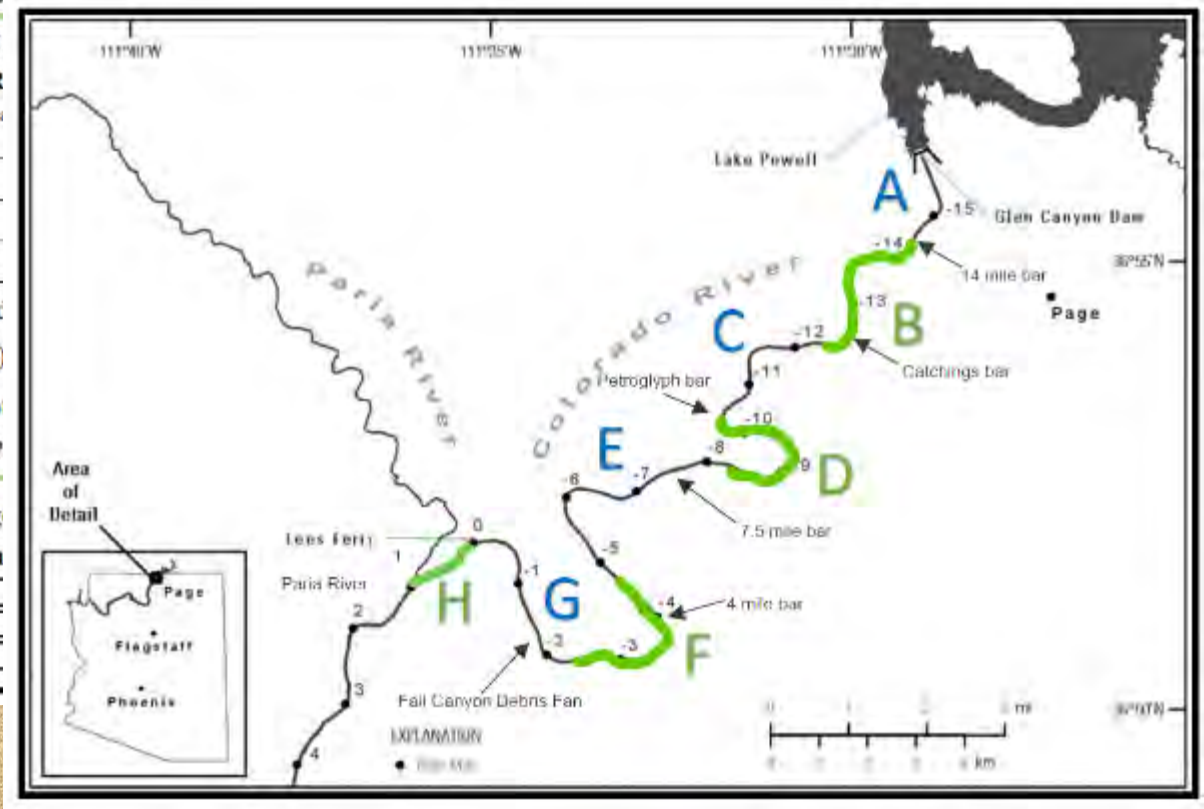
Date (mm/dd/yy): \_\_\_\_\_ To \_\_\_\_\_

Did you hire a guide?  Yes  No

age: \_\_\_\_\_ yrs

annual gross household income

Less than \$50,000  \$50,000 - \$99,999  \$100,000 - \$149,999

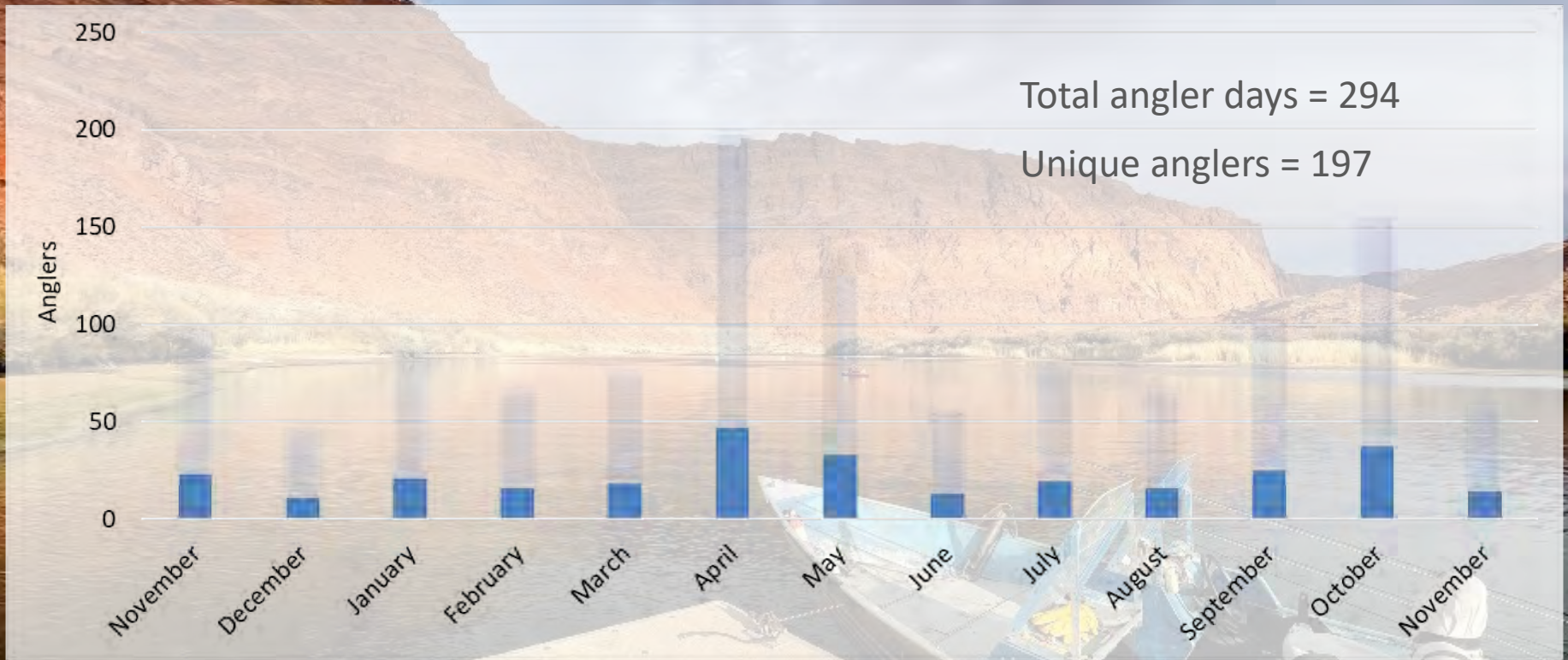




# Incentive structure

<b>Date</b>	<b>Item</b>	<b>Award amount</b>
Nov. 2020 - Feb. 2021	Implementation	\$25/fish
March 2021	Increase in base	\$33/fish
April 2021	Bonanza	\$33/fish, \$50 for 3rd fish, \$50 PIT tagged fish, \$300/sonic tagged fish, \$500/most, \$250/best video
May – July 2021	Base	\$33/fish
Aug 2021	Increase in base	\$33/fish and \$50 for 3rd fish
Sept. - Nov 2021	Increase in base	\$33/fish, \$50 for 3rd fish, \$300 for PIT tagged fish
Dec 2021- Jan 2022	Bonanza	\$33/fish, \$50 for 3rd fish, \$300 for PIT/sonic tagged fish, \$500 for most, \$500 for largest

# Monthly successful angler days



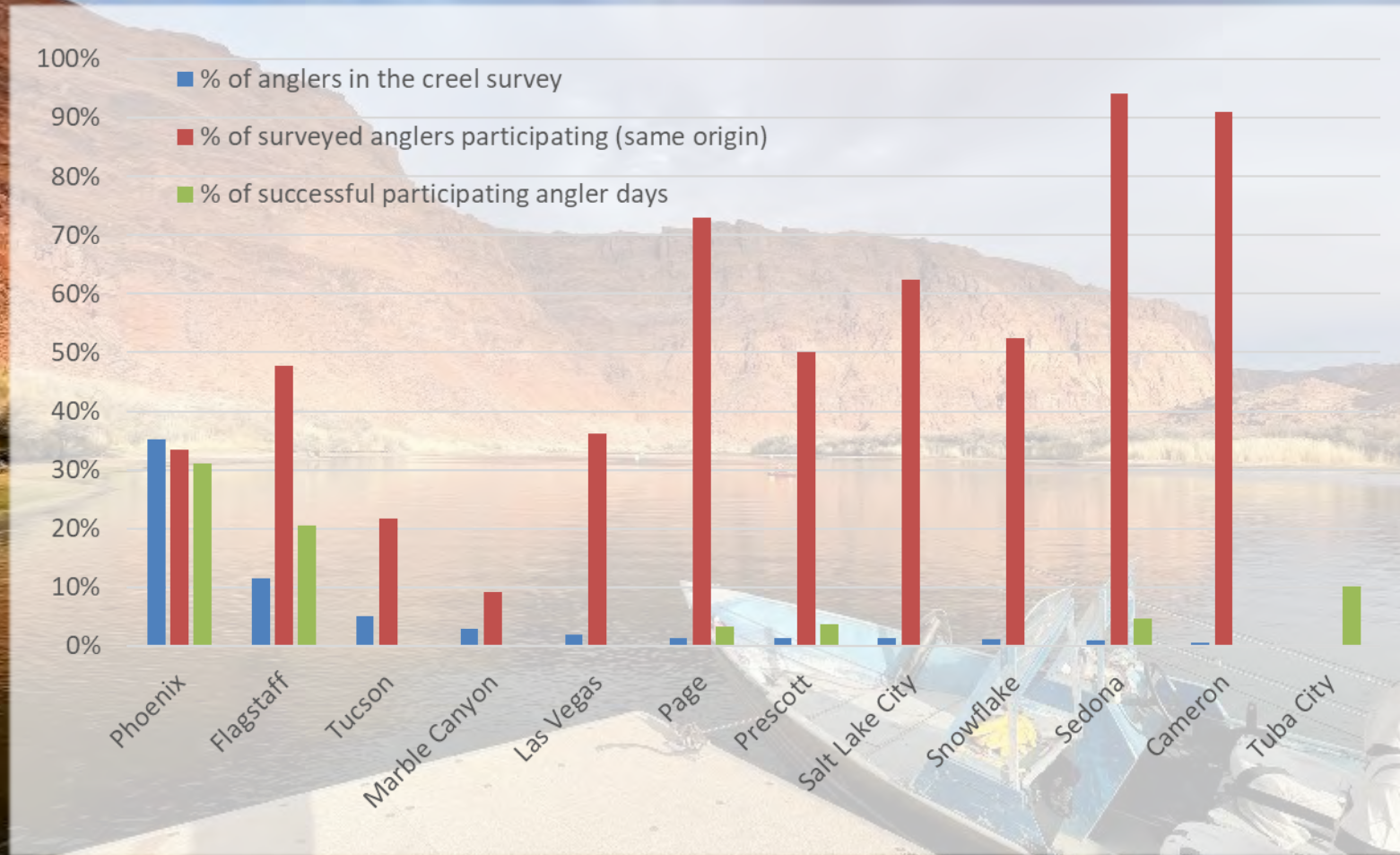


# Ideas for moving forward

- **Extensive margin** refers to how many participating anglers are at Lees Ferry.
- **Intensive margin** refers to how productive and how much effort participating anglers expending at Lees Ferry.



# Participating angler characteristics





# GCNRA angling videos

VIDEO

## Turning in Your Brown Trout Harvest

Glen Canyon National Recreation Area



**Jeff Arnold**  
Fisheries Biologist, National Park Service

### DESCRIPTION

Fisheries Biologist Jeff Arnold explains how to properly clean, tag, and deposit your entails in the Brown Trout licensed Harvest.

VIDEO

## Brown Trout Baits and Locations

Glen Canyon National Recreation Area



### DESCRIPTION

The best places on the Colorado River between Glen Canyon Dam and Lees Ferry, and the most successful baits used

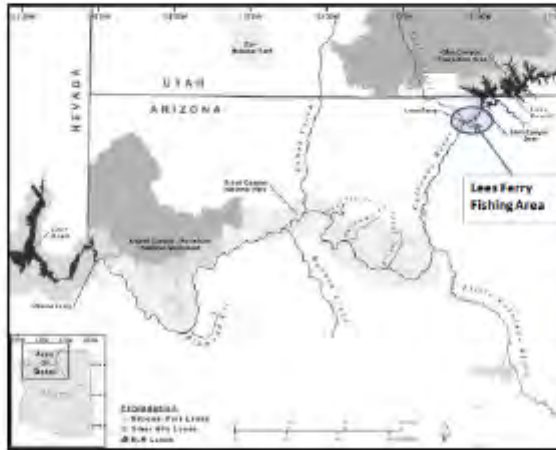
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# Mail survey data collection

OMB Control Number: 1024-0272  
Expiration Date: 0-31-2018

## Glen Canyon Angler Survey



**PAPERWORK REDUCTION ACT STATEMENT** The National Park Service is authorized by 10 U.S.C. 1a-7 to collect this information. This information will be used by park managers to evaluate fishing trips at Lee's Ferry. Response to this request is voluntary. No action may be taken against you for refusing to supply the information requested. Please do not put your name or that of any member of your group on the questionnaire. The permanent data associated with this collection will be anonymous.

**BURDEN ESTIMATE:** The public reporting burden for this form is estimated to average 20 minutes per response. Direct comments regarding the burden estimate or any other aspect of this form to the NPS Information Collection Review Coordinator, National Park Service, 1201 Oakridge Dr., Fort Collins, CO 80526.

In the past few months you were contacted by Arizona Game and Fish and asked to participate in a short creel survey while fishing in the vicinity of Lee's Ferry. We would like you to provide information about that trip when completing this survey.

18. Please check ONE box at the bottom of the table to indicate whether you prefer Trip A, Trip B, or Not Visit.

Trip Characteristic	Trip A	Trip B	Not Visit
	Assume that everything about your Lee's Ferry trip were the same except the following	Assume that everything about your Lee's Ferry trip were the same except the following	
Average River Flow Level	40,000 cfs	25,000 cfs	I would not choose to take a Lee's Ferry Fishing trip if these were my only choices
River flow fluctuation	5,000-8,000 cfs flow fluctuations	5,000-8,000 cfs flow fluctuations	
Number of Fish Caught	Same number of fish as you caught on your trip	Double the number of fish you caught on your trip	
Size of fish caught	Double the chance of catching a trophy fish	Same chance of catching a trophy fish as on your trip	
Your individual trip costs increased by	\$75	\$700	
I would choose (check one only)	Trip A <input type="checkbox"/>	Trip B <input type="checkbox"/>	Not Visit <input type="checkbox"/>

19. Please check ONE box at the bottom of the table to indicate whether you prefer Trip A, Trip B, or Not Visit.

Trip Characteristic	Trip A	Trip B	Not Visit
	Assume that everything about your Lee's Ferry trip were the same except the following	Assume that everything about your Lee's Ferry trip were the same except the following	
Average River Flow Level	3,000 cfs	40,000 cfs	I would not choose to take a Lee's Ferry Fishing trip if these were my only choices
River flow fluctuation	5,000-8,000 cfs flow fluctuations	steady flow levels	
Number of Fish Caught	Double the number of fish you caught on your trip	Same number of fish as you caught on your trip	
Size of fish caught	Same chance of catching a trophy fish as on your trip	Same chance of catching a trophy fish as on your trip	
Your individual trip costs increased by	\$25	\$75	
I would choose (check one only)	Trip A <input type="checkbox"/>	Trip B <input type="checkbox"/>	Not Visit <input type="checkbox"/>



# Questions?

