



*Northern Cheyenne Climate Change  
and Drought Planning*

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A herd of bison is grazing in a grassy field. The bison are scattered across the frame, some standing and some grazing. The background shows a line of trees and a clear sky.

# Northern Cheyenne Ontology

- What it means to be human, a good relative.
- We are on this earth to learn and practice these.
- We are spirits having a human experience.
- Kinship-based paradigm, we are a part of nature, not apart from or above it.



# Social Vulnerability

- “We are not vulnerable, we are targeted.”  
It is by design.
  - Past and current Settler Colonialism, this work cannot be understood without this.
- Despite this, it is critical to know: We exist outside, beyond, without the settler state – working from this is what forms our reality, our actions, practices and being. We are not victims in need of saving.

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# Social Vulnerability

- So according to western metrics of social vulnerability, the short answer is yes.
- Our nation has been intentionally destabilized since the 1800s
- However, we rely upon our own “metrics” – e.g. collective land base, being on the land, family, harvesting, storywork (Archibald), speaking our language, being in respectful relation with all our relatives

A herd of bison is grazing in a grassy field. The bison are of various sizes, including adults and calves. The field is a mix of green and brown grass, suggesting a natural, open range environment. The background shows a line of trees under a clear sky.

# So how does this unfold in climate change planning?

- We collected our own data, according to our axiologies and methodologies through community meetings and survey. It was done by us, for us.
- Also utilized these sources:
  - Comprehensive NCT Report
  - Tribal GIS data – comprehensive GIS database
  - NRCS
  - USGS

A herd of bison is grazing in a grassy field. The bison are of various sizes, including adults and calves. The field is a mix of green and brown grass, with some small shrubs. The background shows a line of trees under a clear sky.

# Quick Word on Partnerships

- Common outsider attitude: tribal data is free and available to anyone who wants it.
- Creating and implementing research and data agreements
- We are sovereign nations



# IRMP/ARMP Community Survey

- NCT IRMP (1989) – update the vision statement
- ARMP – Develop and implement an AMRP
- Community voice is key
- Developed and collected a community survey:
  - IRMP/ARMP Advisory Group
  - Draft questions
  - Focus Groups
  - Final survey



# IRMP/ARMP Community Survey

- **Survey distribution/recruitment:**
  - September 2016-February 2017
  - Paper copies: Surveys & drop boxes posted in Lame Deer and mailings
  - Online (survey monkey) – posted physical copies of link around community, Facebook and website
  - District & other community meetings and events
- Asked about how to best manage Tribe's resources and how to plan for climate change
- Multiple choice, ranking, rating, and short answer questions



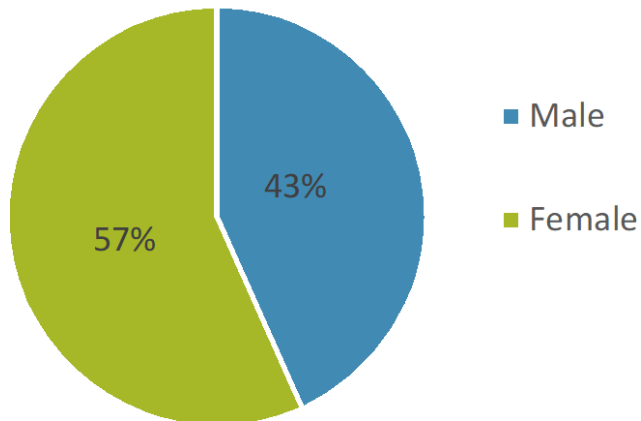
A herd of bison is grazing in a grassy field. The bison are scattered across the frame, some standing and some lying down. The background shows a line of trees and a clear sky.

# IRMP/ARMP Community Survey

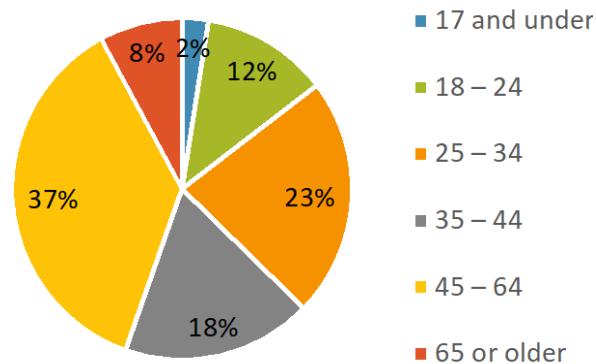
- Incentive/gratitude: 20 \$100 Visa Gift Cards
- Received 366 surveys

# Survey Demographics

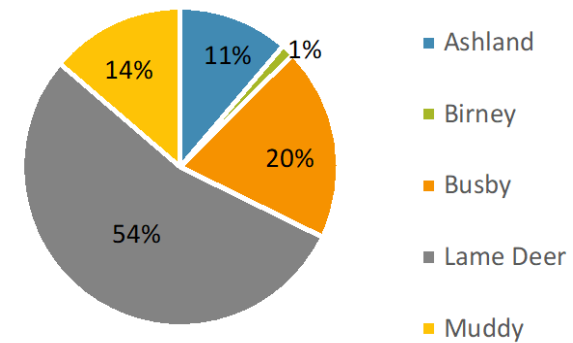
## 1. Sex



## 2. AGE



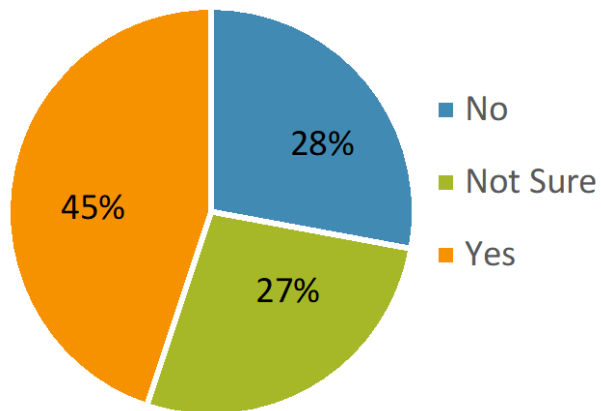
## 3. Where do you live?





# Climate Change

16. Have you experienced and/or witnessed the effects of climate change?

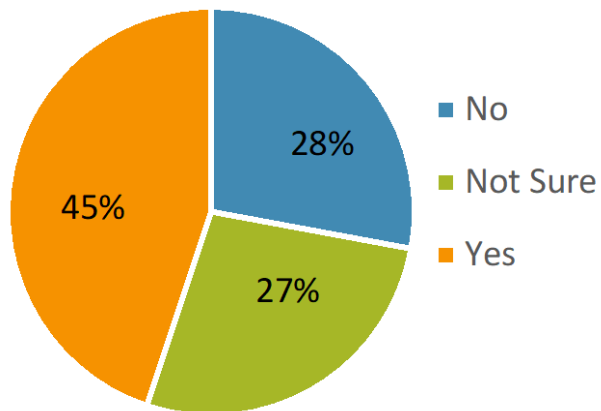


If yes, say more:

- Seeing less wildlife in and around the reservation
- Absence of certain bird and insect species
- Summers seemed warmer and winters seemed shorter, with less snowfall

# Climate Change (cont.)

16. Have you experienced and/or witnessed the effects of climate change?



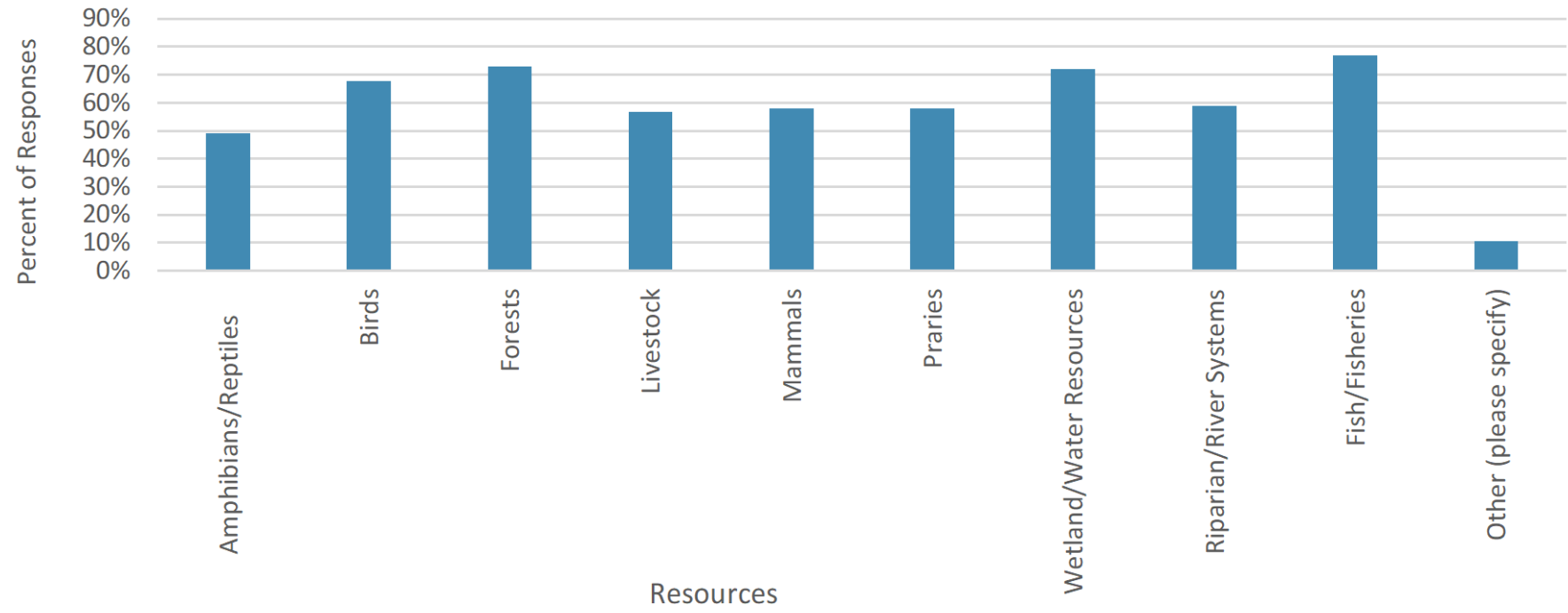
If yes, say more:

- More fires now and creeks and springs are drying up
- Certain plants now seem to be scarce and/or they are not as productive as they have been in the past
- Ceremonial plants have become much harder to find



# Climate Change

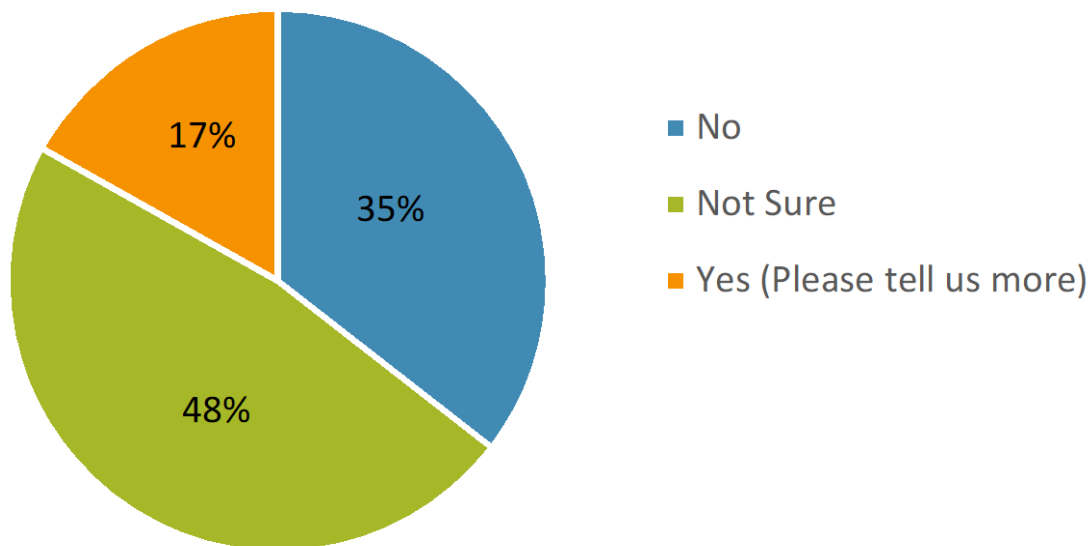
17. What wildlife, plants, and/or habitats do you think are being affected by climate change?





# Climate Change

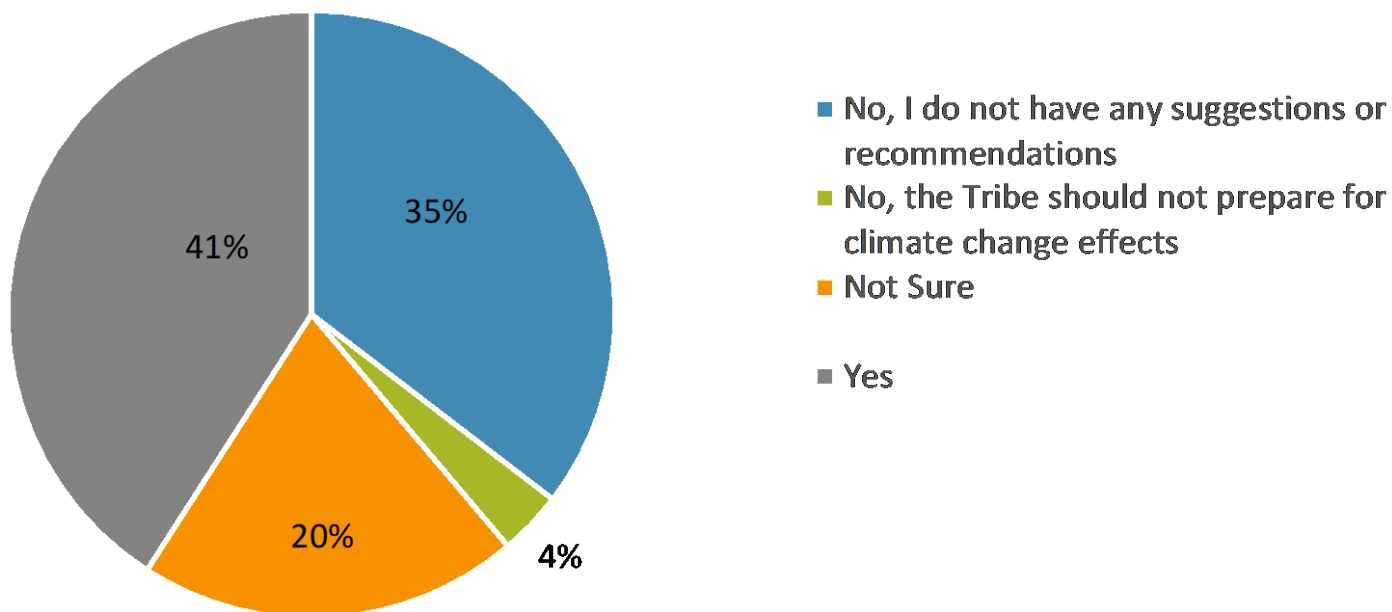
18. Have you changed any of the activities (work, personal, or cultural) that you do and/or do you feel that other tribal members have changed any of the activities that they do because of climate change?





# Climate Change

19. Do you have any suggestions or recommendations for how the Tribe should prepare for climate change effects (e.g., conserve water, change hunting season dates, etc.)?



A herd of bison is grazing in a grassy field. The bison are scattered across the frame, some standing and some grazing. The background shows a line of trees and a clear sky.

# Community Recommendations: Preparing for Climate Change

- “Change dates for hunting season, limit hunting due to over-harvest and loss of habitat for wildlife.”
- “Climate change is very real, I've seen and felt change here on the homeland. The more we educate our young children the better off they will be in the future.”
- “Come up with some sort of climate change plan.”



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# Community Recommendations: Preparing for Climate Change

- “**Conserve water**, strengthen food sovereignty, prevent wildfire.”
- “Having class or lecture on the climate change matter so that the community is aware and to obtain knowledge.”
- Education and climate change.
  - Have outdoor activities

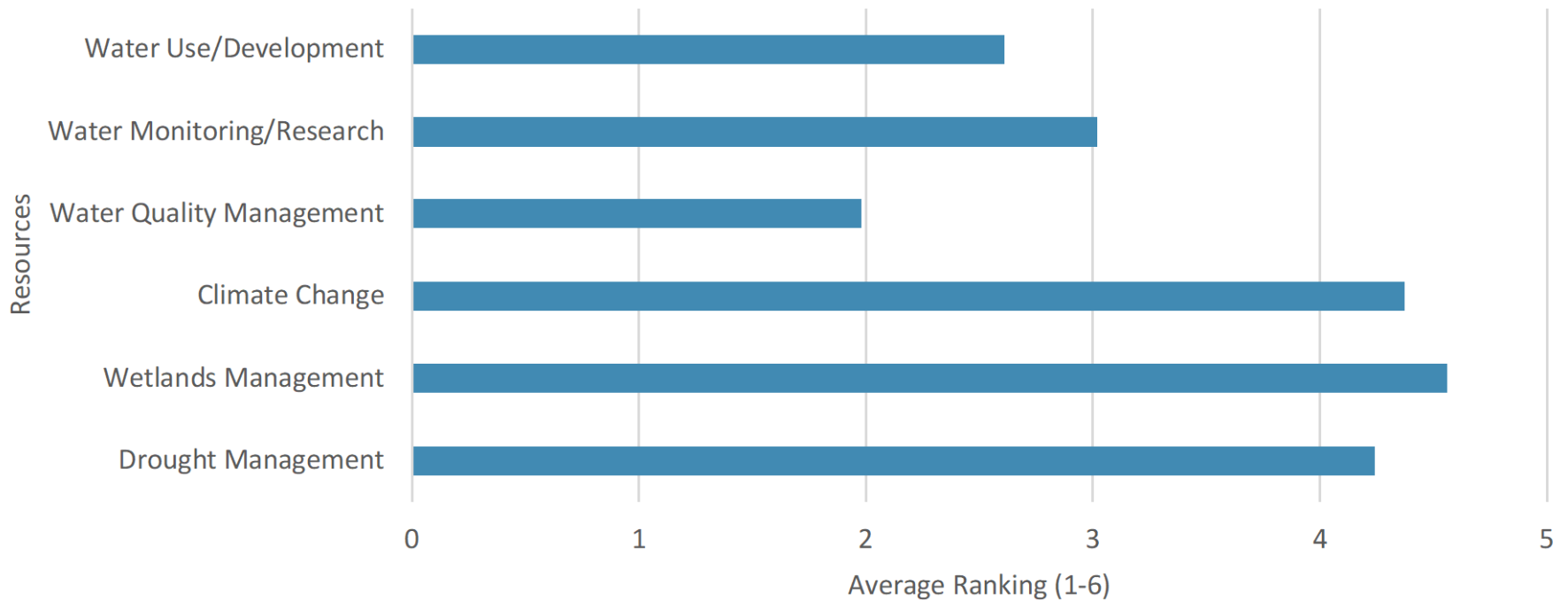
A herd of bison is grazing in a dry, grassy field. The bison are scattered across the landscape, some standing and some grazing. The field is a mix of green and brown grass, indicating a dry environment. The background shows a line of trees and a clear sky.

# Water & Drought Planning

- 2007 Drought Management Plan
- Requires an update that reflects Northern Cheyenne ontology & axiology
  - Evident from survey results

# Community Views of Water

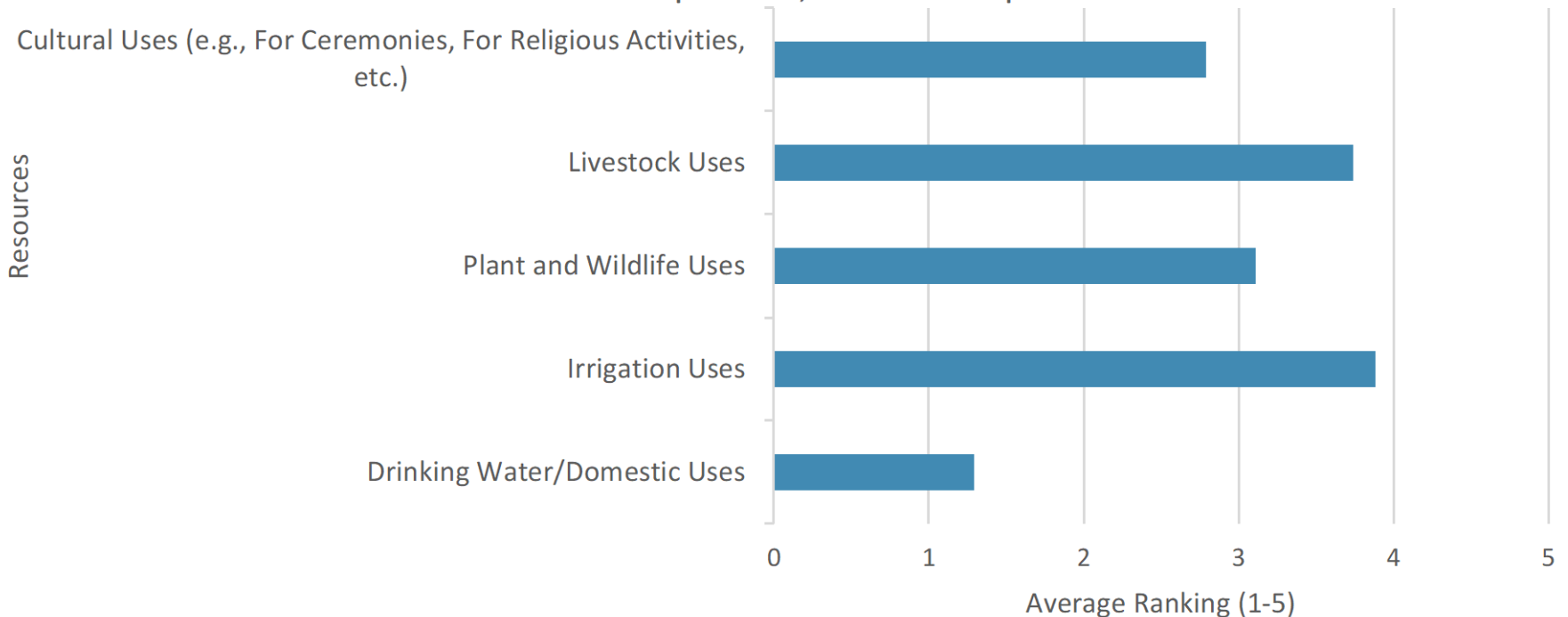
10. Please rank the following water-related issues from most important to least important.



# Community Views of Water

9. Please rank the following water uses from most important to least important.

1 = most important; 5 = least important



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# My Water Research

- Basic Intro
- Results
- Implications for water and drought planning



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Questions/comments?