

# DAM! BRIDGING THE DAM: PERCEPTION AND APPROACHES TO BEAVER-RELATED RESTORATION WORK IN SCATTER CREEK



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## Background:

The effects of climate change have caused an increase in dry summers in the State of Washington. Dry summers directly affect the difficulties of salmon migration and spawning habitat on Scatter Creek, a creek located south of Olympia.

Beavers are a possible solution to this problem, as areas with beaver dams allow for adaptation to climate change. But not everyone is for this restoration work because of human-beaver conflict.

The purpose of this research is to evaluate the wildlife acceptance capacity of beavers in the area.

## Research Question:

What are the Scatter Creek watershed residents' view on beaver dams? What are the factors needed for social acceptance of beaver-related restoration?

## Internship and Methods:

I interned with the Chehalis Basin Partnership an NGO.

1. The first step in the internship involved coordinating the citizen science project that started in 2021.
2. Step two includes organizing the data from the volunteers into a web map.
3. Step three involved surveying the residents in the Scatter Creek area about their perspective of beavers and the problems that the creek has recently been facing.
4. Step four involved a literature review on past beaver-related restoration and understanding factors that made the project successful.



## Results:

- Resident's perspective:

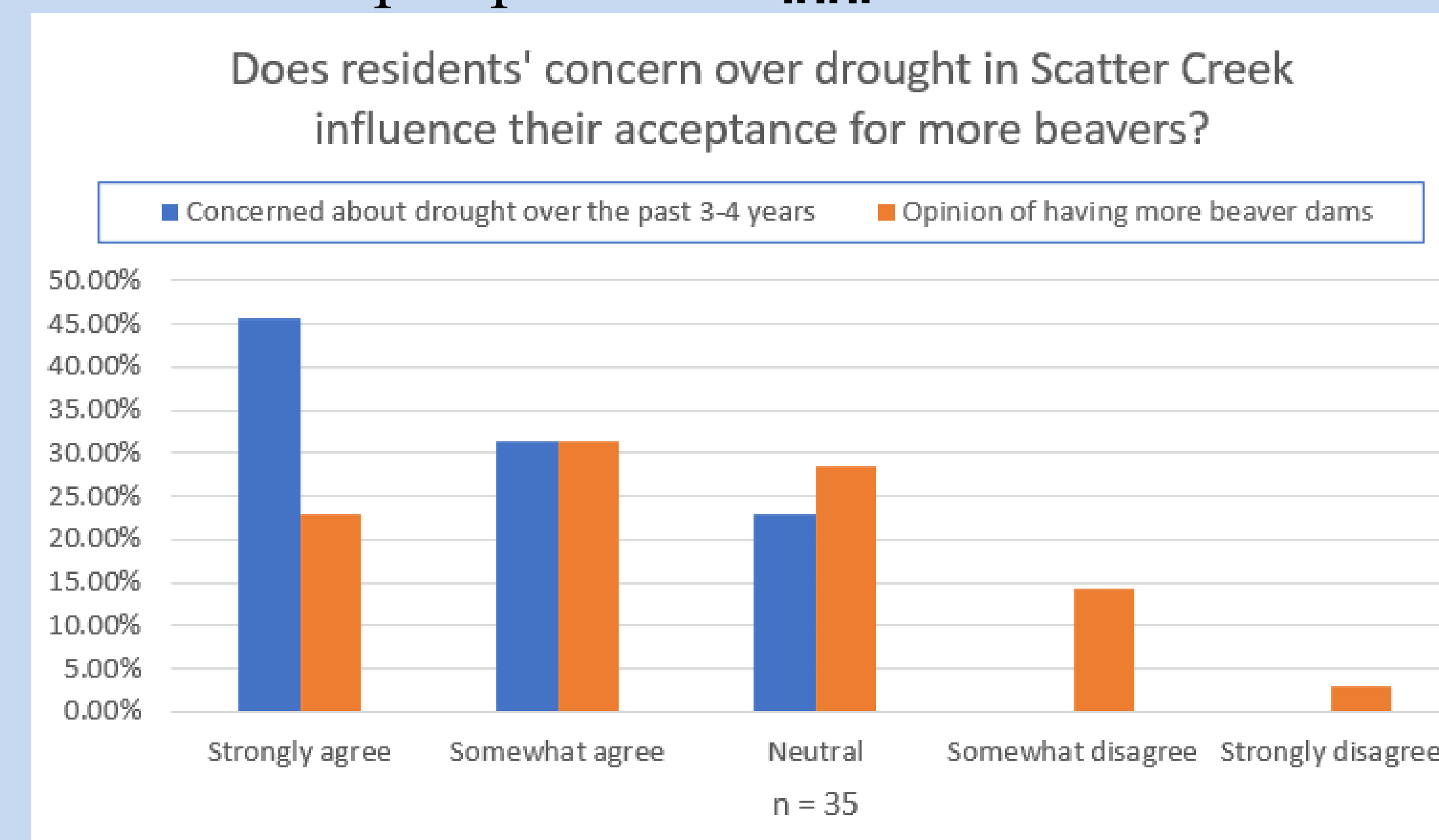


Figure 1: Bar chart showcases distribution of 35 respondents answering the question "4. Over the past 2-4 years I am concerned about drought around Scatter Creek" in blue and "6. There should be more beaver dams in the Scatter Creek area" in orange from my survey done in a Tenino Oregon Trail days community event.

- ❖ 45.70% of residents are concerned about drought in the past 2-3 years in the Scatter Creek area.
- ❖ This does not necessarily mean they will agree to have more beavers in the area.

10. What are positive and negative impacts from coexisting with beavers?
22 responses
We live with them. We own about three miles of Scatter Creek and deal with lots of beavers. One or two are okay more and it's a problem.
Positives are creation of important habits for many critters. Negatives include conflict with human interests.
I enjoy habitat for others that beaver create. I appreciate the support of water and ecosystems that beaver provide.
Positive, They spread water and slow flooding events. I have manged land in Eastern Washington with multiple beavers active in the area. 300 + acre duck hunting club. The rule is to keep culverts you want open silent- logs in whirlpool. Negative, they hear water they react by dropping trees and building dams. Manage by sound where you want them to build.
The more bio diversity the better.
Need to be controlled

Figure 2: Residents' answer to question 10 from the survey done in the Tenino Oregon Trail days community event

- ❖ Residents have an awareness of human-beaver conflicts due to intersecting land usage.
- ❖ Some residents want control of population size if more beavers are in the area.
- ❖ Residents understand some of the benefits that beavers have on the ecosystem

## Results (continued) :

- Factors needed for social Acceptance

To reduce human-beaver conflicts and correctly reintroduce beavers into an area, federal agencies and organizations must focus on four main factors:

1. Increase education on beavers and nonlethal practices
2. Engage with communities more and allow them to be part of the decision-making
3. Understand residents' experience and perspective on the wildlife population in the area
4. Make sure the area is suitable for beaver-related restoration



## Implications:

- Increase the wildlife acceptance capacity of beavers due to a positive experience coexisting with them.
- Restoration work considers the human dimension when working on restoration projects to reduce conflict.
- Restore struggling watersheds and allow for climate adaptation.
- A successful Beaver-related restoration project will allow for yearly water sources for human activities and salmon usage.

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