



**Results and Implications:
MN DNR Climate Change Survey, 2010
& 2010 Minnesota State Survey**

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Washington County Water Consortium Meeting

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role in this research and presentation.*



MN DNR Climate Change Survey, 2010

- Purpose:
 - Better understand DNR employees views of climate change,
 - Learn current mitigation and adaptation strategies in progress
 - Learn ways to better improve information and education efforts

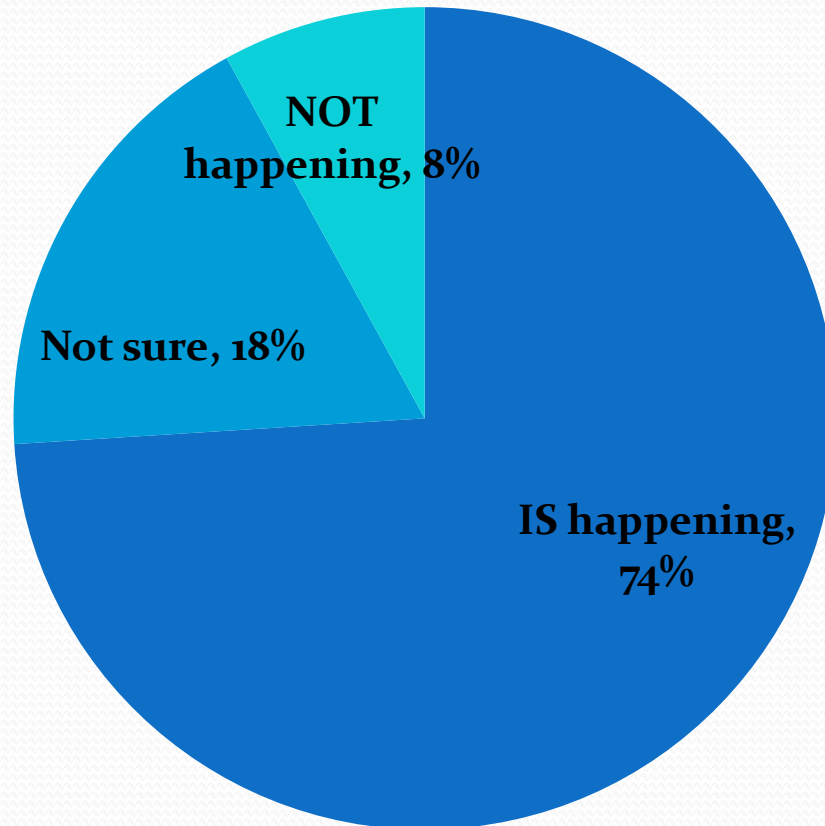


MN DNR Climate Change Survey, 2010

- Methods:
 - Random sample of DNR employees w/ email addresses
 - Modified Dillman (2009) technique
 - 429 of 660 completed survey; 67% response rate
 - $\pm 3.2\%$ margin of error at a 95% confidence interval

MN DNR Climate Change Survey, 2010

How sure are you that climate change is happening/not happening?



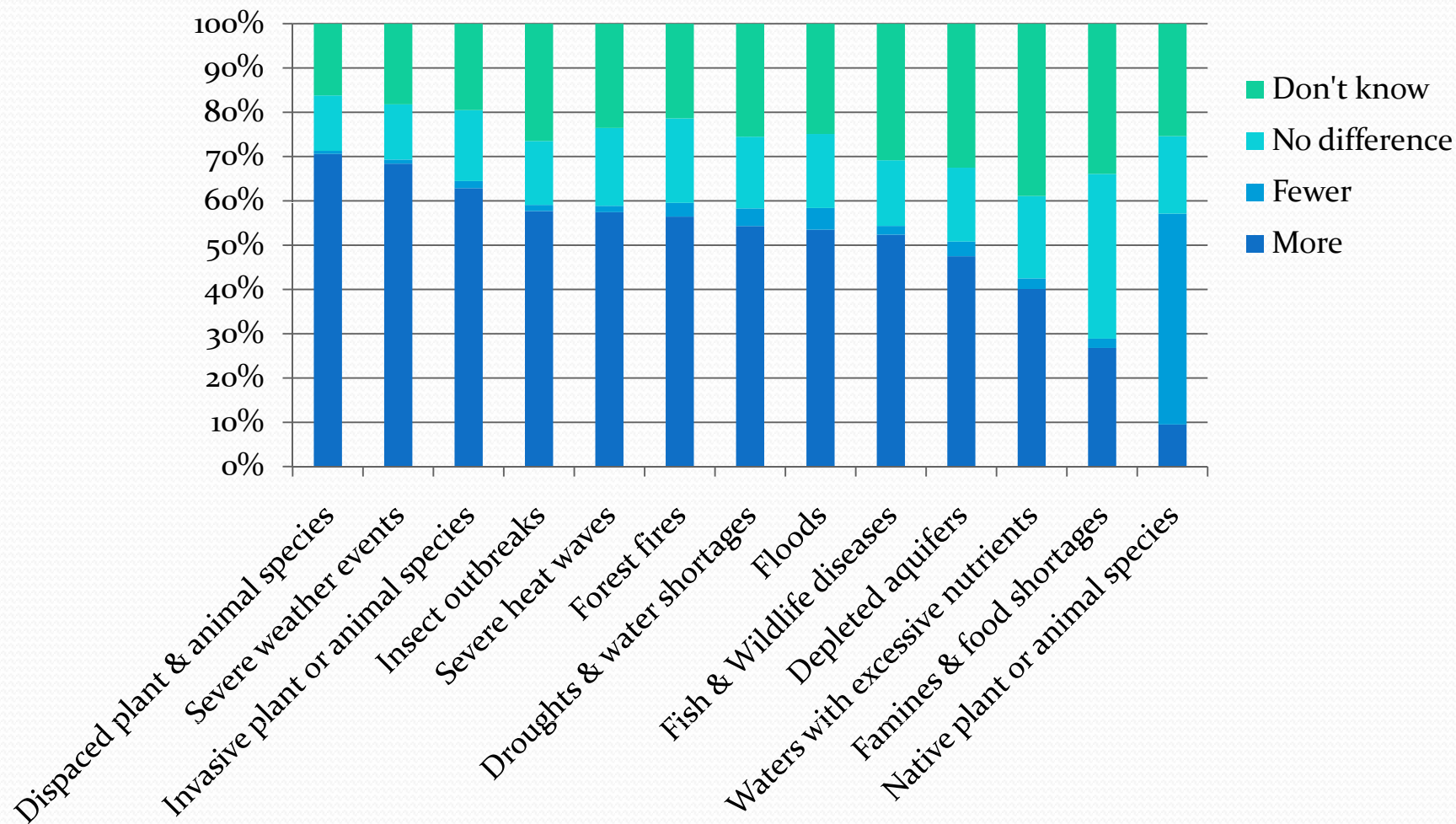
MN DNR Climate Change Survey, 2010

How sure are you that climate change is happening/not happening? (by division & region)

	IS happening (%)	Not sure (%)	NOT Happening (%)
Department	74	18	8
Eco& Water Resources	88	6	6
Enforcement	54	29	17
Fish & Wildlife	82	16	2
Forestry	64	24	12
Lands & Minerals	54	39	8
Parks & Trails	78	16	6
Bureaus	74	21	5
Central Region	83	14	3
Central Office	83	15	2
Northeast Region	64	23	13
Northwest Region	65	23	13
Southern Region	86	12	2

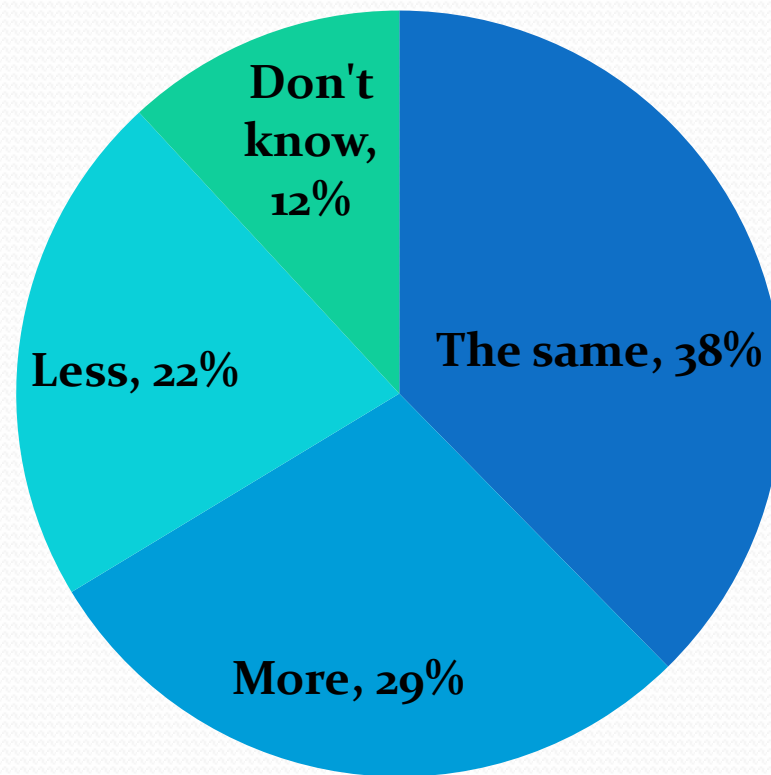
MN DNR Climate Change Survey, 2010

In MN over the next 50 years do you think climate change will cause more or fewer of the following?



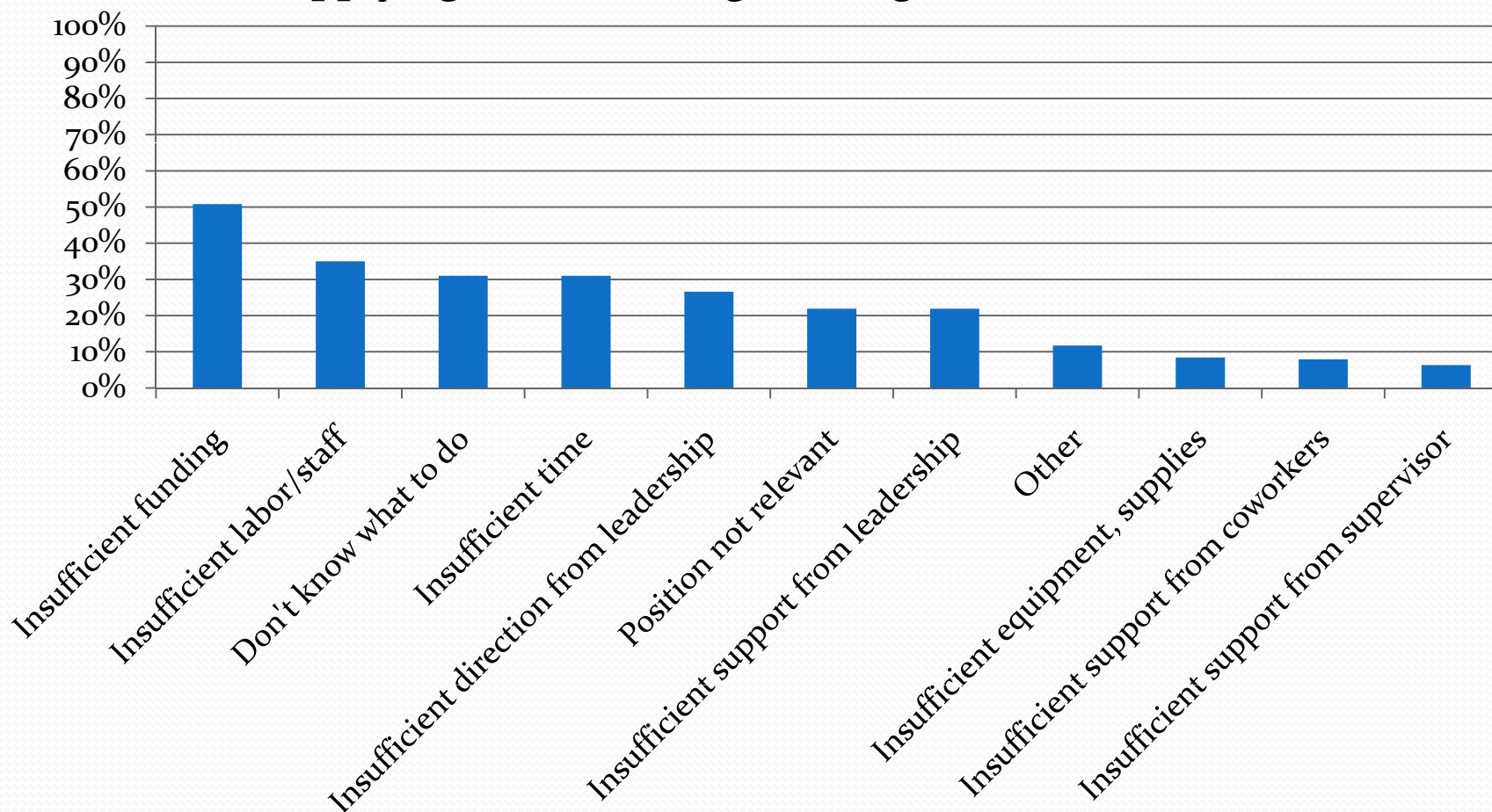
MN DNR Climate Change Survey, 2010

Compared to the rest of the country, do you think MN is less or more vulnerable to impacts from climate change?



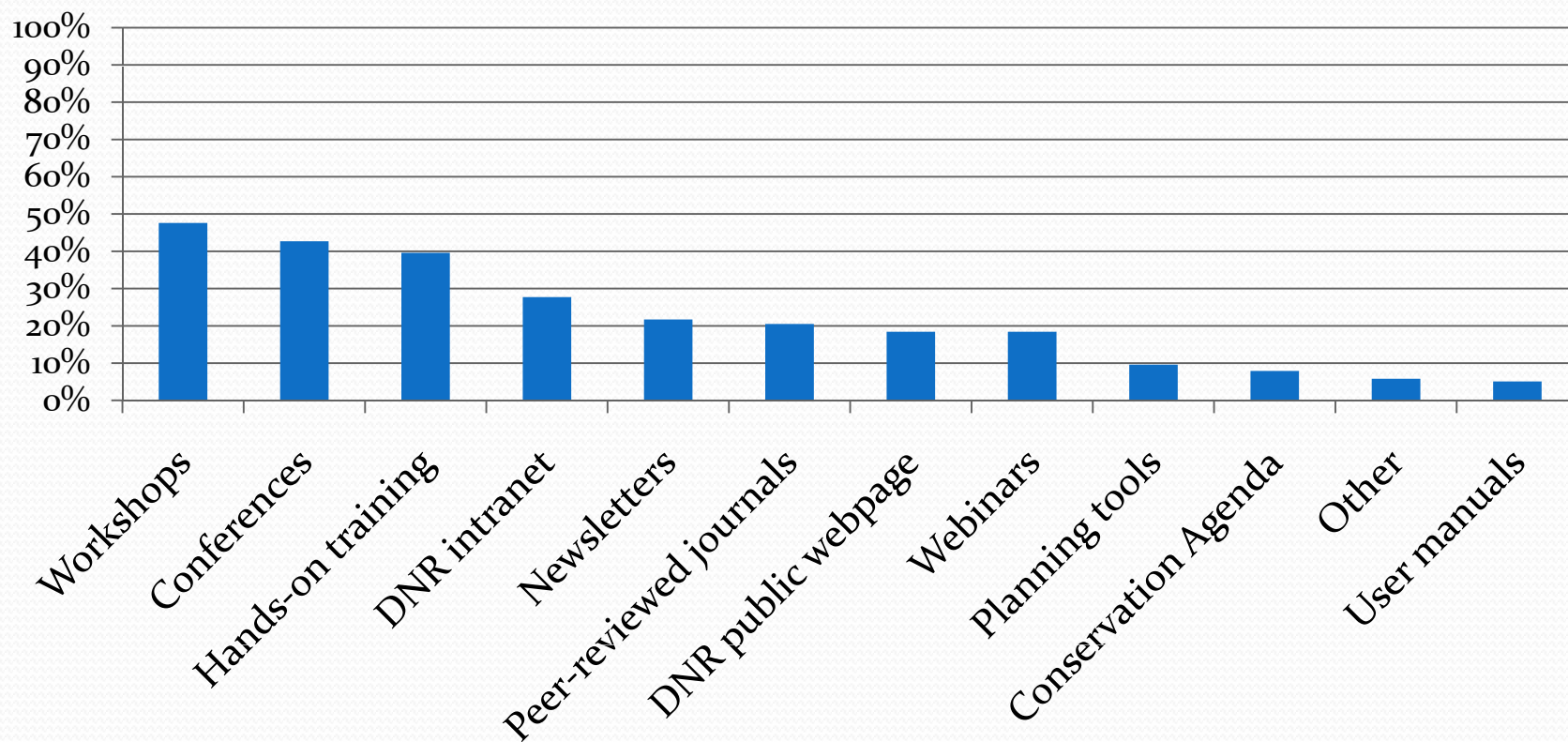
MN DNR Climate Change Survey, 2010

What do you anticipate will be the greatest obstacle for you in applying climate change strategies at the DNR?



MN DNR Climate Change Survey, 2010

What would be the most useful form of information/training to learn more about climate change?





2010 Minnesota State Survey

- Purpose:
 - Better understand MN public's view
 - Obtain baseline data for future statewide climate change surveys
 - Compare MN public to DNR



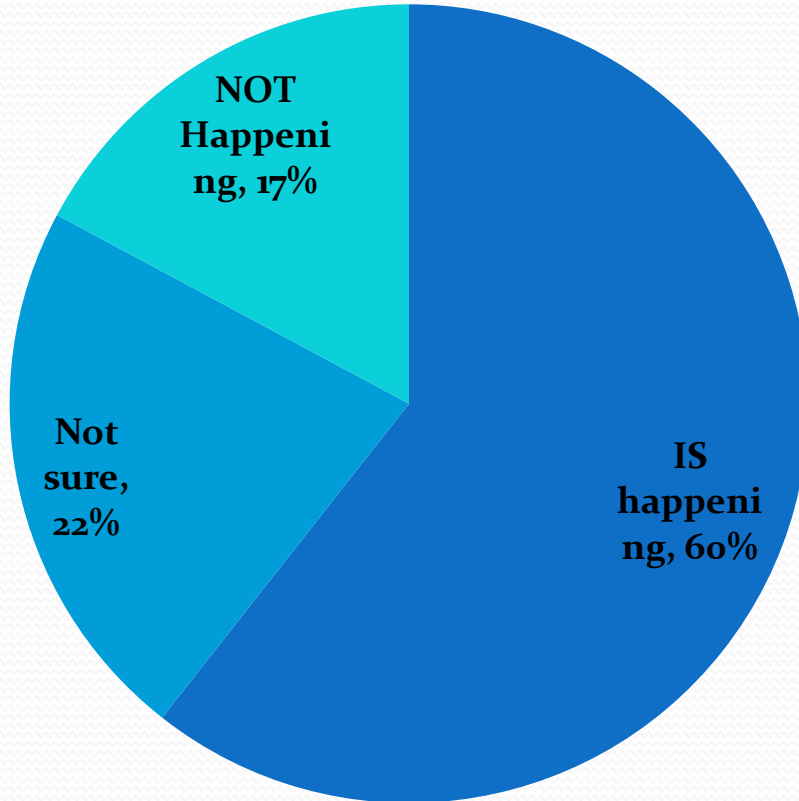
2010 Minnesota State Survey

- Methods:
 - Omnibus survey, agencies submit questions
 - Random digit telephone survey
 - Adults 18 and over, reside in Minnesota
 - 804 completed surveys, 32% response rate

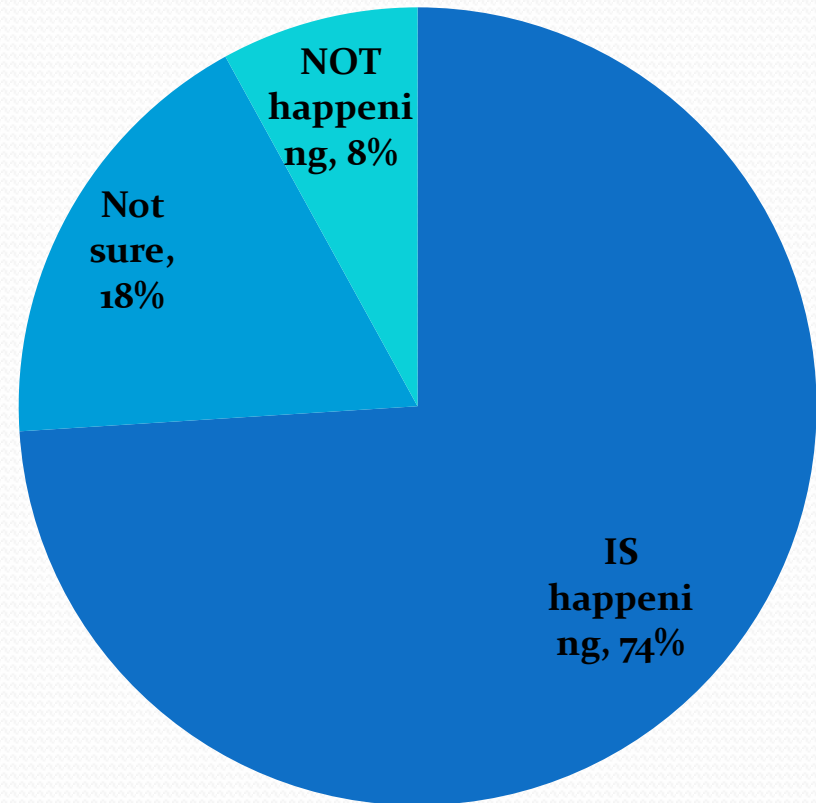
2010 Minnesota State Survey

How sure are you that climate change is happening/not happening?

MN State Survey

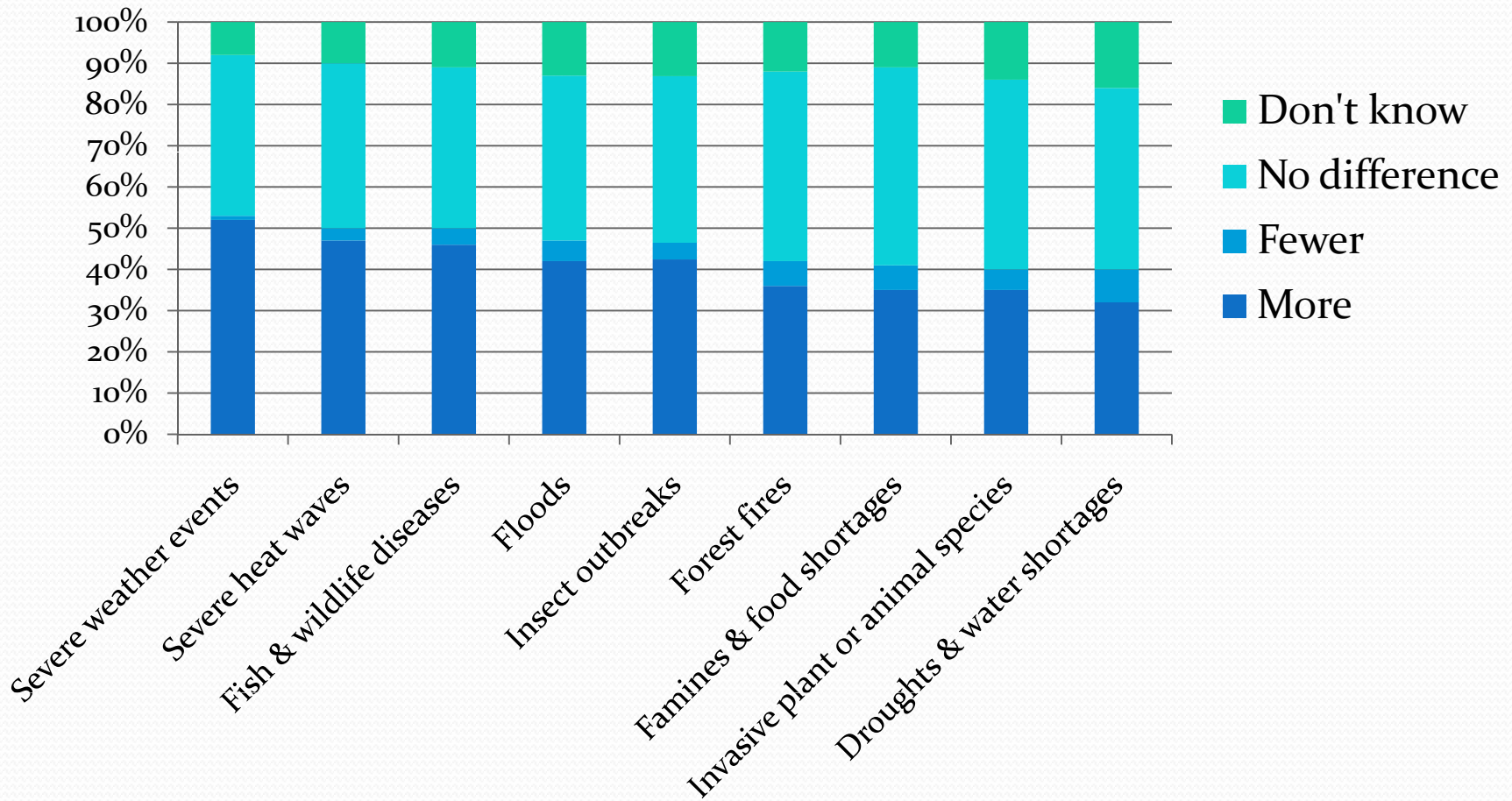


DNR Survey



2010 Minnesota State Survey

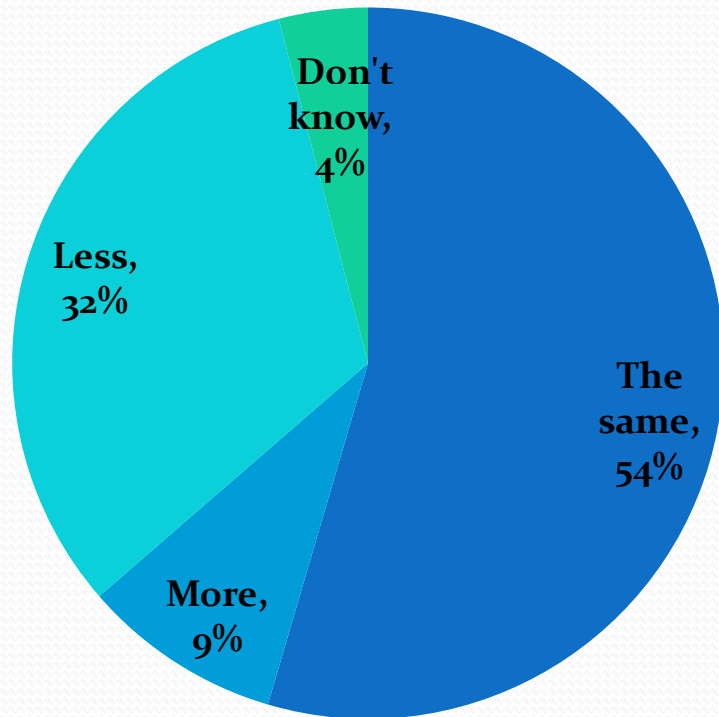
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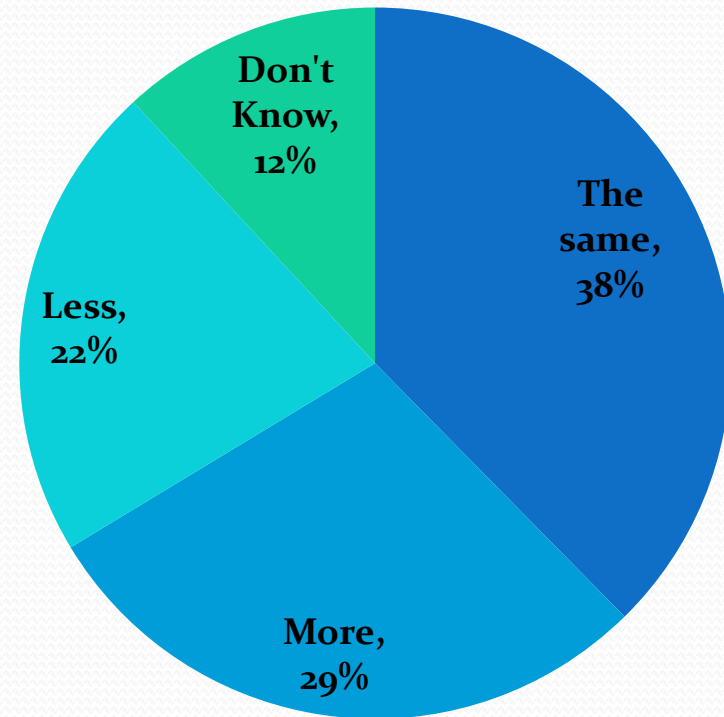
2010 Minnesota State Survey

Compared to the rest of the country, do you think MN is less or more vulnerable to impacts from climate change?

State Survey

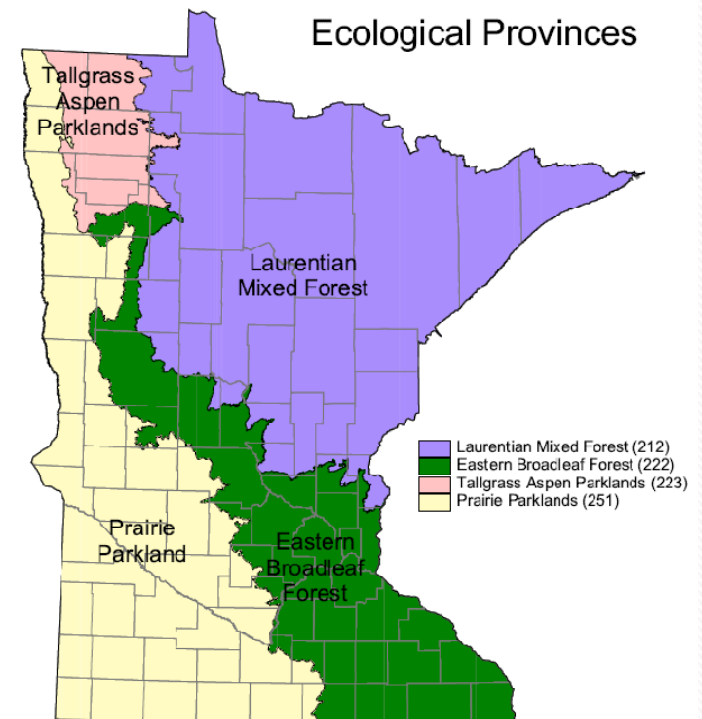


DNR Survey



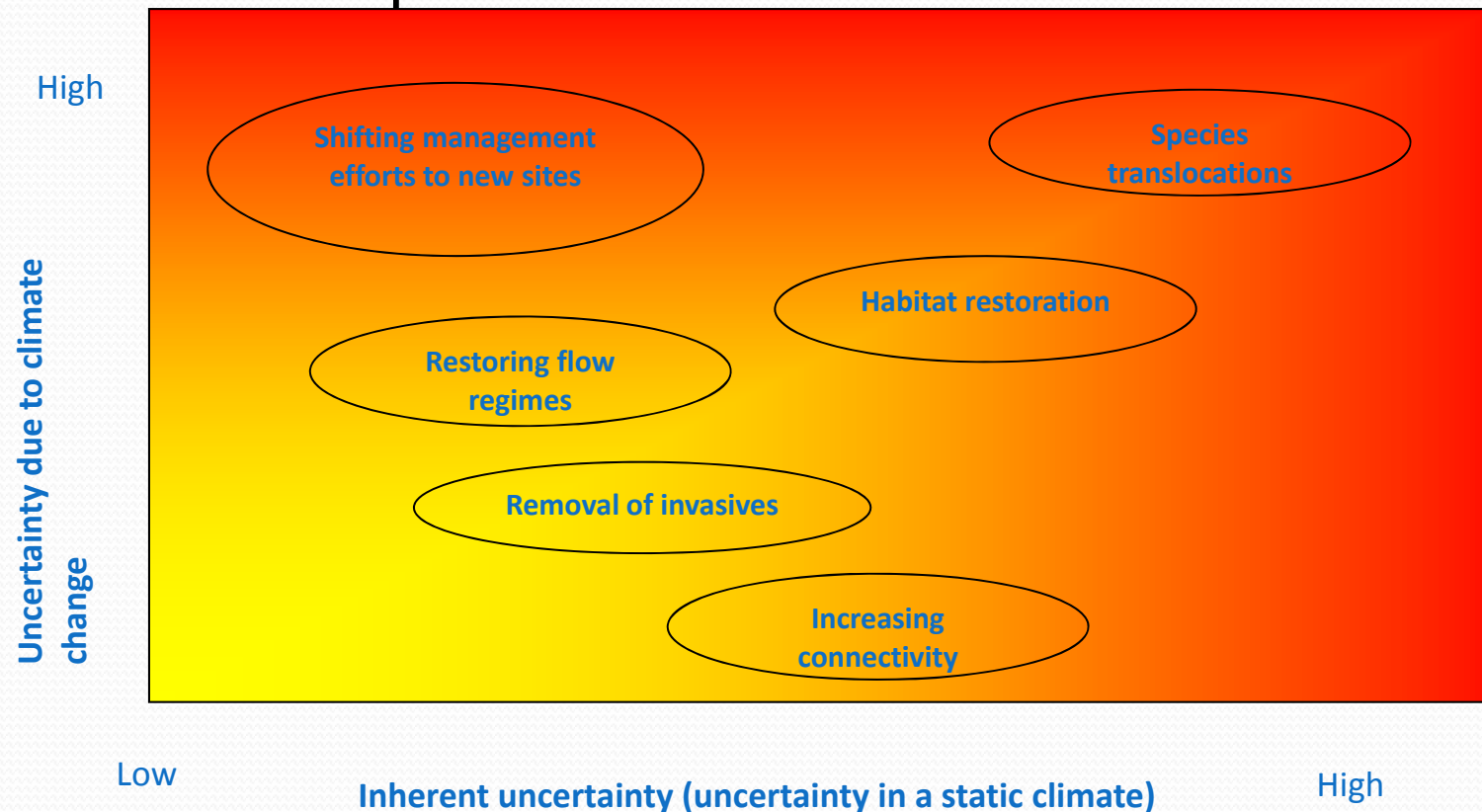
Implications and Next Steps

- More comprehensive statewide public survey
 - UM/USGS proposal –values, beliefs, risk perceptions, attitudes on CC adaptation
- 6 regions plus 2 groups
- Identify partners
- Consider NE MN pilot



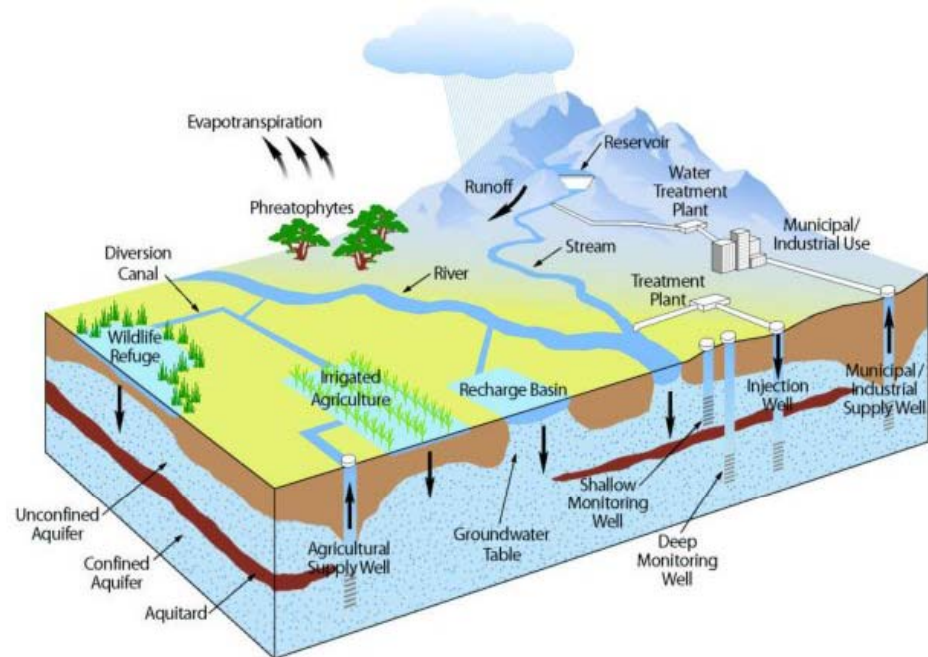
Implications and Next Steps

- DNR planning & staff training
 1. Identify adaptation strategies w/ high uncertainty & determine implementation needs



Implications and Next Steps

- DNR planning & staff training
 - 2. Identify “system” adaptation strategies
 - a. Forests, woodlands
 - b. Grasslands, shrublands
 - c. Rivers, streams,
 - d. Wetlands
 - e. Ground water



Implications and Next Steps

- DNR planning & staff training
 3. Incorporate adaptation strategies at regional & local scales





Thank You!

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For the complete DNR report:

http://files-intranet.dnr.state.mn.us/user_files/3041/climate_change_survey_report.pdf