

On January 29th, 2015, the Jefferson Center hosted a 6-hour deliberative forum with twelve Ohio residents from Cuyahoga, Ashtabula, and Lake counties in Northeast Ohio – the *Northeast Ohio Dialogue on Water & Climate*. The participants were randomly-selected and stratified to reflect a demographically-balanced microcosm of the region.

Participants were asked to approach the forum with the following questions in mind:

- 1) What challenges associated with the impacts of a changing climate on our water resources need to be addressed to preserve the quality of life in our region?
- 2) How should resources for addressing these challenges be allocated in light of other concerns facing the community?

At the beginning of the day, participants identified their top issue concerns for Northeast Ohio. They then interacted with Professor Terrence O’Sullivan of the University of Akron to learn about climate change and its impacts in Northeast Ohio. Participants spent the remainder of the day deliberating with one another to identify their top climate change-related issue priorities, before reevaluating their overall issue concerns to see if climate change issues became more important after education and deliberation activities. The results of this forum are discussed below.

## Regional Priority Concerns

Participants deliberated in small groups to identify their top 5 local concerns across all issues related to preserving quality of life in the region.

- 1) We are concerned with *economic issues* because the economy is the basis for people providing for themselves and their families and making improvements or investments to address other issues.
- 2) We are concerned with *education* because quality, equitable education leads to greater opportunity for individuals and strengthens the economy.
- 3) We are concerned with *police/community relations* because we want safe neighborhoods, trust and communication between communities and police, and accountability/transparency for police interactions with community members.
- 4) We are concerned with *water quality issues* because water is our greatest asset, providing recreational opportunities, safe drinking water, and healthy ecosystems.
- 5) We are concerned with *infrastructure issues* because poor infrastructure can raise costs of living (private property damage, transportation access) for community members.

# Climate-Related Priority Concerns

Following the climate education component of the day's activities, participants identified and grouped key facts, drafted statements of concern related to each group, and voted to prioritize concerns. The statements of concern are presented in order of priority below.

- 1) We are concerned about the *consequences of human action on climate change* because citizens, corporations, and even the government are unaware or unwilling to change current practices, as seen by rising global temperatures, algae blooms, increases in pollution, declining air quality, increasing agricultural runoff, and growing health concerns. (10 points)
  
- 2) We are concerned about the *effects of climate change on our water resources* because of the declining availability of fresh, clean water, which directly affects our quality of life. (7 points)
  
- 2) We are concerned about the *effects of climate change on the economy* because taxpayers will ultimately be forced to allocate more money towards the development of alternative energy, new infrastructure, and specialty environmental departments. Additionally, areas with poor water quality because of toxic runoff will see a decrease in tourism from charter boats, recreational sports, etc. There may also be an increase in food costs from having to import products that will no longer grow in the area. (7 points)
  
- 4) We are concerned about the *changes in local weather patterns and the effects on our environment* because rising temperatures due to greenhouse gases cause lake ice depletion and unpredictable meteorological events such as blizzards and heavy rainfall. (4 points)
  
- 5) We are concerned about the *effects of climate change on public health* because of the rising cases of excessive heat, declining air quality, and the rise in disease-bearing mosquito populations and other sources of tropical diseases. This is seen by the past decade, which had the highest global temperatures, as well as a rise in heat advisories, water safety warnings, and the alarming statistic that excessive heat remains the largest natural disaster killer of humans. (3 points)
  
- 6) We are concerned about the *effects of climate change on public infrastructure* because the extreme changes in temperature and weather will damage roads and sewer and drainage systems, putting a strain on taxpayers to fund replacements and repairs. Furthermore, these changes will increase the need for newer and more advanced water treatment techniques and facilities because of agricultural runoff from farmland. (2 points)
  
- 6) We are concerned about the *effects of climate change on agriculture* because higher temperatures will decrease soil moisture for crops, while heavy precipitation events will damage crops in the ground. These changes will lead to declines in crop yields (up to 80% by 2100 in Ohio for corn, soy, and wheat), increasing prices or decreasing availability of certain crops and food products. Declines in crop yields could hurt Ohio farmers if they can't adapt using new crop varieties or by growing different crops. (2 points)

# Final Priority Concerns

Participants voted on the top 3 climate-related priority concerns and the top 5 regional priority concerns to produce the final priority list below.

- 1) We are concerned about the *effects of climate change on our water resources* because of the declining availability of fresh, clean water, which directly affects our quality of life. We are also concerned with general *water quality issues* because water is our greatest asset, providing recreational opportunities, safe drinking water, and healthy ecosystems. (11 points)
- 2) We are concerned with *economic issues* because the economy is the basis for people providing for themselves and their families and making improvements or investments to address other issues. (8 points)
- 3) We are concerned about the *effects of climate change on the economy* because taxpayers will ultimately be forced to allocate more money towards the development of alternative energy, new infrastructure, and specialty environmental departments. Additionally, areas with poor water quality because of toxic runoff will see a decrease in tourism from charter boats, recreational sports, etc. There may also be an increase in food costs from having to import products that will no longer grow in the area. (5 points)
- 3) We are concerned with *police/community relations* because we want safe neighborhoods, trust and communication between communities and police, and accountability/transparency for police interactions with community members. (5 points)
- 5) We are concerned with *education* because quality, equitable education leads to greater opportunity for individuals and strengthens the economy. (4 points)

Participants were more concerned with climate change and its impacts on water resources following the forum (see evaluation below for more detail). The importance of water resources as a priority concern grew over the course of the day (from 4th to 1st). Discussion revealed that participants viewed Lake Erie as an asset unique to the region, requiring careful stewardship to preserve its value. Many, however, were not aware of the threats facing Lake Erie and the region's freshwater resources more generally.

Participants also emphasized the importance of a strong economy as the lever by which action on other issues depended. The threats and opportunities climate change presents to Northeast Ohio's economy drew considerable interest and discussion, suggesting that discussions of climate change should incorporate information related to both negative and positive impacts of climate change on economic activity.

# Event Evaluation

Participants were asked to complete pre- and post-event surveys to evaluate the effectiveness of the *Northeast Ohio Dialogue on Water & Climate*.

|  | BEFORE | AFTER  |
|--|--------|--------|
| Level of Concern Regarding Changes in Ohio's Freshwater Resources & Climate      | 4.15/5 | 4.48/5 |
| Level of Self-Assessed Knowledge Regarding Ohio's Freshwater Resources & Climate | 2.44/5 | 4.27/5 |
| Climate Change is Happening Due Mostly to Human Activities                       | 5 ppl  | 10 ppl |

**9 out of 12** participants indicated their views on climate change shifted as a result of the forum. Shifts occurred across all political ideologies.

**11 out of 12** participants indicated the Jefferson Center was "very effective" in conducting a fair and unbiased event.

## Participant Comments



Climate change is more of a problem than I realized. I now know it's an immediate concern.



We have a great impact on the environment, and in diverse ways.



I am now more aware of the effects of climate change and actions that can help prevent it.



I found out more about this subject than I thought I could. I was glad to participate.