

APPENDIX A

Experimental Stimuli

(Problem-oriented story)

Flooding increasing due to climate change

With Harbor Brook running through its low-lying downtown, generations of Meriden residents have lived with water in their roads and basements after big storms and heavy winter runoff. One reason is because part of the brook – which is a lot closer to the size of a river — was buried underground and routed into a concrete-lined channel, which doesn't drain like a natural waterway.

Worse yet, the area housed a silver manufacturing company that eventually turned into a brownfield and contaminated the floodwaters.

Then climate change arrived on the scene, bringing bigger, more violent storms with more rain.

“With culverts, undersized bridges and a retaining wall – the water had nowhere to go but out,” said Howard Weissberg, the city's director of public works. “Every major storm event resulted in flooding.”

Storms in the 2008 and 2009 each caused \$25-\$30 million in damage.

“We knew we had a big problem on our hands,” said Juliet Burdelski, a city planner by training who served as Meriden economic development director until this year. “We hadn't had a major flood in a while, but the clock is ticking.”

Then Tropical Storm Irene came through in 2011, followed by Superstorm Sandy a year later.

Housing in the area has become undesirable if not unusable. Flood control work will cost a total of \$60-\$70 million – money the town doesn't have. The work would eliminate the need for prohibitively pricey flood insurance.

Weissberg said he recently was talking to a young couple who were paying \$300 a month for flood insurance. When he told them about the proposed flood control work, he said their response was, “Great, will that ever happen?”

(Solutions journalism story)

Small solutions to climate change: When flood control spurs economic development

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Storms in 2008 and 2009 each caused \$25-\$30 million in damage.

But since 2016, Meriden has had far fewer water worries thanks to an innovative flood control concept called Meriden Green. City planners, landscape architects and others who do climate resilience work in Connecticut think it should be a model for every community.

The core of the project has turned the brownfield area and the river that runs through it – which is now above ground – into a 14-acre park that doubles as a detention basin for water in flood events. The remediation is designed to spur economic development and housing in the area, which had become undesirable if not unusable.

In 2007, the city received nearly \$3 million in state and federal grants to study what to do with the site, which at that point was home to a failed mall.

“We knew we had a big problem on our hands. It was now or never,” said Juliet Burdelski, a city planner by training who served as Meriden economic development director until this year. “We hadn't had a major flood in a while, but the clock was ticking.”

Plans were in the works when Tropical Storm Irene came through in 2011, followed by Superstorm Sandy a year later.

The system began working even as it was being constructed, collecting and draining the water the way it was intended.

Meriden Green, which cost about \$14 million to construct, now contains a completely freed Harbor Brook that properly drains. The brownfield relics have been removed. There are walking and biking paths and an amphitheater. There are a couple of other detention ponds, one up, the

other downstream of the green.

New and rehabbed historic buildings are in progress or available for housing – including affordable units — and commercial space, all accessible to the new commuter rail station.

The flood control work, which will total \$60-\$70 million – isn't quite finished. When it is, the flooding mitigation will have removed 220 commercial and residential properties from the floodplain, which will eliminate the need for prohibitively pricey flood insurance.

Survey Questionnaire

Attribution of Social Responsibility

(1 = Not at all responsible; 5 = Completely responsible)

How much responsibility do you think **individuals** should bear for addressing the flooding problem?

How much responsibility do you think **government officials** should bear for addressing the flooding problem?

How much responsibility do you think **businesses** should bear for addressing the flooding problem?

Perceived Behavioral Control

(1 = Strongly disagree; 5 = Strongly agree)

Adapting to flooding caused by climate change can protect all of us.

With this story's approach people can do something to stop damage from flooding due to climate change.

The negative impact of increasing flooding due to climate change can be mitigated by plans to adapt.

World governments can greatly influence the impacts of flooding due to climate change.

Eco-anxiety

(1 = Never; 5 = Almost always)

Thinking about climate change makes it difficult for me to concentrate.

Thinking about climate change makes it difficult for me to sleep.

I have nightmares about climate change.

I find myself crying because of climate change.

I think, "why can't I handle climate change better?"

I go away by myself and think about why I feel this way about climate change.

I write down my thoughts about climate change and analyze them.

I think, "why do I react to climate change this way?"

My concerns about climate change make it hard for me to have fun with my family or friends.

I have problems balancing my concerns about sustainability with the needs of my family.

My concerns about climate change interfere with my ability to get work or school assignments done.

My friends say I think about climate change too much.

Hope

(1 = Definitely False; 8 = Definitely True)

If I should find myself in a jam, I could think of many ways to get out of it.

At the present time, I am energetically pursuing my goals.

There are lots of ways around any problem that I am facing now.

Right now, I see myself as being pretty successful.

I can think of many ways to reach my current goals.

At this time, I am meeting the goals that I have set for myself.

Support for Collective Response

(1= Extremely Unlikely; 5 = Extremely Likely)

Support efforts the story described to handle flood disasters?

Vote for elected officials who support this kind of disaster planning?

Endorse spending taxpayer money to address these issues in the ways described in this story?

Broadening Emotions

Now, *think back* to the story you read.

What was the strongest emotion you felt after reading it? Please write the name of that emotion in the space below.

Stepping away from the specifics of the story you read, take a moment to imagine yourself in a situation where this particular emotion (the one you wrote down) would arise.

Concentrate on all the emotion you would feel and live it as vividly and deeply as possible. *Given this feeling*, please *list* all the things you would like to do *right now*.

Demographic Variables

Age

What is your age in years?

Please enter a whole number.

Sex at Birth

(Male, Female, Intersex, No answer)

Gender

(Women, Man, Transgender, A gender not listed here, No answer)

Race/Ethnicity

(African American, Asian or Pacific Islander, Latinx or Hispanic, Multi-ethnic/racial, Native American/American Indian, White/Caucasian, Prefer not to answer)