businesses, or local governments.

Minimize your personal impact

Individuals and families, working in concert, can have significant impacts to both slow the rate of climate change ("mitigation") and adapt to those changes already in progress. Mitigation, primarily by reducing greenhouse gas emissions, is beyond the scope of this pamphlet.

Some adaptation measures are more appropriately pursued by governments, but homeowners can take many helpful steps. **Planting trees** on private property provide many benefits, including cooling, water management, noise reduction, removal of air pollutants, and beautification. Replacing urban trees will be particularly important in the wake of the emerald ash borer devastation of Wisconsin's native ash trees. Property owners can also take steps to better **manage rain water** on their property, by installing rain barrels and rain gardens, and insuring downspouts drain to gardens or lawns rather than to streets.

Be prepared

More severe weather is one important consequence of climate change for La Crosse. Preparing your own household for potential flooding, high winds, heat waves, drought, and wild fires may include planning, stocking emergency supplies, and building improvements. Local governments can recommend building changes, mandate them using building codes, and provide financing programs, but building owners must make the needed changes. A good place to start your personal emergency planning is at <u>http://www.ready.</u> gov. One source of La Crosse-specific information is http://cityoflacrosse.org/index. aspx?NID=1041.

Join others

Adapting to claim change can be a daunting job, and it's easy to get discouraged. Join a group working to protect the people, places, and things you love. You can learn interesting and valuable information, meet great people, and have fun! Many of the organizations on the "community" page of the Sustainable La Crosse Commission Web site work on climate change adaption, as do the government agencies below.

Contact Information

Sustainable La Crosse Commission

http://sustainablelacrosse.com Amy Peterson, City Planning & Economic Development Administrator, (608) 789-7363, petersona@cityoflacrosse.org

Nick Nichols, County Sustainability Coordinator, (608) 785-9768, Nichols. Nick@co.la-crosse.wi.us Wisconsin DNR

http://dnr.wi.gov/climatechange Sally Kefer, Land Use Team Leader, (608) 267-3128, Sally.Kefer@Wisconsin.gov

Environmental Protection Agency

http://epa.gov/climatechange

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Climate Change Adaptation

La Crosse, Wisconsin

Why care about climate change? Climate change impacts in the La Crosse area How can we make La Crosse more resilient? Steps for citizens to learn and do more

Purpose of This Brochure

Climate change and global warming are frequently in the news. You want unbiased information for both personal decisions and public policy. The Sustainable La Crosse Commission has created this brochure as a starting point for residents to learn about climate change, how it affects the La Crosse area, and what can be done to minimize its negative impacts.





Why care about climate change?

Climate is the pattern of day-to-day weather over periods of decades or more. The University of Wisconsin and the Wisconsin Department of Natural Resources (DNR) have established the Wisconsin Initiative on Climate Change Impacts (http://wicci.wisc.edu) to study historical weather data, model climate, and develop strategies for the state. Future climates predicted by computer models indicate Wisconsin will see higher temperatures, warmer winter, gradual increases in annual



rainfall, and bigger storms separated by longer dry spells.

The impacts from these changes include flooding along rivers and the Great Lakes, local flooding and erosion, heat waves, drought and wild fires, and changes to natural ecosystems and agriculture. While there could be some benefits, most consequences are negative, including **disruption of our daily lives, damage to health and property,** and **destruction of critical infrastructure and ecosystems.**

Climate change impacts in the La Crosse area

In 2012, the Sustainable La Crosse Commission convened a workshop on climate change and its impacts for La Crosse area community leaders. Attendees learned about climate science and predictions for the La Crosse area. Diverse climate models of the Midwestern states, based on weather records, forecast changes in the La Crosse area between through 2055*:

- Average temperature to rise 6.5°F, with greatest increases in the winter
- Sixteen more nights a year with temperatures below 0°F
- Twenty-four more days a year with temperatures above 90°F
- More precipitation, and more severe precipitation events
- Less snow cover, deeper frost depth, and more freeze-thaw cycles

**Wisconsin's Changing Climate: Impacts and Adaptation*, 2011, http://wicci.wisc.edu/publications.php.

Attendees were polled for their specific concerns for the La Crosse area, which included:



Riverside Park, April 2001 (US Geological Survey)

- Flooding and associated damage and health consequences
- Bigger storms overwhelming rain water systems
- Back up of sewage into basements
- Contamination of private wells
- Erosion and collapse of bluffs and roads
- Damage from silt in river channels
- Saturation and weakening of levees
- Waterfront damage
- Flood born disease and mold exposure
- Wind, tornado, hail, and ice damage
- Exhaustion of municipal budgets

What adaptations can make La Crosse more resilient?

There are a wide range of short- and longterm measures that could make human and natural systems more resilient to climate change, such as:

- Clean and slow storm water and calm traffic with rain gardens and other green infrastructure
- Manage storm water better in neighborhoods where flooding is new
- Stabilize steep slopes to prevent mudslides and road collapse
- Fund runoff and flood management practices with the city's new stormwa-

Bliss Road, August 2011 (Erik Daily/La Crosse Tribune)

ter utility

- Collaborate to solve problems across borders and levels of government
- Incorporate climate change when emergency management and other community plans are updated
- Provide information about climate change to the public
- Implement programs to identify and educate vulnerable populations
- Set new landscaping standards to permit and encourage native plants
- Make regional plans for farmland and open space preservation
- Seek federal/state technical and financial assistance on emerging needs

How these adaptation measures will be prioritized, planned, funded, and implemented over the coming years will be determined by La Crosse area residents, acting through their local and regional government bodies.

What can I do?

Learn more

Residents and business owners can learn more about climate change adaptation from resources listed at the end of this brochure. Informed citizens can make the best choices about investing in adaptation measures, whether for their households,