

State of Our Environment



2010 Earth Day Update

Stable Climate is just one of the ten city environmental goals, but the potential impacts from a changing climate threaten our ability to reach many of our other goals. Many local projects are expected to help mitigate our greenhouse gas emissions. Even though there are large structural changes necessary at the national and state level, there are many things we can do at the local level to make Ann Arbor a leader in reducing greenhouse gas emissions.

Ann Arbor leads in environmental protection

The state of our local environment is relatively encouraging. Ann Arbor is at the forefront of numerous areas of environmental protection, including sustainable energy use, and protection of public health. **While there have been areas of improvement, there's no ignoring the potential of climate change to negate our local progress.** Without diligence on our part to anticipate and mitigate those threats, our future quality of life is at risk. For its part, the City of Ann Arbor is taking proactive steps to address those broader threats to our environment. And, fortunately, we have a great deal of influence over many environmental factors that impact our quality of life. This report addresses those components within the context of the city's recently adopted environmental action plan principles and goals.



Environmental Action Plan Goals

- **Clean Air** - Eliminate air toxics, criteria pollutants, and persistent bioaccumulative toxins (PBT)
- **Clean Water** - Ensure safe water for drinking, recreation, other uses, and other species
- **Efficient Mobility** - Provide infrastructure and policies for efficient modes of transportation
- **Health-Promoting Urban Environment** - Ensure that the built environment promotes public health and improvements to the natural environment
- **Local Food Sufficiency** - Conserve, protect, and restore local agriculture and aquaculture resources
- **Responsible Resource Use** - Produce zero waste
- **Safe Community** - Eliminate damage to public health and property from natural and other hazards
- **Stable Climate** - Eliminate net greenhouse gas emissions and other destabilizing climate impacts
- **Sustainable Energy** - Use 100% renewable energy
- **Viable Ecosystems** - Conserve, protect, & restore aquatic & terrestrial ecosystems

WHAT'S NEW?

The SOE report includes **61** indicators organized around the city's ten environmental goals. Thirteen **NEW** indicators were developed in the past two years including: individual indicators describing the health of each of the City's seven creeksheds, two indicators describing the Urban Forest, Total Phosphorus Reductions in the Huron River, and Footing Drain Disconnections. Three indicators were removed because they did not provide significant information on progress toward the City's environmental goals: Illicit Discharges, Sidewalks, and Commuting Behavior. Several indicators were combined into one Ecological Diversity indicator.

Visit the website for a detailed assessment of all 61 environmental indicators.

www.a2gov.org/soe



Recent Initiatives

The City of Ann Arbor is a leader in community sustainability, developing progressive policies and implementing measures to protect our natural environment's air, land, water and people. The following examples highlight some of the City's recent environmental milestones. With your help, we can protect our spot on the big blue dot!

Energy

- Green Energy Challenge to increase city-wide renewable energy use (ongoing)
- Residential solar potential mapping (2008)
- Selected as a Department of Energy Solar City
- 5,000 Solar Roofs Initiative (ongoing)
- Washtenaw County Wind Project (ongoing)
- LED Street Light Conversion Program (ongoing)
- Biodiesel Plant Feasibility Study (completed)
- ICLEI Cities for Climate Protection (ongoing)
- Green Energy Map (ongoing)
- Biogester Feasibility Study (completed)

Water

- Drinking water exceeds federal standards (ongoing)
- Huron River and Impoundment Management Plan (ongoing)
- A2H2O - Only Tap Water Delivers - reusable bottles (2007)
- Rain Barrels and Rain Gardens (2007)
- Phosphorus-free Fertilizer Ordinance (2007)
- Huron River aquatic vegetation study (2007)
- Flood Mitigation Plan (2007)
- Water Treatment Facilities and Water Resources Master Plan (2006)
- Footing Drain Disconnect Program (ongoing)
- Stormwater Rates Study (2007)
- Stormwater GIS and Hydraulic Modeling (ongoing)

Parks and Recreation

- Parks, Recreation and Open Space plan (2006)
- Adopt-a-Park program established (2006)
- Frog, salamander and toad survey (ongoing)

Transportation

- Non-motorized Transportation Plan (2007)
- Ann Arbor to Detroit Rapid Transit Study with SEMCOG (ongoing)
- Updating Comprehensive Transportation Plan (ongoing)
- Model for Mobility - regional alternative transportation vision (ongoing)
- A2D2: Comprehensive Parking Study (ongoing)

Recycling, Reuse, and Solid Waste

- Single stream recycling (2009)
- Recycling plant nearly doubles capacity (2008)
- New curbside compost carts (2008)
- New Transfer Station (2007)
- Expanded Compost Processing Facility (2007)
- Expanded recycling services to City businesses (2007)
- Compost Pilot Program Information (2007)

Land Use and Development

- Street and Park Tree Inventory Completed (2009)
- A2D2: Ann Arbor Discovers Downtown development recommendations (ongoing)
- Detention Pond Survey (ongoing)
- Green Belt Strategic Plan and Advisory Committee (ongoing)
- Tree Replanting following Emerald Ash Borer (ongoing)
- Three approved Brownfield cleanup projects (ongoing)

Recent Awards: Ann Arbor has been recognized as a leader in environmental sustainability by a number of organizations. The following awards were presented by external organizations:

- Top 20 On-site Green Power Users, #16, (2009), EPA
- Silver Level Bicycle Friendly Community (2009), League of American Bicyclists
- Smarter City, #12 in medium-size category (2009), Natural Resources Defense Council
- Outstanding Compost Operation Award (2008), Michigan Recycling Coalition
- America's Healthiest Hometowns for Retirement, #1, (2008), AARP
- America's 50 Greenest Cities, (2008), Popular Science
- Best Walking Cities, #3, (2008), Prevention Magazine and the American Podiatric Medical Association
- Climate Innovation Invitational Award, (2007), ICLEI-Local Governments for Sustainability
- Promoting Active Communities Gold Award, (2006), The Governor's Council on Physical Fitness, Health and Sports
- Top 21 Cities for Cyclists, (2006), Bicycling Magazine
- Outstanding Planning Project Award to the City of Ann Arbor's 2006 Northeast Area Plan (2006), Michigan Association of Planning
- Model Waste Reduction Program of North America, (1999), U.S. Environmental Protection Agency
- Tree City USA, (member since 1982), National Arbor Day Foundation

Measuring Progress Toward Our Environmental Goals

Each environmental goal has one or more primary indicators that we use to measure progress. We recognize that each indicator may support several of the City's environmental goals, but we have chosen to show each indicator only once on this matrix and associate each goal with its primary indicators.

For each indicator, we have assigned where we think we are now, based on the information available. We have assigned the color red, yellow, or green to indicate that we are currently in poor, fair, or good condition, respectively, with regard to this indicator. Similarly, we have assigned an upward, downward, or level arrow to designate whether an indicator is getting better, getting worse, or stable. For example, we looked at "Days of Unhealthy Air" based on the Air Quality Index (AQI). Because we have relatively few "unhealthy" days, we colored the indicator green. Because the number of unhealthy days has been decreasing over time, we used the upward arrow to show that the overall trend is improving. Some indicators have question marks because no data are available. Data supporting each indicator's status and trend can be found online in the full report.

There are many different ways to measure our progress. These indicators have been chosen because they demonstrate our:

* regulatory compliance (e.g., National Ambient Air Quality Standards);

* use of a resource (e.g., water and energy use); or

* community choices (e.g., recycling, greenbelt purchases)

This set of indicators will change based on new information, your suggestions and our ability to measure progress in other areas.

Key		Where are we now?		Where are we going?		To Encourage Efficient Mobility		To Sustain a Healthy-Promoting Urban Environment		To Encourage Local Food Sufficiency		To Use Resources Responsibly		To Maintain a Safe Community		To Stabilize the Climate		To Encourage Sustainable Energy		To Foster Viable Ecosystems		
Good	Bad	Good	Fair	Getting Better	Stable	Good	Bad	Good	Fair	Getting Better	Stable	Good	Bad	Good	Bad	Good	Bad	Good	Bad	Good	Bad	
Carbon Monoxide (CO)	Lead Emissions	Carbon Monoxide (CO)	Days of Unhealthy Air Quality	Ground Level Ozone	Sulfur Oxide (SOx) Emissions	Nitrogen Oxide (NOx) Emissions	Particulate Levels	WWTP Total Suspended Solids (TSS)	WWTP Total Suspended Solids (TSS)	Footing Drains Dis-connected	Impervious Surface	Car Pool Commute Trips	Single Occupancy Trips	Wastewater Treated	Water Use per Capita	Park & Ride Lot Use	Bicycling Commutes	Walking Commutes	Density	AATA (Bus) Ridership	Waterpark Participation	
Efficient Mobility	Local Food Sufficiency	Health-Promoting Urban Environment	Responsible Resource Use	Safe Community	Stable Climate	Sustainable Energy	Viable Ecosystems	Natural Area Acreage	Urban Forest Age Structure	Renewable Electricity Generation	Ecological Diversity	Conservation of Rare Species	Creekshed Health	Invasive Species Mgmt.	Farm Market Vendor Diversity	Greenbelt Land Preserved	Downtown Bike Parking Facilities	Miles of Bike Lanes	Total Waste per Capita	Total Tons Landfilled	Approved Brownfield Projects	Inspected Detention Ponds
Wastewater Treated	Waterpark Participation	Parkland Acreage	Total Tons Composted	Percent of Waste Diverted	Greenhouse Gas Emissions	Alternative Fuel Use	Natural Area Acreage	Urban Forest Age Structure	Renewable Electricity Generation	Electricity Use	Natural Gas Use	Creekshed Health	Invasive Species Mgmt.	Urban Forest Diversity	Farmer Market Diversity	Greenbelt Land Preserved	Downtown Bike Parking Facilities	Miles of Bike Lanes	Total Waste per Capita	Total Tons Landfilled	Approved Brownfield Projects	Inspected Detention Ponds
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The full State of Our Environment Report can be found online: www.a2gov.org/soe. Check the web site for recent initiatives and a detailed assessment of more than 50 environmental indicators.

You Can Make A Difference

The actions you take each and every day can make a positive difference. We encourage you to take action to protect and improve what we have in Ann Arbor, and to prevent the worst outcomes of climate change. The following simple steps add up in a big way.

To Keep Our Air Clean

- Save electricity. Adjust the air conditioner temperature a few degrees higher. Turn off appliances & lights when not in use. Purchase energy efficient appliances and products.
- Limit engine idling.
- Choose cleaner 4-stroke engines.

To Keep Our Water Clean

- Dispose of products safely. Don't pour household toxics such as oil, paint and pesticides down the drain.
- Do not flush unused medications. Over the counter and prescription medicines have been found in rivers.

To Encourage Efficient Mobility

- Use alternative modes of transportation. Try the bus, dust off your bike or walk to work.

To Sustain a Healthy-Promoting Urban Environment

- Get involved in public planning workshops - communicate your long-term vision of the community with City staff and other residents. Support Smart Growth.

To Encourage Local Food Sufficiency

- Visit the Ann Arbor Farmer's Market.
- Become a shareholder in a community supported agriculture movement.

To Use Resources Responsibly

- Reduce! Be selective about your purchases.
- Reuse! Check Washtenaw County's online guides such as the Turning Trash into Treasure Guide.
- Recycle! To request free home storage bins, call 99-GREEN (734.994.7336).
- Compost! Start a home yard waste compost pile.

To Maintain a Safe Community

- Dispose of products safely. Store household toxics such as oil, paint and pesticides out of flood areas.

To Stabilize the Climate

- Reduce your carbon footprint. Use an online greenhouse gas emissions calculator to estimate your household's annual emissions and identify ways you can cut your emissions.
- Conduct a home energy audit.
- Homeowners can contact the Ann Arbor ReUse Center's Environmental House to learn about home energy audits.
- Use the Sun. Visit the City's Web site to assess the solar potential of each Ann Arbor property.

To Encourage Sustainable Energy

- Volunteer with Natural Area Preservation or with the Adopt-A-Park program.
- Landscape with native plants.

Find more tips, links to local environmental resources, and updates on City initiatives online at www.a2gov.org/soe.