

State of Our Environment



2009 Progress Report from the Environmental Commission to the Citizens of Ann Arbor

Ann Arbor's built and natural environment sustains us. It is the air we breathe, the water we drink, and the land we inhabit. Our environment consists of a collection of interconnected systems that define Ann Arbor. These local systems are embedded in regional, even global processes, expanding the impact of community activities such as energy consumption or recycling beyond city boundaries.

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

CHANGES FOR 2009

The 2009 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, three 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.



The complete State of Our Environment report can be found at
www.a2gov.org/soe.

INSIDE: Environmental Indicators

BACK COVER: Recent Initiatives

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 assessed 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?	
	Good
	Fair
	Poor
	Not assessed
Where are we going?	
	Getting Better
	Getting Worse
	Stable
	Unknown

Clean Air

 Carbon Monoxide (CO)

 Lead Emissions

 Days of Unhealthy Air Quality

 Ground Level Ozone

 Sulfur Oxide (SOx) Emissions

 Nitrogen Oxide (NOx) Emissions

 Particulate Levels

Clean Water

 Wastewater Treated

 Water Use per Capita

 WWTP Phosphorus Loadings

 Drinking Water Quality

 WWTP Total Suspended Solids (TSS)

 Footing Drains connected

 Impervious Surface Coverage

 Phosphorus Reductions in Hruon

Efficient Mobility


 AATA (Bus) Ridership

 go/pass

 Park & Ride Lot Use

 Bicycling Commutes

 Walking Commutes

 Single Occupancy Trips

 Car Pool Commute Trips

 Vehicle Miles Traveled

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.

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 Health-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.

Health-Promoting Urban Environment

- Parkland Acreage
- Downtown Bike Parking Facilities
- Total Developed Land
- Population Density

Local Food Sufficiency

- Greenbelt Land Preserved
- Farm Market Vendor Diversity

Responsible Resource Use

- Total Tons Composted
- Percent of Waste Diverted
- Total Tons Recycled
- Total Waste per Capita
- Total Tons Landfilled

Safe Community

- Inspected Detention Ponds
- Approved Brownfield Projects
- Remediated Sites
- Developed Parcels in the Floodplain
- Lead Poisoning

Stable Climate

- Greenhouse Gas Emissions

Sustainable Energy

- Alternative Fuel Use
- Renewable Electricity Generation
- Electricity Use
- Natural Gas Use

Viable Ecosystems

- Natural Area Acreage
- Urban Forest Age Structure
- Ecological Diversity
- Conservation of Rare Species
- Urban Forest Percent Canopy
- Creekshed Health
- Invasive Species Mgmt.
- Urban Forest Diversity

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.

To Encourage Sustainable Energy

- 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 Foster Viable Ecosystems

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

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

The complete State of Our Environment, can be found online: www.a2gov.org/soe. Check the Web site for recent initiatives and an assessment of more than 50 environmental indicators.

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 Lighting Pilot (ongoing)
- Biodiesel Plant Feasibility Study (completed)
- ICLEI Cities for Climate Protection (ongoing)
- Green Energy Map (ongoing)
- Biodigester 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

- 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

- 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:

- Silver Level Bicycle Friendly Community (2009), League of American Bicyclists
- Smarter City, 12th place in medium size category (2009), Natural Resources Defense Council
- Outstanding Compost Operation Award (2008), Michigan Recycling Coalition
- America's Healthiest Hometown for Retirement (2008), AARP
- America's 50 Greenest Cities, (2008), Popular Science
- Best Walking Cities, 3rd place (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

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