



EcoCity CLEVELAND

IDEAS AND TOOLS FOR A SUSTAINABLE BIOREGION

\$4

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Editor: David Beach

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Good words

Let us be dissatisfied
until the tragic walls that separate
the outer city of wealth and comfort
and the inner city of poverty and despair
shall be crushed by the battering rams
of the force of justice.

— Martin Luther King Jr.

Progress is not the speed with which
technology expands its control ...
but a process that lets man find serenity
and grow more content
at less cost to the earth.

— David Brower

WATER UNDER PRESSURE

The best streams in Northeast Ohio are under the most pressure from development. If trends continue, we could be left with nothing but marginal water quality everywhere in the region.

See pages 8-13

Move to Cleveland?

So it seems that our rust belt image is hard to shake. Civic boosters recently commissioned a national survey to see if all the hype about Cleveland's "comeback" had changed perceptions among business leaders and professionals. Much to their dismay, the answer was a resounding no.

"The percentage of people that would consider moving to Cleveland was pretty horrific," said one of the pollsters in a *Crain's Cleveland Business* interview. "We were ranked last or close to last in nearly everything."

The boosters explained the poor showing as a marketing problem. Greater Cleveland doesn't spend as much on promotion as other metropolitan areas. Our story isn't getting across. Outsiders don't know about our great quality of life.

But maybe it's more than a marketing problem. Maybe we really aren't doing a very good job taking care of the things that a new generation of business leaders cares about.

Increasingly, skilled people want to live in places that work hard to protect the environment and ecosystems, provide easy access to natural resources, celebrate historic buildings and landscapes, offer a variety of convenient transportation options, and have interesting public spaces where people gather. In short, they want a healthy and distinctive mix of city and countryside – the best of urban life and the natural world.

How well do we provide those qualities? How focused are we on making the public investments in civic goods – parks, walkable streets, town squares, transit, beautiful beaches, greenways and river corridors, open space – that will make our communities a joy for everyone on a daily basis?

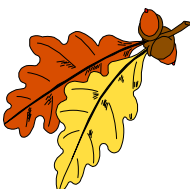
A stronger regional focus on such investments will make our home more livable and more sustainable for us and for our children. And doing so will be the best way to sell Northeast Ohio to the rest of the world.

Thanks

Thanks to donors to our year-end fundraising solicitation (see list on p. 23). We raised more than \$12,000, and our growing base of donors is very encouraging. Also thanks to the Katherine and Lee Chilcote Foundation for a recent grant to support the writing and production of radio essays on the state of our bioregion, which we will market to public radio.

New staff

We welcome Manda Gillespie as our third full-time staff person. Manda is a graduate of the Oberlin College Environmental Studies Program and brings a wealth of knowledge about green building, energy efficiency, sustainable food systems, and other issues. She will be helping with our Cleveland EcoVillage project, as well as assisting with many organizational tasks. She can be reached at our office or by e-mail at mgillespie@ecocleveland.org.



David Beach
Editor



Mission

EcoCity Cleveland is a nonprofit, tax-exempt, educational organization.

Through the publication of the *EcoCity Cleveland Journal* and other programs, it will stimulate ecological thinking about the Northeast Ohio region (Cuyahoga Bioregion), nurture an EcoCity Network among local groups working on urban and environmental issues, and promote sustainable ways to meet basic human needs for food, shelter, productive work and stable communities.

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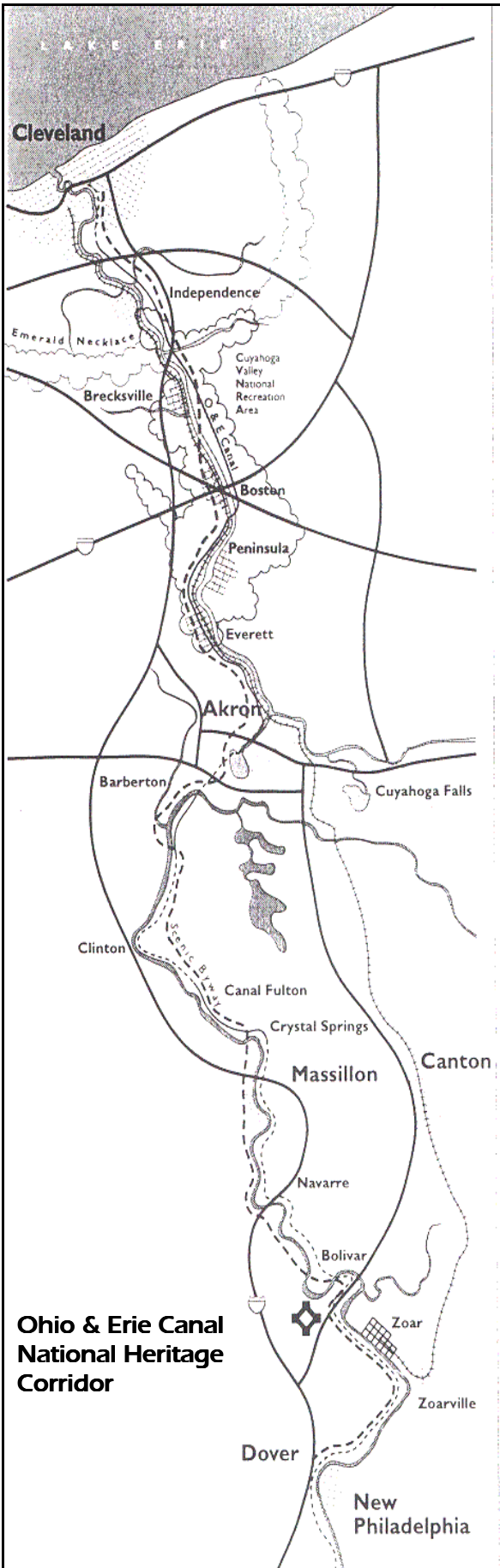
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Canal Corridor extends projects and plans



Mile by mile and project by project, the Ohio & Erie Canal National Heritage Corridor is developing into one of the region's great assets. Among the developments in recent months:

- The Cleveland Metroparks opened the Canal Reservation, which opens up the Cuyahoga Valley north of Rockside Road and allows visitors to see a fascinating mix of nature and industry. The reservation extends the popular Towpath Trail northward, and a further extension to Harvard Road will be complete within the next two years.

- The Cuyahoga County Planning Commission and Ohio Canal Corridor are finalizing plans for a route that would take the Towpath Trail through the industrial Flats of Cleveland all the way to the lakefront. The big challenge has been finding a safe, yet affordable, route around the steel mills.

- The Ohio & Erie Canal Association, the group designated by Congress to manage the heritage corridor program, has finished a draft master plan for the entire 110-mile corridor that stretches from Lake Erie to Dover/New Philadelphia. The plan

outlines the further development of alternative means of transportation, such as the Towpath Trail, Cuyahoga Valley Scenic Railway, a Scenic Byway system of roads, water-related transportation by canoe and excursion boat, and links to historic sites and neighborhoods along the corridor. It also contains plans for creating an interpretive program for the entire corridor, marketing the corridor, and creating CanalWay Centers and other access points.

- Planning is proceeding for a Canal Basin Park in the Flats that would feature the two Hulett ore unloaders that preservationists prevented the Cleveland-Cuyahoga Port Authority from demolishing.

- A new Mill Creek trail will be under construction soon to connect the Towpath Trail with Mill Creek Falls and Garfield Park. And another trail from Cleveland's Washington Park to the Canal Reservation is also in the works.

For more information about corridor happenings, call Ohio Canal Corridor at 216-348-1825 or the Ohio & Erie Canal Corridor Coalition at 330-434-5657.



The Cleveland Metroparks new Canal Reservation offers a fascinating mix of nature, industry, and history.

What we need to do about the 'burbs

An interview on race and regionalism with John Powell

In Northeast Ohio — one of the most racially segregated metropolitan areas in the nation — race has been a powerful force shaping the region. To promote greater dialogue on this important subject, we reprint the following interview with John Powell in which he takes the provocative stance that “bringing racial justice awareness to regionalism is the single most important civil rights task facing us today.”

Powell is one of the most innovative thinkers regarding race, civil rights, public policy, and the law in the country. He is the executive director of the Institute on Race and Poverty and Julius E. Davis professor of law at the University of Minnesota. He was formerly national legal director of the ACLU and has published widely on race, civil rights, and the law.

The interview was conducted by Bob Wing, editor of ColorLines magazine.

Q: What is regionalism?

A: Regionalism is the notion that you should think about, fight for, and administer resources at a regional and not just a city or federal level. The economy, the infrastructure (transportation, utilities, etc.), and the labor market all function on a regional level. In general a region can be thought of as a city and its suburbs, what the census calls a metropolitan statistical area. That is why regionalism is sometimes called “metropolitics” by people like Myron Orfield.

Q: Why is regionalism important for anti-racist work?

A: Today, metropolitan regions are divided racially and spatially into largely white and affluent suburbs and largely non-white and poor urban centers. These dynamics are at the heart of racial inequality today. If this inequality is to be effectively fought, suburban sprawl and political fragmentation must be combatted by movements for regional and metropolitan equity.

Regional inequity has seriously undermined the efforts of the civil rights

movement. By the time the movement came to the north, this structure of suburban sprawl and urban poverty had been put in place and the movement could not effectively address it. A series of policy and Supreme Court decisions like *Milliken* in the mid-1970s outlawed desegregation and anti-discrimination efforts across school district and city lines. These decisions protected racial inequality between what were increasingly white suburbs and minority cities.

In fact, while the Supreme Court basically dismantled the ability of whites to garner resources and protect themselves on a neighborhood basis, it actually enhanced their ability to do the same on a regional basis. Just as the doctrine of states' rights at the beginning of the century was a code for allowing the states to frustrate the rights and economic

hopes of blacks, the doctrine of local autonomy and municipal rights have been used to frustrate these hopes at the end of the century.

As a result, whites have been able to re-isolate minorities in the declining urban core and older suburbs, away from jobs, growth centers, a strong tax base, and other opportunities. This is aggravated by the fact that today suburban voters

outnumber urban voters: the political center of regions throughout the country has shifted to the suburbs, again isolating the urban core.

Q: But regionalism seems to be dominated by white environmentalists and suburban interests that are not interested in racial justice.

Growing apart: Development patterns, housing policies, and transportation investments in metropolitan regions have separated races and isolated minorities in poor communities.

A: True. So far, regionalism, “smart growth,” and anti-sprawl movements have been mainly framed around the interests of white suburbanites and environmentalists. Our challenge is to reframe these issues from the standpoint and interests of people of color, who mainly live in the cities and older, declining suburbs, but whose conditions are inextricably connected to the newer, growing suburbs.

In most cases, the cities actually subsidize the suburbs, which in turn suck resources out of the cities. Cities need to fight for equal resources — housing, transportation, jobs, and education — with the suburbs. Cities cannot raise the money they need to deal with issues of concentrated poverty simply within the cities.

Q: How is concentrated poverty related to regionalism?

A: Although most politicians frame the issue of regionalism mainly through an environmental lens, as a historical matter the central issue driving sprawl is race.

Where there is sprawl — the expanding low-density use of land — and political fragmentation in an area with a substantial minority population, there will be racialized concentrated poverty at the core.

Metropolitan regions are divided racially and spatially into largely white and affluent suburbs and largely non-white and poor urban centers.

Concentrated poverty is where people with incomes below the poverty line represent over 40 percent of a census tract: most of these are people of color.

This pattern is caused by white middle class and upper middle class people fleeing to the edge of the region, taking important resources and opportunity with them and erecting barriers to low-income people of color. Concentrated poverty should be understood as racial and economic segregation combined. It is the segregation of poor people of color from opportunity and resources.

Q: Can you give an example of how this dynamic of sprawl and concentrated poverty actually works out?

A: Over the last twenty years, the population of Detroit has fallen from just under two million to probably less than a million today. Most of those remaining are low-income black people. At the same time, the population of the Detroit metro area as a whole has increased by 3 percent — but the land it occupies has multiplied times 12. Hundreds of separate municipalities have been created, and they vie to capture resources and keep needy, low-income people out. This is classic sprawl and fragmentation.

The first population that moved to the metropolitan edge was white and upper middle class—the corporate executives of General Motors, Chrysler, Ford, and their friends. When they moved, they brought their auto plants and resources with them. I grew up in Detroit from 1960-1995, and during that time there wasn't one auto plant built inside the city of

Detroit. In 1960, 56 percent of the jobs in the Detroit metropolitan area were in Detroit proper; today only 18 percent of the jobs are in Detroit.

When rich people move, they also suck resources out of the urban core: businesses, jobs, property taxes, malls, money for highways, transit, police, water, etc. Then other middle class strata in the population follow them, reproducing the same phenomena. This flight was not just looking for the right place to live, but looking for a white place to live.

This in turn left Detroit and dozen of other cities across the country with masses of poor people of color who have much greater social needs than middle class or rich people, but with a decimated tax base with which to pay for those needs. Fewer resources, concentrated poverty. More needs, higher taxes.

Q: But how is this sprawl related to race?

A: You know, half the people in the country living in concentrated poverty are black. Another third are Latinos. Even though more than half the impoverished people in the country are white, most poor white people don't live in concentrated poverty.

Moreover, during the long economic boom we've had in the U.S., the number of people living in areas of concentrated poverty has doubled. So it's not just economics; concentrated poverty is sorted by race. And this racial sorting takes place not just on a neighborhood level now, but on a regional level: cities versus suburbs, inner-ring suburbs versus outer-ring suburbs, this side of the freeway versus that side of the freeway, etc.

Q: Can you expand on the role of the government in this racialized sprawl?

A: The government had a central role in the history of sprawl, especially through its housing policy. When the government set up the homeowners loan corporation and then the Federal Housing Authority in the 1930s, it wrote a truly racist underwriting manual to guide them. To qualify for a loan, you had to live in a "racially homogenous community," meaning an all-white community. The federal government was the first to draw a red line around

communities of color, prohibiting loans. Newly constructed homes were preferred over existing homes, thus encouraging the development of suburbs. And then the federal government built highways so people could get from their new suburban homes to their jobs in the cities.

Since the private lending industry wanted to do big business with the federal government, they adopted the same racist policies for making home loans.

These programs racially structured housing patterns just as large numbers of blacks were leaving the south and moving to cities in the 1940s and 1950s. Some economists have estimated that the federal government has spent over two trillion dollars subsidizing the flight of white people out of the central cities. Following the government's lead, private banks and the secondary mortgage market made trillions of dollars available primarily for white suburbs.

But there is even more racist inequity when one looks at our transportation policy, our infrastructure policy, or our taxing policy. They reflect nothing short of a national suburban policy and an anti-city policy. And race is central to understanding any of these policies.

Q: What is the difference between regionalism and current urban strategies?

A: I think in many ways urban strategies, so-called "in place strategies," have been the wrong strategy. These strategies focus on specific neighborhoods.

For example, there are hundreds of community development corporations (CDCs) that fight for more low-income housing in their neighborhoods. I

The car and other big influences on metropolitan America

According to a recent survey by the Fannie Mae Foundation, the following five items have had the most influence on the development of American metropolitan areas in the past 50 years:

1. The 1956 Interstate Highway Act and the dominance of the automobile.

2. The Federal Housing Administration's mortgage financing and subdivision regulations.

3. De-industrialization of central cities.

4. Urban renewal, downtown redevelopment and public housing projects.

5. Levittown-style mass production of suburban tract houses.

In the next 50 years, the biggest influences are predicted to be:

1. Growing disparities of wealth.

2. Suburban political majority.

3. Aging of the baby boomers.

4. Perpetual "underclass" in central cities and inner-ring suburbs.

5. Smart Growth environmental planning initiatives to limit sprawl.

If racial inequality is to be effectively fought, suburban sprawl and political fragmentation must be combatted by movements for regional and metropolitan equity.

Struggling with race

At a *Church in the City* forum last October, Cleveland Catholic Bishop Anthony Pilla identified five themes that had emerged in the church's work on urban sprawl and regional cooperation: corporate responsibility, economic diversity, the value of partnership, regional development, and cultural and inter-religious diversity.

"Among these five strands I have identified, racism emerged as the most prevalent issue," the Bishop said. "It permeated virtually every discussion.

"We are a community that struggles both consciously and unconsciously, personally and systematically, with racism."

say we really don't need it. If you look at Minneapolis for example, 85 percent of low-income houses are in a few neighborhoods, often at the behest of community advocates. The problem is that concentrating low-income public housing also concentrates poor people away from opportunity and resources. It adds to concentrated poverty.

By contrast, Montgomery County, outside Washington, DC, adopted a mixed-income housing plan. Their plan requires that 15 percent of new housing has to be below market rate and half of those need to be public housing. They thus distribute public housing throughout the community rather than concentrating it in a few neighborhoods. And the public housing is not some cheaply built high rise, but normal commercial units that have been taken off the market. It's a very popular plan that deserves consideration elsewhere.

By regionalism I'm not suggesting a dispersal strategy, but I am suggesting a comprehensive strategy. We need a strategy that looks at what's going on in the region and that links people of color with opportunities. This can be done through new transportation lines. It can be done by bringing some jobs and businesses to the community itself. But we also have to have the option of having people move to where those opportunities currently exist outside of the inner cities.

I know there is real concern about maintaining strong communities of color, but can we do this if they are communities of concentrated poverty?

Q: Why do you think many activists are reluctant to take on regional issues?

A: Many urban social activists are legitimately concerned that regionalism will weaken the political and cultural ties of minority communities that are centered in the cities.

Certainly this is a real issue. But the answer is not to avoid participation in regional discussions, but to participate in such a way that we protect those concerns. With or without us, regional development is occurring and undermining our communities. The corporations, developers, and suburban whites who drive this regional development are not likely to put racial issues on the table. If we don't come to the table, wealthy and middle class whites will simply continue to set the regional agenda according to their own interests, and we will simply suffer the consequences.

Q: What organizing opportunities does regionalism present?

A: The core issues are really jobs, housing, and education. But they are also the hardest issues to get political unity on, given the class and racial

differentiation of the metropolitan populations. So, unless you already have significant political clout, I suggest you start with easier issues like tax base revenue sharing, transportation, and infrastructure sharing.

These issues appear to be relatively race neutral, but can nonetheless be quite beneficial to people of color. For example, some years ago in Portland, concerns about slowing growth, saving the spotted owl, and maintaining farmland led to an agreement to create an urban growth boundary. Consequently, the resources that would have sprawled out started going back in. Land and housing values in Portland started soaring, including those of the black and Latino communities. In fact, Portland's black community is accumulating wealth at a faster rate than any other black community in the country. A non-racial regional decision to create an urban boundary line had positive impact on racial minorities. There are still issues but the environmental community in Portland has started to focus on racial justice issues.

In Detroit, there is a growing coalition between those who want to save farms and those that want to save the cities. And throughout the country, faith-based organizations are successfully taking up this issue. Unfortunately, the civil rights community is not present.

Q: Where do you think regionalism fits in a racial justice agenda? How important is it?

A: I believe that fighting for regional resources and participating in regional planning are crucial to a successful racial justice agenda. Currently, regionalism is aggravating racial inequality and injustice. People from Al Gore to big corporations to your county boards of supervisor to your regional transit boards make regional decisions every day, and people of color are basically absent from these decisions.

I think that bringing issues of race into regionalism is crucial to a progressive agenda that can cut away at racialized concentrated poverty and inequities in education. In fact, I believe bringing racial justice awareness to regionalism is the single most important civil rights task facing us today. □

This article is reprinted from the Fall, 1999 issue of *ColorLines*, a national magazine of race, culture and action. Subscriptions are \$16 per year. Visit their website at www.colorlines.com.

John Powell (he doesn't capitalize his name) can be contacted at the Institute on Race and Poverty, 415 Law Center, 229 19th Avenue South, Minneapolis, MN 55455 (612-625-8071). A recent report, "Concentrated Poverty: Causes, Effects, and Solutions," is available on the institute's Web site, www.umn.edu/irp.

Fighting for regional resources and participating in regional planning are crucial to a successful racial justice agenda.

City/suburb disparities

Total market value per household
in Northeast Ohio, 1995

Map prepared by the Housing Policy Research Program, Cleveland State University, 1997

The map above shows how household wealth in the seven-county region of Northeast Ohio is distributed among a band of wealthy suburbs and much poorer urban centers. In 1990, the per capita income in Cleveland was just 54 percent of surrounding suburbs, the highest income disparity in the state and among the worst in the nation.

This division has a strong racial dimension. As the table at right shows, the Cleveland metro area has the highest index of segregated housing patterns in the state (also one of the worst in the nation). Most poor African-Americans have been left behind in Census tracts with high rates of poverty. In contrast, most poor whites do not live in poverty tracts, which means that they are better connected to opportunities—jobs, decent schools, middle-class role models—in the larger community.

Most poor blacks live in ghettos, most poor whites live in middle-class areas

Metropolitan area	Metro segregation index	Metro poverty in 1990	Poor blacks in poverty tracts	Poor whites in poverty tracts
Columbus	67	11.8%	77%	27%
Toledo	74	13.9%	85%	40%
Dayton	75	11.9%	82%	40%
Lorain/Elyria	57	na	na	na
Akron	69	12.1%	73%	30%
Canton	62	na	na	na
Cincinnati	76	11.4%	74%	28%
Youngstown	76	13.8%	93%	33%
Cleveland	85	11.8%	91%	37%
Ohio average	69	12.4%	82%	34%

Analysis by David Rusk, 1996

Water under pressure

After three years of study, public officials have released an important plan to protect water quality in Northeast Ohio. The draft plan reflects the best thinking of local planning agencies, health departments, sewer districts, environmental protection agencies and political leaders. The plan is comprehensive and realistic. It is also frightening.

The major conclusion: Regional water quality is expected to decline, reversing the gains of the last 20 years.

That will happen if current trends continue. And the trends are very likely to continue because there are no management structure and policies in place to change them.

New challenges

The plan is called *Clean Water 2000: The 208 Water Quality Management Plan for Northeast Ohio*. The "208" refers to a section of the Clean Water Act that requires

Goals of the region's water quality plan update

Several goals were established as a framework for plan development:

- The plan should take a watershed approach that coordinates agencies addressing point and nonpoint pollution sources as the basis for management planning;
- The plan should optimize use of the existing investment in infrastructure with infill development, not encourage public investments in new infrastructure;
- The plan should be protective of what has been gained in environmental quality and outline measures needed to be undertaken to meet designated uses with particular attention to enhanced protection of critical water resource areas;
- The plan should provide a regional framework for locally determined development density that is protective of water quality;
- The planning process should be a tool for educating local public decision makers on regional water quality management issues; and
- The plan should be an educational tool to elicit support of the general public for plan implementation.

coordination of water quality management in metropolitan areas. The intent is to ensure that public investments in sewers, wastewater treatment plants, and other programs are well planned and effective – and that conflicts between local jurisdictions are avoided (for example, you don't want two cities extending sewer lines to serve the same area).

The first 208 plan for Northeast Ohio was completed in 1979. It focused primarily on improving sewage treatment to reduce the gross pollution of our streams, rivers and lakes. Hundreds of millions of dollars later, our waterways are much improved. Rivers like the Cuyahoga downstream of Akron are coming back to life.

Now, more than 20 years later, the 208 plan has been updated. And it focuses on a new set of water quality challenges – challenges that involve not how we treat wastewater as much as how we treat land. Simply put, the emerging water quality issue for the new century is urban sprawl.

Here is how the region's water quality experts describe the situation: "...the most widespread threat to water quality in 1999 is occurring in the rapidly developing areas of the region on the periphery of the existing urban areas. This threat comes from a variety of potential sources, including new point source discharges from residential and commercial developments, but most significantly from the combined effects of land disturbances to construct these new developments. This has caused a wholesale transformation of the landscape from rural, sparsely populated, vegetated open spaces to large areas of denser populations with corresponding increases in impervious surfaces (pavements, parking lots, and buildings). This transformation is threatening critical water resources once thought relatively secure from water pollution threats (upland drinking water reservoirs, headwaters areas, and high quality streams once far removed from urbanization). Thus, while the perceived water pollution problems of the 1970s have largely been addressed, there remains a whole new set of water pollution challenges at the turn of the century to be confronted."

From stream to drainage ditch: Much of the new development in the region degrades water quality and biological diversity.

Where the growth is

To illustrate where future water quality problems will likely occur, the planners mapped projected population growth in Northeast Ohio (top map on page 9). Then they overlaid the population projections on a map of major watersheds (bottom map on page 9).

The maps show that much of the future regional population growth will occur in watershed areas that currently feature relatively high water quality. This includes areas like the lower Grand River and the Aurora Branch of the Chagrin River, which are projected to be high growth areas. The middle Cuyahoga River and the upper portion of the lower Cuyahoga are also expected to grow substantially. Both the East and West Branches of the Rocky River are projected to experience growth, with particular impacts expected in the vicinity of the City of Medina. The lower reaches of the East Branch of the Black River and nearby areas of Lorain County that drain directly to

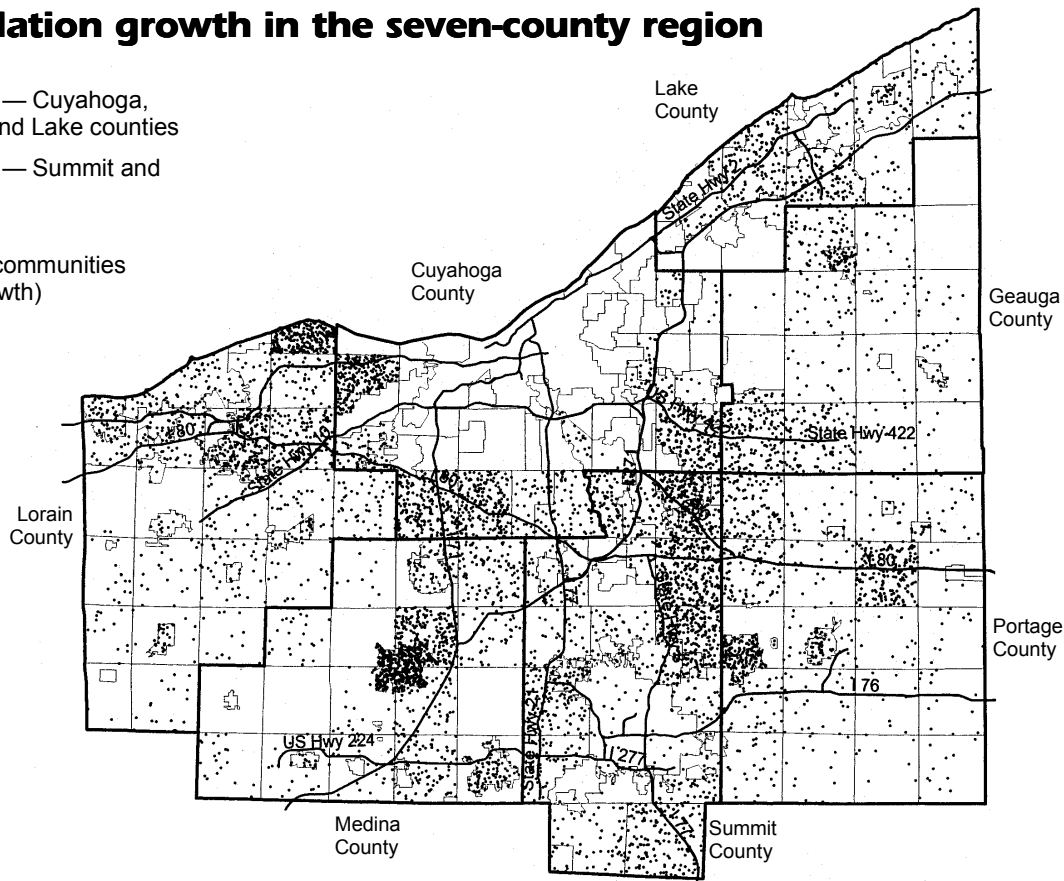
Projected population growth in the seven-county region

Projections for 2000-2025 — Cuyahoga, Lorain, Medina, Geauga and Lake counties

Projections for 1990-2020 — Summit and Portage counties

1 dot = gain of 30 persons

(dots are clustered in the communities experiencing the most growth)

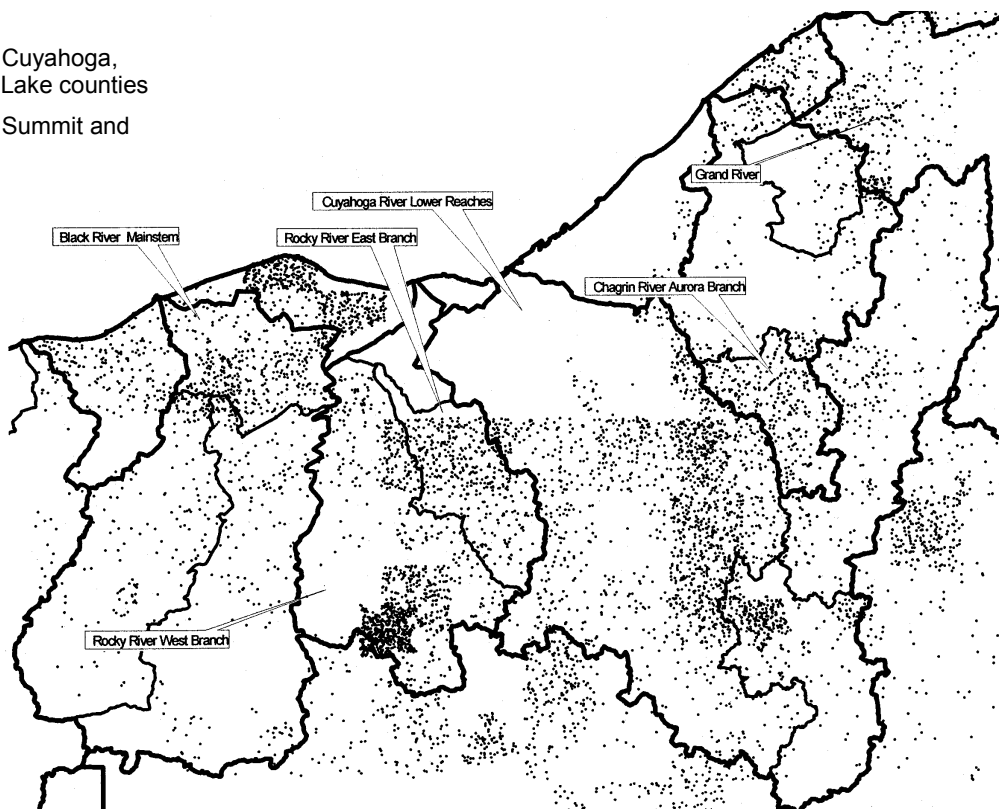


Projected population growth in Northeast Ohio watersheds

Projections for 2000-2025 — Cuyahoga, Lorain, Medina, Geauga and Lake counties

Projections for 1990-2020 — Summit and Portage counties

1 dot = gain of 30 persons
(dots are clustered in the communities experiencing the most growth)



Source: Northeast Ohio Water Quality Management Plan, March 2000 draft, NOACA. Projections based on 1990 data.

Clean Water 2000 fact sheet

What is it?

Clean Water 2000 is an update of Northeast Ohio's water quality management plan. It outlines a comprehensive approach for local government action to maintain and protect the region's water quality, particularly in the urbanizing areas of Northeast Ohio where future threats to water quality are most pronounced. The plan has been prepared pursuant to Section 208 of the federal Clean Water Act. Because it describes where sewers and wastewater treatment facilities will be built and recommends policies for managing development to protect water quality at the regional level, it is perhaps as close as we will get to an official regional land use plan in Northeast Ohio.

Responsible agencies

The planning process was coordinated by the region's two federally-recognized water quality management agencies – the Northeast Ohio Areawide Coordinating Agency (NOACA) and the Northeast Ohio Four County Planning and Development Organization (NEFCO). NOACA serves Cuyahoga, Geauga, Lake, Lorain, and Medina Counties. NEFCO serves Portage, Stark, Summit, and Wayne counties.

A task force was appointed to develop the plan. It included representatives of municipalities, counties, sanitary sewer agencies, boards of health, planning commissions, county park districts, soil and water conservation districts and watershed advisory bodies from each of the seven counties in the planning area. The task force was chaired by Erwin Odeal of the Northeast Ohio Regional Sewer District and David Crandell of the Akron Department of Public Utilities.

Planning area

The planning area encompassed five watersheds in Northeast Ohio that are tributary to Lake Erie. From east to west, these are the watersheds of the Grand, Chagrin, Cuyahoga, Rocky and Black rivers. The planning area also includes interbasin areas (such as Doan Brook or Euclid Creek) that drain directly to Lake Erie.

Issues addressed

The water quality plan attempts to take a comprehensive approach to improving water quality in the region. It includes recommendations to address the expansion of public sewer services, failing home sewage systems, nonpoint source pollution and stormwater runoff, protection of critical water resources, urban stream restoration, control of erosion from construction sites, protection of floodplains and habitat along rivers, and the use of road salt. It also recommends ways that communities can cooperate more effectively to manage growth and development at the regional level.

Process for comment and approval

The plan was released in draft form in March 2000 for public comment and for review by every community in the region. Copies are available for viewing in area libraries and on the NOACA Web site at www.noaca.org. Public forums will be scheduled. Comments are due by May 17.

After revisions, the plan will be presented to the boards of NOACA and NEFCO for approval. It will then be submitted to Ohio EPA and U.S. EPA for approval.

For more information

- Northeast Ohio Areawide Coordinating Agency (NOACA), 216-241-2414 or www.noaca.org.
- Northeast Ohio Four County Planning and Development Organization (NEFCO), 330-835-5731.
- Ohio EPA, information on current water quality conditions from the agency's 305(b) report, which is available at www.epa.state.oh.us.
- Clean Water Network (national water quality information and legislative information), www.cwn.org.
- Center for Watershed Protection (information on protecting and restoring urban watersheds), www.cwp.org.

No buffer zone: Houses crowd the Chagrin River.

Lake Erie will also be affected, according to the plan.

Typically, the impacts will start on the small headwater streams that flow into the rivers. House by house, the land will be cleared of protective vegetation and replaced with roads and rooftops. The delicate balance of water flow will be upset. Water will surge into the streams during rains – depositing sediment, lawn chemicals and other pollutants, eroding the stream banks, washing away aquatic life. The pristine, woodland streams will become a turbid drainage ditches. And the water quality impacts will be transmitted downstream to the major river. (See sidebar on page 11 for more impacts from impervious surfaces.)

Preventive measures

To address such problems in the developing areas of our region, the *Clean Water 2000* plan makes a number of recommendations. Some of these are common-sense measures that are either partially implemented already in some communities or should have been implemented years ago:

- County health departments should take greater responsibility for siting, permitting, and inspecting **home sewage systems**. In rural areas without sewer lines, houses and small businesses have small,

individual systems to treat wastewater (such as a septic tank to collect solids and a leach field to allow wastewater to percolate into the ground). Presently, the regulation of these systems varies from county to county. Some systems are installed in soils that do not permit proper drainage. Many systems are not maintained and eventually fail to work. It's very important to require people in the country to take responsibility for their wastewater because when failing home systems create a serious pollution problem, the Ohio EPA often will require a public sewer system to be installed. New sewers then open up the area to more intensive development, which then creates even more water quality problems.

- Local municipalities and counties should tighten regulations on **construction activities** that disturb an acre or more of land. This includes effective stormwater management ordinances to ensure that development does not alter runoff patterns and cause flooding or pollution downstream. And it includes programs to prevent soil erosion and control sediment from construction sites. For projects that impact critical water resources, the Ohio EPA also should require controls to mitigate stormwater impacts.

- To protect drinking water supplies, communities should

minimize the amount of **road salt** used to clear roads in winter.

- Design and maintain roads to minimize the amount of pollutants that wash off during rains.

- Promote the development of **watershed stewardship programs** to involve citizens in restoring local streams and educate the public about the importance of water quality. Many such programs already exist, and the plan recommends that NOACA facilitate the formation of a group for the Rocky River, the one remaining major river in the region without a watershed organization.

- Encourage voluntary **land conservation programs**, such as land trusts that acquire easements from property owners to prevent land from being developed.

- Provide better **information** to local officials on the impacts of

development throughout a watershed so there's greater awareness of how development in one community affects neighbors downstream.

Controlling growth

Other recommendations in the plan deal more directly with managing growth and development. They are potentially more controversial and may be harder to implement. They include:

- Communities in developing areas should require **building setbacks** to protect a vegetated buffer zone along stream corridors. This buffer zone should be 75 to 300 feet wide depending on the size of the stream. Protected stream corridors serve a number of functions, including flood control, erosion control, pollutant filtration, and habitat protection. Communities can also save tax dollars and reduce future property damage by preventing encroachment on the stream channel.

- Communities should promote **conservation design** subdivision regulations (as opposed to cookie-

cutter, large-lot zoning) to limit the stormwater impacts of new development. This typically involves clustering homes on smaller lots to preserve open space and reduce impervious surfaces. It reduces the costs of development while protecting the environment.

- Ohio EPA should allow local officials to give streams **special protection under water quality regulations**. For example, permits often allow a stream to be polluted up to its theoretical "assimilative capacity" (based on the assumption that streams can handle a certain amount of pollution without showing signs of degradation). But the plan recommends that local officials be able to request that Ohio EPA set aside up to 20 percent of a stream's assimilative capacity. This would give high quality streams an

additional regulatory cushion and could reduce the amount of development allowed in a watershed.

- **Regional planning** should be expanded to coordinate water quality planning and transportation planning. Public investments in new infrastructure

could encourage growth management and promote development in existing cities and towns rather than in rural areas.

Acting in watersheds

The above recommendations are positive steps for water quality in the region. But most are limited by a fundamental flaw in how we care for our water resources in Ohio.

Increasingly, the key to clean water is reducing sprawl and protecting natural stream corridors. It's a land use issue. But our land use decision-making takes place in cities, towns and counties, not in watersheds.

As the *Clean Water 2000* plan says, "Watershed approaches are not mandated in the State of Ohio and

The key to clean water is reducing sprawl and protecting natural stream corridors. It's a land use issue. But our land use decision-making takes place in cities, towns and counties, not in watersheds.

Paving over the landscape

More than 1.5 million acres of land are developed each year in the United States. Development alters the surface of the land by replacing natural cover with rooftops, roads, parking lots, and sidewalks. These hard surfaces are impermeable to rainfall and are collectively known as impervious cover.

Recent watershed research has shown that impervious cover has a profound and often irreversible impact on the quality of our nation's aquatic resources. More than 30 different scientific studies have documented that stream, lake and wetland quality declines sharply when impervious cover in upstream watersheds exceeds 10 percent. The strong influence of impervious cover on aquatic systems presents a major challenge to communities interested in sustainable development.

Here are some of the impacts of impervious surfaces on water resources:

- Higher peak discharge rates and greater flooding
- More frequent bankfull flooding
- Lower stream flow during dry weather
- Enlargement of the stream channel
- Greater streambank erosion
- Increased alteration of natural stream channels
- Less large woody debris in streams
- Loss of pool and riffle structure
- Increased number of stream crossings, with greater potential to affect fish passage
- Degradation of stream habitat structure
- Decline in stream bed quality (imbedding, sediment deposition, turnover)
- Fragmentation of the riparian forest corridor
- Warmer stream temperatures
- Greater loads of stormwater pollutants
- Bacterial levels that exceed recreational contact standards
- Lower diversity of aquatic insects and freshwater mussels
- Lower diversity of native fish species
- Loss of sensitive fish species (e.g., trout, salmon)
- Lower spawning success of fish
- Decline in wetland plant and animal diversity

From *Better Site Design: A Handbook for Changing Development Rules in Your Community* by the Center for Watershed Protection

would seem to be complicated by the State Constitution's allocation of primary land management responsibility to local units of government."

It's not likely that the state will mandate watershed authorities anytime soon. So it seems that our only realistic hope for reversing current trends is for hundreds of units of local government and thousands of local officials to get "watershed religion" and start cooperating on an unprecedented scale. A daunting prospect!

We do have some encouraging examples of voluntary, cooperative action in the region. For example, the Chagrin River Watershed Partners is helping communities in the Chagrin River watershed to cooperate on development issues. But we're still a long way from success. The dominant development trends of the region don't respect water.

Ultimately, we need to transcend the little municipal and county boxes that frustrate planning and effective action to protect streams and their watersheds. We need new techniques of ecological development that integrate human society into the natural world.

We need to cultivate a more profound awareness of the value of water as the basis of our health, our region's biological diversity, our recreational opportunities. We need to appreciate that abundant clean water is one of our greatest competitive advantages over the rest of the country.

Water connects us. It flows through the land, the air, and our bodies. You can't say where it begins and ends. It obeys no boundaries. We all have a stake in it. □



Threats to critical resources

The region's draft water quality plan identifies "critical water resources" that warrant special protection. These include drinking water supplies, state resource waters (surface waters in parks or environmentally-sensitive areas), riparian zones and flood plains. These resources provide many benefits to the residents of Northeast Ohio, but they face many threats.

Threats to surface drinking water supplies

Increased rates of sedimentation and stormwater runoff due to shifts in land cover/land use in upper watersheds.

Increased loadings of toxic materials, including heavy metals and pesticides.

Increased salinity due to road salt runoff.

Increased nutrient loadings emanating from faulty on-site systems, small package plants, lawn care, and/or altered agricultural practices.

Loss of riparian [habitat along rivers] function in the upper watersheds which serve to reduce flowing pollutant loads.

Threats to ground water drinking supplies

Bacterial contamination due to faulty on-site system operation and maintenance.

Concentrated leaks, spills, or dumping of hazardous materials.

Over development of the resource either through over pumping or by over developing recharge areas.

Saline intrusion due to over pumping at depth.

Salinity problems resulting from road salt contamination.

Threats to state resource waters

Loss of riparian vegetation within a State Scenic or Wild River segment.

Stream channel instability problems related to the over development of the upper watershed and/or the loss of significant riparian vegetation in the watershed.

Habitat alteration due to increased storm water runoff from inadequately controlled development and from increased sediments loads related to poor construction practices.

Water warming due to loss of riparian vegetation in upstream reaches or to increased surface runoff volumes.

Impairment or threat of impairment of recreational uses due to bacterial loadings.

Threats to riparian zones and flood plains

Loss of zone effectiveness due to vegetation removal from expanded agriculture or resulting from development within the zone.

Channel instability introduced by uncontrolled storm water runoff from upstream sites.

Development in the zone which requires engineered protection due to channel flooding or stream bank instability.

Source: Clean Water 2000 Water Quality Management Plan

Impaired streams

Many streams in Northeast Ohio already do not meet water quality goals. Here is a summary of local stream impairments based on assessments by Ohio EPA.

Black River Watershed

Mileage assessed: 215.48

Impaired by urban runoff: 14%

Impaired by agriculture: 87%

Impaired by channelization and dams: 13%

Upper Cuyahoga River Watershed

(including the Little Cuyahoga River)

Mileage assessed: 164.61

Impaired by urban runoff: 38%

Impaired by agriculture: 5%

Impaired by channelization and dams: 49%

Impaired by on-site system failure: 13%

Impaired by spills: 23%

Impaired by other sources: 28%

Cuyahoga River Watershed

(below junction with Little Cuyahoga):

Mileage assessed: 187.00

Impaired by urban runoff: 51%

Impaired by agriculture: 20%

Impaired by channelization and dams: 13%

Impaired by on-site system failure: 6%

Impaired by spills: 31%

Impaired by other sources: 9%

Chagrin River Watershed

Mileage assessed: 94.90

Impaired by urban runoff: 89%

Impaired by channelization and dams: 5%

Impaired by other sources: 26%

Euclid Creek Watershed

Mileage assessed: 18.52

Impaired by urban runoff: 100%

Impaired by channelization and dams: 51%

Impaired by spills: 51%

Rocky River Watershed

Mileage assessed: 146.10

Impaired by urban runoff: 37%

Impaired by agriculture: 5%

Impaired by channelization and dams: 6%

Impaired by on-site system failure: 6%

Impaired by other sources: 1%

Lower Grand River Watershed

(below Mill Creek):

Mileage assessed: 66.65

Impaired by urban runoff: 21%

Impaired by agriculture: 21%

Impaired by on-site system failure: 35%

Impaired by other sources: 26%

Source: Ohio EPA 1996 Ohio Water Resource Inventory, Appendix A-2.

Local control vs. regional problems

[N]early all major problems directly related to growth are regional, not local in nature. This is most obvious for air pollution and traffic congestion [or water pollution]. Both involve conditions that arise throughout a region and flow freely from one part to many others... So policies adopted by individual localities cannot effectively cope with these problems unless they are coordinated in some way.

Nevertheless, most elected officials at all levels want to place control over growth-related public policies in the hands of individual local governments, acting independently. Politicians adopt this attitude because it is highly popular with both local officials and most suburban residents, all of whom want to retain maximum control over who lives in their communities. In a democracy, politicians are motivated to adopt policies popular with voters, regardless of whether those policies have any chance of actually achieving their stated goals. Therefore, in most U.S. metropolitan areas, nearly all growth management powers are entirely controlled by local officials, even though this means that resulting policies cannot effectively solve most growth-related problems, which are regional in nature.

—Anthony Downs,
The Brookings Institution

Highlights of the region's plan for clean water

Wastewater management facilities

The plan updates wastewater management facility planning areas in the region and identifies community plans for wastewater treatment. In the plan local officials have presented NOACA with their plans for wastewater treatment. Some have used this opportunity to decide that they want to limit spread of sanitary sewers so as to maintain lower development densities that are commensurate with maintaining rural character. With its adoption by NOACA and certification by Ohio EPA only those sewer plans that are consistent with the Clean Water 2000 plan will be approved.

Nonpoint source controls

The plan recommends local government use of some new tools to control nonpoint source pollution, a growing regional problem. (Nonpoint source pollution is diffuse pollution from the runoff from roads, farm fields and other sources. It is much harder to control than point sources, such as the discharge pipe from a factory). These tools include new model ordinances to help better manage storm water runoff and to control construction site erosion/sediment problems. They also include a riparian buffer ordinance designed to move people out of danger from flooding and stream bank failure, while protecting streams and aquatic life from further degradation. Local officials are also being asked to encourage broader use of low impact designs for new subdivisions that help to maintain areas of natural vegetation while still accommodating growth.

Home sewage management

A new initiative to improve the operation and maintenance of home sewage disposal systems, another major source of water pollution, was developed with the guidance of the seven county health departments in Northeast Ohio. The plan identifies enhanced management policies to be implemented by these agencies to better protect the region's water resources and to avoid future problems in unsewered areas without requiring the extension of sanitary sewers into areas where they are not wanted.

Protection of critical water resources

The region possesses numerous water resources that are so special that they are considered critical to the maintenance of local health and community welfare. These water resources include surface and groundwater-drinking supplies, high-quality vegetated riparian corridors, and streams with scenic, wild or recreational value. The plan identifies these critical water resources and recommends the adoption of procedures whereby local officials by themselves, or with the assistance of Ohio EPA when asked, are given a set of options to provide for enhanced protection of these critical water resources. Ohio EPA is requested to modify state Clean Water Act authority to enhance the capacity of local officials to protect critical resource areas. Ohio EPA is also requested to expand the list of project types eligible for low interest loans under the State Revolving Loan Fund for this purpose.

Restoration of urban streams

The plan recommends Ohio EPA approval of an urban streams restoration planning process that will enable local communities to undertake practical efforts to address streams heavily impacted by urban land uses. The plan also provides recommendations for enhancing watershed planning, and better coordination of transportation and water quality infrastructure planning.

Population growth and the associated demands for newly constructed housing will result in the continued disturbance of undeveloped lands precisely in those watershed areas most vulnerable to these changes. The locations of new homes will influence many businesses to relocate to be closer to their employees or their customers. Land uses will continue to change from a predominantly rural character to urbanizing uses, and this will affect how water runs off the land surface or into the ground. The increase in urban runoff and other sources of nonpoint source pollution can degrade water quality, habitat for aquatic life and aquatic life itself. If these trends continue and no countervailing water quality management strategies are implemented regional water quality is expected to decline, reversing the gains of the last twenty years.

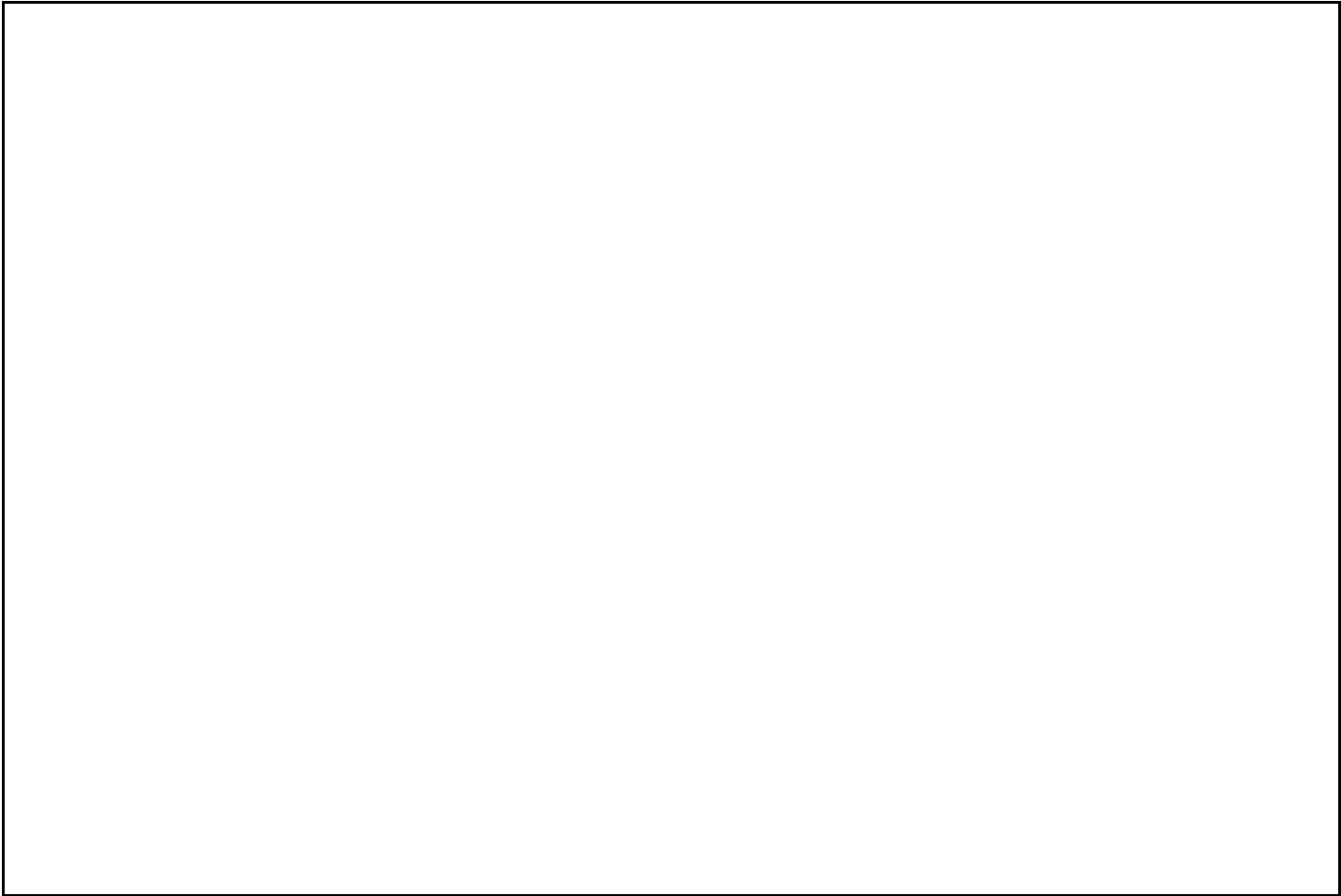
—Clean Water 2000

Vision for an urban commons

Imagine if you could take a block in a typical neighborhood of Cleveland or an older suburb and remove all the garages and fences behind the houses. You could create a large commons — a park for the residents of the block. Garages could be relocated to the end of the block.

Artist Mary Kelsey imagined what this transformation might look like in the middle of a real block in Cleveland Heights.

Drawing by Mary Kelsey



Alien threats: Will the woods of Northeast Ohio retain their species richness?

Exotic species and the 100-acre woods

The following article about the fragile future of our region's biological diversity was written by Brian Parsons, natural areas coordinator of The Holden Arboretum. It was originally printed in the Fall, 1998, Arboretum Leaves newsletter.

By Brian Parsons

What will the natural landscape of Northeastern Ohio look like in 50 years or even 10 years? Will The Holden Arboretum, or any other land-holding organization, be able to maintain the level of species richness, or biodiversity, that we experience today? How many of us will notice if these levels decline? These questions will be answered by how land managers address and mitigate the influence of edge effect and the corresponding invasion by alien edge species.

Life on the edge

What is an edge in ecological terms? Simply put, an edge is that area where two different plant communities meet and intergrade. Older texts state that the greatest diversity of plant and animal

species exists where edges of two different plant communities meet. The greater the contrast between the two communities, the greater the species richness. Texts written over 50 years ago speak of edge in positive terms. Is that still true today?

The ever-expanding edge

As a result of suburban development, natural areas throughout the U.S. are beset by ever-expanding edges. Obviously, suburban

development results in an immediate loss of habitat and species diversity on the developed parcel, but what about the undeveloped parcels?

Imagine a 100-acre woodland with typical, rich, biotic diversity. This woodland contains multiple layers within the woody canopy and shrub zone; a rich understory of native wildflowers; and numerous bird and animal species.

Suddenly the area is developed and reduced to a 20-acre woodland surrounded by houses on all sides. There are many long, well-defined edges between the remnant woods and the new development. What might happen to this remnant woodland?

As a result of suburban development, natural areas are beset by ever-expanding edges.



When succession takes place near a well-established seed source of native plant species, native plant species develop along edges. The first species to colonize these edges generally are those species planted by birds — woody plants with fleshy fruits that birds eat, digest, and ultimately plant.

As succession continues, more species are added, and the edge moves toward the center of the more open community. But in new housing developments, most residents don't let succession occur. They work to push the edge back toward the natural area.

Today what more commonly happens is that the majority of species planted by birds along woodland edges are nonnative woody species of trees or shrubs. A walk along any wood line at the arboretum will reveal shrubby combinations of buckthorn, privet, multiflora rose, European cranberry, bush honeysuckles, and vines such as oriental bittersweet and porcelain berry.

Our naturalized aliens

The sciences of agriculture and horticulture have long promoted plant species from other countries for additions to our landscapes and gardens. Older gardening texts tell us that a plant isn't considered established in your garden until it seeds into your landscape.

Statistically, this means we have actually established over 2,000 exotic plant species in our natural landscape on a national level. Throughout the Midwest, states report that approximately one-third of their total flora is composed of non-native naturalized plant species. In Ohio, for example, only 1,800 species are considered native of our total flora of approximately 2,700 plant species.

Plant, animal, and insect species within natural communities co-evolve and develop a series of checks and balances that prevent any one species from dominating a community. Some plant species may be opportunistic and may for a short period dominate a community, but, as succession progresses, balances are restored.

The main problem with exotic plant species is two-fold. Many of these aliens are opportunistic, and no organisms exist within their new community to keep the alien plant in check. Imbalances occur, and these exotics maintain their hold on the community despite the best efforts of succession.

Vertical nichery

Vertical niches develop from the many layers of vegetation in a plant community. Various species inhabit and use as many vertical niches as are present in a habitat. Niches might be used for nesting,

food sources, or cover.

The greater the number of vertical niches available, the greater the species diversity. When exotics dominate woodland edges, however, diversity decreases as our flora becomes homogenized and all woodlines look alike.

Into the interior

Edge effect and the influence of exotic plant species do not stop at woodland edges. In time, the forest interior becomes disturbed by natural events as openings are created in the canopy. When trees fall, these new openings become colonized and dominated by exotic

Natural landscape: Hemlock ravine in the Cleveland Metroparks South Chagrin Reservation.

plant species if they are the nearest available seed source.

So, here is our 20-acre remnant. Houses now surround it, exotic plant species are established along all of its edges, and its interior is slowly being degraded by exotics, which are added as natural disturbances occur.

We have mentioned only woody plant species. What happened to all the animal species that once lived in our 100-acre wood? Fortunately, animals are mobile, and many of the displaced animals seek refuge wherever possible in the persisting remnant.

But as available niches are filled, the remaining animals either leave to establish new ranges or, which is more often the case, they have nowhere to go and must compete within their own niche for food and cover, resulting in overpopulation.

What effect do the displaced animal species, such as white-tailed deer, have on our remnant woods? As almost all of us have seen by now, deer eat woody plants and eliminate plant layers within woodlands through intensive browsing. When this occurs, the bird



species using these layers for food or nesting decline. Many bird species use the lower layers of a woodland for nesting, but a formerly common resident of our mature woodlands, the wood thrush, is declining throughout its range because of the lack of nesting sites and other edge species.

Around our woodland are houses, and as time goes on we see an increase in other edge animal species such as raccoons, cats, and brown-headed cowbirds. All of these species are parasites on woodland nesting bird species. Cats and raccoons eat nesting bird species they can reach, and cowbirds lay their eggs in other birds' nests, resulting in a decrease in native birds and an increase in cowbirds.

The blow beneath our feet

So exotic trees and shrubs surround us, our lower understory layers are disappearing, and there are fewer and fewer nesting birds. Have we left out any exotic influences? Unfortunately, the final blow to our woodland is happening to the forest floor, our once-full ground layer.

Here groups of members of the Lily systematically Vegetation that thrives graze-resistant is cat-briar and brambles.

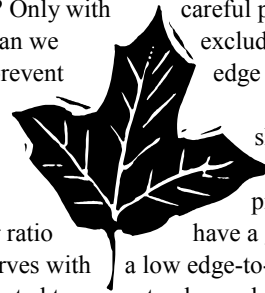


plants, namely all the family, have been eliminated by deer. on disturbance and is favored, such as Shade-resistant herbaceous exotics join the battle.

Invasive herbaceous exotics such as garlic mustard or lesser celandine sweep through, shade out, and replace our native wildflowers. Canary reed grass, common reed, and purple loosestrife dominate the watershed. The battle is over, and our 100-acre woods is a woodland in name only.

Streets are named to honor the fallen. Trillium Trail and Wood Thrush Way become choice addresses. The once-teeming diversity has been reduced by hundreds of species. Biodiversity declines. Is this the rain forest? No, this story happens in northeastern Ohio every year, and is coming to a woodland near you.

Is all lost? Are we powerless to stem the tide of exotic and mitigate edge effect? Only with careful planning and considerable effort can we exclude exotic plant and animal species and prevent edge effect from severely reducing diversity



The size and shape of a forest remnant has a great bearing on edge effect. Long, skinny preserves with a high edge-to-interior ratio have a greater chance of failure than do preserves with a low edge-to-interior ratio. Edge effect has been estimated to extend anywhere from 10 to 100 meters into a natural area. The farther the edge reaches, the greater the opportunity for our tale of woe to come true.

Fighting back

Edges can be planned and managed so as to prevent domination by exotic plant species. More native plant species can be planted and restored by the homeowner. Also, the homeowner can weed, mow, or spray to exclude exotic woody plant species. Deer can be controlled through hunting or excluded by fencing, and our lower woody layers can be preserved.

Exotic trees, shrubs, vines

Avoid these in landscaping and control along woodland edges

<i>Acer platanoides</i> Norway male	<i>Lonicera tatarica</i> Tartarian honeysuckle
<i>Ailanthus altissima</i> tree of heaven	<i>Malus prunifolia</i> Chinese crabapple
<i>Alnus glutinosa</i> European alder	<i>Morus alba</i> white mulberry
<i>Ampelopsis brevipedunculata</i> porcelain berry	<i>Populus alba</i> white poplar
<i>Aralia spinosa</i> devil's walking stick	<i>Rhamnus cathartica</i> * common buckthorn
<i>Berberis thunbergii</i> Japanese barberry	<i>Rhamnus frangula</i> * European buckthorn
<i>Betula pendula</i> * European white birch	<i>Rosa canina</i> dog rose
<i>Celastrus orbiculatus</i> * Japanese bittersweet	<i>Rosa eglanteria</i> sweetbrier
<i>Elaeagnus angustifolia</i> * Russian olive	<i>Rosa multiflora</i> * multiflora rose
<i>Elaeagnus umbellata</i> * autumn olive	<i>Salix fragilis</i> crack willow
<i>Euonymus alata</i> winged spindle-tree	<i>Salix purpurea</i> basket willow
<i>Euonymus fortunei</i> * Chinese spindle-tree	<i>Ulmus pumila</i> Siberian elm
<i>Exochorda racemosa</i> pearl-bush	<i>Viburnum opulus</i> European high-bush cranberry
<i>Ligustrum vulgare</i> * common privet	
<i>Lonicera x bella</i> * Bell's honeysuckle	
<i>Lonicera japonica</i> * Japanese honeysuckle	
<i>Lonicera maackii</i> * Amur honeysuckle	
<i>Lonicera morrowii</i> * Morrow's honeysuckle	

*especially threatening to local ecosystems

Source: James Bissell, Robert Bartolotta, and Beverly Danielson of the Cleveland Museum of Natural History



Invasive herbaceous edge species such as garlic mustard and lesser celandine can be pulled or sprayed and not allowed to seed on the site. Plant layers can be saved through considerable effort and planning by the landowner.

Greater efforts have to be made to screen new plant species and cultivars for their potential to harm natural areas. There is a fine line between the horticultural merit and the natural-area threat of any nonnative plant species. Nurseries, plant breeders, and homeowners should evaluate plants on the basis of their weed potential and the type of fruit they bear. Not all non-native plant species are bad. However, some genera, such as *Viburnum*, have a proven capacity to invade natural areas and need to be closely evaluated prior to introduction to our landscapes.

What about the bird species? What is their fate? Unfortunately, our 20-acre remnant still remains an ecological trap that can doom migrant bird species to nesting failures and ultimately a reduction in species numbers. Forest fragmentation is the greatest threat to area-sensitive, forest-interior birds. Thus, we need more large preserves and land conserved by the state, counties, townships, cities, developers, and other land-holding agencies. Conserved areas need a low edge-to-preserve-interior ratio to offer these bird species a chance.

Perspective on remnants

Does our 20-acre woodland have any merit? Although just a remnant, it still offers shade, protects part of a watershed, and provides homes for some animal and plant species. It also presents an opportunity for restoration, and perhaps it can serve as a link or corridor to a larger, better-planned preserve.

But this remnant should not be rationalized and considered a complete ecosystem. In truth, it is damaged. Its biotic diversity has been severely reduced and may never return to pre-development levels. This remnant woods teaches a lesson, one which planners, developers, zoning boards, and all land managers are to maintain the need to learn if we are to maintain the levels of diversity we now enjoy and the levels we may need in the future.

Experts say that for every species lost, ten associated organisms disappear. Nobody knows what level of biotic diversity is needed for our growing populations to survive, but does it make sense for us to continue down the same path time and time again? Lessons need to be learned.

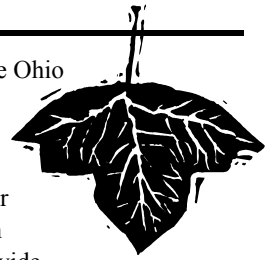
We need to change our thinking and our planning of communities. We need to carefully screen new plant introductions for their potential threat to natural areas. We need to aggressively exclude exotic species from natural areas.

We need to support legislation to declare more aliens as nuisances. We need to support land-managing organizations—

agencies such as The Nature Conservancy, the Ohio Division of Natural Areas and Preserves, The Holden Arboretum, The Cleveland Museum of Natural History, and county park systems with our votes and dollars so they can purchase enough land to provide buffers and create preserves with low edge-to-interior ratios.

We need to protect more 100-acre woods while we still have them. We need to give the edge back to our native species. □

The Holden Arboretum is a 3,100-acre living museum of woody plants located in the Chargin highlands east of Cleveland at 9500 Sperry Rd., Kirtland. It is the largest arboretum in the United States, and its research and conservation programs make it a leading horticultural institution. For information about educational programs and membership, call 440-946-4400 or see www.holdenarb.org.



We need to protect more 100-acre woods while we still have them. We need to give the edge back to our native species.

Exotic herbaceous plants

Avoid these in landscaping and control along woodland edges.

- | | |
|--------------------------------|---------------------------------|
| <i>Aegopodium podagraria</i> * | day lily |
| goutweed | <i>Iris pseudacorus</i> |
| <i>Alliaria petiolat</i> * | yellow flag iris |
| garlic mustard | <i>Lythrum salicaria</i> * |
| <i>Artemisia vulgaris</i> * | purple loosestrife |
| mugwort | <i>Melilotus alba</i> |
| <i>Centaurea maculosa</i> | white sweet clover |
| spotted knapweed | <i>Onithogalum umbellatum</i> * |
| <i>Chelidonium majus</i> | Bethlehem-bells |
| greater celandine | <i>Pachysandra terminalis</i> * |
| <i>Cirsium arvense</i> * | pachysandra |
| Canada thistle | <i>Phalaris arundinacea</i> * |
| <i>Cirsium vulgare</i> | reed canary grass |
| bull thistle | <i>Phragmites australis</i> * |
| <i>Conium maculatum</i> | giant reed grass |
| poison hemlock | <i>Polygonum cuspidatum</i> * |
| <i>Convolvulus sepium</i> | Japanese knotweed |
| common bindweed | <i>Ranunculus ficaria</i> * |
| <i>Coronilla varia</i> | lesser celandine |
| crown vetch | <i>Saponaria officinalis</i> |
| <i>Dipsacus laciniatus</i> * | bouncing bet |
| cut-leaf teasel | <i>Typha angustifolia</i> |
| <i>Dipsacus sylvestris</i> * | narrow-leaved cattail |
| common teasel | <i>Typha x glauca</i> * |
| <i>Duchesnea indica</i> * | hybrid cattail |
| Indian strawberry | <i>Vinca minor</i> * |
| <i>Epilobium hirsutum</i> * | Myrtle |
| hairy willow-herb | |
| <i>Euphorbia cyparissias</i> | |
| cypress spurge | |
| <i>Galium odoratum</i> | |
| sweet woodruff | |
| <i>Hedera helix</i> * | |
| English ivy | |
| <i>Hemerocallis fulva</i> | |

*especially threatening to local ecosystems



Source: James Bissell, Robert Bartolotta, and Beverly Danielson of the Cleveland Museum of Natural History

Rail planning updates

From the number of rail planning initiatives currently under way, one would think that Ohio and Greater Cleveland are on the cusp of a rail renaissance. From the local level to the national, transportation planners are committing resources to studying passenger rail service improvements. In the coming years, Northeast Ohioans could be seeing their transportation options expanded with rail services that could take them from downtown Cleveland to Beachwood, Lorain and Solon or to Chicago, New York and beyond.

RTA studies three Rapid extensions

■ **Red Line:** In November, the board of trustees of the Greater Cleveland Regional Transit Authority (RTA) approved a recommendation to extend the Red Line from its current terminus at Cleveland Hopkins International Airport to the IX Center and into Berea. Before the plan can be submitted to the Federal Transit Administration with a request for funding, it must first be approved by the board of the Northeast Ohio Areawide Coordinating Agency (NOACA is Greater Cleveland's regional transportation planning organization) and be open to public comment and review. As part of this process, a public hearing took place on March 8 and written comments will be accepted through April 10. For more information, call RTA's Maribeth Feke (216-566-5160) or Ed Taylor (216-566-5020).

■ **Blue Line:** On March 9, RTA conducted its first public meeting to gather citizen input on a proposed extension of the Blue Line past its current terminus at Van Aken Boulevard and Warrensville Center Road, possibly to the new Chagrin Highlands

development at Harvard Road and I-271. Various alternatives are under consideration, including the option of improving bus service in the area rather than extending the rail line. Call RTA's Richard Enty at 216-566-5260.

■ **Waterfront Line:** In early February, RTA released the results of the initial round of analysis of options for extending the Waterfront Line from its current terminus at the South Harbor station southwards to link up with the existing Red/Blue/Green Line tracks. Four alternatives remain, as well as "no-build" and bus system improvement alternatives. Planners hope to get approval of a preferred alternative from the RTA board, NOACA and the City of Cleveland by May. In the meantime, the public can comment on the various options by calling the Waterfront Line project office at 216-523-2939 or by completing a survey posted on the project Web site at www.mkcentennial/waterfront.

Other rail initiatives

■ **I-77 corridor:** Planners working on a Cleveland-Akron-Canton transportation study will sponsor four public meetings in April. The study will assess several options for addressing traffic problems in the I-77 and SR 8 corridors, including commuter rail. Details are still being worked out, but meetings will probably be held on April 6 in Cuyahoga Falls, April 8 in Canton, and on two other dates in Cleveland and a Cuyahoga County suburb. For information, call 216-371-3323 or visit the project Web site at www.cactrans.org.

■ **Amtrak:** As part of a major national expansion plan, Amtrak plans to add new daily service to link Chicago and New York City via the existing Ohio stations of Toledo, Sandusky, Elyria, Cleveland,

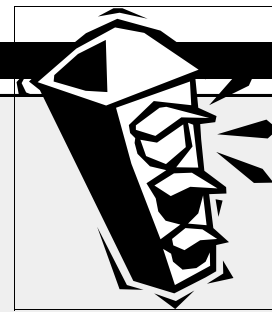
and Alliance. The new train – to be called the Manhattan Limited – could start running as early as this spring and would have afternoon and early evening departure and arrival times. For more information on passenger rail developments, call the Ohio Association of Railroad Passengers at 614-470-0334 or see www.amtrak.com.

■ **Regional commuter lines:** In March, NOACA began phase 2 analysis of commuter rail service in Northeast Ohio. Seven routes are being considered that would link downtown Cleveland to Lorain, Elyria, Medina, Akron/Canton, Solon/Aurora and Lake and Ashtabula county locations. Call NOACA's Steve Jones at 216-241-2414 for more information.

■ **Cleveland-Columbus rail service:** Latest reports from the steering committee of the Cleveland to Columbus rail study indicate that service using only a single train set may be recommended. This would mean that only two round trips per day would be possible, reducing riders' flexibility in departure and arrival times. Call ODOT's Matt Selhorst (614-644-7091) or the Ohio Rail Development Commission (614-644-0306) for more information.

■ **Midwest high-speed rail:** In February the nine-state Midwest Regional Rail Initiative (which includes Ohio), released the final version of its report on a Midwest regional high speed rail system. The report forecasts that in 2010 a fully operational Midwest system would carry 9.6 million passengers annually and earn sufficient revenue to cover operating costs. Cincinnati, Cleveland and Toledo would be included in the system. The report can be downloaded from www.dot.state.wi.us/opa/rail.html.

— Bradley Flamm



Questioning rail projects

It's encouraging to see the variety of rail transit projects being studied in Northeast Ohio. A more extensive, convenient and affordable transit system could give people more choices, be better for the environment, encourage sustainable land use, and lead to reinvestment in our older communities.

But (and it's hard for transit advocates to admit this) not all of the projects deserve support. The proposed Red Line extension, for example, has some very serious weaknesses. The alternative endorsed by RTA's board of trustees would cost \$200 million to build, result in only a modest increase in total ridership on RTA's buses and Rapid lines, and lead to higher, not lower, total energy consumption.

What projects would make good investments in a more balanced transportation system? Here are some questions to ask:

■ Does the proposed rail expansion lead to fewer cars on the roads, more efficient use of energy and improved air and water quality?

■ Will the expanded rail lines provide better service to people who depend on transit for their mobility?

■ Will the operating costs required by rail service expansions negatively impact the basic bus service that RTA provides?

■ What are the long-term plans for ensuring RTA revenues from fares and taxes are sufficient to cover the agency's costs?

■ Are local municipalities and developers willing to coordinate their planning efforts with RTA to encourage higher-density, mixed-use development near transit stations? Ideally, transit should be a strategic public investment that supports development, and greater development should support transit by supplying more riders.



NOACA elects new officers

In January the board of the region's transportation and environmental planning agency, NOACA, elected new officers for the year 2000:

- President — Hunter Morrison (City of Cleveland Planning Director).
- Vice-President — Stephen Hambley (Medina County Commissioner).
- Secretary — Vincent Urbin (Mayor, City of Avon Lake).
- Treasurer — Daniel Troy (Lake County Commissioner).

Two principles guided the selection of the new officers. First, geographic equity was respected, with each of the principle officers being selected from a different NOACA county (Cuyahoga, Lake, Geauga, Lorain and Medina). Second, a regular order of succession was followed, with last year's vice-president succeeding as president this year. Thus, Medina County Commissioner Hambley should be the next NOACA governing board president in 2001.

For more information about NOACA, call 216-241-2414 or see their Web site at www.noaca.org.

De-paving Akron?

Akron Mayor Don Plusquellic raised eyebrows recently when he proposed a major new transportation project. The interest came not because he was proposing an expensive new highway, but because he wondered aloud whether Akron should demolish almost a mile of its Innerbelt.

Razing one mile of SR 59 in downtown Akron between Cedar and Howard streets could open up 25 acres of prime real estate for private development

Bicycle workshop



On April 27, the Northeast Ohio Areawide Coordinating Agency (NOACA) will sponsor a bikeway planning workshop at Cleveland State University's International Conference Center. This will be an important event for everyone interested in promoting bicycle transportation in the region.

Registration is \$30 by April 10 and \$40 afterwards. Contact Sally Hanley for more information at 216-241-2414, x273.

and/or greenspace. The \$65 million Innerbelt was only opened in 1987, but it has never had high levels of use. The demolition might cost \$10 million and the mayor has proposed a one-year feasibility study to explore the possibilities.

The project is not without precedent: the cities of Minneapolis, Portland, London, and San Francisco have demolished or closed highways in recent years, thereby opening up new land for private and public uses, without seriously impacting traffic.

State funding obtained for three capacity projects

In December, the Ohio Transportation Review Advisory Council (TRAC) allocated \$89.3 million in fiscal year 2004 federal funds to major new capacity projects around the state. Locally in the NOACA region, three projects received \$22 million:

- Relocation of Brookpark Road and modifications to the I-480 / Grayton Road interchange, both to allow the lengthening of a runway at Cleveland Hopkins airport (\$12.6 million).
- Widening of a short section of I-90, from SR 611 to SR 83, in Lorain County (\$1.3 million).
- Widening of US 20 in Lake County from Mentor to Fern Road in Painesville (\$7.7 million).

Six Flags over traffic

ODOT has initiated a traffic impact study of SR 43 and SR 306 in northwest Portage County because of expected increases in traffic congestion as Six Flags Ohio, the former Geauga Lake Amusement Park, constructs four new roller coasters and other attractions. The study will assess several possible roadway improvements and transit enhancements, but some are already calling for the construction of a new interchange on SR 422 in southern Geauga County.

For more information, contact ODOT District 4 at 800-603-1054 or AMATS, the Akron Metropolitan Area Transportation Study, at 330-375-2436.

Cincy-Dayton merge

Anti-sprawl activists are fighting a proposed 1.7-million square foot mega-mall between Cincinnati and Dayton along I-75. Citizens fear the mall would destroy farmland and open space, attract other development that will crowd schools, raise taxes for new infrastructure and services, increase traffic, and create air and water pollution. The project hinges on the state building a new interchange on I-75.

Living Car-Free in Cleveland

Car-free...in Cleveland?

It's true! You can do everything you want to do in Northeast Ohio without being dependent on a car. Plus, you'll discover that a car-free lifestyle will save you money, enable you to get to know the region better than you ever could through the windshield of a car, and help to make Greater Cleveland an even better place to live.

Now there's a guidebook — *Car-Free in Cleveland* — to tell you everything you need to know about living a more car-free lifestyle. This 112-page book, written by the members of Alt-Trans Cleveland with assistance from EcoCity Cleveland, is the complete guide to getting around Northeast Ohio by bus, rail, car- and van-pools, taxi, bike and on foot. It also describes the most pedestrian- and transit-friendly neighborhoods in the area.

Copies of the book are available in area bookstores or can be ordered directly by sending \$9.00 per copy (includes \$6.95 cover price plus tax and shipping) to Alt-Trans Cleveland, c/o EcoCity Cleveland, 2841 Scarborough Rd., Cleveland Heights, OH 44118. To learn more about the book, call 216-283-0200 or see EcoCity Cleveland's Web site at www.ecocleveland.org.

Winners

■ The **Ohio Environmental Council** recently celebrated its 30th anniversary, a sign of the endurance and importance of environmental issues.

■ With funding from the Stocker Foundation and individual donors, **Black River Audubon** will help establish two conservation areas at Lorain County Community College – a grasslands area for meadow nesting birds and a wooded wildflower area and trail. This will provide an ecological boost to a campus that is now mostly huge parking lots and expanses of nonnative turfgrass.

■ Geauga Park District's chief naturalist **Dan Best** and radio host **Jim Blum** won a first place media award from the National Association for Interpretation for their series, "Beyond the Backyard." You can hear their spots on Friday, Saturday, and Sunday evenings at 8 p.m. and midnight on WKSU-FM 89.7

Land trust news

■ The **Chagrin River Land Conservancy** expanded its operations in 1999 by preserving 797 acres of land in the Chagrin River watershed. Staff grew to five professionals, and the group raised over \$1.4 million for land protection. For details, call 440-729-9621.



■ The Revere and Medina County land conservancies have merged into the **Medina Summit Land Conservancy**. Both Summit and Medina counties are under intense development pressure, and the two organizations felt that a larger land trust would have more expertise and the ability to preserve land on a larger scale. For more information, call 330-659-4247 or 330-722-5020.

■ The **Hudson Land Conservancy** is having success preserving wetlands and woods in the Mud Brook subwatershed of the Cuyahoga River.

■ **Holden Arboretum** is expanding the land under its protection. It now owns about 3,400 acres along the border of Lake and Geauga counties and has an additional 967 acres under conservation easement.

■ The **Northeast Ohio Land Trust Coalition** will be presenting a series of educational seminars for local land trusts, starting with one on organizational development on April 8. For more information, call Roger Gettig at Holden Arboretum, 440-946-4400.

Grants for the environment

Grants from local foundations do a lot to shape activism for the environment and urban redevelopment in Northeast Ohio. Here is a selection of projects funded in 1999 by a few of the larger, local foundations.

The Cleveland Foundation

The Cleveland Foundation made a major change at the end of 1999 by deciding to make the environment a program area (it had been an adjunct to health and other program areas). This will give environmental issues a higher priority at the foundation and will lead to greater funding in the coming years. It will make The Cleveland Foundation a much stronger player in shaping the environmental quality of the region. Below are some of the foundation's grants in 1999:

- Clean Air Conservancy—Work on the air pollution permitting process in the city of Cleveland, \$34,800.
- Cleveland Metroparks System—State-wide work on park and recreation funding needs and opportunities, \$2,000; Leonard Krieger Canalway Center, \$250,000.
- Cuyahoga River Community Planning Organization—Public awareness activities, \$40,000.
- Cuyahoga Valley Association—25th Anniversary Celebration of the Cuyahoga Valley National Recreation Area, \$7,500; Agricultural development in the CVNRA, \$100,000.
- Earth Day Coalition—Part-time dedicated staff position for Earthfest 2000, \$25,000.
- EcoCity Cleveland—Communication Activities, \$20,000.
- Grand River Partners, Inc.—Land surveying and appraisal costs in the Grand River Watershed, \$20,000.
- National Audubon Society—Birding trails and festival program, \$17,500.
- Oberlin College—Speakers' series on environmental design and urban issues, \$17,040.
- Ohio Environmental Council—Work with local watershed groups, \$17,040.
- ParkWorks, Inc.—Production of a book on Cleveland area parks, \$5,000.
- Trust for Public Land—Third year support for the Cleveland Field Office, \$45,000.

The George Gund Foundation

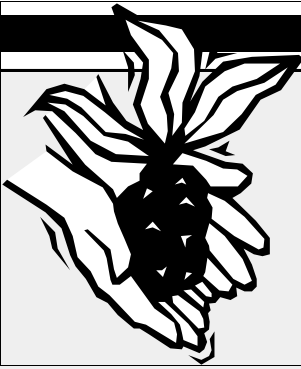
- Association of Parents to Prevent Lead Exposure—Lead hazard outreach in urban communities, \$15,000.
- The Clean Air Conservancy—Operating Support, \$40,000.
- Earth Day Coalition—Operating Support, \$50,000.
- EcoCity Cleveland—Sustainable Communities 2000 Symposium, \$30,000.
- Oberlin College—Cleveland Green

Building Directory, \$5,546.

- Seventh Generation—Operating Support, \$20,000.
- Sustainable Energy for Economic Development—Operating Support, \$25,000.
- Trust for Public Land—Ohio field office in Cleveland, \$45,000 and purchase of development rights program, \$5,000.
- Cuyahoga County Planning Commission—County Greenspace Project workshops on topics key to protecting natural areas, \$25,000.
- Detroit-Shoreway Community Development Organization—Cleveland EcoVillage Project research on single and multifamily residential "green" construction codes, \$10,000.
- Earth Day Coalition—Feasibility study for a Cleveland green building advisory service, \$45,540.
- Earth Day Coalition—Phase-two feasibility study for a "green" office building to house environmental nonprofit organizations in Cleveland, \$50,000.
- Environmental Defense Fund—Assess environmental health risks of four disadvantaged communities in Cleveland, \$25,000.
- Cuyahoga Valley Association—Countryside Initiative to develop a new framework for agriculture in the Cuyahoga Valley National Recreation Area, \$50,000.
- Neighborhood Progress, Inc.—Energy efficient upgrades on five pilot homes in Orchard Park, \$26,000.
- Shaker Lakes Regional Nature Center—Public education, research, and advocacy for conservation of the Doan Brook watershed, \$64,000 over two years.
- Oberlin College—"Redesigning Cleveland for the 21st Century" Speaker Series, \$50,000.

The Nord Family Foundation

- EcoCity Cleveland—Programs that promote an ecological vision for northeast Ohio and preserve the region's natural resources, \$15,000 for two years.
- Oberlin College—Environmental Studies Program's education and restoration programs in partnership with the Oberlin Sustainable Agriculture Project, Inc., \$15,600.
- Political Economy Research Center, Inc.—A special course for Lorain County educators called "The Economics of the Environment," \$15,650.
- Seventh Generation—To establish the Black River Environmental Center, \$68,791.
- South Lorain Community Development Corporation—Continued support for neighborhood revitalization and affordable housing, \$55,000.



Thanks to donors

We thank the following individuals and organizations who contributed to EcoCity Cleveland's year-end appeal for donations. (We also thank the many other members who contributed during the year by subscribing to our journal at the supporting level.)

Major Donors, over \$100

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Transitions

- The new general manager of the Greater Cleveland Regional Transit Authority is **Joe Calabrese**, who comes to Cleveland from central New York state.
- **Dick Anter** has left his position as head staff person for the Northeast Ohio Home Builders Association. His interim replacement is **Nate Coffman**.
- The founder and executive director of the Committee for Public Art, **Kathy Coakley**, has left to pursue other opportunities.
- **Vince Adamus** has left the Growth Association's Build Up Greater Cleveland program to become economic development director for Brook Park.
- **Bob Wysenski** (aka "Mr. Cuyahoga") has left Ohio EPA after a career in local water quality issues that spanned nearly 30 years. He was a guiding force in efforts to clean up the Cuyahoga River.
- Northeast Ohio now has a chapter of the **North American Butterfly Association**. Meetings are held at the Quail Hollow State Park in Hartville. For more information, call 330-699-6213.
- The **Ohio Sierra Club** is seeking a full-time person to work on transportation issues. For a job description, see www.ohio.sierraclub.org, or send a resume to the Ohio Sierra Club, 145 N. High St., Suite 409, Columbus, OH 43215.

Resources

- All the events and happenings in and around the **Cuyahoga Valley National Recreation Area** are now accessible on the Web at www.dayinthevalley.org.
- The Northeast Ohio Group of the **Sierra Club** has a redesigned Web site (www.sierraclub.org/chapters/oh/northeast) with information about meetings, events, outings and other environmental Web sites.
- Third edition of the great resource book, **Common Groundwork: A Practical Guide to Protecting Rural and Urban Land**. A joint project of the Western Reserve Conservation and Development Council, the Ohio Office of Farmland Preservation, Seventh Generation, and Chadbourne & Chadbourne Inc. For ordering information, call 800-484-7949 or 440-543-7303.
- The **Geauga Park District** is now on the Web at www.geaugalink.com/gcpkdist.
- The **Brookings Institution** Web site has information and research on cities and metropolitan areas at www.brookings.edu/urban.

Permits to pollute

Here are some Ohio EPA actions of interest from recent weeks. For complete and up-to-date lists of permit activities in your county, watch for weekly legal notices in your local newspaper. For more detailed information, call the Ohio EPA Northeast District Office in Twinsburg, 330-425-9171.

Public Notices

Retay's Welding Co., North Ridgeville, hazardous waste full closure plan.

Water pollution permits

Fenske Tool, Sheffield, discharge to Black River.

Forest Park Subdivision waste water treatment, Strongsville, at the discharge from the treatment facility.

Gate Mills Township Waste Water Plant, Gates Mills, discharge to Chagrin River.

Brimfield Water Treatment Plant, Ravenna, discharge to unnamed tributary of Plum Creek.

Goodyear Tire and Rubber Company Park Sufield, discharge to Wingfoot Lake.

Copley CVS, Inc., Copley, discharge to Pigeon Creek.

Healthaven Corp., Akron, discharge to Turkeyfoot Lake.

Wagner Quarries Co., Sandusky, discharge to Taylor Ditch and Hemminger Ditch.

Water pollution permit renewal applications

Sun Co., Cleveland Hopkins Airport, aviation fuel discharge into Abram Creek.

Obron Atlantic Corp., Painesville, stormwater discharge into Grand River.

Cleveland Nottingham Filtration Plant, Cleveland, discharge to Euclid Creek.

Gauga Co. Infirmary Creek, Chardon, discharge to an unnamed tributary of Cuyahoga River.

Gauga Co. Troy Oaks Wastewater Plant, Hiram, discharge to Ladue Reservoir.

Findley State Park, Wellington, discharge to Findley Lake.

ODNR Service Building Plant, Wellington, discharge to Wellington Creek.

Brentwood Lake, Sewage Treatment Plant, Carlisle Township, discharge to Alexander Ditch.

Cresthaven Sewage Treatment Plant, Elyria, discharge to Martins Run.

Eaton Homes Sewage Treatment Plant, Elyria, discharge to Hales Marrington Ditch.

Westview Sewage Treatment Plant, Columbiana Township, discharge to Baker Creek.

Columbia West River Water Treatment Plant, Columbia Township, discharge to Rocky River.

Plum Creek Sewage Treatment Plant, Columbia Township, discharge to Plum Creek.

Oberlin Water Treatment Plant, Oberlin, discharge to Black River West Branch.

Morgan Adhesives Co., Stow, discharge to unnamed tributary of Powers Brook.

North Royalton Waste Water Treatment Plant, discharge to Rocky River East Branch Tributary.

Colonial Rubber, Ravenna, discharge to Wahoo Ditch.

Hamlet Mobile Home Park, Ravenna, discharge to unnamed tributary to West Branch.

Wingfoot Lake Airship Base, Mogadore, discharge to Wingfoot Lake.

Summit County Copley Meadows Waste Water Treatment Plant, Akron, discharge to Copley Ditch.

Air pollution permits

Calderon Energy Co., Cleveland, closed coal conversion to process metallurgical coke.

Magnesium Aluminum Corp., Cleveland, gas melting furnace.

Lorain Tubular Co. LLC, Lorain, walking beam reheat furnace.

Ohio Edison Co., West Lorain Plant, five stationary combustion turbines.

First Energy Corp., various locations, diesel powered electrical generating units.

ADDA Nickel Plating Services, Walton Hills, two open top vapor degreasers and four ventilation systems.

Schloss materials Co., Garfield Heights, portable asphalt plant.

Sunshine Industries, Inc., Euclid, Smoketrol incinerator.

Component Repair Technologies, Inc., Mentor, Detrex vapor degreaser.

Seville Centrifugal Bronze Inc., Seville, induction melting furnaces and centrifugal casting cells.

Akron Foundry Co., Akron, aluminum reveratory furnace.

PPG Industries, Inc., Franklin Township, Lime Lake Reclamation Project.

Michelin North America, Inc., Mogadore, tire curing presses.

USG Interiors, Westlake, a natural gas fired burn off oven.

Kokosing Materials, Inc., Fredericktown, portable asphalt plant, unpaved roads and asphalt storage tank.

Engineered Plastic Corp., Akron, grinding operation.

Mack Concrete, Inc., Akron, concrete mix batching central plant.

W. G. Lockhart Construction Co., Akron, portable concrete plant, storage piles, unpaved roads.



Water/sewer line extensions

Cambridge Pointe Subdivision, Parma Hts. West Canal Improvements—Phase A, Valley View.

Marsh Landing on Bacon Rd., Painesville Twp.

Villa East Condominiums, Fairport Harbor. Glendale Road, North Ridgeville.

Pheasant Hills Subdivision, Wadsworth. Cambridge Pointe Subdivision, Parma Hts.

Kenmore Lane, Bedford Heights. Summerwood Subdivision, Broadview Hts.

Chillicothe Road, Kirtland. Deerfield Subdivision No. 1, Ridgeville

Twp.

Hunters Crossing Apartments, Elyria.

Waterside Crossings South Subdivision No. 2, Avon Lake.

Avon Commerce Parkway Subdivision, Avon.

Reserve Square Clusters No. 2, Avon Lake. Avon Commons, Avon.

Stone Creek Subdivision Phase 4B, Brunswick.

Pioneer Way Subdivision, York Twp.

Hunter Ridge Drive, Streetsboro.

Austin Estates Section Q, Norton.

Mount Vernon Estates No. 5, Norton.

Spring Hill Clusters-Phase 2, Macedonia.

Ferguson Drive/Elm Avenue, Tallmadge.

Thornbury Phase 3 & 3A, Solon.

East Liberty Ave., Vermilion.

Commons of Providence, Sandusky.

Wakefield Run Subdivision Phase 2 on

Boston Rd., Hinckley Twp.

Rosefarm Allotment Phases 4 & 5,

Fairlawn.

North Turkeyfoot Rd./Main Street Water Improvements, Coventry Twp.

Water infrastructure gap



There's a big gap between the nation's current spending on water quality infrastructure and the capital needs. A recent study by

U.S. EPA estimates that funding needs for drinking water, wastewater and nonpoint source facilities will amount to \$15 billion a year for the next 20 years. Current spending is about \$9.4 billion a year.

Major capital investments will be needed to repair and replace aging pipes and treatment facilities. There is an extraordinary historical "hump" in water infrastructure capital needs today resulting from the demographic echo of the baby boom and post World War II construction binge and long neglect of investment in buried infrastructure.

Highly recommended

Thanks to Harold Walker for recommending our EcoCity Cleveland Journal (and Progress from the Surface Transportation Policy Project in Washington, DC) to readers of the Kent Environmental Council newsletter. His endorsement included the following interesting comments:

In *The American Prospect* of January 3, 2000, Jedediah Purdy distinguishes the "Shades of Green" in today's environmental movement, and points out that environmental politics has expanded from its traditional concern with "wild places and wild species" to a broader commitment to "the place where we all live, all the time." This suggests a point which may be obvious, but of which we need to remind ourselves regularly: the environmental imperative is about the way we shape our cities and our towns, our subdivisions, our shopping areas and our industrial districts, our parks and our plazas; it is about the way we move around from place to place, and the way we produce, use, and evaluate wealth. It is easy to feel that we are locked into patterns which tend to erode the health of the bioregion and of our social habitat. A new energy and a new imagination are needed for the design of our natural and social relations. (My goodness, what a mouthful!) For the shaping of habitat and the design of transportation systems, these two periodicals bring broad and over-arching concerns down to the level of practical options. I continue to find them most stimulating, and recommend them to KEC readers.

Medina County rejects farmland tax

Farmland preservation and open space advocates were disappointed on March 7, as Medina County voters turned down a ¼-cent sales tax hike for a program to buy development rights from farmers. The vote was 14,531 to 17,943.

The tax would have generated about \$3.6 million a year for 10 years to purchase development rights from willing sellers. This would allow the land to stay in private ownership, but it could never be developed with homes or commercial buildings. Medina would have been the first county in Ohio to have a dedicated funding stream for such a program.

Medina County's population has nearly doubled to 155,000 since 1970, and the county is losing 40 acres of farmland a week to residential development. Proponents of the tax measure said it would be a wise investment because land preservation would reduce future taxes (new houses typically demand more in service that they generate in taxes), reduce traffic congestion, and preserve the rural character of the county.

Polls showed support for land preservation, but the ballot measure proved hard to sell to voters. The "purchase of development rights" concept was difficult to explain during a short campaign. The measure had unfavorable ballot language that focused on the tax rather than on the purpose of preserving land. And the county's pro-growth political leadership was either opposed to the issue or unwilling to take a stand. The notable exceptions were County Auditor Michael Kovack and Commissioner Steve Hambley, who were willing to speak out for growth management.

Twinsburg votes for open space

Last November the residents of Twinsburg voted overwhelmingly for a \$10.5 million bond issue to purchase 908 acres in Twinsburg Township and Reminderville. The land has one of the longest sandstone ledges in Ohio and numerous wetlands. In addition, there was concern about increased school enrollment and additional demands on city infrastructure if the land were to be developed.

There was the potential to build 900 to 1,600 homes there. An adjacent 541 acres could be preserved by the Summit County Metro Parks.

When the public buys public land

The land of a former state mental health facility, now known as Kuster's Woods, has been preserved as a park. The 374 acres in Sagamore Hills and Walton Hills has been bought for \$1.6 million by a consortium including the Cleveland Metroparks, National Park Service, and Sagamore Hills Twp. Assisting with the deal was the Ohio Field Office of the Trust for Public Land, a national conservation organization.

This is one of the largest single purchases of land in Northeast Ohio for park purposes in recent decades, and it occurs in one of the most rapidly developing parts of the region.

While the deal should be applauded, it also raises an interesting question: Why should taxpayers have to pay top dollar to preserve land that is already in the public domain? In this case, the state could have simply transferred the land to the parks.

Gypsy moth panic?

One of the hottest environmental issues looming over Northeast Ohio in the next few years will be the spraying of pesticides to control gypsy moths. The nonnative moths are moving into the area from Pennsylvania, and we are primed for a major outbreak.

In the caterpillar stage, the gypsy moths eat the leaves of trees, and they can completely defoliate acres of woods. The temporary devastation panics people and pushes the authorities to spray pesticides from the air. But the spraying also kills other insects, many of them beneficial, and raises health concerns. Moreover, decades of spraying in the Northeast didn't stop the gypsy moths. Many experts believe that in most cases the best thing to do is nothing.

The Northeast Ohio Sierra Club will present a special program on gypsy moth spraying and the dangers of pesticides at 7:30 p.m., April 26, at the Nature Center at Shaker Lakes, 2600 South Park Blvd. in Shaker Heights.

David Cornicelli (1963-1999)

In December we were greatly saddened when cancer claimed our friend and colleague, David Cornicelli. David was an inspirational force in the local environmental movement, working for the Center for the Environment at Case Western Reserve University, Seventh Generation in Lorain County, and, most recently, as project manager for the Cleveland EcoVillage project in the Detroit Shoreway neighborhood of Cleveland.

David was the kind of person who was always searching for ways to make the world a better place. The following quote from Robert F. Kennedy could have come from David: "Some men see things as they are and ask, 'why?' I dream things that never were and ask, 'why not?'"

David's family requested that EcoCity Cleveland receive donations in his name. We have established a memorial fund, which will be used to create a tribute to David at the EcoVillage site.

Planning to stay!

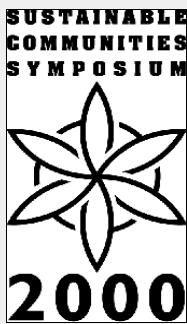
Around the world people are imagining new ways to improve their quality of life – ways that balance economic progress, social equity, and long-term protection of the environment. Now an unprecedented array of local businesses, government, civic and academic organizations has come together to plan how Northeast Ohio can participate in this global conversation about sustainability. The effort will culminate in the Sustainable Communities Symposium 2000 on May 11-13 at the Cleveland State University Convocation Center.

Over the past six months, more than 150 community leaders have been developing sustainability priorities in the areas of architecture and urban design, business and economics, political and zoning issues, and infrastructure. The symposium will be a working conference that will allow participants to learn about the recommendations developed thus far and discuss the best action plans for setting Northeast Ohio on the path toward greater sustainability.

The symposium kicks off on Thursday evening, May 11 with a free reception and talk by Greg Watson, program director for the Massachusetts Renewable Energy Trust and former director of the Dudley Street Neighborhood Initiative in Boston. Also featured will be Gary Lawrence, an international consultant on sustainability and former planning director of Seattle.

The symposium continues with presentations and working sessions all day Friday, May 12, and Saturday morning, May 13 (there is a \$65 registration fee for the two days, \$20 for students).

For registration information about the Sustainable Communities Symposium 2000, call 216-523-7495, or see the Web site www.scs2000.org.



April 8

The **Buying into Cleveland** Home Show from 9 a.m. to 5 p.m. at the Cleveland Convention Center, 500 Lakeside Ave. Free. For more information contact Living in Cleveland Center at 216-781-5422.

April 8-9

A workshop on the fundamentals of strong **land trusts** featuring Marc Smiley at the Holden Arboretum, 9500 Sperry Rd., Kirtland. To register call 440-946-4400.

April 10-12

The Urban Land Institute presents a conference on **Developing New Urbanist Communities** in Orlando, Florida. For information or registration call 800-321-5011 or see www.uli.org.

April 11

Meeting of the **Ohio Electric Consumers Network**, 10 a.m. at the Cleveland Housing Network, 2999 Payne Ave. Call 216-371-3570.

April 13

Western Reserve Resource Conservation & Development Council will meet at 9 a.m. at the Cuyahoga Soil and Water Conservation District, 6100 W. Canal Rd. in Valley View.

April 14

Symposium on **environmental policy** and the law at Capital University Law School in Columbus from 1-5:30 p.m. To register call 614-236-6377.

April 15

Demonstration of sampling techniques for aquatic organisms in **Mill Creek**, 6:30 p.m. at the Cleveland Metroparks Garfield Park Reservation. Call 216-341-3152.

April 15

Celebrate **Earth Day 2000** with the Nature Center at Shaker Lakes, 2600 South Park Blvd. in Shaker Heights from 11-3:00 p.m. For more information call 216-321-5935.

April 15

Hike to explore **Cleveland's industrial landscape** with Tim Donovan of Ohio Canal Corridor. For details, call 216-348-1825.

April 15

Birdwatching workshop at the Cuyahoga Valley National Recreation Area, Happy days Visitor Center, 1:30-4 p.m. Call 1-800-650-4636 or see www.davinthelvalley.org.

April 16

Geauga Park District annual **spring bird walk**, Headwaters Park. Other walks on

EARTHfest 2000



The Earth Day Coalition's EARTHfest 2000 will be held on Saturday, April 22 at Cleveland Metroparks Zoo. Admission to the Zoo (not including the Rainforest) is free.

EARTHfest is Ohio's largest environmental education event and one of the longest standing and most successful Earth Day events in the country. It features over 100 nonprofit and business exhibitors and involves upwards of 500 active volunteers. In the past eight years between 20,000 to 70,000 people have attended EARTHfest each year. EARTHfest is a community-based event that helps families learn about environmental issues facing Northeast Ohio and the planet and begin to take the first steps in working together to conserve, project, and restore our environment.

For details about the event, call the EarthDay Coalition at 216-281-6468, or see www.earthdaycoalition.org. For information about bus service to EARTHfest, call RTA's Answerline at 216-621-9500.

April 23 at the Burton Wetlands and April 30 at the Rookery. All walks start at 7:30 a.m. Call 440-285-2222 Ext. 5420.

April 16

Hike to view the **big trees** of the North Chagrin Reservation, 1 p.m. at A.B. Williams Memorial Woods parking lot.

April 17

Public meeting on the study for transportation alternatives for the **Canton-Akron-Cleveland Corridor**, 11:30 a.m. at NOACA, 1299 Superior Ave. Also at 7 p.m. at the Northeast Ohio Regional Sewer District, 4747 E. 49th St. in Cuyahoga Heights. Call 216-781-7888.

April 17

EarthDay 2000 Forum with Dr. William Birch speaking on finding a sense of place in the new global order, noon at the Dively Room at Cleveland State's University Urban Building. Call 216-687-4860.


April 18

Cuyahoga Valley National Recreation Area will celebrate the parks 25th anniversary with an educational hike based on **park**

preservation, 9:30 a.m. at Pine Lane Trailhead. Call 1-800-445-9667 or see www.dayinthevalley.org.

April 22
Natural gas bus tour through Lake, Cuyahoga, and Geauga counties to **explore the Chagrin River** from its headwaters to Lake Erie from 9 a.m. to 2 p.m. For reservations call 800-669-9226.

April 22
Bicycle Ride to commemorate Earth Day in the Metroparks at 10 a.m. For information on locations and registration call 440-473-3320.

April 25
 Monthly meeting of the Northeast Ohio Sierra Club **Urban Sprawl Committee** featuring Howard Wise, Executive Director of the Ohio Office of Farmland Preservation Office, 7 p.m. at the Lakewood Public Library, 15425 Detroit Ave. Call 216-521-2434.

April 26
Northeast Ohio Regional Sewer District **Doan Brook Study Committee**, 5 p.m. at Notre Dame Academy, 1325 Ansel Rd. For information call 216-875-8802.

April 27
NOACA presents a **Bikeway Planning Workshop** featuring local project examples and expertise at the Cleveland State University International Conference Center. For more information or to register contact Sally Hanley at 216-241-2414, ext. 273.

April 28
A special program on allying forces to combat **discrimination in housing** will be held at the University Club, 3813 Euclid Ave., from 11 a.m. to 2 p.m. To register call the Cuyahoga County Entitlements Group at 216-443-7285.

April 29
Explore **Cleveland's Tremont neighborhood** on foot with Tim Donovan of Ohio Canal Corridor. Meet at the Gazebo in Lincoln Park (I-71 and W. 14th St.) For start time and reservations call 216-348-1825.

April 30
Cuyahoga Valley National Recreation Area **spring wildflower hike** along the Pine Grove Trail, Octagon Shelter, 2-4 p.m. Call 1-800-445-9667 or see www.dayinthevalley.org.

April 30
Cleveland Metroparks celebrates **International Migratory Bird Day** with birdwalks at Cleveland Metroparks Zoo, North Chagrin Reservation, and Ohio & Erie Canal Reservation. For times and details call 216-351-6300.

May 2
Monthly meeting of the **Black River Audubon Society**, 7 p.m. at the Lorain County Metro Parks Carlisle Visitor Center in LaGrange.

May 6
Tour local farms using **conservation techniques** at the Cuyahoga Valley National Recreation Area, Hunt Farm Center, 2-4 p.m. Call 1-800-445-9667 or see www.dayinthevalley.org

May 7
Tour Cleveland's downtown to understand its **urban geology** with the Cuyahoga Valley National Recreation Area. Meet in Terminal Tower at 1:30 p.m. (\$2 fee) Call 1-800-445-9667 or see www.dayinthevalley.org.

May 7
Visit **bird migration** hot-spots in Mentor from 7 a.m. - noon with the Cleveland Museum of Natural History. To register call 216-231-4600.

May 8
Meeting of the **Black River Remedial Action Plan** Coordinating Committee at the Lorain County Metroparks' Carlisle Visitors Center in LaGrange. For information call 440-322-6367.

Stormwater Management for Urban Watersheds, April 27



EcoCity Cleveland presents a workshop on state-of-the-art techniques for restoring urban streams in older communities, featuring national experts from the Maryland-based Center for Watershed Protection. The workshop will cover the challenges older communities face in managing stormwater and meeting new water quality regulations, best management practices, site design for redevelopment and retrofit opportunities, and public education strategies. The Doan Brook watershed will serve as a case study. The workshop is part of a Doan Brook project funded by the Northeast Ohio Regional Sewer District.

The workshop will be at 8:30 a.m. to 4:30 p.m., April 27, at The Civic, 3130 Mayfield Rd., Cleveland Heights. Cost is \$35. For registration information call EcoCity Cleveland at 216-932-3007 or see www.ecocleveland.org.

Homeowners' workshop, May 24
We also will present an information session on what homeowners can do to reduce stormwater runoff and pollution from their yards. The free workshop will be at 7-9 p.m., May 24, at the Shaker Community Building, 3450 Lee Rd. Come learn about how you can contribute to solving our worst water quality problem!

Board meetings of regional agencies

Here are the regular, monthly meeting times of agencies that are shaping our region. Call to confirm, as times and locations sometimes change.

- **Cleveland-Cuyahoga County Port Authority**, 101 Erieside Ave. Cleveland, 216-241-8004. Friday of first full week at 10 a.m.
- **Cleveland Metroparks**, 4101 Fulton Parkway, Cleveland, 216-351-6300. Second and fourth Thursdays at 9 a.m.
- **Cuyahoga County Planning Commission**, 323 Lakeside Ave. West, Cleveland, 216-443-3700. Second Tuesday at 2 p.m.
- **Greater Cleveland Regional Transit Authority (RTA)**, 1240 W. 6th St., Cleveland, 216-566-5100. Second and fourth Tuesdays at 9 a.m.
- **Northeast Ohio Areawide Coordinating Agency (NOACA)**, 1299 Superior Ave., Cleveland, 216-241-2414. Board meeting second Friday at 10 a.m. Transportation Advisory Committee third Friday at 10 a.m.
- **Northeast Ohio Regional Sewer District**, 3826 Euclid Ave., Cleveland, 216-881-6600. First and third Thursdays at 12:30 p.m.

Outmigration in Northeast Ohio

Redistribution of population by county, 1970-1998

Overall, the 15 Northeast counties lost 193,810 people (or 4.6 percent of their population) between 1970 and 1998. But many counties experienced growth, as population moved out of older urban centers in Cuyahoga, Summit, Trumbull and Mahoning counties.



Source: U.S. EPA Cleveland Office, Census population estimates

"Indispensable reading for those who want to know what's really going on in the region or what the headlines may be a decade from now."

—David Orr, Oberlin College Environmental Studies Program

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