



anvec

FALL 2001

REPORT

AN ENVIRONMENTAL QUARTERLY

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IRECTOR'S REPORT

Thoughts on September 11

September 11, 2001 is a date that will be forever embedded in our memories. I suspect none of us will ever forget the horror of that day. ANJEC extends its deepest sympathies to all who lost family, friends and co-workers in those terrible events.

The consequences of the World Trade Center tragedy will be with us all for many years to come. The destruction and loss of life are unforgettable. But so are the extraordinary outpouring of financial support and the service and support offered by thousands of volunteers to help the survivors and their families.

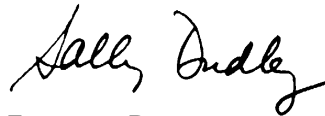
What you may ask does this have to do with environmental commissions? Well, several unintended consequences of the attack offer hope for a heightened awareness and understanding of the kinds of values commissions pursue every day. We are seeing a broad renewal of patriotism and love for our nation. This is not far from the heart of the love of the land that is the source of inspiration for so many environmentalists. And with love of the land comes a respect for how we use the land for our human needs. As Aldo Leopold wrote in 1949 a "land ethic simply enlarges the boundaries of [a] community to include soils, waters, plants animals or collectively the land. This sounds simple: do we not already sing our love for and obligation to the land of the free and the home of the brave? ... A land ethic changes the role of *Homo sapiens* from conqueror of the land. . . to plain member and citizen. It implies respect for his fellow members and also respect for the community."

A sense of community has been much more evident since September 11 as people have stopped, looked around and reached out to their neighbors to do whatever they can to help each other in this distressing time. Coupled with this has been an appreciation of our parks and public spaces. As the Trust for Public Land has reported, many citizens went out to New York City's parks in the aftermath of September 11. They were drawn to these public places because they knew they'd find their neighbors, green spaces, tranquility and beauty.

Cover photo by Kay Leaird from a hot air balloon over Hunterdon County.

Love and respect for our country also relates to the work that environmental commissions do every day. To make our democracy work, citizens must participate actively. This means participating actively in government activities. Only with ongoing, constant involvement can we influence the decisions of elected and appointed officials to make sure that they honor the values of land conservation.

We urge our members to keep moving forward, and build on the renewed sense of community and the importance of responsible active citizenship.



Executive Director



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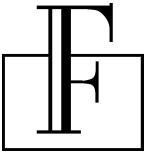
566 MUNICIPALITIES ONE ENVIRONMENT

Executive Director Sally Dudley
Editor Sandy Batty

The Association of New Jersey Environmental Commissions is a private, non-profit educational organization for environmental commissioners, concerned individuals and organizations. ANJEC membership supports efforts to protect natural resources and improve the quality of life in New Jersey.

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Sally Dudley Retires as Executive Director



For the past 14 years, ANJEC has been fortunate to have Sally Dudley at its helm, working tirelessly to carry out ANJEC's mission to preserve and protect the environment in New Jersey. She has spent more time on the road than most politicians, visiting commissions and attending meetings of every imaginable kind, and has successfully guided ANJEC through a challenging time when uncontrolled sprawl threatened our state's environment and quality of life.

Now she has decided spend less time in the car and more time working on projects closer to home. As of January 1, 2002, Sally will step down as ANJEC executive director, and Assistant Director Sandy Batty will take her place. Sally will continue to work for ANJEC on a part-time basis.

Throughout her tenure, Sally steadily increased ANJEC's capacity to help environmental commission members to be effective local environmental advocates. Her unflagging energy has been an inspiration to commissions and ANJEC staff alike, as they work to preserve open space, protect health and natural resources, and increase the public's understanding of environmental issues.

Sally has promoted the efforts of environmental commissions, and in the process, raised their prominence statewide. Drawing on her experience as a former mayor and township committee-woman, she worked with local officials to make them aware of the many benefits of establishing a municipal environmental commission.

ANJEC has grown under Sally's leadership. Her fund-raising skills quadrupled the organization's revenues, enabling ANJEC to make program, technological and administrative improvements. When Sally became executive director in 1987, the organization had three staff members. Today, 17 staff members work in offices in Mendham and Trenton and a home office in Cape May County.

Sally has made ANJEC a coalition builder, becoming a founding member of:

- Highlands Coalition - conservation and citizen organizations protecting the Highlands areas in northern New Jersey and adjoining Pennsylvania and New York.
- Stockton Alliance - chief executives from 20 business and environmental organizations.
- Coalition for Affordable Housing and the Environment - 30 environmental, housing and community development organizations working for decent, affordable housing built to protect the environment.
- Environmental Summit - environmental organization leaders who meet regularly to keep each other informed, coordinate their activities and avoid situations that divide their efforts.


Under Sally's direction, ANJEC became a leader in addressing New Jersey's environmental concerns, successfully promoting statewide environmental initiatives such as the 1998 referendum establishing a stable source of funding for open space. Governors Florio and Whitman appointed Sally to statewide bodies including the Governor's Council on New Jersey Outdoors, the Pinelands Commission and the State Brownfields Taskforce. Until recently, she chaired the NJ Natural Lands Trust, an independent agency created by the Legislature to preserve land in its natural state for public enjoyment and to protect natural diversity. She also serves on the board of Morris 2000 and New Jersey Future.

Recently, Sally received the Professional Leadership Award from Leadership New Jersey. Liz Johnson, of Isles, Inc., nominated her, writing: "Sally works tirelessly ... from one end of New Jersey to another to promote



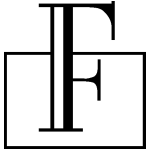
Sandy Batty and Sally Dudley

better environmental policy throughout New Jersey.... Of particular note are her behind-the-scenes efforts to enable the environmental community to reach consensus on important policy issues."

We will miss Sally's strong and effective leadership, but ANJEC is fortunate to have Sandy Batty to carry on the high standard of work that Sally has set. With long-term experience at ANJEC and years of involvement in municipal government, Sandy has a broad understanding of environmental issues at the local and state levels. As assistant director since 1993, she has managed the organization's financial administration and handled the day-to-day supervision of staff. Before NJ had mandatory recycling, her work on ANJEC's widely recognized Recycling Education project helped convince homeowners, apartment dwellers and business owners to recycle on a regular basis. More recently she has directed and edited all ANJEC publications including the quarterly *ANJEC Report*, and the award-winning *Environmental Manual for Municipal Officials*. She regularly makes presentations on environmental topics for ANJEC and other organizations. Sandy has been active in her community as planning board chair, environmental commission member, two-term Borough Council member and Deputy Mayor. She served on the Morris County Solid Waste Advisory Council and the County Open Space Trust. 

Planning for the Future: The Build-out Analysis

By Barbara Simpson, ANJEC State Plan Project Director



Fast-forward to several decades from now. What will your community look like when all the vacant land has been built on? Recent studies predict that New Jersey may reach this situation – build-out – as soon as 2030. We will be the first state in the nation to do so.

A build-out analysis can help residents understand what their municipality, or a section of it such as a highway corridor, will look like if built to the capacity allowed by current zoning. The analysis also helps residents realize the environmental, social and economic impacts of full development and evaluate whether the current zoning will achieve the goals of the Master Plan. An economic analysis can forecast the future tax base from the fully built-out plan and funds needed to finance new infrastructure that is required for the expanded community. This includes schools, water and wastewater treatment plants, recreational facilities, roadways and services.

A build-out analysis can identify changes needed in local master plans, zoning ordinances and development regulations before unwanted development happens. The analysis will not address the capacity of the natural or infrastructure systems, because it is based on zoning that may not recognize the capacity of these systems. (For example, the zoning may allow half-acre lots around lakes without consideration of the potential for eutrophication from non-point source pollution.)

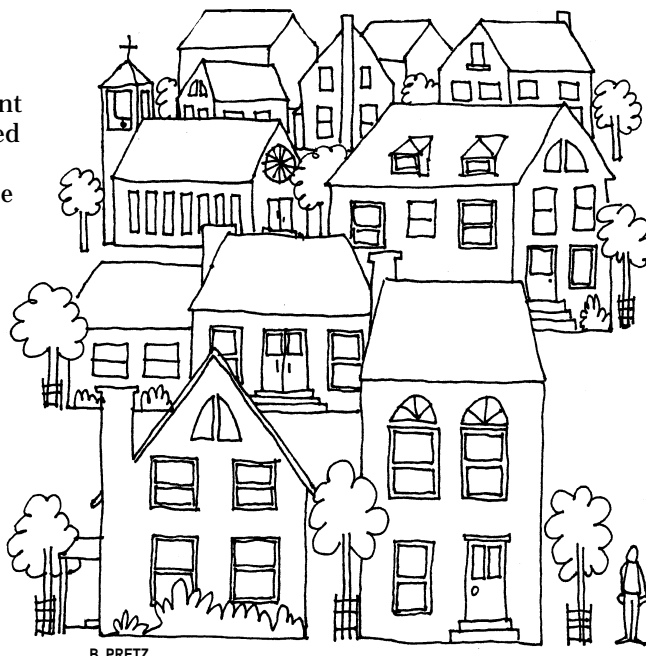
While build-out studies are useful, they generally

cannot predict when full development will occur. This depends on pressures, such as the economy, which are outside the municipality's control.

Starting a Build-out Analysis

Defining the boundary of the study area is a critical first step. It can be the entire municipality or a part of it, for example, the commercial zone, an area with large undeveloped tracts or tracts of brownfields (underutilized and potentially contaminated former industrial sites).

The next step is to gather data. The necessary information is probably at your fingertips. The Environmental Resource Inventory (ERI), or Natural Resource Inventory, has baseline natural resource information. Your planning and engineering departments have planning and zoning information. The county and state are also valuable sources of information.



Information Sources

From the municipality:

- Tax Map showing property sizes
- Current Zoning Map
- Existing Land Use Map
- Environmental Resource Inventory showing environmentally sensitive areas
- Open Space Plan showing publicly owned lands and conservation easements
- Development and subdivision approvals not yet built

From the county:

- Tax lots in GIS (Geographical Information System) format
- Open Space Plan showing publicly owned lands

From the State (GIS from NJDEP at www.state.nj.us/dep/gis):

- Land use by watershed
- Wetlands
- Streams, lakes, and floodplains
- State Planning Areas

Maps come in a variety of sizes and scales. All maps should be changed to the same scale to facilitate transfer of data between maps. The computerized mapping program, GIS, can change the scale of the maps and can print multiple copies. (For GIS software contact the NJ DEP Office of Information Technology at 609-633-9103.) County planning departments may also have the zoning maps and lot and blocks in digitized format for computer use. If your community does not have access to GIS, manual mapping techniques are still effective. The key is to adapt to local skills and budgets so that you can complete the build-out analysis quickly since the pace of development continues.

Having high quality data is imperative. The build-out analysis will be only as good as the information collected. Good data are critical to build confidence in the results of the study.

Preparing a Build-Out Analysis

1. Gross Land Surface. Locate and calculate Gross Land Surface – all the land in the region to be studied. Review the existing land use map to identify zones to include. The focus should be on vacant lands since they are where potential development will go, but the redevelopment potential of a mature suburb could be analyzed to show the potential of infill and renovation to increase density. Tax maps can help determine a property's acreage and any easements on the property.

2. Constrained Lands. Locate and calculate acreage on the lands with development constraints like

- Public lands,
- Historic sites,
- Conservation and utility easements,
- Approved development not yet built, and
- Environmentally sensitive lands like wetlands, flood plains, steep slopes (greater than 15 percent), water bodies, and soils with limitations (limited percolation or bearing strength).

All land is considered developable unless it is affected by State regulations, like wetlands or floodplains, or the municipality has specific municipal ordinances limiting development in areas such as steep slopes or stream corridors

3. Net Usable Land. Subtract the *constrained lands* from the *gross land surface* in the study area to obtain the *net usable land area* or developable land where future growth can occur. In all likelihood, this land will be the remaining farmlands, forest and open space not currently deed-restricted. Transfer the *net usable land area* to the base map with either ink or GIS techniques.

4. Total Subdividable Acreage. Use the zoning map and applicable ordinances to determine the requirements for each vacant parcel. The zoning

control requirements for each district may include road rights-of-way, septic field requirements, minimum frontage, open space set-asides, and building coverage or floor area ratio requirements (FAR). For example, a community may zone for clustering in residential zones with a mandatory open space set-aside of 25 percent. Zoning requirements will place additional limits on number of units or acreage of development. Subtract these zoning controls from the *net usable land area* to obtain the *total subdividable acreage*.

5. Full Build-Out – Divide the *total subdividable acres* by the underlying lot-size requirement for each zone to obtain an estimate of potential new residential units or additional commercial space.

You can summarize the results of the study with tables and bar charts. A phased build-out approach shows several points in the future, such as 50 percent or 75 percent building coverage.

Education and Outreach

Too often conclusions and recommendations of studies never become reality. Time is needed at the end of the project to inform interested citizens on the study and to explore ways to implement the findings.

Present the results of the build-out analysis at a public forum with local officials and interested citizens. Articles in the local newspaper, public service announcements on cable TV, and postings on the community web page should publicize the event. Handouts summarizing the study's results should be available at the meeting for participants to take for in-depth review.

Support of public officials is key to accomplishing the recommendations resulting from the build-out analysis, because the officials will make the necessary zoning and infrastructure planning decisions. Town officials may need to adopt more creative development and design techniques to protect natural resources, retain a stable tax base, and avoid wall-to-wall

Barnegat Bay Study

The Center for Remote Sensing and Spatial Analysis (CRSSA) at Cook College, Rutgers did a build-out analysis of the Barnegat Bay Watershed. The analysis makes a strong case for down-zoning areas without sewer service and for preserving open space.

Using GIS to create build-out models, CRSSA considered three scenarios:


- Baseline: based on current regulations with down zoning to 3.2 acres outside sewer service areas,
- No down-zoning: Current regulations with no down-zoning,
- Century Plan: Current regulations with down-zoning and preservation of tracts of open space identified by the Trust for Public Land.

CRSSA estimated the potential number of dwelling units, residential population and amount of impervious surface under the three scenarios. The resulting build-out model shows the number of

dwelling units and population could increase 30 to 34 percent under the Baseline scenario, with an increase in impervious surface cover of 50 percent, suggesting that water quality will be impacted from non-point sources. Without down-zoning the population increase would be 37 to 43 percent. Under the Century Plan scenario, approximately 89,000 acres of open space would be preserved, reducing the overall amount of developable land by 32 percent. This would result in a population increase of 25 to 29 percent. However as these open space tracts are generally zoned as low density residential, their removal from development reduces the total number of dwelling units by only 16 percent and only minimally reduces the overall impervious surface cover.

The build-out analysis reinforces the idea that comprehensive watershed scale planning is needed to address future development impacts.

subdivisions. The town can also use the study to calculate what additional services the community will need at complete build-out, such as education, recreation, municipal fire, police, and maintenance services, and infrastructure for drinking, waste, and stormwater systems. A build-out analysis also will give the community an opportunity to compare the Master Plan goals with the current zoning to insure that they are consistent.

A build-out analysis will provide valuable insight of future development potential of a community based on current zoning. Techniques such as large-lot zoning, mandatory clustering, an open space plan, transfer of development rights, and reductions in building lot coverage can then change the outcome. 

Stafford Uses Its Build-Out Analysis

Stafford Township (Ocean) has completed several build-out analyses. The Township was concerned about encroachment of development on environmentally sensitive lands such as the Barnegat Bay Estuary, so Township officials worked on conservation zoning and preservation of large tracts of land. The basis for a 1990 build-out study was the 1976 Land Use and Housing Plan Element of the Master Plan, which estimated the population at build-out to be 66,472. As a result of the 1990 build-out study, the Township passed creative conservation zoning that reduced the projected population to 48,725 people.

Recently Stafford has acquired open space and changed its zoning to further reduce the projected population at build-out to 29,957

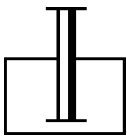
people. This represents a reduction of approximately 14,000 homes from 1976 to 2000.

Data compiled in the study were also used to perform an economic analysis to evaluate the breakeven point where additional development will be a tax burden on the community. Economic analysis can be a good technique for convincing local officials and citizens that overdevelopment may not pay for itself in the long run. Tables and figures can effectively summarize the results of the economic analysis.

Stafford Township efforts show that municipal officials including environmental commission members can use a build-out analysis as a technique for protecting their natural resources and educating the public on the benefits of doing so.

State Plan Valid Basis for Zoning

By Susan Kraham, Clinical Staff Attorney
Rutgers Environmental Law Clinic



In June, the Superior Court of New Jersey, Appellate Division, advanced the cause of sound land use planning in this state. In a landmark case, *Mount Olive Complex v. Township of Mount Olive*, the Court concluded that compliance with the State Plan is a legitimate basis for the Township to adopt or amend zoning ordinances. According to the Court, "in our view, a municipality's voluntary compliance with the State Plan should be a significant factor in a reviewing court's determination respecting the validity of a zoning or rezoning ordinance."

The suit involved a developer's challenge to the Township's rezoning of its property first to clustering on two acres and ultimately to one unit per five acres. The developer had obtained Planned Unit Development (PUD) approval in 1971 and although he constructed the first section of the PUD, the PUD approval and necessary sewer permits had lapsed by 1988. In addition, the property was part of a Mount Laurel compliance plan, under which 40 units


of affordable housing were planned for subsequent sections of the PUD. After the entry of the consent judgment in the Mount Laurel case, COAH reduced the Township's fair share number by 181 units and granted the Township substantive certification. Following an extended reexamination of its Master Plan, which included a careful review of the environmental constraints and recognition of the application of the State Plan's policies to the property, the Township rezoned the property.

The plaintiff challenged the rezoning, sought to enforce the PUD approval and sought to enforce his right to build the 40 units of affordable housing under the Mount Laurel settlement. The trial court denied the plaintiff's Mount Laurel claim but invalidated the Township's zoning ordinance asserting that, while large lot zoning might be appropriate in some circumstances, in this particular case, it was overkill.

On appeal, the Court affirmed the Mount Laurel determination. The Court reversed the invalidation of the zoning

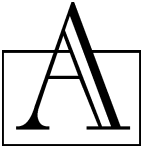
ordinance. In reaching its conclusion the Court explicitly reviewed the environmental factors relied on by the Township.

Importantly, the Court found unequivocally that compliance with the State Plan was adequate support for the Township's rezoning. "We do not hesitate to conclude that a municipality may consider and rely on the State Plan in redesigning its land use regulations." The Court also found that because the State Plan embodies the purposes of zoning set forth in the MLUL, and "consequently, a municipality's voluntary adherence to the State Plan guidelines may support a determination that amendment to its zoning regulations advance the purposes of zoning defined by the MLUL."

This case is extremely important to municipal efforts to incorporate the policies and resource map of the State Plan into their local zoning efforts. The timing is also significant in light of the State Planning Commission's efforts to develop methods for endorsement and consistency determinations. 

The Battle to Save the Chase Tract

By Jeff Gollin, ANJEC Trustee



An important victory for open space preservation occurred in mid-April when the NJ DEP Green Acres Program - in partnership with the private sector, county and local government - signed an agreement to preserve the 416 -acre Chase Manhattan tract in Holmdel. The successful outcome of the battle to preserve the Chase tract serves as an inspiration to any group who wonders if it can make a difference.

The Chase property consists of rolling hills, old growth forest, wetlands and farmsteads. The tract contains several homes and barns from the 1700s and 1800s and several Lenape archaeological sites. It has habitat for threatened and endangered wildlife species and native vegetation. It is a critical link in an existing open space corridor from Telegraph Hill in northern Holmdel to Thompson Park at the southern boundary.

Chase Manhattan acquired the property several decades ago for its future corporate headquarters. At the time, New Jersey municipalities were pursuing "clean ratables" to contribute property taxes to fund expanding school populations. Office development on the Chase tract conformed with Holmdel's existing zoning.

By the late 1980s, a group of Holmdel citizens was beginning to question the aggressive policy of attracting industry - particularly in the southern two-thirds of the Township that sloped toward the Swimming River Reservoir. They were concerned about the negative environmental impact of development - especially with extension of sewers into this area. The pattern throughout New Jersey has been that once sewer lines are laid, intensive housing development inevitably follows.

A new Holmdel administration decided to reduce land use impact in



southern Holmdel, by changing the Master Plan and having the State Plan designate most of the area as Environmentally Sensitive Planning Area 5. The Township rezoned this area (including the Chase tract) from Office Development to Large Lot Residential. Chase Manhattan Bank sued Holmdel over this change and the matter dragged through the courts for over a decade.

After rezoning, pro-development politicians returned to power and tried to reverse their predecessors' land use policies. Fortunately, the complexity of the land use and zoning regulation process was instrumental in saving southern Holmdel from mass development.

With pro-development people in power, a developer graded and obliterated a ridgeline across from the high school and chopped down 200-year-old sycamore trees. Then the private operators of the PNC Bank Arts Center clear-cut 10 acres of old growth forest for a temporary parking area. The final straw came with the Township Committee's arbitrary removal of Environmental Commission Chairman Larry Fink.

This series of unfortunate events mobilized an outraged public. Concerned residents organized into a group called Citizens for Informed Land Use (or CILU). Rather than focusing on a single crisis, the

organization resolved to become a persistent voice for responsible land use in Holmdel and the region. CILU's leadership was careful not to take positions as knee-jerk naysayers or members of a political faction but as reasonable individuals interested in learning the facts and doing the right thing.

The Township Committee was holding hearings to promote the "compelling" need to extend sanitary sewers in southern Holmdel - with the Township engineer's strong pro-sewer recommendations and emotional pleas by a small number of vocal homeowners reporting septic problems. Charges and counter charges ensued, and things still looked bleak.

Then, two months prior to the 1998 June primaries, the Township Committee and Planning Board made a serious error. Near midnight at a routine Planning Board meeting, a motion was introduced to request that the State Planning Commission change the Environmentally Sensitive Planning Area 5 designation for most of southern Holmdel to a Village Center roughly twice the area of Red Bank Borough. The only audience member remaining was Environmental Commissioner Russell Dronne, who realized the proposal was an attempt to bring sewers into southern Holmdel.

This proposal required a change in Holmdel's Master Plan, which the Planning Board introduced for a vote in mid-May to meet a State Plan hearing deadline. Dronne expressed concern that a substantive planning change could take place so quickly, with little if any public input. Later that night he e-mailed CILU members and others and posted the Village Center map on the Internet.

CILU leaders' knowledge of the *NJ Municipal Land Use Law* helped a great deal. They knew that planning boards should base the municipal Master Plan on stated objectives and standards, and sound technical information, including data on natural conditions found in the Natural Resource Inventory. A master plan should have extensive public input. Zoning regulations should be consistent with the Master Plan.

CILU's leaders also understood that the State Plan's designations of Planning Areas should agree with the municipal Master Plan and local zoning. The State Plan discourages sewers in Environmentally Sensitive Planning Areas, such as the Chase property.

At the May Planning Board meeting, a large audience of CILU and other

citizens protested the proposed change. Public outcry forced the Township officials to withdraw their letter to County planners proposing the Village Center and to leave the Master Plan unchanged.

Many CILU members attended the State Plan cross acceptance meeting in June. They made it clear to County and State planning officials that the people of Holmdel did not want the Environmentally Sensitive (PA5) designation removed from southern Holmdel. The Office of State Planning reassured them that the burden of proof for such a substantive change rested with the Township.

In the aftermath of the Village Center controversy, two pro-development Township Committeemen lost their seats to pro-environment candidates, breaking the previous 5-0 pro-development stranglehold.

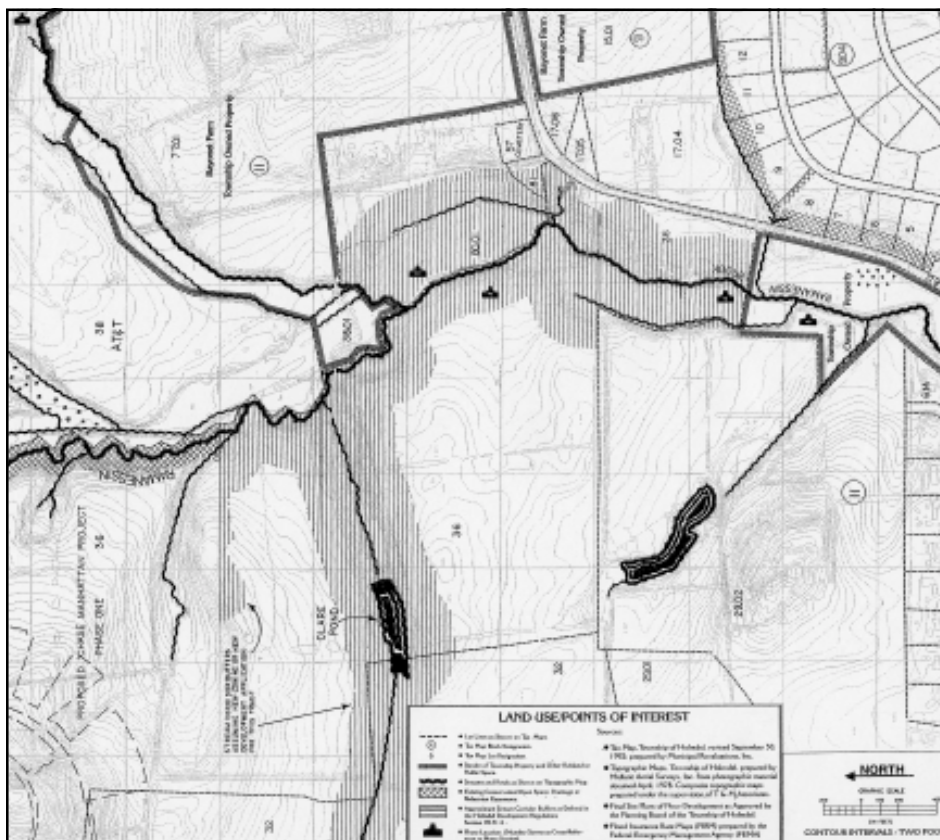
The CILU had won some important battles, but the war was not over. In August 1998, developer Howard Schoor made an informal proposal for developing the Chase tract as a Planned Retirement/Golf Course community. Mr. Schoor's proposal called for sewerage the Chase property.

CILU sprang into action. It distributed literature to Holmdel citizens on such topics as stormwater runoff, non-point source pollution, the "ratable chase," watershed management, impervious coverage and other environmental concerns. Using "nature is its best salesperson," former Environmental Commission Chairman Larry Fink took scores of Holmdel citizens on Greenway Walks along the Ramanessin Brook, including the Chase property.

Public resistance to the Schoor proposal began to mount. In spring 1999, the Township Committee conducted a public survey to determine how Holmdel's citizens wanted Chase to be developed. The results indicated that what they wanted was Open Space. Of 2,080 valid responses:

- 1,069 favored Open Space Only
- 284 favored a combination of Open Space & Planned Retirement Community
- 233 favored a combination of Open Space and Offices/Labs
- 205 favored Offices/Labs Only
- 289 favored Planned Retirement Community Only.


By 1,164 to 948 Holmdel citizens also expressed their opposition to sewers. Yet, later that summer, the Township Committee honored a request to conduct neighborhood surveys in unsewered areas, asking whether residents favored or opposed sewers. Despite concerns that people might ignore the bigger picture in favor of obtaining sewers for themselves, residents in key developments continued to vote against sewers. In late 1999, Sharon Burnham, Executive Director of the Monmouth Conservation Foundation (MCF) appeared before the Township Committee to assert that acquisition of the Chase property was possible. MCF was willing to be the lead-agency for combining the disparate funding sources needed and organizing many diverse constituencies to work toward a single goal.



The Holmdel Environmental Commission's "Greenways of Holmdel" emphasized protection of the Chase Tract.

CILU and other Holmdel citizens contacted State, County and local officials about the environmental importance of the Chase tract. They made the phone calls, did research, attended meetings and spoke about the significance of the Chase Tract to Holmdel, the watershed and the region. The news media helped immeasurably with articles and strong support on the editorial page.

A sea change occurred in Holmdel's political landscape. Larry Fink and Russell Dronne were elected Township Committeemen. Holmdel citizens now understand the value of protecting their town's remaining open lands and natural landscape.

A small group of ordinary citizens who believe strongly in something can fight City Hall. But they must know how the system works (and how to work it), have "good science" on their side, and must also be willing to engage in political confrontation. 

Creative Financing Saves Land

Raising the \$19 million needed to preserve the Chase tract took two years, and a creative partnership forged by the Monmouth Conservation Foundation and Friends of Holmdel Open Space. They helped the NJ DEP Green Acres Program negotiate a deal between a willing seller and a coalition of non-profits and government agencies. This is how the partnership worked:

The State Farmland Preservation Program funded 190 acres of the tract's farmland for less than \$9 million. This farmland will be resold, with permanent restrictions limiting future uses to agriculture.

A coalition of partners purchased the remaining 227 acres, to be maintained as part of the Monmouth County Park System. Green Acres provided almost half the funding needed, in separate grants to be matched by Monmouth Conservation Foundation, Monmouth County

and Holmdel Township.

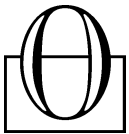
Local and county open space taxes and trust funds proved their value. The Township's open space tax will repay almost \$3 million loaned by the DEP and used to match the Green Acres funds. The County is using \$2 million from its open space trust fund to match Green Acres dollars.

Monmouth Conservation Foundation, with help from Friends of Holmdel Open Space, raised \$500,000 in pledges and donations - including an interest-free loan of \$300,000 from New Jersey Conservation Foundation - to match their Green Acres grant. This ongoing fundraising effort is the largest they have ever undertaken for a single project!

— from *"The State We're In"*
by Michele Byers, Executive Director,
New Jersey Conservation Foundation

New Septic Regulations

By Abigail Fair, ANJEC Water Resources Specialist

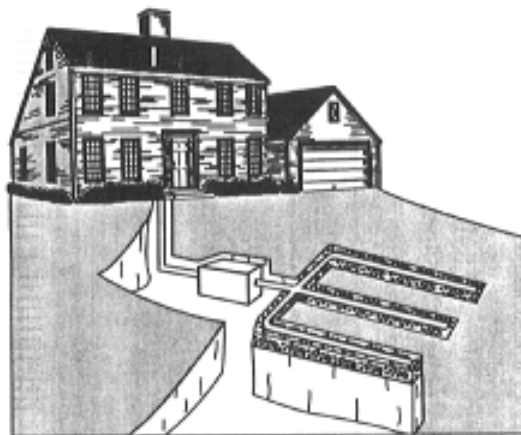


On March 20, new NJ DEP regulations went into effect for residential development proposals with six or more septic systems and non-residential projects discharging 2,000 gallons or more per day to groundwater. Previously, residential developments on septic systems needed NJDEP review for 50 or more homes.

The new rules mandate stricter environmental assessments and also require that the developer obtain an amendment to the local wastewater management plan.

The environmental assessments must:

- address impacts to riparian buffers;
- conduct nitrate dilution modeling to determine groundwater impacts;
- determine that there will be no net increase in pollutant loading and only minimal hydrologic modification;




- determine that future water supply needs can be met.

Rather than wait for development applications, municipalities can amend their wastewater management plans and ordinances to address these regulations. NJDEP will review such amendments to see if the local ordinances consider the rules. To

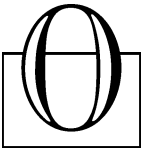
qualify, for example, a municipality would have to require adequate riparian buffers and stormwater management that mimics natural runoff conditions and promotes infiltration.

For more information, contact NJDEP watershed chiefs:

- Upper Delaware/ Wallkill, Ken Klipstein, 609-633-3812;
- Raritan, Kerry Kirk Pflugh, 609-633-7020;
- Northeast, Sandra Cohen, 609-633-1179;
- Lower Delaware, Barbara Hirst, 609-633-1441;
- Atlantic Coastal, Dave Rosenblatt, 609-984-6888. 

Wetlands Regulation Amendments

By Abigail Fair, ANJEC Water Resources Specialist



On September 4, 2001 NJ DEP adopted several amendments to the Freshwater Wetlands Protection regulations under the 1987 New Jersey Freshwater Wetlands Act. This article highlights some of the more substantial changes to the regulations. The DEP web site www.state.nj.us/dep/landuse has the full text of the newly adopted amendments, or you can call DEP at 609-984-0058 for a copy.

Freshwater wetlands play a valuable role in protecting drinking water supplies, providing flood and storm damage protection, giving habitat for fish and wildlife, and maintaining critical base flows to surface waters during droughts. Under regulations implementing the Freshwater Wetlands Protection Act, an environmental commission must receive notice of applications for wetlands permit applications in its municipality. The applicant must file the full application with the Town Clerk. Depending on the extent of wetlands and the pace of development activity, some commissions receive a large number of notices. It is important to know how the changes in regulations affect the permitting process.

Under the amendments, DEP rearranged the provisions of the regulations and made a number of changes and clarifications to sections dealing with Statewide General Permits and wetlands mitigation requirements. Statewide General Permits (GPs) provide for activities in wetlands and state open waters that are considered to be routine and will cause only minimal individual and cumulative environmental impacts. For activities that cause more disturbance to wetlands than those allowed by a GP, Individual Permits are needed. The requirements for Individual Permits are much more restrictive, and a public hearing can be requested to provide the public for an opportunity to comment.

Permit Coordination

In an effort to coordinate programs, the amendments provide that in some cases applicants can obtain a Flood Hazard Area permit at the same time as a wetlands General Permit if they meet permit requirements and disturb only state open waters. This applies to:

- utility lines,
- road crossings,
- outfall structures,
- streambank stabilization,
- stream cleaning.

Applicants can also obtain general permits and transition area waivers in a combined general permit authorization.

General Permits

The rule amendments create five new General Permits for: landfill closure, tree cutting for airport safety, livestock watering troughs, stream cleaning, and redevelopment of degraded areas – brownfields.

The General Permit for isolated or non-tributary wetlands no longer allows filling of **vernal habitats**, defined as a wetland that:

- occurs in a confined depression without a permanent flowing outlet,
- maintains ponded water for at least two continuous months between March and September of a normal rainfall year.
- is free of fish throughout the year, or dries up at some time during a normal rainfall year,
- shows evidence of breeding by at least one obligate species or two facultative species. Obligate species always occur in wetlands and are the best species indicators of vernal habitats. Facultative species occur in vernal wetlands over a majority of the time, but can also be found elsewhere.

WETLAND SPECIES

OBLIGATE SPECIES:

Marbled Salamander
Blue spotted Salamander
Jefferson Salamander
Eastern Tiger Salamander
Wood Frog
Spotted Salamander
Eastern Spadefoot Toad
Jefferson x Blue Spotted Salamander

FACULTATIVE SPECIES:

Snapping Turtle
Eastern Mud Turtle
Spotted Turtle
Eastern Painted Turtle
Red-spotted Newt
American Toad
Eastern Spadefoot Toad
Fowler's Toad
Pine Barrens Treefrog
Northern Gray Treefrog
Southern Gray Treefrog
Upland Chorus Frog
Northern Cricket Frog
New Jersey Chorus Frog
Green Frog
Southern Leopard Frog
Four-toed Salamander
Northern Spring Peeper
Long-tailed Salamander
Wood Turtle

Vernal habitat provides such value to ecosystems that the Department is proposing to pass new amendments to the regulations that will prohibit any General Permit from being issued for disturbance of a vernal habitat. Such efforts to provide better protection to valuable ecosystems are laudable and need strong support.

Many environmental organizations believe that all isolated wetlands should be considered as vernal habitats until an applicant for a project can establish that a particular wetland is not. Otherwise the identification will be up to DEP and it lacks

sufficient staff to accomplish comprehensive identification of vernal habitat statewide.

DEP has refined the General Permit for minor road crossings in an attempt to address loopholes that became apparent over time. The amendments authorize:

- short road crossings that will be less than 100 feet long and the total cumulative disturbance of wetlands, transition area (the buffer around the wetlands) and State open waters is one-quarter acre or less,
- longer road crossings where the cumulative disturbance of wetlands, transition area, and State open waters is one-eighth acre or less.

If a proposed road crossing skirts the edge of a wetland or transition area, the applicant must prove that there is no alternative that would provide access to the developable upland with less adverse environmental impact. Also, a road that repeatedly crosses the same wetland is considered one crossing.

Any proposed road crossing that is over 100 feet long and exceeds one-eighth of an acre disturbance of wetlands, transition area and State open waters must have an alternatives analysis. This permit authorizes up to one-quarter acre of total cumulative disturbance of wetlands, transition area and State open waters.

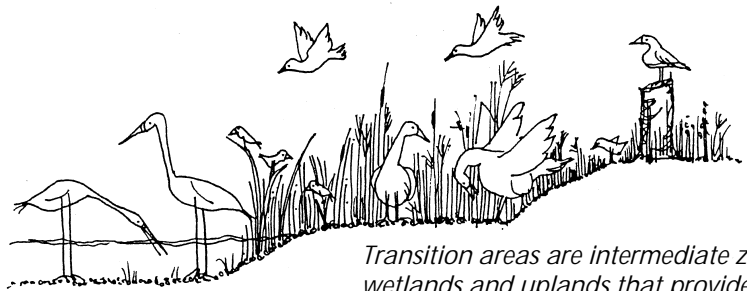
The General Permit for trails and boardwalks no longer limits disturbances for publicly owned trails and boardwalks to a certain amount of disturbance, although it still limits the width to six feet.

The general permit for bank stabilization activities expands the permit to include soil bioengineering systems for no more than 300 feet of stream bank. If the streambank bioengineering is for activities funded by the DEP's Division of Watershed Management, the disturbance may be for 500 feet of stream bank.

Other Provisions

Transition Area Waivers. A new provision of the regulations provides that any structure must be set back 20 feet from a transition area boundary.

Takings. In an unusual new provision, the adopted regulations provide that applicants for transition area waivers or individual permits



Transition areas are intermediate zones between wetlands and uplands that provide habitat and incorporate both wet and dry areas.

may request that the Department evaluate whether denial of a permit could result in a taking of property without compensation.

Mitigation. When a development destroys wetlands, the applicant must compensate the public for the loss by restoring degraded wetlands, creating new wetlands, buying credits at a wetlands mitigation land bank, or making a cash contribution to the NJ Freshwater Wetlands Mitigation Council.

The amendments to the regulations provide for a new class of disturbance for determining mitigation requirements. The amendments define small wetlands disturbances as 1½ acres or less. A developer can mitigate these disturbances by purchasing credits at the nearest wetlands mitigation bank, in the same subwatershed if possible, or in the service area of a bank where the disturbance is, or finally, a mitigation bank in the state. After exhausting the mitigation banks, the developer's next option is to mitigate on-site or off-site or preserve uplands. The final option for mitigation is donation to the State Mitigation Council.

For disturbances greater than 1½ acres, if mitigation is not possible on site, the next alternative is to explore the possibility of purchasing credits from a mitigation bank in the same subwatershed of the disturbance or in the service area of a bank where the disturbance takes place. A hierarchy then follows similar to that for small disturbances.

These provisions worry environmental groups since wetlands perform particular functions depending on their location in the watershed. Traditional mitigation should start with avoidance. If that is not possible, then it should be as close to the site of the disturbance as possible. If an applicant can mitigate wetlands losses simply by buying credits in a wet-


lands bank that may not be anywhere near the disturbance, the public is not truly being compensated for the loss. For example, wetlands in headwater areas are especially important as they provide critical base flow to streams. Once headwater wetlands are destroyed, water quality in the stream can rarely be restored.

Review Period

The rules warn applicants to check carefully submission requirements because the average time for Department review is lengthy:

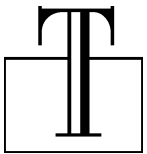
- letters of interpretation approximately 69 days;
- general permits, 65 days;
- transition area waivers, 71 days; and
- individual permits, 161 days.

ANJEC and other environmental organizations were successful in advocating the elimination of some proposed amendments to the regulations that they determined very damaging. The New Jersey wetlands law is the strongest in the country and New Jersey's wetlands losses are lower than the nation's. However, before the New Jersey act was passed, the state had lost over half of its wetlands. We cannot afford to lose more unnecessarily. Most of New Jersey's wetlands losses have been allowed under General Permits issued for activities in wetlands that are supposed to be routine and that individually and cumulatively do minimal harm.

Environmentalists oppose increasing the number of General Permits and strongly support efforts to reduce impacts from the most damaging permit – that for isolated wetlands. DEP has proposed a new regulation to prohibit issuance of General Permits in a type of isolated wetland (vernal habitat). The public should support this new proposal, which will help reduce wetlands loss from the General Permit category. 

Leaving the Greens — Creating a Naturalized Landscape

By John Zingis, President
Air Land & Sea Environmental Management Services, Inc.



Too often homeowners, professional offices and commercial establishments strive for the perfect lawn. Such a lawn involves high maintenance, lots of water and pounds of fertilizers, herbicides and pesticides. In contrast, Air, Land & Sea Environmental Management Services, Inc. (AL&S) an environmental consulting firm in Point Pleasant, decided to restore the grounds around its offices to a blend of naturalized vegetation and aquatic features.

As AL&S President and owner of the grounds, I decided to create an environmentally friendly landscape by eliminating most lawn areas and restoring the natural characteristics of a wooded lot. I based my decision on many factors, including the time required to cut, water and apply fertilizers. I felt a wooded lot, water features and smaller lawn would compliment my environmental consulting business.

When I purchased the property in 1998 it had an old residence that was used partially to store landscaping equipment. Changing the property to a professional office required a site plan application to the Point Pleasant Planning Board. A main feature of the property was a well-shaped and established white oak. The applicant worked closely with the design engineer to shape the proposed parking lot around the tree root zone. The environmentally sensitive parking area required several design waivers, including a gravel surface, a recharge trench and railroad ties around the perimeter. To preserve the 150-year-old oak, I proposed a stone parking lot to reduce stormwater runoff and encourage recharge and railroad ties installed at grade so as to preserve the tree's wide root zone and not sever the fragile feeder roots. The Planning Board was convinced and permitted the design waivers.

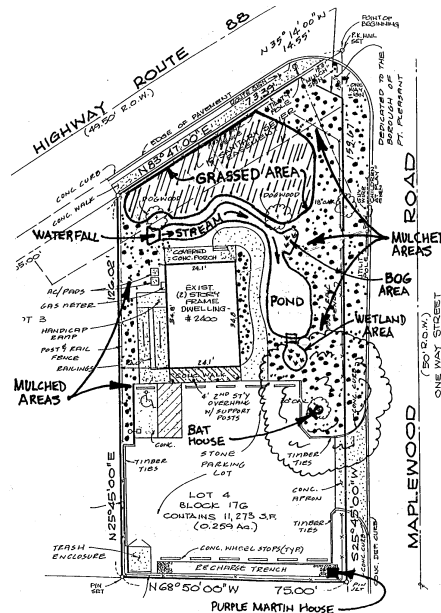


FIGURE 1 - LANDSCAPING PLAN

Changeover to Naturalized Grounds

Restoring most of the property to a naturalized setting involved mulching grassed areas, planting an indigenous understory, building a stream and pond and adding special features to enhance wildlife habitat. The improvements incorporated the design goals of the National Wildlife Federation's Backyard Wildlife Habitat program, Rutgers Cooperative Extension Service — Toms River Office and Ocean County Soil Conservation Service.

The first phase was the design of a stream and pond, which provide aesthetically pleasing sites and sounds, and a valuable water source to the many birds that visit the grounds. The water feature was underlined with a fish-safe EDPM liner. A skimmer at one end circulates the water to a natural bio-filtration system, disguised as a modest waterfall. Delaware stone from a local quarry covering the liner and water's edge mimics natural settings of

northwest Jersey. A natural bog / wetland feature is at the low end of the pond behind the skimmer. The finishing touch was the addition of fish, tadpoles and aquatic vegetation.

The second phase restored the former grassed lawn areas to a natural forested setting. This involved placing 4 to 6 inches of double-screened mulch from a local recycling facility. The mulch retains water and provides nutrients for the prized oak and other plants. The mulched areas were planted with indigenous plant species including low bush blueberry, sweet pepper bush, mountain laurel and high bush blueberry. The wetland bog area was planted with cinnamon and sensitive ferns, species of rush and wool grass. Most of the plants came from development sites destined for clearing. Mountain laurel, red oak and lilac at the building's perimeter offer color, while flowers at the waterfall attract butterflies.

Other additions were two bird feeders, bat house in the old oak tree, nesting habitat for Mason bees, introduction of praying mantis egg cases and lady bugs as beneficial insects, pond fish, bull frog tad poles and a purple martin nest. These features, all commercially obtained, enhance the natural setting and attract wildlife.

Reducing the lawn areas by 75 percent, from approximately 5,250 square feet to 1,250 square feet, has saved half an hour per week in grass cutting, and significantly decreased fertilizer application and lawn watering. The naturalized setting is a demonstration project for homeowners, professional offices and commercial establishments. The National Wildlife Federation has awarded its Certification for Backyard Wildlife Habitat to AL&S, the first professional office in Ocean County to be so recognized. For additional information call AL&S at 732-295-3900.

ANJEC in the City

By Kerry Miller, ANJEC Researcher/Writer



Urban Open Spaces

Urban parks are powerful tools for civic identity.”—Peter Harnik, *Inside City Parks*



A central tenet of “smart growth” is the channeling of development into existing population centers that have infrastructure, instead of allowing it to sprawl randomly across the landscape. Although smart growth saves natural and financial resources and precious open space, increased density in developed areas will be palatable only if we can maintain a high quality of life in those communities. Restoration of urban infrastructure of all types—both grey and green—is vital if we hope to attract business, industry and residents back into the cities and older suburbs. An adequate quantity and quality of green spaces for leisure and recreation is key to a high quality of life.

In July, the NJ DEP sponsored a “Greening the Urban Landscape” conference, co-sponsored by ANJEC and the Watson Institute for Public Policy, to examine issues related to creating, restoring and improving open spaces in developed areas. In his welcoming remarks, DEP Commissioner Robert Shinn expressed the Department’s commitment to the greening of New Jersey’s urban centers through its Urban Forestry, Green Acres, Brownfields Redevelopment and Watershed Management Programs. DEP’s Urban Coordinator, Judy Shaw, helps officials from developed communities find technical support and sources of financial assistance for restoring parks, creating bikeways and pedestrian improvements, incorporating trees into streetscapes, converting brownfields



Charles Jordan, Portland’s Commissioner of Parks and Recreation addresses the conference.

to greenfields, and planning infill housing to complement existing historic landscapes.

DEP has ongoing efforts to develop greenways along the state’s waterways, many of which flow through urban areas. Urban parks along waterways help to control flooding, aid in aquifer recharge and provide much needed recreational space.

Some urban streams that have been channelized or put into a pipe can be returned to their original banks and revegetated.


The “Greening” conference featured addresses by municipal officials and community activists who have worked in the trenches in the urban parks movement. Several speakers stressed the value of urban parks and recreation programs as molders of urban youth, providing opportunities for teamwork and success through sports, keeping kids occupied and out of trouble, and allowing firsthand experience of nature. Trenton Mayor Douglas Palmer recalled the pivotal influence of urban parks on his own development growing up in Trenton.

Wilbur McNeil, a founder of the successful effort to restore Weequahic Park in Newark, found that neighborhood involvement in restoring degraded green places can trigger a community renaissance. He related how a grassroots effort begun ten years ago by a small group of joggers in the Ironbound section grew into a huge park restoration project, engendering a sense of ownership and pride in Newark’s South Ward. The result is that graffiti and vandalism in the

restored areas of Weequahic Park have been almost non-existent.

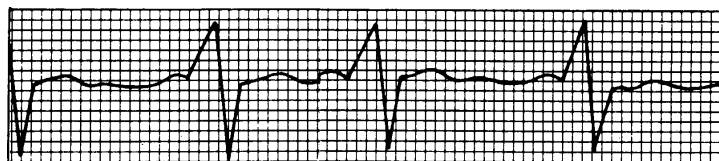
Keynote speaker Charles Jordan, Commissioner of Parks & Recreation in Portland, Oregon, is a long-time advocate of parks and recreation as vehicles for positive social change. He noted that it costs about \$27,000 per year to incarcerate a juvenile, and suggested that a similar level of investment in parks and recreation could yield much greater benefits.

Mr. Jordan cautioned that open spaces, like freedom, are never assured; once won, they must be continually defended, or they will disappear. Our efforts to “save” land and create parks will be wasted if we do not incorporate mechanisms for *continued maintenance* of open spaces into preservation campaigns. In addition, we must impart to our youth an understanding of our *reasons* for preserving nature and open spaces, so that they will carry on when we are gone. “What they don’t understand, they will not value, and what they do not value, they will not protect,” said Mr. Jordan. Urban environmental education is an integral part of preservation, to create a generation of stewards who will defend our communities’ hard-won open spaces.

Author and nature columnist Marie Winn closed the morning program with some anecdotes about birdwatching in Central Park. She pointed out that although urban parks may be managed and manicured, they have plenty of real nature to offer. Her book *Redtails In Love: A Wildlife Drama in Central Park* describes tells the story of a nesting pair of redtail hawks that took up residence in the green heart of one of the world’s busiest cities. 

INTERCOMM

Reports on Environmental Commission Activities



Local Open Space Taxes

Nineteen of New Jersey's counties and 147 municipalities have established a dedicated open space tax to support purchase of open space. Many environmental commissions have helped in getting open space taxes passed in their towns.

New Jersey law provides that a county or municipality may levy an annual open space tax after the voters have approved a ballot proposition for the tax. The referendum is non-binding - county or municipal governing bodies are not compelled to levy the tax, even if approved. However, usually the government acts to impose the tax, knowing the voters support it. Often the ballot question allows the governing body to set the open space tax rate within a certain range (for example, "up to 2 cents per \$100 of assessed value"). The ballot question must state what types of open space preservation the funds may be used for, such as conservation lands, recreation lands, farmland or historic sites. It must also say whether they may be used to pay debt service on borrowings for open space. The funds may go for acquisition, development or maintenance of recreation and conservation lands.

In **Pompton Lakes** the Environmental Committee fought for two years to get the open space initiative on the ballot. To assess residents' support of an open space tax the Committee circulated a petition, which came back with very positive results. That and a proposal for development of 700 condos in a floodplain helped persuade the governing body to put the open space tax referendum on the ballot. The environmental committee used its funds, contacts and information to help inform residents of the benefits of open space preservation. The mayor organized an ad hoc group of citizens including members of the

environmental committee to promote the referendum. Members spoke before many groups - PTAs, Golden Years, soccer associations, and women's clubs - and also printed and sent out a flier about the open space tax. They stressed that the tax of one cent on \$100 assessed value would be just \$14 per year on an average house. They used ANJEC's publication "Open Space is a Good Investment" for background on the financial benefits of saving open space. The results of the referendum will be seen in November.

Doubting whether there was much land to save, the **Pequannock** government questioned whether to propose an open space tax. They decided that the first step was to create an open space plan, to see how much open space was at stake and what priority each vacant parcel would have for acquisition. The Environmental Commission hired Morris Land Conservancy to help develop the Open Space Plan. When the first draft of the plan was ready, the Commission held a public meeting to inform residents and to let them know that at least four significant parcels of open space existed in town. At completion of the final draft, the commission held a second public meeting. Robin Jones, chairman of the commission, estimates that the process took nearly two years.

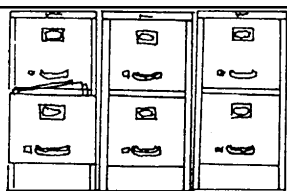
Convinced that the town had land worth saving, the town government

decided to place an open space referendum on the ballot. The Environmental Commission was made the lead agency to inform residents about the tax and why open space was important. Working toward the common goal of open space protection, Commission members have enthusiastically publicized the referendum at all town events and activities. They developed a game board where residents had to match names with land parcels and held a bike raffle. The entire Commission worked the crowd at the town fair to build support for open space. A local artist developed a logo, so that people would immediately identify the open space campaign. Every piece of publicity carried the logo - a T-shirt with the motto "Think Open Space", pencils printed "Save Open Space: Pequannock Twp. Environmental Commission" and sticky note pads. The Commission had a float in the town parade and two banners were strung across the main avenue in town encouraging a "yes" vote. Commission members also wrote editorials for the local newspaper and printed 2000 fliers to distribute to residents.

The November election will decide whether the referendum succeeds. If so, the town will form an open space committee that will have environmental commission members on it.

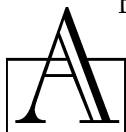


RESOURCE CENTER



Site Plan and Subdivision Review: The Commissioner's Role

By Lisa Voyce, Resource Center Staff



primary role of the environmental commission is to assist the planning board in understanding potential environmental impacts of development within the town. Many planning boards ask, and in some cases require that the commission weigh in early in the site plan and subdivision review process. The commission should provide comments well before the first public hearing on an application so the board has time to consider, ask for more information and act upon the commission's concerns and recommendations during its hearings.

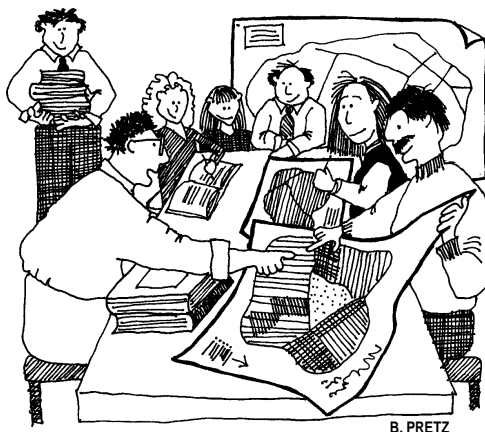
The commission's report to the planning board should be a "findings of fact" and recommendations on environmental issues - not a statement to deny or approve an application. This article provides guidance to commissions in reviewing and presenting their findings to the board. The goal is to provide information that influences the planning board's decision-making to better protect the environment.

Getting to Better Decisions

The commission is an advisory body - it cannot make decisions on land use. The goal should be better land use decisions by the town.

The commission needs to manage the review process and enhance the professional relationship between the commission and planning board. The commission must have good technical information, but it should also realize much of its impact results from the working relationship with the board, its professional staff and consultants.

ANJEC's Resource Paper "Site Plan Review: Procedures for Environmental Analysis" describes the legal authority for site plan review, environmental



review procedures, how to evaluate environmental impacts, guidelines for site inspections and an outline of what the environmental commission report to the planning board should include. The Resource Paper can be used as a technical reference in performing site plan review.

Managing the Process

Getting the Information You Need: Is the commission included in any pre-application conference, application submission and completeness review? Often, these meetings with staff and the applicant are the best time to raise issues of concern. Changes are easier to make early on, before the applicant has invested time and money in drawings and design work. How does the environmental commission get application packages from the planning board? Does the commission receive a separate copy for review? Does an individual or the group do the review? Does the dual member share a copy with another reviewer, or do some reviews him/herself? Whatever method you choose, decide how it's to be done and follow through consistently.

Providing Information to the Planning Board: How and when does the

planning board want or need your comments? Does it want comments in writing or in verbal testimony? The important point is to get the commission's comments as part of the official record of the meeting in case there are subsequent legal proceedings. Decide who on the commission has the authority to sign off on the reports to the planning board. It may be necessary to submit comments or give testimony and ask questions on an ongoing basis. In fact, by continuing to comment on testimony and reports as they are provided, the commission can help counter any accusation that it has prejudged the application.

Site Inspection Protocol: As representatives of the municipality, commission members can access the applicant's property with proper identification. You need to notify the landowner before entering the property. If planning board members are doing a site inspection, consider going along with them. Do not go alone, for safety and security reasons. Stick to reviewing the site characteristics that impact the environment, use a checklist, and do not make comments that can be construed as prejudicial to anyone.


Evaluation of Environmental Impacts: Provide data to show which natural resources are at risk and why specific applications should be modified or be supported. It is important to point out any ordinance violations, design waivers or zoning variances that result from the proposed development, as they can be reasons to deny an application with adverse environmental impacts. Point out if construction would damage important natural resources or require additional infrastructure for flood or erosion control or to manage traffic flow. Include tree removal, open space loss, stream degradation, aquifer recharge impacts, habitat destruction, flooding, steep slope destabilization and other significant issues.

Report Presentation: Prepare findings of fact, recommendations for action and conclusions. Findings of fact should include a brief description of the application, current site conditions, surrounding local and regional land use, expected conditions during construction and once the project is completed. A list of all permits required should be included. Positive and negative impacts of the application and recommendations to mitigate impacts during and after con-



struction, conditions to be met over time and permits that should be obtained before any development activity begins should also be included. Present conclusions reached by the commission, based on the facts presented in the report. This is the place for the commission to recommend approval, denial and conditions of approval or redesign of the project. It also might suggest other options to consider, including open space donation, a conservation cluster, Residential Site Improvement Standard (RSIS) waivers to lessen impacts and other creative ideas to give the planning board options in negotiating a better overall decision.

The Commission Role at Public Hearings: The dual member and another member familiar with the application and able to represent the commission's concerns should attend the public hearing. Submit written reports at least ten days prior to the hearing to allow time for distribution to the planning board members. Bring a copy to the hearing. Be prepared to ask questions of the applicant, answer any questions the board has for the commission, or to find the answers in a hurry. Remember your role is to provide information and support to the planning board members so they can make a good decision and mitigate impacts to natural resources. Be brief and respectful. If more than one person asks questions or gives testimony, don't be repetitive. Ask pertinent questions and provide facts to show how the project will impact the environment. No matter what the behavior of others – from the board, the applicant or the public – be firm but polite.

Give Credit where Credit Is Due: Don't fall into the trap of being negative. That, faster than anything, will make people not want to listen to you. If an application includes an effort to avoid steep slopes, provide a buffer along a stream or some other positive attempt to protect natural resources, give them credit for that. If the planning board or a staff member does anything that assists your efforts to protect the environment say so and thank them. If the Master Plan or an ordinance includes something that helps to protect natural resources, note it. Find allies, like the Open Space or Historical Preservation Committee and work with them to leverage your efforts and increase the commission's number of positive relationships. 

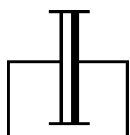
GOOD EARTHKEEPING

Information commissions can pass on to their communities



My Next Car? I Want a Green One!

By Lisa Voyce, ANJEC Resource Center



In the suburbs, there is little public transportation and walking is not always an option. But one way to reduce gasoline consumption and the automobile emissions is to replace the gas-guzzling SUV with a "green" car.

My husband and I did this and purchased a Honda Insight—a so-called "hybrid" car that uses both battery and gasoline to power its engine. The other hybrid on the American market is the Toyota Prius. The U.S. Environmental Protection Agency (EPA) ratings show the Honda Insight gets an average of 61 MPG and the Toyota Prius 52 MPG, better gas mileage than just about anything else on the road.

The gasoline/electric engine uses an electric boost from an on-board battery at times it needs a little more help, like going up a steep hill. It turns itself off to save fuel and shows a red light as a signal of this. On the highway, we've gotten readings of 150 MPG. The Insight is also an ultra-low emissions vehicle (ULEV) that looks like a sports car. All this and a federal tax deduction of \$2000 for buying one.

There is help in selecting green cars. The EPA recently published its Green Guide, the first on-line rating system for light trucks and cars. The Green Guide goes beyond fuel economy to include tailpipe emissions ratings. Vehicles can get from one to five stars—the more stars, the greener the vehicle. Different classes of vehicles are rated together, so you can compare vehicles within the class. To allow comparison going from class to class, EPA provides an overall 10-point scale rating system, with ten being the greenest.

The American Council for an Energy-Efficient Economy's (ACEEE) environmental guide to cars and trucks includes fuel costs, health costs and tons of greenhouse gases emitted in determining its ratings. ACEEE is a non-profit organization dedicated to advancing energy efficiency to promote both economic prosperity and environmental protection.

Before you buy your next car, check out the vehicles you are considering at the EPA web site, www.epa.gov/autoemissions or the ACEEE web site at www.aceee.org or www.GreenerCars.com just for the ratings. There is a subscription fee for accessing the entire ACEEE web site, but information on the 12 best, 12 worst and greenest in each vehicle class (e.g., two-seater, SUV) is available on-line for free. The paper version, titled *Green Book: The Environmental Guide to Cars and Trucks* is available for sale for about \$9.00 on-line and in bookstores.

More Hints on Driving Green:


The impacts of driving include pollution of the air with particulates that can invade your lungs and cause disease, irritating nitrogen and sulfur oxides, toxic hydrocarbons and deadly carbon monoxide and global warming from the release of carbon dioxide. With all this *plus* the paving over of the countryside to accommodate all those cars, the need to reduce our use of vehicles and decrease the impact of the vehicle we do use becomes obvious.

The USEPA recommends keeping up with your car's routine maintenance schedule; limiting warm-ups, cold starts and idling time; avoiding

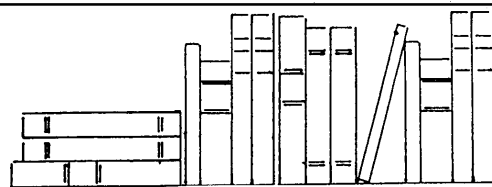
the wait in line at the drive-through; accelerating gently and steadily; obeying speed limits; keeping tires properly inflated and aligned; planning and combining your trips and using mass transit whenever possible.

The Environmental Defense Fund (EDF) takes things a little farther suggesting that we consider becoming a one-car family to encourage walking, biking and trip reduction. EDF

adds that we should reduce the load on the engine by keeping loads light. We also can reduce the use of air conditioning in our cars and prevent A/C leaks of chlorinated fluorocarbons (CFCs), which deplete the earth's ozone layer that protects us from harmful ultraviolet rays. Recycling used parts and buying recycled oil decreases the waste generated. Last, but not least, ask your employer if

you can telecommute or start a carpool to your job to reduce your car's miles on the road. The EDF web site at www.environmentaldefense.org contains additional information regarding vehicle life cycle and ways individuals can help prevent pollution at each stage. 

BOOK REVIEWS



The Green Infrastructure Guide, Planning for a Healthy Urban and Community Forest, by Ann B. Brady, Dianne R. Brake, Charles W. Starks, The Regional Planning Partnership, Princeton, NJ. 2001, 108 pages, \$30.00.

This booklet defines "green infrastructure" as the natural resources such as trees, streams, wetlands and open space. Green infrastructure is not limited to rural landscapes, but includes street trees, parks, waterfronts, lawns, landscaped buffers and the natural features of urban and suburban landscapes. Green infrastructure was the key to America's growing economic development in previous decades, but now, the spreading development is damaging sensitive ecosystems, including wetlands and farmlands. By its very nature, New Jersey's urban sprawl has serious impacts on green infrastructure.

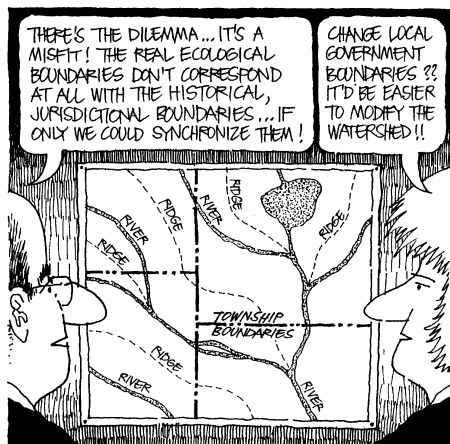


Illustration from the "Green Infrastructure Guide"

This Guide, intended for municipal governments, planning boards and community groups, tries to bridge the gap between quality of life and the importance of protecting green infrastructure. Chapters deal with land use planning, the community forest, discouraging lawns and protecting water resources. The authors give valuable insight into the role of green infrastructure in land use and how to determine whether a community's planning practices are in line with the protection of the environment. A "Green" checklist at the end of the booklet helps communities make sure they have tools to protect their natural resources and refers to chapters that explain these tools. Many photographs and whimsical cartoons illustrate the advantages of planning for our Green infrastructure.


Critical Masses: Citizens, Nuclear Weapons Production, and Environmental Destruction in the United States and Russia, By Russell J. Dalton, Paula Garb, Nicholas P. Lovrich, John C. Pierce and John M. Whitney, MIT Press, Cambridge, MA. 1999, 457 pages, \$27.50.

Animals whose descendants will still be radioactive in thousands of years, children born sick and dying young - this is the legacy of the Nuclear Age in the United States and Russia. This book investigates how U.S. and Russian citizens have forced their governments to address the environmental damage of the nuclear arms

race over the last 50 years. It gives a compelling account of the problems of nuclear waste storage in these countries. Public opinion surveys and personal interviews show the conflict between the concern of citizens and national defense interests at the facilities at Hanford, Washington and the Mayak region in the Ukraine.

The pressure to produce plutonium during the Cold War led to a huge expansion of the Hanford facilities. Unfortunately the airborne release of heavy metals such as strontium was the result. The Hanford processes have discharged heavy elements such as phosphorus into the Columbia River, without consideration for the local Native American population, whose diets of milk and livestock made them especially susceptible to radioactive particulates.

In Mayak, Russia plutonium production and nuclear waste generation were "classified." What is known is that all waste was "diverted" into major lakes in the area. Any overflow will result in contaminated waste reaching the Techa Valley and making it uninhabitable.

The book chillingly depicts the specter of two of the most polluted places on earth and raises questions that possibly can never be answered, such as what can be done to address these problems and how citizens can intervene. 

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ANJEC has a new website address that's easier to type and to remember. It's www.anjec.org. We are always adding to it, so let us know your suggestions. If your environmental commission has a website let us know that so we can put a link on the ANJEC Site.

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Save the date

Dinner to Honor Sally Dudley

Help us thank Sally for all she has done as ANJEC's executive director to support the efforts of environmental commissions, raise awareness of their importance, and build coalitions to strengthen the environmental movement in New Jersey.

Friday, January 25, 2002 — 6:00 to 10:00 PM

The Nassau Inn

10 Palmer Square, Princeton, NJ

Details to follow

ANJEC Opens Trenton Office

ANJEC has opened a satellite office in Trenton, so that we can be closer to the State Legislature and administrative offices. The new office also gives ANJEC an urban location, in keeping with our focus on serving environmental commissions in urban areas. Adrienne Dixon, ANJEC Urban Project Director, will be at this site. Barbara Simpson, ANJEC State Plan Project Director, also will be working at the office, giving her easy access to State Planning Commission meetings, which she attends regularly. The Trenton location has the additional advantage for staff and visitors of being accessible by public transportation.

The office is located in the League of Women Voters building on West State Street, just down the street from the State Capitol building and across from the state museum. Come visit us!

ANJEC

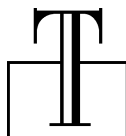
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Local Environmental Grants



The NJDEP's Environmental Services Program is continuing its matching grants program for local environmental agencies, including environmental commissions and soil conservation districts. The grants help commissions in preparing natural resource inventories, planning studies and reports describing strategies to protect environmental resources and in conducting projects designed to disseminate information to the public. The grants range from \$1000 to \$2500, which must be matched by the municipality.

NJDEP mailed application packages to all commissions on September 1, with the deadline for grants December 1, 2001. For more information, contact the Environmental Services Program at 609-984-0828. 

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