

ANJEC REPORT

WINTER 2011



ANJEC Congress highlights

Report:
extreme
weather
predicted

Fair-well to
ANJEC's Abbie





Director's Report

No time to doubt climate change

Recently, Governor Christie said he was skeptical that global climate change was human caused, explaining that scientists disagree on this subject. This shift to the right by the Governor could be just responding to the conservative swing nationally where half the newly elected Congressmen say they don't believe that humans cause climate change. Yet hopefully, the Governor's statement is no more than politics, and it does not indicate a change in State policies dealing with greenhouse gas emissions.

During his campaign, the Governor supported New Jersey's aggressive efforts to reduce production of greenhouse gases. Christie seemed to accept the findings of an overwhelming number of credible scientists who link that climate change to human activities. Now is not the time to back down on the State's effective promo-

tion of solar and wind energy, energy efficiencies and conservation.

In particular, our State needs to stay firm on its commitment to the Regional Greenhouse Gas Initiative (RGGI) – the first mandatory, market-based effort in the country to reduce greenhouse gas emissions. New Jersey is one of ten states participating in RGGI, which capped CO₂ emissions at current levels from power plants and will work for 10 percent reduction by 2018. Under this “cap and trade” arrangement, RGGI auctions the excess allowances from CO₂ emitters, with the proceeds going to fund programs to improve energy efficiency and increase renewable energy technologies.

Much of the resistance to emissions reduction initiatives comes from those involved in the petroleum industry, who say that a national cap and trade program or a carbon tax will be economically disastrous.


ANJEC holds the line on dues

Although we had scheduled a dues increase for 2011, ANJEC recognizes the great financial constraints that municipalities are facing this coming year, so the Board of Trustees has voted to keep environmental commission dues at \$280 for a third year. Member benefits include:

- home delivery of the *ANJEC Report*;
- email alerts on funding opportunities and events of interest;
- a 20 percent discount on all ANJEC publications;
- discounted registration fees for our workshops and annual Environmental Congress; and

- access to the ANJEC Resource Center's extensive collection of publications, reports, ordinances and research as well as resource experts and professional contacts.

Commissions can sign up additional members, such as town officials, for \$20 each. Renewal information and a dues invoice have been mailed to all commission chairs at the town hall address. If you need a copy, please contact us at (973) 539-7547 or email us at

info@anjec.org. 

However, in the long term, taking no action could be more disastrous to our economy.

We rely on petroleum products to keep our economy going. Transportation is our greatest consumer of fossil fuels – not just moving people but almost every product we buy or sell. Also agriculture, plastics and pharmaceuticals require petroleum byproducts for their production. This supply of petroleum must be conserved at least until the time when we can find ways to move and manufacture products without the need of petroleum.

And reducing the burning of fossil fuels has other benefits in lessening air pollution with its harmful effects on human health, and reducing our dependence on foreign oils.

In a state with 1,792 miles of tidal coastline, including 126 miles of ocean-front, sea level rise and extreme weather events (see article on page 15) put our economy and public safety at risk. The Governor cannot afford to gamble on climate change.

Sandy Batty
 Sandy Batty
 Executive Director

Library Subscription \$18.00
 ISSN 1538-0742

anjec
REPORT

Vol. 31 / No. 1 WINTER 2011

566 MUNICIPALITIES ONE ENVIRONMENT

Executive Director Sandy Batty
 Editor Julie Lange Groth

The Association of New Jersey Environmental Commissions is a private, non-profit educational organization serving environmental commission and open space committee members, concerned individuals, non-profits, and local officials. ANJEC's programs aim to promote the public interest in natural resource preservation, sustainable development and reclamation and support environmental commissions and open space committees working with citizens and other non-profit organizations.

The *REPORT* welcomes articles and photographs but is not responsible for loss or damage. Opinions expressed by guest authors do not necessarily reflect ANJEC policy. Articles may be reprinted with permission and credit. Please address correspondence to *ANJEC REPORT*, PO Box 157, Mendham, NJ 07945; tel: 973-539-7547; fax: 973-539-7713. E-mail info@ANJEC.org. Web site: www.anjec.org.

In This Issue:

- 2** Director's report
- 4** ANJEC recognizes eight towns for environmental achievement
- 8** Congress arms environmentalists on the front line
- 12** Land use strategies in the solar age
- 15** Extreme weather ahead
- 17** ANJEC Smart Growth grants help towns connect trails
- 19** Wishing Abbie a fond Fair-well!
- 21** Mapping tools help towns plan for coastal flooding
- 23** Eco art: A recipe for engaging youth in your city's environmental commission
- 25** Preserve named for longest serving member of Pinelands Commission
- 26** Smart Growth Updates: Highlands towns file for conformance
- 27** Paperless *ANJEC Report* now available!
- 28** Unique art exhibition celebrates water
- 29** ANJEC honored with planning award
- 30** ANJEC People 2011
- 31** Setting sail to protect the Bayshore

On the cover: *Scenes from ANJEC's 37th Environmental Congress October 15, 2010.*
 Photos by Gary Szelc and Peter Craig.

Acting Locally



ANJEC recognizes eight towns for environmental achievement

ANJEC presented its prestigious Environmental Achievement Awards to eight environmental commissions and three environmental nonprofits at the 37th Annual Congress on Friday, Oct. 15, at Brookdale Community College in Lincroft. This year's awards competition attracted a bumper crop of impressive submissions representing high-quality projects from throughout the State. A special awards committee comprised of ANJEC trustees and staff members selected winners based on their exceptional environmental efforts. ANJEC has been presenting these coveted annual awards since the mid-1980s.

Cape May Point Environmental Commission – Triangle Park Rain Garden

Under the leadership of the Environmental Commission, the site of a neglected historical monument that had become an eyesore and embarrassment was transformed into a pocket park and rain garden that now attracts garden and butterfly tours. The Commission recruited



Solar fountain in Triangle Park Rain Garden in Cape May Point

volunteers to plan the garden and raised funds to plant and maintain it. In the process, they had to remove a large concrete pad. The rain garden features a solar-powered bird fountain, a donated boat transformed into a planter, and many species of native plants that provide food and habitat for wildlife and local and migratory birds. The Triangle Park Rain Garden won the town's 2010 Community Service Award.



Green Matters TV show on recycling in Manalapan

Manalapan Township Environmental Commission – Green Matters in Manalapan: a television series

To reach a broader audience, provide environmental education and promote “greener” behavior, the Environmental Commission created a television series for the local cable TV station. Commission members developed the content, wrote scripts and helped edit the programs. They invited high school environmental club members to participate in the shows. The first three episodes focused on using compact fluorescent bulbs to conserve energy, building a rain garden and curbside recycling, which included a David Letterman-style “Top 10 Reasons to Recycle.”



Photo by Peter Craig

Members of Millstone Township Environmental Commission accept their award from ANJEC Board President Chris Allyn.

Millstone Township Environmental Commission – T & E ordinance

To protect the environmentally sensitive community of Millstone Township (at the headwaters of the Assunpink with extensive wetlands), the Environmental Commission undertook, with the support of the Township Committee, a mission to protect the local threatened and endangered species and their habitats. The Commission spent three years researching the areas and ways to protect them. With advice from their consultant, they developed an ordinance that strictly protects the T & E habitat, and that the Township Committee unanimously passed in 2010.



Roxbury Township's new community garden

Roxbury Township Environmental Commission – Community garden

The initiative to create a community garden on eight acres of Township-owned open space began in January 2007 under the Environmental Commission's leadership. The Commission researched nearby community gardens and recognized an opportunity to encourage organic growing on land that had not been farmed for some

years. Genesis Farms of Blairstown educated the Commission on best practices for organic community gardening and a local Master Gardener advised on soil testing. Local businesses donated time and equipment to install water lines and fencing. After a ribbon cutting on Earth Day, 2009, the garden operated at full capacity in its first season.

The Southampton Environmental Commission – Rural Sustainability Plan

The Commission applied for and received a NJ Department of Community Affairs grant of \$50,000 to develop a 20-Year Rural Sustainability Plan for the Township. In addition to administering the grant, coordinating professional consultants, and hosting six community visioning meetings, Commission members wrote the *Carrying Capacity Report* and the 2009 *Environmental Resource Inventory* that provided the basis for the final product, a *Rural Sustainability Plan Vision 2030*. The Planning Board adopted the *Plan* into Southampton's *Master Plan*, and it received an Achievement in Planning Award from NJ Planning Officials in March 2010. Commission members estimate that they contributed over 1000 hours of labor to this project.

Voorhees Township Environmental Commission – Open Space Enhancement Plan

The Voorhees Environmental Commission observed that many of the 140 Township-owned open land parcels were not being utilized or appreciated, due to a lack of public awareness, access or maintenance. The Commission worked with a

Vorhees Township Environmental Commission members

Photo by Peter Craig



consultant to inventory, map, inspect and assess the town's open spaces. They recommended 150 neighborhood-centered enhancement projects including parking, removal of fallen trees, and informational signage and outreach, as well as low-impact activity facilities suitable for the underserved senior population, trails and bike pathway connections to encourage physical activity and non-motorized transportation, and suggestions for corporate and volunteer support for the town's open space network.



Westville rain garden seminar

Westville Environmental Commission – Conservation education and erosion control projects

The Commission decided to use two of their previous construction projects, a rain garden and a butterfly garden in a well-visited park, to encourage residents to create conservation projects in their own backyards. The Commission hosted a Rutgers Rain Garden Seminar, with free starter plants for the 22 attendees, and a Butterfly Garden seminar. Another 80 people heard talks on the Rain and Butterfly Gardens as part of the Woodbury House and Garden Tour. The Commission also worked with the county park and public works staff to correct severe stream erosion problems along the Butterfly Garden. Corrective action included establishing a five-foot no-mow zone and stabilization of the bank with coir logs planted with native plants. The Commission funded the plantings and provided labor to secure the plants in the logs.



Photo by Peter Craig

Chris Adornato of the Woodbridge Environmental Commission accepts the Achievement Award from ANJEC Board President Chris Allyn.

Woodbridge Twp. Environmental Commission – “Greenable Woodbridge”

As envisioned by the Woodbridge Township Environmental Commission, “Greenable Woodbridge” is an effort to engage the entire community in becoming directly involved in taking responsibility for creating an energy efficient present and future. The Commission engaged businesses, volunteers and Township employees in a partnership effort to accomplish a number of activities: a “Greenable Woodbridge” guide on the Township website, a 20-page “Green News” edition of the Woodbridge News, organizing a series of public outreach programs for businesses, students and residents, and coordinating with a special School District Green Team to implement sustainability in the schools, with Green Teams operating in each of the district’s 24 elementary, middle and high schools.

Honorable Mention: Asbury Park Environmental Commission – Eco art for youth

The Environmental Commission teamed up with the Sustainability Committee on an eco-art project to help local youth develop an appreciation of nature and a sense of stewardship. Volunteer mentors introduced the work of eco-artist Andy Goldsworthy, and then led an activity where the youth selected natural canvasses in Sunset Park and at the beach and composed visual art using only natural elements that emphasized shape, texture, form, light, color and composition.

Five ways environmental commissions are like native plants

Excerpted from acceptance speech by Cinnie MacGonagle, Musconetcong Watershed Association

As a former environmental commissioner, I see several similarities between native plants and commissions:

1. Both help to keep our rivers clean and provide examples of how to conserve water.
2. Both enhance habitat for wildlife by providing shelter and food sources for insects, birds and other animals.
3. Both will thrive despite benign neglect from those that selected them.
4. Both require very little, or often no money at all, to flourish.
5. Both can withstand extremely difficult conditions and are really tough.

Nonprofit organization awards **Friends of the East Brunswick Environmental Commission** – Community garden

The Friends group, created to support the Environmental Commission with projects and funding, initiated formation of a Community Garden. With Township permission, they opened the garden in 2009 with 80 plots and more than doubled the plots to 170 in 2010. The plan was to create “a community of gardeners” through the community garden. Committees share the various duties: social, shared garden, newsletter, general garden and website. Two plots now grow produce for the Municipal Senior Center and, supplemented with donations from gardeners, they produced 541 pounds of produce. In addition, the Friends formed a unique partnership with a “sister garden” in East Brunswick, Australia, using a Skype hookup to watch their groundbreaking and speak to their gardeners. With overwhelming demand, the group is planning ways to expand the garden in 2011.

Musconetcong Watershed Association (MWA) – Native planting at the River Resource Center

The Association created a habitat of native plants at its River Resource Center to foster appreciation of indigenous species. The MWA solicited plant donations and received a small grant to cover preparation and planting. Volunteers prepared the soil and planted native trees, shrubs, perennials, grasses, ferns and vines. They placed plant labels, created a native plant brochure and a map and key of the plants. The project helps educate people about how valuable native plants are for the River, its wildlife and the people living in the watershed.

Sourland Planning Council – “Living in the Sourlands: A Guide for Responsible Stewardship”

Formed to protect the ecological integrity and special character of the Sourland Mountain region, the Sourland Planning Council wanted to increase awareness and appreciation of the Sourlands and to show residents how they can soften their footprint on the fragile ecosystem. The Council researched, wrote and published a colorful 44-page handbook that illustrates the environmental issues and problems relevant to the Sourland Mountains, and gives practical advice for people living and working in the region. Handbook topics include protecting native plants, dealing with invasive species, attracting birds, organic practices and protecting water resources. The Council distributed 14,000 copies to residents and businesses in the region, who responded to the publication enthusiastically. Within six weeks following the mailing, Council membership increased 20 percent.

More information

Contact the ANJEC Resource Center for more details and contact information for these award-winning projects. Email resourcecenter@anjec.org or call (973) 539-7547. 

Congress arms environmentalists on the front line



NJDEP Commissioner
Robert Martin
Photo by Peter Craig

On Friday, Oct. 15, ANJEC hosted its 37th Annual Congress. This year's theme was "On the Front Line: Local Environmental Action in Challenging Times." Workshops and presentations throughout the full-day event armed participants with important information and reinforced the crucial importance of local action in the face of a difficult and volatile political and economic climate. Below are highlights from plenary talks by New Jersey Department of Environmental Protection (DEP) Commissioner Bob Martin and Chris Daggett, President of the Geraldine R. Dodge Foundation.

Commissioner Martin shares vision for DEP

By **Kerry Margaret Butch**,
ANJEC Urban Project Director

"The Governor only gave me one mandate – to make decisions based on science, facts and data. Not based on ideology, not based on politics," said Bob Martin, New Jersey's DEP Commissioner, to hundreds of environmentalists gathered at ANJEC's Congress. He stressed that the Christie Administration plans to deliver on the promises made during the election.

Martin cited several key accomplishments at DEP that involved holding polluters accountable and protecting the environment while stimulating the economy, including:

- The tritium cleanup at Oyster Creek Nuclear Power Plant;
- New Jersey's petition to the US Environmental Protection Agency to address the air pollution caused by the Portland, PA, power plant;
- The Administration's willingness to go to trial with several western Pennsylvania power plants that burn coal and pollute the air;
- The litigation to recover \$500 million in legal and clean up costs for the

- Passaic River (Martin believes the State will win in the long run);
- The Licensed Site Remediation Professional program, which he said has encouraged big companies to step up and promise the cleanup of 350 sites on a timetable;
- The Administration's commitment to public access to the coast by creating draft rules that balance safety, security and recreation;
- The Comprehensive Plan to restore the health of the Barnegat Bay;
- The creation of the Office of Green Energy and Economic Development, designed to promote solar energy and offshore wind turbines while creating thousands of jobs;
- Keeping state parks and wildlife areas open despite budget cuts;
- The creation of a Science Advisory Board;
- Taking a stand against offshore drilling and offshore liquified natural gas development.

Martin also mentioned that when the Legislature passes a long-term sustainable funding plan for the Green Acres Program the Governor will sign it.

Transformation at DEP

Commissioner Martin clearly showed his corporate roots when outlining the large number of changes DEP is pushing through

internally, such as the creation of a strategic plan that involves visioning and contains priorities and accomplishments gained through discussions with stakeholder groups since his appointment.

He discussed changing DEP's culture around customer service while maintaining the standards of permitting, making sure that applicants are given a clear "yes" or "no" in a timely fashion. He admitted that this was not easy to do with a staff that has been cut from 4000 people to a current number of 2800 employees in the last 10 years. The cuts in staff coincide with a rise in regulations, which makes it more difficult to keep up with the workload.

Martin said he has made better technology a priority in his administration. Environmental commissioners and Congress attendees were given the opportunity to ask Commissioner Martin questions on local issues such as the promotion of green energy development in Waretown and flooding concerns in Westville.

On members' minds

Other concerns brought to Martin's attention by audience members involved specific legislation, such as A2529, a bill passed by the Assembly in October that revises certain definitions related to alternative energy technologies.

Martin was also grilled on policy issues such as quantitative targets for greenhouse gas reduction, which Martin confirmed that the State is still pursuing, and the DEP's decision to end much of the oyster restoration program in Raritan Bay and the Hackensack River, which Martin stated was for public safety and to prevent contaminated shellfish from getting into the food supply and jeopardizing the State's seafood industry.

Martin was also asked whether the DEP would work with the Highlands Council to purchase more land. He reiterated his commitment to the Highlands and gave assurances that it was a top priority.

A representative from Clean Ocean

ANJEC depends on our business members to help pay for the cost of printing the *ANJEC Report*.

Please let them know that you saw their ad here.

Remember, however, that ANJEC does not necessarily endorse any of these firms.

Save Energy



Capitol Roofing Co.

ECO-FRIENDLY ROOFING PRODUCTS

COOL WHITE ROOFS AND COATINGS
SOLAR PANELS
SKYLIGHTS (FIXED AND VENTING)
SUN TUNNELS

FREE EVALUATIONS

Commercial • Residential


201-659-3567 or 973-414-0660

www.capitolroofingco.com

email: info@capitolroofingco.com

NJ STATE LICENSE #13VH00522100

- Endangered Species Surveys
- Wildlife Inventories/Studies
- Habitat Mitigation Proposals




Biostar Associates, Inc.

ENVIRONMENTAL CONSULTANTS
Jill Stein Dodds
President


jsdodds@biostarassociates.com
(908) 234-0870 (908) 996-3214

- Wetland Delineations
- Photography
- Ecological Impact Assessments
- Expert Testimony

Discover Ecotourism in the MEADOWLANDS LIBERTY REGION



Meadowlands Liberty

convention & visitors bureau 

MLCVB.com 877-MLCVB-US

Action gave kudos to the Administration for continuing to fight offshore liquefied natural gas development.

In closing, Commission Martin remarked, "My door is always open to all the groups around the State, environmental groups, businesses and individuals. My door is always open and I want to make this happen."

New Dodge head issues challenge to innovate

By **Kerry Miller**,
ANJEC Assistant Director

After careers in both the private and public sectors, former New Jersey gubernatorial candidate Chris Daggett is venturing into new territory as President of the Geraldine R. Dodge Foundation. From his office at the organization's new LEED-certified building in Morristown, he will impact the direction many of the State's non-profit organizations take with the help of funding from the Dodge Foundation.

Attendees at the 2010 Environmental Congress were eager to hear his perspective on the current state of environmental protection and the strategies the Dodge Foundation hopes its grantees will adopt to make the State and their communities more sustainable.

Daggett noted that both New Jersey and the country are at a watershed moment in which blaming, polarization and an inability to make decisions characterize our political landscape. Nonprofits have less money to spend, while the need is greater than ever for social and environmental support. (The Dodge Foundation

itself lost \$100 million in 2007, forcing it to reduce its recent giving to nonprofits by one third.)

Social systems, demographics, and the manner and speed with which we communicate are changing very quickly, and traditional boundaries are blurring. Daggett sees a great need for creativity and flexibility among communities and nonprofits, not only to keep up, but to get ahead of the curve and figure out what is really necessary for sustainability and survival.

Encouraging signs

Among the hopeful signs noted by Daggett were:

- a greater interest in civic involvement and volunteerism due to the large pool of early retirees and the unemployed;
- a rise in new technological opportunities for nonprofits, such as mobile phone and internet solicitation and social media networking; and
- the trend toward social causes becoming an integral part of business, where products and brands are sometimes linked to a specific cause.

The Dodge Foundation has identified two categories of activities and strategies that it wants to promote through its grantmaking. The first is creativity and personal growth; the second is civic engagement and collaborative efforts, which need to continually evolve in order to be sustainable. Daggett sees strength in the way the Sustainable Jersey certification program promotes non-threatening collaboration, by encouraging people to meet face-to-face, both within a community and with nearby communities. By working together on a project, they can move from competition to what he calls "co-opetition" on other more contentious issues.

Daggett suggested several potential areas for exploration, including how to engage youth in social action, possibly through "micro volunteering" that capitalizes on and fits with the busy schedules and fast-paced lives of today's young people. The Dodge Foundation also is a strong propo-



*Chris Daggett,
President, Geraldine R.
Dodge Foundation*
Photo by Peter Craig

ment of triggering personal action through storytelling -- using short vignettes or personal anecdotes to reach out over the internet or other social media. Daggett encouraged environmental commissions and nonprofits to use storytelling as a tool to engage people.

Another area in need of creative solutions is the trend toward innuendo-based reporting; as a society, we need to develop new ways to check facts and evaluate the massive amounts of information coming at us daily, to avoid cynicism and vulnerability to demagogues.

Environmental commissions as agents of change

Daggett commended environmental commissions for adding value to their communities by creating and lobbying for innovative ordinances and policies which, after “field testing” at the local level, sometimes drive changes in State policies. For example, local phosphorous fertilizer ordinances, stream corridor ordinances and tree protection ordinances have led to proposed legislation limiting phosphorous in fertilizers, a new State regulation establishing large buffers for sensitive streams, and New Jersey’s “no net loss” tree policy for State construction projects.

With respect to environmental initiatives, Mr. Daggett stressed that saving degraded resources from further depletion or destruction is not enough. We should



Members elected Nelson Dittmar, right, as ANJEC's new president replacing outgoing Chris Allyn, left. Photo by Peter Craig

strive to restore our resources and natural systems to their optimal state of function. “We all know a healthy environment is everyone’s birthright,” he said, “and it’s also everyone’s responsibility to protect it – indeed, to sustain and regenerate it – for future generations.”

Above all, Daggett urged ANJEC and environmental commissions to seek out creative and innovative partnerships and solutions to environmental and social problems. He left us with this challenge: “What if we all came together at the next Congress to talk about how we have tapped into the social sector trends, to spark not just incremental changes to current practices, but to leap frog social change in our communities?” 🌱

ANJEC's Directory of Environmental Consultants

Information on environmental professionals and businesses operating in New Jersey and surrounding regions. You can search by keyword (including company name) or service area.

Check out the Directory at www.anjec.org and click on “Environmental Consultants” Available 24 hours a day, 7 days a week

Land use strategies in the solar age

By **Cheryl Reardon**,
ANJEC South Jersey Bayshore Project Director

Renewable Portfolio Standard goals outlined in New Jersey's Energy Master Plan call for distributors to supply at least 30 percent of the State's electricity from renewable energy sources by 2020. Spurred by this mandate and fueled by current financial incentives, numerous large scale commercial solar installations are presently in the application pipeline – primarily on agricultural lands in southern New Jersey.

Substantive regulatory changes have been made to advance solar energy, due in part to the presumption that solar goals would not be adequately addressed by local master planning. Recent New Jersey legislation deems solar technology an “inherently beneficial use” and exempts photovoltaic panels from Stormwater Management Regulation impervious cover calculations, leaving some land use boards dazed and confused.

Sustainable energy planning should provide a balanced approach that allows for solar placement in appropriate locations in accordance with Master Plan objectives, while giving careful consideration to environmental and agricultural resources outlined within a town's Environmental Resource Inventory and Farmland and Open Space Preservation Plans.

Below is an overview of the workshop presented by Christopher J. Warren, Professional Planner, Alaimo Group, at the ANJEC Congress on Oct. 15. His slide presentation is available on the ANJEC web site at www.anjec.org/pdfs/Congress2010SolarLandUseStrategiesCWarren.pdf.

Solar by the numbers

New Jersey's goal for solar energy is 2,500 MW of solar energy by 2021. Assuming a yield of 1 MW per 4 acres, meeting this goal will require in excess of 10,000 acres of photovoltaic panels.

Solar Renewable Energy Credits (SRECs) are a marketable commodity currently selling at about \$650 per credit, with 1,000 kWh equal to 1 SREC. At this rate, a 1 MW system can produce about \$650,000 in revenue per year.

Solar energy developers are also eligible for a Federal Tax Credit equivalent to 30 percent of the cost of installing the system. For example, if the system costs \$30 million to install, the developer can earn a tax credit of \$9 million.

New Jersey is a leader in the solar energy initiatives that are sweeping the country. While few question the goal of renewable energy, there is a need to look at the initiative in a balanced way.

Classes of solar development

Warren outlined considerations and guidelines land use boards can use in evaluating site plans for various types of solar developments. Different financing options, incentives and restrictions exist for solar development based on type of use, including:

- Small scale accessory use for home, business or institutions;
- Agricultural accessory use;
- Principal use on publicly owned land or redevelopment areas;
- Principal use on private land (commercial).

The impervious cover exemption

Recent law (S921) specifies that the New Jersey Department of Environmental Protection shall not include solar panels “in any calculation of impervious surface or impervious cover” for State regulatory programs or in the review of subdivisions or site plans.

The State exemption is being interpreted as exempting these facilities from local stormwater management regulation due to the changed definition of impervious cover. Due to exemption, the impact of these facilities on actual runoff rate or on the time of concentration cannot be fully determined by municipalities. However, the stormwater impact of ancillary facilities such as substations or electrical equipment yards can be evaluated.

Inherently beneficial use

When the Municipal Land Use Law (MLUL) was amended to characterize wind and solar energy facilities as “inherently beneficial uses,” the New Jersey League of Municipalities opposed the change on the basis that it allows solar development to be located anywhere in the community without demonstrating community benefits and that the amendment represents another example of the interference of the legislature in the local planning process in New Jersey.

The question now becomes: How should renewable energy facilities be regulated now that they are considered “inherently beneficial?” Typically, alternative energy developers will contend that there is no “substantial detriment” to the public welfare or “substantial impairment of the intent and purpose of the zone plan” when they pursue variances or other relief. The onus of demonstrating the proofs has shifted to the public or to the land use board professionals to demonstrate the impact in an irrefutable fashion.

Use by right

The MLUL was also amended to permit renewable energy facilities as a use by right on at least 20 acres of contiguous

land under common ownership within every industrial district of a municipality. In the face of this amendment, municipalities have a number of regulatory options. They:

- Could be silent and rely on the use variance process to regulate;
- Could permit solar facilities in specific zoning districts to encourage their location in those districts, but this approach would not preclude the establishment of these facilities within other districts through the use variance process;
- Could define commercial solar energy facilities as a conditional use to define conditions under which it would be permitted.

Conditional use process

Land use boards should regulate commercial solar in a manner that recognizes the need for these facilities and the degree of visual or other impact. They should also consider whether an alternative use of the land may have a greater undesirable impact. In the current economic downturn, landowners are looking for revenue without major permitting or investment, which could lead to important tracts being committed to solar use for an extended period of time.

The conditional use process is the most appropriate mechanism for regulating commercial solar energy facilities for the following reasons:

- The conditions under which the facility would be permitted are defined and predictable which is important to the review board and the applicant;
- The impact on the alternative use of land is controlled (i.e., the impact on highly productive lands is minimized);
- It balances sustainable agriculture and sustainable energy objectives;
- The objectives of the zone plan with regard to commercial solar are established and must be recognized in the review of the negative criteria when variances are sought in other districts or when variances are sought from the conditional use standards themselves;
- It allows facility closure procedures and assurances to be specified;

- It may enable stormwater management performance standards to be applied.

The key is a well conceived set of conditional use standards that are reasonable in nature and that address bulk standards, visual and offsite impacts and facility location.

In the Pinelands


The Pinelands Commission is developing solar planning principles that will culminate in an amendment to the *Comprehensive Management Plan* later next year. The proposed regulation would be district specific and would permit solar facilities as an accessory use and as a conditional principal use.

Common conditions for principal solar use would be:

- screening of facilities in all districts;
- 200-foot scenic setbacks in Preservation, Forest, and Rural Development Areas;
- re-vegetation requirement when use is terminated;
- no offsite facilities in protected areas; and
- limits on pole height due to visual impact.

Additional proposed rules would apply in various areas of the Pinelands to protect ecological values, prime agricultural soils and agricultural production .

Key conclusions

- The State has made a major commitment to renewable energy;
- Regulations have been modified to support the capital investment in these facilities and to reduce the level of regulation;
- Balance has been tilted in favor of commercial solar developers in use variance procedures;
- The conditional use mechanism enables a municipality to support the sustainable energy objective while establishing appropriate and reasonable conditions;
- Conditional use regulation also increases the predictability of the decision and increases the risk for developers that do not follow local regulatory standards;
- Adopting a sustainability element to the Master Plan would help municipalities add strength to local regulation. 

ANJEC depends on our business members to help pay for the cost of printing the *ANJEC Report*. Please let them know that you saw their ad here. Remember, however, that ANJEC does not necessarily endorse any of these firms.

H

2

M

architects + engineers

862.207.5900 • www.h2m.com

119 Cherry Hill Rd, Ste 200, Parsippany, NJ 07054

H2M has served the public and private sectors for over seven decades, in Water Resources, Wastewater, Utilities, Educational, Insurance, Industrial and Pharmaceutical markets.

14 ANJEC REPORT - Winter 2011

Extreme weather ahead

Bruising nor'easters could be following 2010's record heat

By **Whitney Larsen**, Environment New Jersey



On the heels of a summer that saw many parts of the country hit by record heat, severe storms and damaging floods, a new Environment New Jersey report documents how global warming could lead to extreme weather events becoming even more common in the future. The report also highlighted recent extreme weather events that have impacted New Jersey, such as the powerful nor'easters that hit last March and the record-breaking summer heat. Several climatologists joined Environment New Jersey in releasing the report this past September, including David Robinson of the State Climatologist Office at Rutgers University.

Among other extreme weather events, the report, entitled *Global Warming and Extreme Weather: The Science, the Forecast, and the Impacts on America*, highlighted how one of the nor'easters last March dropped over 6 inches of rain in some areas of New Jersey, causing the Raritan River to rise over 9 feet above flood level and forcing the evacuation of more than 400 residents. The storm caused two deaths and left 157,000 people without power. Before utility and emergency personnel could respond fully, another storm dumped several more inches of rain a few days later. In Perth Amboy, high tides washed away several homes, and extra police officers had to be deployed to deter looters.

The extreme heat and drought this past July and August also hurt agricultural production in our State. Fruit crops, like the peaches and blueberries for which New

Jersey is known, ripened weeks ahead of schedule due to the heat and drought. Crops like corn and hay were expected to see yields decline about 20 percent. "The record temperatures that we experienced in New Jersey this summer have given us a glimpse of what we can expect in the future," said Dr. Jim Miller of Rutgers University.

A warming climate means more storms

While no single event can be entirely attributed to climate change, a warming climate is increasing the odds of more extreme weather. Each weather event arises from a combination of short-term weather patterns and long-term climatic trends, and global warming "loads the dice" for severe weather.

The report was released as Congress was considering several bills to let polluters off the hook by *blocking* global warming pollution standards for some of the largest pollution sources. At the same time, the Obama administration is poised to advance new fuel economy and global warming pollution standards for cars and trucks – standards that would achieve substantial reductions in global warming pollution while also cutting oil use and saving consumers money at the gas pump.

Using American ingenuity to make our cars and trucks go farther on a gallon of gas is one of the easiest ways to cut global warming pollution and thus decrease the threat of severe weather, all while saving New Jerseyans money at the pump and slashing our oil use. At Environment New

Jersey we have urged the Obama administration to enact standards for cars and trucks that will ensure the average new car can travel 60 miles on a gallon of gas by 2025.

Report highlights

Among the key findings from the Environment New Jersey report:

- Sea levels at many locations along the East Coast have been rising rapidly due to the expansion of warming sea water and due to the melting of glaciers. In the Mid-Atlantic region alone, at least 900,000 people live in areas that would be threatened by a predicted 3.3 foot (1 meter) rise in sea level.
- Global warming is projected to bring more frequent heavy downpours and snowfalls, since warmer air can hold more water vapor. Already, the number of heavy precipitation events in the United States increased 24 percent between 1948 and 2006, helping to make flooding the most common weather-related disaster in the U.S. Recent years have seen a string of incredibly destructive floods and snowstorms, including the 2008 Midwest flood that caused \$8 to \$10 billion in damage and 2010's "Snowmagedon" that cost the East Coast more than \$2 billion.
- Heat waves are projected to be more frequent, more intense, and last longer due to global warming. Heat waves are among the most lethal of extreme weather events, as illustrated by a 2006 heat wave that affected the entire contiguous United States and was blamed for at least 147 deaths in California and another 140 deaths in New York City.


The record-breaking summer heat and powerful nor'easters last spring were just two examples of how extreme weather causes extremely big problems for New Jersey's economy and our public safety. Given that unchecked global warming will likely fuel even more severe weather, we need to start cutting global warming pollution now.

Chairman of the Assembly Environment Committee John McKeon put it best: "I urge the Obama administration to set the bar high for the next generation of vehicles in the United States. The EPA is currently writing the regulations for the next phase of federal clean car standards that could reduce global warming pollution from vehicles by 108 million metric tons annually and save consumers \$31.8 billion annually at the pump. New Jersey has been a leader in enacting clean car legislation and tackling greenhouse gas emissions and I look forward to similar legislation and standards at the federal level."

More information

- To read the complete report *Global Warming and Extreme Weather: The Science, the Forecast, and the Impacts on America* visit www.environmentnewjersey.org/uploads/f9/be/f9bedeecd458d09b3f1b38330d7f5ace/Extreme-Weather-vNJ.pdf.
- Contact the author, Whitney Larsen, at wlarsen@environmentnewjersey.org.

Environment New Jersey

www.environmentnewjersey.org is a statewide, citizen-based, environmental advocacy organization that represents over 20,000 citizen members and works for clean air, clean water, and open space. 

ANJEC 2009 Annual Report

We accomplished a lot together in our 40th anniversary year!
Read all about it in the ANJEC Annual Report, now available on our web site at www.anjec.org or by emailing us info@anjec.org or by calling us at (973) 539-7547

ANJEC Smart Growth grants help towns connect trails



By **Kerry Miller**, ANJEC Assistant Director

To become more sustainable by reducing automobile-generated pollution and consumption of resources, many towns have developed bicycle/pedestrian and trail network plans that connect schools, stores, sports facilities, cultural resources and other “destinations” within the municipality. The next step is to connect each town’s internal walking and biking network with those in adjacent towns, expanding opportunities for both local and longer-distance non-motorized travel.

On Saturday, September 18, 2010, residents and officials from three southern Sussex County municipalities – Byram, Hopatcong and Stanhope – gathered for a ribbon-cutting ceremony to mark the opening of a connecting link that joined their local trails into a unified system. It was a joyous occasion, and the culmination of 18 months of intensive work by dedicated volunteers from each of the towns.

The project had its start in early 2009, when Byram Township and the Boroughs of Hopatcong and Stanhope reached across their borders to establish a Tri-Community Trails Committee (TCTC). The Committee included representatives from each town’s environmental commission and its trails and/or recreation board, as well as other interested volunteers.

Beginning with a grant

The TCTC obtained a 2009 ANJEC Smart Growth Planning Grant of \$3750 to help cover the projected costs of mapping and

professional assistance for their first effort, a plan to connect planned and existing internal trails at their borders. A narrow historic bridge over the Lackawanna Cutoff rail line looked like the ideal point for the connection, and was the focus of the grant project. Byram and Hopatcong contributed an additional \$940 each to the planning effort, and all three communities committed to in-kind labor by volunteers and town staff.

At a grant project kickoff meeting, the group discussed the unique issues each town needed to address. Both Byram and Hopatcong already had established bike and pedestrian trails in the vicinity of the project, freeing them to focus on a few remaining gaps and deal with the larger “connections” issues. The Byram and Hopatcong linking trails are co-aligned with the Highlands Trail.

Stanhope’s trail resources in the project area were not as refined, consisting of “ad hoc” footpaths created by schoolchildren and residents to access local schools, so Stanhope’s representatives needed to concentrate on formalizing their local segments. The Sussex County GIS Office agreed to assist with producing a trail map for distribution to the public, with TCTC members refining its final form.

A year of many hours

Over the next year, the Tri-Community Trails Committee logged hundreds of hours, considering potential routes, identifying environmental features that should be avoided, doing field investiga-



Byram, Stanhope and Hopatcong trail walkers

tions and GPS plotting, taking photos, researching property records, and talking with landowners, most of which were public entities. They also kept the communities informed by posting web site updates and feeding information to the local press, which responded with numerous newspaper and online articles throughout the project.

Said TCTC member and former Hopatcong Mayor Cliff Lundin, "One of the most challenging aspects of the project was working with landowners to obtain trails easements. In a few cases, we had to go around parcels if the owner was not willing to cooperate. We had to be flexible."

Although the ANJEC grant only covered the planning portions of the project, the TCTC was committed to putting their plan into action as quickly as possible. They felt that an 18-month implementation schedule was possible because most of the trails were on publicly-owned lands. The



A 3-way trail marker at the intersection of the Tri-Town Trail

Committee recruited local volunteers to help clear, rake and blaze trail segments, and installed yellow trail markers, triangular to symbolize the three participating towns. As the last segments were being put in place, TCTC finalized a tri-town trail map for the public, and began to plan for an opening ceremony.

The big day arrives

The ribbon cutting ceremony was attended by Mayor James Oscovitch of Byram, Mayor Diana Kuncken of Stanhope, and Councilman Howard Baker of Hopatcong, as well as many residents and the press. Lundin, who is also Hopatcong's Open Space Committee vice-chairman, noted that, in addition to the obvious environmental, health and recreational benefits provided by the project, "The connecting trail is a symbol that the environment does not stop at municipal borders." It is also proof that a small grant can go a long way, and that towns and environmental commissions can work together productively.

The network, parts of which traverse old Native American trails, will allow inter-community bike and pedestrian access to the Sussex County Library, Byram Elementary and Intermediate Schools, Hopatcong and Lenape Valley Regional High Schools, and the Hopatcong Natural Area Preserve. The full system, most definitely more than the sum of its parts, will, "promote healthier living and make [the communities] more walkable, to get away from the hop-in-the-car mentality," said Byram Township Committeeman Scott Olson.

TCTC member Janice Hunts from Stanhope reflected the feelings of the group: "It's just exhilarating...being part of something that is so beneficial to the towns." TCTC member Malcolm Piester from Hopatcong, who at the opening ceremony was given a "You Make A Difference" award by Hopatcong Mayor Sylvia Petillo, called the Hopatcong wooded trail "really beautiful, a good way to exercise and get away from the congestion of town." 

Wishing Abbie a fond Fair-well!

By **Sandy Batty**, ANJEC executive director

This October, Abigail Fair retired from ANJEC after directing its water resources program for 22 years. She will be moving to Massachusetts to be near relatives.

In her years at ANJEC, Abbie worked on the gamut of water protection issues. She delved into all topics from stormwater to septic systems, wastewater planning and stream protection. Continually researching and learning more on these topics, she shared her growing knowledge with environmental commissioners, other environmental organizations and the State Department of Environmental Protection (DEP).

A warrior for water

Before coming to ANJEC, Abbie coordinated the Freshwater Wetlands Campaign, a coalition of nonprofit organizations whose work resulted in the passage of New Jersey's landmark *Freshwater Protection Act* in 1987. The Campaign struggled for passage of the *Act* for over a year. It was an exciting time, Abbie recalled, "Legislators were dragging their feet, but then Governor Tom Kean declared a moratorium on all construction until new wetlands legislation was enacted. That did it. The new bill was passed and signed in two weeks."

She started at ANJEC the next year, directing the wetlands education program to help local officials understand the new law. She organized and spoke at workshops and answered countless calls about

the law and regulations. The culmination of her work was a 50-page manual for municipalities, *Wetlands Protection in New Jersey*. The manual, now in its third edition, remains a standard text on the Act.

In recognition of her expertise, Abbie was appointed to the New Jersey Wetlands Mitigation Council, established by the

Wetlands Act. The Council serves as a repository for land and monetary contributions made as a result of wetland and State open water impacts that cannot be mitigated on site.

A legacy of public service

She also has been ANJEC's land use specialist, working to foster land use policies that protect New Jersey's water resources. She gained much practical knowledge in this area by serving on the local government in Chatham Township. In 1977 Abbie was appointed to the Township's Environmental Commission and to the Planning Board, where she served for 23 years. When she saw that development permits in town were threatening the water supply, she decided to run for election to the Township Committee. She won a seat in 1992, and was elected to five terms, serving a total of 15 years, including a term as mayor – an amazing feat for the only Democrat on the governing body.

With all her experience, it was natural that when people would call or email ANJEC asking for help with a water or land use problem, Abbie would provide the



Abigail Fair



From left, Abbie Fair, Highlands Coalition Executive Director Julia Somers and Sally Dudley, former ANJEC executive director, at Abbie's Nov. 4 retirement party


answers. She would always take whatever time needed to respond to their questions, and then often would follow up – writing a letter to the editor, speaking to a reporter about the issue, or staying in touch with the person to find out how things were going. “I like to get accurate information out to the public so they can make informed decisions on important issues. Working with environmental commissions and local governments that are determining land use throughout New Jersey allows me to do that continually,” Abbie explained.

While she helped countless local officials, she also applied her environmental expertise at the regional and state level – coordinating other environmental organizations to mount a united stand on issues, meeting with the DEP, and commenting on proposed regulations and legislation. She helped organize a coalition of environmental groups focusing on specific water issues, and scheduled meetings with DEP staff to help draft and amend water regulations.

Protecting the Great Swamp

Living on the edge of the Great Swamp, Abbie knows that the way land is used in a watershed greatly affects the water quality of the stream, lake or other water body fed by that watershed. She founded the Great Swamp Watershed Association in 1981 to advocate for protection of that 55-square-

mile region in Morris and Somerset Counties. Later she served on the Ten Towns Great Swamp Watershed Management Committee, formed in 1995 to develop and implement a watershed management plan. The Committee drafted model ordinances and other land use measures to guard against destructive development in the Swamp. Abbie built on this experience to help commissioners across New Jersey understand the need for watershed protection and the measures that they could take to help local water bodies.

Abbie has promised to stay in touch – keeping her eye on New Jersey through the internet – and hopefully will be emailing or calling with suggestions and assistance to ANJEC staff and environmental commissioners. Even so, Abbie's departure will leave a huge hole in our office, and in environmental protection efforts in our state. 

ANJEC depends on our business members to help pay for the cost of printing the *ANJEC Report*. Please let them know that you saw their ad here. Remember, however, that ANJEC does not necessarily endorse any of these firms.

**Green Sky
Industries** 

***“Recycling
for all the right reasons”***

Corporate Headquarters:
42 Chestnut Street
Clifton, New Jersey 07011

*With facility locations in
Clifton and Carteret, New Jersey.*

Telephone: (973) 772-0253
Website: www.GreenSkyInd.com

Mapping tools help towns plan for coastal flooding

By **Jody Carrara**, ANJEC Project Director

In October, I was part of a group of local planners, environmental commissioners, and emergency managers who learned how to use current Geographic Information System (GIS) data to map areas most vulnerable to flooding and storms. We attended an exceptional hands-on GIS training course hosted by the New Jersey Coastal Management Office and the Jacques Cousteau National Estuarine Research Reserve, located in Tuckerton.

The Coastal Inundation Mapping course was taught by National Oceanic and Atmospheric Administration (NOAA) representatives from the Coastal Services Center located in Charleston, SC. The course was brought to New Jersey through the efforts of Leigh Wood, a Coastal Service Center Fellow working with the New Jersey Coastal Management Office on a project that maps community vulnerability to coastal hazards and sea level rise.

We've all experienced more frequent flooding in our towns--from Trenton to Bound Brook, the barrier islands and the Delaware Bay coast. We must assess those high risk areas and plan and zone accordingly. Mapping using a GIS, which overlays data from a variety of sources, can be used to visualize scenarios that may happen to any coast, river or stream during a storm event. This NOAA course helped us to answer questions like how high and widespread the flooding might be.

Putting it all together

Two full days of lecture and hands-on mapping using ArcGIS software taught us

how to take information from NOAA, the US Geological Survey (USGS), the Federal Emergency Management Agency and others and incorporate the data into one map. Course attendees started by working with the elevation data and then added more data sets to accurately model different storm events on those elevations.

The course discussed remote sensing techniques that can be applied to produce highly accurate and detailed maps of elevation throughout New Jersey. Recently, the New Jersey Coastal Management Office, in partnership with the USGS, was able to secure Light Detection and Ranging (LiDAR) mapping for Cape May, Cumberland and Salem Counties. More up-to-date LiDAR mapping for Ocean and Atlantic Counties will be available in 2011. The course also illustrated the importance of bathymetric data (ocean, bay or river underwater topography) to get an accurate model of the potential impacts of storm surge, nor'easters and sea level change.

Building on a solid base

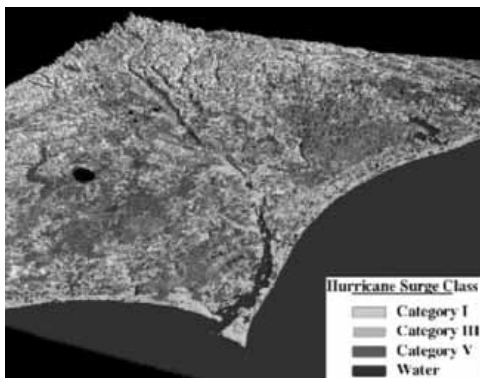
Once base layer maps are generated, you can begin to model or map predictions of flood elevations derived from USGS tide gauges and local flood data. NOAA has a storm surge model that was used throughout the course to illustrate mapping modeled water surfaces. This tool, the Sea, Lake, and Overland Surge from Hurricanes (SLOSH) model, was developed by NOAA and the National Weather Service. It identifies the potential surge zones associated with the various storm categories on the Saffir-Simpson hurricane scale.

The GIS techniques helped us to visually depict those areas in a town most susceptible to storm surge and inundation. A major benefit of the SLOSH model for planners, engineers and emergency management is that it can be used operationally, or in real time. The anticipated final product of Wood's fellowship next August 2011 will be a "Community Vulnerability Assessment Mapping Guide" that will walk the user through the step-by-step preparation of the offered mapping methods.

Flooding causes an average of \$6.9 billion each year in damages in the US according to NOAA information. Most of our New Jersey population lives along a coast. (We all want a water view, don't we?) We don't need a crystal ball to see that flooding in New Jersey will continue. But the power of mapping using a GIS can help planners prepare zoning and build capacity to protect coastal residents and property to the greatest extent possible.


Coming soon!

Want to learn more about mapping areas vulnerable to flooding and storms? ANJEC will be hosting a workshop in Spring 2011 on Coastal Inundation Mapping. Watch your email or visit our web site (www.anjec.org) for updates.



On this NOAA model, various surge zones are draped over the Digital Elevation Model for the Onslow Bay region. (See www.fema.gov/hazard/map/index.shtml)

More information

- New Jersey's Coastal Management Program: www.state.nj.us/dep/cmp/czm_data.html
- NOAA Coastal Services Center: www.csc.noaa.gov/
- NOAA SLOSH information: www.csc.noaa.gov/products/nchaz/htm/ccap4.htm
- Jacques Cousteau Coastal Center: www.jcnerr.org
- ANJEC Resource Center at resourcecenter@anjec.org or (973) 539-7547 

Plan ahead – reserve your dates now!

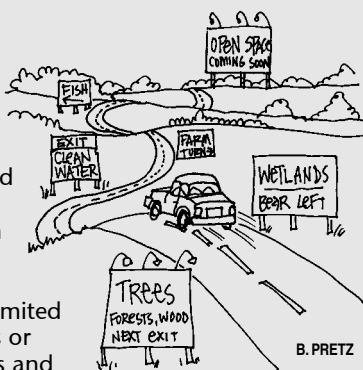
ANJEC Road Shows

As you plan for 2011, don't forget training for your town's environmental commission or green team. An ANJEC Road Show offers expert training tailored to support your goals and meet the needs and interests of your team.

We will prepare a customized workshop focused on one or two topics of your choice, at a time and location of your choosing.

The cost of a Road Show is \$220, which covers unlimited enrollment. Why not share the cost with other groups or towns? Invite your local officials, boards, commissions and residents.

There are many potential topics to consider, from basic commission operations to land preservation, water resources, energy conservation, sustainability and much more.



For more information visit our web site at www.anjec.org/RoadShows.htm or call (973) 539-7547 or email info@anjec.org.

ANJEC in the City

Eco art: A recipe for engaging youth in your city's environmental commission

By **Kerry Margaret Butch**, ANJEC Urban Project Director

Ingredients:

- 2 enthusiastic environmental commissioners
- 2 knowledgeable and artsy green team members
- 3 to 5 adult youth team leaders
- 9 to 25 youth
- 1 writer
- 3 to 5 natural canvasses
- 1 (or more) photographers
- 9 to 25 healthy snacks
- 1 heaping tablespoon of community spirit

Mix with enthusiasm and pour into gallery space provided by a willing business, nonprofit or public agency

An assorted group of "green" colleagues from Asbury Park approached me in my role as youth teacher at Holy Spirit Church in Asbury Park and asked if any young teens in my group would like to participate in a communitywide Eco art project that was going to be part of the 2010 Arbor Day celebration in the city. "We are going to start off small," announced Amy Quinn, an Asbury Park environmental commissioner. "We want to expand our activities for youth and Michelle has a great idea."

Michelle Knapik, environmental program officer for the Geraldine R. Dodge Foundation and a founding member of Asbury Park's Green Team, was inspired by the "Voices from the Land" teacher training program of the Educational Information and Resource Center (EIRC), and recruited Environmental

Commissioners Amy Quinn and Joe Woerner to design a project modeled after renowned Scottish artist Andy Goldsworthy's method of creating artwork and sculpture out of the natural landscape. Michelle shared photographs of Goldsworthy's work that were amazing and inspired immediate enthusiasm. Goldsworthy creates sculptures using natural materials such as stones, leaves, twigs, snow and ice, and uses the natural landscape – perhaps a forest, a snow covered field, or the ocean – as a backdrop. The sculptures are meant to be created for a day, photographed and then left to be erased by nature itself as leaves decompose, the ice and snow melt or sand structures are washed away by the sea.

Knowing that I had some very artistic young people in my group, I was excited to bring the idea to the class. In addition to the opportunity to be creative, the project gave us a chance to discuss stewardship of the earth and respect for nature, to



Bits of seashell become ephemeral works of art created by youth in an eco-art project on Arbor Day in Asbury Park. Photo by Michelle Knapik



Asbury Park youths Brenda Cabrera (left) and Deyanira Molina create art on the beach. Photo by Michelle Knapik

experience being immersed in nature and, last but not least, to learn about the ephemeral nature of this type of art.

Two other adult youth team leaders stepped up to the plate from the Boys and Girls Club of Monmouth County and the Asbury Park High School Band. The organizers gave us project orientation and informational packets prior to the event. Additional volunteers offered to photograph the artwork and provide bag lunches for the youth.


Several of my students jumped at the chance to participate. Together we selected the beach as our natural landscape. The other two groups chose Sunset Park as their site.

We gathered on a gorgeous spring day. The ocean was a deep and rich blue, the sky was bright and the sun was shining. Our team met on the boardwalk and discussed some guidelines for the project:

- they could collect natural items but not disturb the ecosystem;
- they could work together or individually;
- they were encouraged to explore and respect nature but had to keep a safe distance from the jetty or the water.


Our team designed three sculptures, which Edyie Saleh and Michelle Knapik photographed. The photographs of the artwork were later exhibited at Heaven Art and Antiques on Cookman Avenue during Asbury Park's First Night in June thanks to owners Malcolm Navis and Tom Pivinski, who also chairs of the Asbury Park Environmental Shade Tree Commission.

The young artists were incredibly proud to show their work (as were their parents) and got to explain the project and their sculptures to members of the community. Several of the photographs were sold at the event and those funds were donated to the Boys and Girls Club of Monmouth County. The teens were tickled pink to be highlighted in *The Coaster*, our local paper. The project earned the Asbury Park Environmental Shade Tree Commission an Honorable mention in ANJEC's 2010 Environmental Achievement Awards program.


For more information on the EIRC's Voices from the Land Program, click on www.monarchteacheretwork.org or contact Brian Hayes (856) 582-7000 extension 110. 

ANJEC depends on our business members to help pay for the cost of printing the *ANJEC Report*. Please let them know that you saw their ad here.

Remember, however, that ANJEC does not necessarily endorse any of these firms.



RUTGERS
New Jersey Agricultural
Experiment Station



Water Resources Program

Providing solutions for the many water quality and quantity issues facing New Jersey.

Rutgers Cooperative Extension Water Resources Program
Rutgers, the State University of New Jersey
14 College Farm Road
New Brunswick, NJ 08901

P. 732-932-9800 ext.6209 F. 732-932-8644
(Christopher C. Obropta, Ph.D., P.E.)

www.water.rutgers.edu

Casey & Keller, Inc.

CIVIL ENGINEERS, LAND SURVEYORS, PLANNERS



PARK DESIGN
GREEN ACRES SURVEYS
REDEVELOPMENT

P.O. Box 191
258 Main Street
Millburn, NJ 07041
Ph 973-379-3280
Fx 973-379-7993

www.caseyandkeller.com

Preserve named for longest serving member of Pinelands Commission

By **Julie Lange Groth**, ANJEC Report Editor

There's now a quiet little piece of the Pinelands that will forever be known as "Candy-land." On Saturday, Oct. 23, the New Jersey Conservation Foundation dedicated the 4,000-acre Candace McKee Ashmun Preserve at Forked River Mountain.

In addition to being ANJEC's first executive director, Candy is the acting chair of the New Jersey Pinelands Commission, a founding member reappointed by eight consecutive governors.

As chair of the State Department of Environmental Protection's Great Swamp Advisory Committee from 1989 to 1993, Candy

led the initiative that resulted in the formation of the Ten Towns Committee, a collaboration to protect and manage the delicate watersheds and ecosystems in ten Morris and Somerset County municipalities.

Governors Kean and Florio appointed Candy to the State Planning Commission, where she chaired the Plan Development Committee, and she currently serves as Trustee for the Coalition for Affordable Housing and the Environment and as Vice President of the Fund for New Jersey.

A passion to protect

Candy has also been mentor and muse to many New Jerseyans who work to protect the environment. "Not only can most of

today's prominent leaders in New Jersey's environmental movement trace their individual careers and victories to Candy, but most of the collegial forums of environmental leaders have been launched or strengthened by Candy," said Michelle

Knapik, environmental program director at the Geraldine R. Dodge Foundation, on her blog.

For over 40 years, Candy has championed the protection of precious and vulnerable natural resources, and she has left an indelible mark on New Jersey's landscape. She has received numerous state and national awards, including the National Citizen

Planner of the Year Award from the American Planning Association.

At the dedication, New Jersey Conservation Foundation Executive Director Michele S. Byers said officials have wanted to dedicate a preserve to Ashmun for years but did not have the "right" property until the last 700 acres of the preserve at Forked River Mountain – which extends from Wells Mills Park to Lacey Township – were obtained last year.


"She is probably the most staunch and dedicated conservation leader in the history of New Jersey," said Byers. "And she brings an enormous amount of energy and knowledge to dealing with the important land preservation issues we face here." 



Photo by Kerry Miller

Candy (left) and NJ Conservation Foundation Executive Director Michele S. Byers at the dedication of the Candace McKee Ashmun Preserve at Forked River on Oct. 23.

Smart Growth Updates



Highlands towns file for conformance

By **David Peifer**, Highlands Project Director

Highlands conformance of municipal planning and zoning to the *Highlands Regional Master Plan (RMP)* is moving forward.

To achieve conformance, municipalities must complete seven “modules” and prepare a “petition” for submission to the Highlands Council. Council staff reviews the petitions for administrative completeness and then posts them on the Council’s website. Staff also prepares a “Draft Consistency Review and Recommendation Report” and returns the petition to the municipality for revision. The petition and the report are then posted on the Council’s website for public comment. After consideration of public comment, the petition is submitted to the Council for approval. The Council may approve, deny or return the petition for further work.

Plan Conformance activities are supported by grants to municipalities and counties. To date, costs of conformance have been running about as anticipated with actual average expenses of \$49,801 as compared to the estimated \$50,000 per municipality.

By the numbers

As of November 1, 59 of the 88 Highlands municipalities and five of the seven counties in the Region have submitted petitions. The petitions of 45 municipalities and two counties have been declared “administratively complete” and have been posted to the Council’s website (www.highlands.state.nj.us/).



Photo by Ann Grenader

West Milford Lake in New Jersey's Highlands

Staff has completed review of twelve petitions and returned them to eleven municipalities and one county.

The Council has approved the petitions of Byram and Chester Townships in September and October respectively. Both municipalities contain both preservation and planning areas. Byram is unique thus far in obtaining a “Highlands Center Designation” (see Fall 2010 *ANJEC Report*). ANJEC supported both petitions in testimony before the Council and noted the towns’ deep and longstanding commitment to good planning and their history of active environmental commissions. Currently, Hampton Borough’s petition is in the public comment period.

What commissions can do

Environmental commissions can review and comment on petitions at the municipal level during petition development and before the Council.

Most importantly, all the petitions approved have numerous tasks to be completed. Commissions can make important contributions to their completion. These tasks are defined in the approved petition on the "Final Highlands Implementation Plan Schedule".

Of particular interest to commissions are:

- Adoption of implementing ordinances;
- Updating the ERI to digital format;
- Water Use and Conservation Management Plan;
- Habitat Conservation and Management Plan;
- Stream Corridor Protection and Management Plan;
- Wastewater Management Plan;

- Septic System Management/Maintenance Plan;
- Lakes Restoration Management Plan;
- Scenic Resources Management Plan;
- Municipal (or regional) Stormwater Management Plan;
- Land Preservation and Stewardship Plan; and
- Forest Stewardship Plan.

For more information visit www.highlands.state.nj.us or contact the ANJEC Resource Center at resourcecenter@anjec.org or (973) 539-7547.

Paperless ANJEC Report now available!

By **Julie Lange Groth**, ANJEC Report Editor

Dear reader,

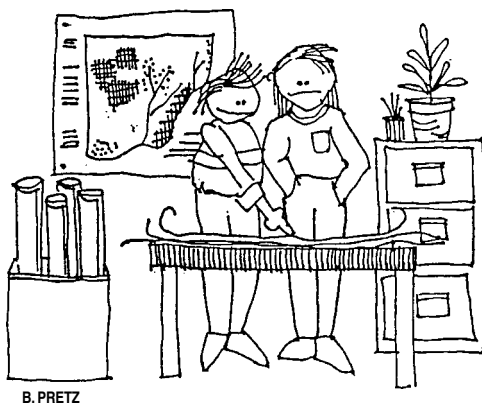
ANJEC members can now choose to receive the quarterly *ANJEC Report* via email! Hundreds of readers have already made the switch since we announced this option in July.

Choose your format!

If you would prefer to receive your ANJEC Report electronically in the future, please let us know. Benefits include:


- ✓ Earlier delivery (one to three weeks ahead of the mailed version);
- ✓ Full color cover;
- ✓ Easy, one-click links to articles and references;
- ✓ Easily downloaded onto your electronic reading device.

You will also help us reduce the magazine's carbon footprint by eliminat-



B. PRETZ

ing some of the paper, printing chemicals and transportation involved with producing our magazine.

To sign up for a free, members-only subscription to the paperless *ANJEC Report* just contact us at info@anjec.org or call (973) 539-7547. 

Unique art exhibition celebrates water

By **Julie Lange Groth**, ANJEC Report Editor

ANJEC and the Printmaking Center of New Jersey (PCNJ) recently collaborated to mount a juried exhibition and live auction of environmental art. The show featured the exciting work of over 40 artists from towns throughout New Jersey, around the country and even across the Atlantic.

Original works in a wide range of sizes and a variety of media were on display, from etchings to serigraphic art, photography, woodblock printing, silkscreen, handmade paper art and more. The exhibition opened with a reception on Oct. 23 and concluded with an auction to benefit ANJEC on Sunday, Dec. 5 in the Printmaking Center gallery in Branchburg.

Theme: “A Reverence for Water”

Guest juror and former ANJEC Executive Director Candace McKee Ashmun selected the theme of the show, “A Reverence for Water.”

“We were just overwhelmed by the response to our call for entries,” says PCNJ Executive Director Linda Helm Krapf. “The theme of the show seems to have strongly resonated with artists from far and wide. We were really excited about the diversity of styles and printmaking media in this exhibition.” 



Photo by Gary Szelec

From left, PCNJ Exhibit Director Matt Kooser, Carolyn Dittmar, ANJEC Trustee Chris Allyn, PCNJ Executive Director Linda Helm Krapf and ANJEC Board President Nelson Dittmar




ANJEC Trustee Chris Allyn with Laurinda Stockwell's “Ice Flow1” Photo by Peter Craig

ANJEC honored with planning award

The New Jersey Chapter of the American Planning Association (APA-NJ) honored ANJEC with the Distinguished Civic Leadership Award on November 4, acknowledging that ANJEC has advanced sound planning in the public arena. In presenting the award, APA-NJ President Courtney Mercer said:

“This year marks the 40th anniversary of the Association of New Jersey Environmental Commissions doing just that. They have been a major force in not only the creation of environmental commissions across this state, but they have trained commissioners and provided technical assistance to make sure they can do their job effectively. They provide Smart Growth Planning Grants; they have resource papers on everything from TDR to septic management; they hold training workshops throughout the year and host an annual environmental congress. In fact, they have trained a great number of planners throughout the years as well! ...

“They were there at the creation of the Pinelands, the Meadowlands and the Highlands regional initiatives, and have been ardent supporters of state planning. They do not limit themselves to rural areas either; they have staff and resources dedicated to urban open space and revitalization..

“I had the pleasure of interning for ANJEC when I still had it in my head that I was going to be a political scientist. I worked with, Candy Ashmun, Sally Dudley, Sandy Batty, Abbie Fair and Kerry Miller, to name a few - all dedicated to making NJ a better place. They helped me to see that grassroots efforts are what will help realize change for the better in this State. ANJEC is truly an organization to emulate. APA-NJ thanks ANJEC's dedicated staff and volunteers for helping to advance environmental protection and sound land use planning for so many years!” 



Boy bonds with turtle at Delaware Estuary Coast Day

Coastal celebration

For the eleventh year running, the New Jersey Sea Grant Consortium (NJS GC) hosted *Coast Day NJ: A Celebration of the Sea* on Sunday, October 10, in Cape May. The event, a past Governor's Tourism Award winner, features family-oriented activities designed to educate visitors about New Jersey's coastal environment and celebrate the State's rich maritime heritage.

Member of
EarthShare
New Jersey

anjec
is proud to be a member
of Earth Share New Jersey

For more information contact Ann Marchioni, ANJEC's Development Director, and Board Member of ESNJ at (973) 539-7547 today.

ANJEC People 2011

Officers

President: **Nelson Dittmar** (Union)
Vice President of Operations:
Nancy Tindall, Robbinsville (Mercer)
Vice President for Development:
Ray Cywinski, Demarest (Bergen)
Treasurer: **Byron (Gus) Allen**, Tenafly
(Bergen)
Secretary: **Marian Glenn**, Summit
(Union)
Past President: **Chris Allyn**, Harding
(Morris)

Board

Peter Craig, VMD, Holland (Hunterdon)
Russell Dronne, Holmdel (Monmouth)
Francis Faunt, Mannington (Salem)
Priscilla Hayes, Esq., Robbinsville
(Mercer)
Michael Hunninghake, Bordentown
City (Burlington)
Michael Koestler, Harrison (Gloucester)
Cliff Lundin, Esq., Hopatcong, (Sussex)
Cinny MacGonagle, Bloomsbury
(Hunterdon)
Marion McClary, Clifton (Passaic)
Ashley Pengitore, Haledon (Passaic)
Gary Szelc, P.E., Fanwood (Union)
Barbara Vadnais, Morristown (Morris)

Advisory Committee

Kirk Barrett, Ph.D., South Orange
(Essex)
Michele Bellinger, Mays Landing
(Atlantic)
Cynthia Berchtold, Cherry
Hill (Camden)
John Capozucca,
Bloomingdale (Passaic)
Bob Dobbs, Voorhees
(Camden)
Al Dubois, Clifton (Passaic)
Allan Esenlohr, Green
(Sussex)
Leslie Ficaglia, Maurice
River (Cumberland)
Julie Gandy, Evesham
(Burlington)

J. Geoffrey Gollin, Holmdel (Monmouth)
Joy Grafton, Edison (Middlesex)
Blanche Hoffman, Old Bridge (Middlesex)
Cynthia Jacobson, Maplewood (Essex)
Merwin Kinkade, Montclair (Essex)
Blanche Krubner, Jackson (Ocean)
Jan Larson, Dover (Ocean)
Joyce Laudise, Berkeley Heights (Union)
Theresa Lettman, Manchester (Ocean)
Martha Lieblich, Leonia (Bergen)
David Moskowitz, East Brunswick
(Middlesex)
James Sherman, Esq., Montclair (Essex)
Sandy Siegel, Maywood (Bergen)
Peg Van Patton, Hillsborough (Somerset)
Herbert Wegner, Pittsgrove (Salem)
Nancy Wysocki, Haworth (Bergen)

ANJEC Staff

Sandy Batty, Executive Director
Kerry Miller, Assistant Director
Karen Buchanan, Financial Manager
Ann Marchioni, Development Director
Michele Gaynor, Resource Center
Steve Carroll, Resource Center Volunteer
Sally Dudley, Web Site Director
Ann Campbell, Web Site Volunteer
Elizabeth Ritter, Office Manager
Deborah Tomb, Administrative Assistant
Virginia Citrano, ANJEC Forum Volunteer
Stephanie Seidmon, Resource Center
Volunteer

ANJEC Project Directors

Candace Ashmun, Environmental
Summit
Kerry Margaret Butch, Urban
Initiative
Julie Lange Groth, Sustainable
Communities
David Peifer, Highlands
Jody Carrara, Coastal
Planning
Cheryl Reardon, South
Jersey Bayshore



Setting sail to protect the Bayshore

Congressman Frank A. LoBiondo and members of his staff joined the South Jersey Bayshore Coalition (SJBC) for a sail aboard the AJ Meerwald on August 30th, departing from Utsch's Marina in Cape May. Mother Nature provided a picture perfect day to appreciate the beauty and significance of the South Jersey Bayshore.

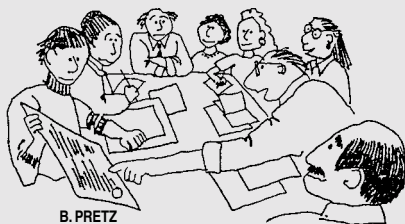
During the sail, representatives of the SJBC's 17 environmental, conservation, and educational member organizations identified specific projects and goals with Congressman LoBiondo, and discussed Federal initiatives needed to protect the Bayshore's watershed in order to sustain its globally unique resources. A high priority for the Coalition, which is coordinated by ANJEC, is Federal legislation needed to fund a feasibility study for the Bayshore's watershed to be considered for National Heritage Area designation. 🌿



Congressman Frank A. LoBiondo and Meghan Wren, Director of Bayshore Discovery Project raising sail. Photo by Jane Galetto

Environmental Commission Training Coming

ANJEC's annual training course on effective operations and activities is a must for new commissioners and a good refresher for more experienced members. Offered at three different locations in March 2011, these single-session workshops will include commission responsibilities and powers, tools and methods for protecting local natural resources and fostering sustainable communities.



Check www.anjec.org or call 973-539-7547 for dates and locations, and for other ANJEC workshops.

ANJEC depends on our business members to help pay for the cost of printing the *ANJEC Report*. Please let them know that you saw their ad here. Remember, however, that ANJEC does not necessarily endorse any of these firms.

GET EDUCATED ON ENERGY SAVINGS

Energy efficiency upgrades don't need to break your facility's budget. In fact, they may barely make a dent.

FINANCIAL INCENTIVES AVAILABLE

New Jersey's Clean Energy Program™ offers an extensive array of comprehensive plans that make energy efficiency more accessible than ever. You'll save up front through sizeable financial incentives and down the line with considerably reduced utility bills.

To get your share, visit NJCleanEnergy.com/MUNI or call 866-NJSMART to speak to a representative.



NJ SmartStart Buildings® is a registered trademark. Use of the trademark without permission of the NJ Board of Public Utilities is prohibited.

ANJEC depends on our business members to help pay for the cost of printing the *ANJEC Report*. Please let them know that you saw their ad here. Remember, however, that ANJEC does not necessarily endorse any of these firms.

HEYER, GRUEL & ASSOCIATES
Community Planning Consultants

236 Broad Street
Red Bank, NJ 07701

Tel 732 741 2900
Fax 732 741 2929

mail@hgapa.com


www.hgapa.com



Ecological ES Solutions

**Consulting services for the conservation community
Assessment, Planning, Stewardship, Research**

Michael Van Clef, Ph.D.
9 Warren Lane, Great Meadows, NJ 07838
Telephone: 908-528-6674, Fax: 908-637-4448
E-mail: mvanclef@hotmail.com
www.njecologicalsolutions.com



RTP
Environmental Associates, Inc.

**AIR • WATER • SOIL • SOLID
WASTE
CONSULTANTS**

239 US Hwy 22 East (732) 968-9600
Green Brook, NJ (732) 968-5279
New Jersey 08812 www.rtpenv.com

Donald F. Elias
A. Roger Greenway

DENNIS W. HUDACSKO
Zoning & Planning Consulting

Community Character & Scenic Protection

135-2 Cowperthwaite Road (908) 781-5610
Bedminster, NJ 07921 zoningexpert@verizon.net
http://mysite.verizon.net/hudxo2/

BANISCH
ASSOCIATES, INC.

*Conserving Resources and
Renewing Community since 1976*

111 Main Street, Flemington, NJ 08822
908.782.0835 www.banisch.com

Don't Miss Out!

If we don't have your current email address, you could be missing valuable information from ANJEC.

With increasingly tight budgets, and mailing costs on the rise, ANJEC will be depending more and more on email to share late-breaking environmental news, announcements about trainings and events, and other developing information of interest to local environmentalists. To make sure you're in the loop, **send your current email address to info@anjec.org.**

**OPEN SPACE & NATURAL RESOURCE
PLANNING SERVICES FOR LOCAL
GOVERNMENTS...**



DELAWARE VALLEY
dvrpc
REGIONAL
PLANNING COMMISSION

Suzanne McCarthy
Manager of Environmental Planning
215-238-2934
smccarthy@dvrpc.org



Janine G. Bauer, Esq.
jbauer@szaferman.com

*Representing Public Entities in
Environmental Matters Since 1986*

**Szaferman
Lakind** Szaferman, Lakind, Blumstein,
Blader & Lehmann, P.C. Attorneys at Law

101 Grovers Mill Road, Suite 104, Lawrenceville, NJ 08648
Tel: 609.275.0400 • Fax: 609.275.4511 • www.szaferman.com

ANJEC depends on our business members to help pay for the cost of printing the *ANJEC Report*. Please let them know that you saw their ad here. Remember, however, that ANJEC does not necessarily endorse any of these firms.



PROFESSIONAL ENGINEERING

- Hydrology & Hydraulic Studies
- Site Plans & Subdivisions
- Expert Testimony

ENVIRONMENTAL CONSULTING

- Environmental Impact Statements
- Wetland Studies
- Flood Plain Studies
- Natural Resource Inventories
- Site Evaluation Studies
- Permits
- Phase 1 Audits
- Expert Testimony

PROFESSIONAL LAND USE PLANNING

- Community Master Plans
- Zoning and Land Development Ordinances
- Environmental Ordinances
- Expert Testimony
- Environmental Land Use Mapping

John A. Thonet, PE, PP, *President*
 14 Upper Kingtown Road
 Pittstown, NJ 08867
 908.238.0473 • Fax: 908.238.9164
www.thonetassociates.com

AMY S. GREENE ENVIRONMENTAL CONSULTANTS, INC.

Put Our Knowledge of the Environment to Work for You!

- ENVIRONMENTAL RESOURCE INVENTORIES**
- WETLAND DELINEATIONS ~ GREENWAYS PLANS**
- POND & STREAM RESTORATION**
- VEGETATION/WILDLIFE SURVEYS ~ GIS MAPPING**
- OPEN SPACE STEWARDSHIP PLANS**

4 Walter E. Foran Blvd., Ste 209, Flemington, NJ 08822
 908-788-9676 Fax 908-788-6788
 Email: mail@amygreene.com www.amygreene.com

Environmental Liability Management, Inc



Environmental Engineering, Planning, and Risk Management Consultants since 1989

www.exploreELM.com

BARTLETT.

BECAUSE FULL, HEALTHY TREES MAKE FOR FULL, HEALTHY LIVES.



BARTLETT TREE EXPERTS

SCIENTIFIC TREE CARE SINCE 1967



For the life of your trees.

PRUNING FERTILIZATION PEST & DISEASE MANAGEMENT REMOVAL
 CALL 877 BARTLETT 877.227.8538 OR VISIT BARTLETT.COM

Hatch Mott MacDonald
 consulting engineering

Headquarters: Millburn, NJ
 offices across North America

800.832.3272
www.hatchmott.com

ECO SYSTEMS

Environmental Consultants

Thomas D'Angelo

17 Indian Terrace
 Lafayette, NJ 07848
 973-875-8585
 Fax: 973-875-8080



Environmental Impacts • Resource Inventories
 Grants • Wetlands

**Thanks to ANJEC
Corporate Silver Member
Church & Dwight Co., Inc.**
And
**ANJEC Corporate Donor
Bristol-Myers Squibb Company**

ANJEC depends on our business members to help pay for the cost of printing the *ANJEC Report*. Please let them know that you saw their ad here. Remember, however, that ANJEC does not necessarily endorse any of these firms.



THE DOGGETT CORPORATION

ROGER D. MELICK

Tel 800-448-1862 ■ 908-236-6335 Fax 908-236-7716
melickr@cs.com

Lebanon, New Jersey 08833 Modesto, California 95354



**Watershed Assessment & Restoration
Environmental & Biological Assessments
Environmental Modeling Studies
Stormwater & Wastewater Management
Energy Efficiency & Renewable Energy**

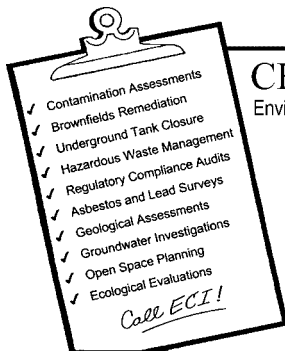
James F. Cosgrove, Jr., Principal
Research Park, 321 Wall Street, Princeton, NJ 08540-1515
Tel: (609) 924-8821x111 Fax: (609) 924-8831
JCosgrove@Omni-Env.com

Princeton Hydro **pH**

Providing
**Experience, Expertise,
Excellence**
for all your **Water, Soil** and
Natural Resource needs.

www.PrincetonHydro.com
info@PrincetonHydro.com
t. 908.237.5660
f. 908.237.5666

— Founded in 1998 —
12 Years of Excellence



- ✓ Contamination Assessments
- ✓ Brownfields Remediation
- ✓ Underground Tank Closure
- ✓ Hazardous Waste Management
- ✓ Regulatory Compliance Audits
- ✓ Asbestos and Lead Surveys
- ✓ Geological Assessments
- ✓ Groundwater Investigations
- ✓ Open Space Planning
- ✓ Ecological Evaluations

Call ECI!

CHECK with the experts

Environmental professionals serving government, commercial and industrial clients since 1980.



Environmental Compliance, Inc.

101 Mt. Bethel Road, Warren, NJ 07059
PROFESSIONAL SCIENTISTS AND ENGINEERS

For a free consultation contact John Jimenez or Joseph Torlucci

(908) 754-1700

web site www.eci-nj.com

e-mail: j.jimenez@eci-nj.com



ASSOCIATION OF NEW JERSEY
ENVIRONMENTAL COMMISSIONS

P.O. Box 157
Mendham, NJ 07945

Non Profit Org.
U.S. Postage
P A I D
West Caldwell, NJ
Permit No. 195