

ENVIRONMENTAL SYNOPSIS

The Chairman's Corner

Rep. Scott E. Hutchinson, Chairman

Spring is upon us and with its colorful blossoms and green leaves, forest pests are also beginning to make their presence felt – again – in Pennsylvania.

Because of the potential damage that forest pests can wreak on the commonwealth's woodlands and the damage that is already being done, I recently wrote to Pennsylvania's congressional del-

egation urging congress' support for increased funding in Fiscal Year 2009 for the USDA Animal and Plant Health Inspection Service (APHIS) Emerging Plant Pests program.

The Joint Legislative Air and Water Pollution Control and Conservation Committee (Committee) offers a unique perspective in regard to forestry pests. The Committee has overseen a Legislative Forestry Task Force (Task Force) for many years. The Task Force conducts continuing research projects on a variety of forestry-related issues, utilizing forest and forestry experts at the state, national and international levels. In 2007, the Task Force conducted a study of the impact of forest pests in Pennsylvania.

The Committee and the Task Force share the concerns of such organizations as the Pennsylvania Landscape and Nursery Association, the Pennsylvania Forest Products Association and The Nature Conservancy that Pennsylvania's valuable forest resources are at risk from the introduction of damaging insects and diseases not native to the Commonwealth, which can cause billions of dollars in destruction and alter the forest ecosystem. The Task Force's study has shown that there are several recent and serious threats, in which forest pests have either already been detected in Pennsylvania, or are on our

doorstep. A recent Pennsylvania Bureau of Forestry survey reports that 32 insects and five pathogens were reported in the commonwealth. In order to prevent the further spread of these insects and pathogens, prompt action is needed.

The Task Force issued a series of recommendations in regard to forest pests as part of its most recent report. Many of the report's recommendations were aimed at the state and local levels, but the Task Force did speak loudly and clearly in regard to federal action regarding forest pests. That recommendation read:

"Congress should fund the USDA's APHIS and Emerging Plant Pest programs consistently and adequately to make them more effective tools for managing and eradicating invasive species."

In that regard, a sharp and substantial increase in funding is necessary in order to ensure adequate support for eradication and control efforts targeting the Emerald Ash Borer (confirmed in Pennsylvania), Asian Longhorned Beetle, Sudden Oak Death pathogen, and Sirex Woodwasp (confirmed in Pennsylvania). All four foreign and invasive species threaten trees in Pennsylvania's and our nation's forests and communities.



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NOTES FROM THE DIRECTOR

CRAIG D. BROOKS, EXECUTIVE DIRECTOR

The Environmental Protection Agency (EPA) recently published draft guidelines for those applicants preparing grant proposals for brownfields site assessments. The proposed guidelines will promote community involvement and flexibility and represent a marked improvement from current guidelines. One of the major changes will allow communities to form coalitions and apply for larger grants. This would enable communities to pool their resources in applying for and monitoring assessment grants, target smaller communities and encourage better regional planning.

Under current assessment guidelines, local authorities may apply for up to \$200,000 in federal funds to be used as seed money to attract developers to redevelop brownfield sites. The proposed change will allow three or more communities to join together in applying for an assessment grant of up to \$1 million. This is now only allowed for revolving loan fund applicants, not for those applying for assessment grants. This means that sister communities will be able to pool their talents and that grant money can be spread out over larger areas. In addition, some small communities with limited staffs will now be able to apply for such grants.

Changes in guidelines for grant proposals for brownfields assessments will allow communities to join together and seek larger grants

While the change will not affect EPA funding limits, it will provide communities with more planning flexibility. Not only will it have the potential to foster greater regional planning but also to make for more efficient use of the financial resources.

EPA's brownfields program provides funds to empower states, communities, tribes and nonprofit organizations to prevent, inventory, assess cleanup and reuse brownfield sites. Total estimated funding expected to be available for assessment, revolving loan fund

and cleanup competitive grants for fiscal year 2009 is approximately \$72 million. The law requires EPA to spend 25 percent of the amount appropriated for brownfields grants on sites contaminated with petroleum.

A brownfield site is real property for which the expansion, redevelopment or reuse may be complicated by the presence or potential presence of hazardous substances, pollutants, contaminants or petroleum products. Mine-scarred lands can also qualify for brownfields appropriations.

EPA estimates that it will award approximately 200 cooperative agreements and has said that approval of grants will be based on whether the property will protect human health and the environment, or enable the property to be used for parks, greenways or similar recreational or nonprofit purposes. In addition to the direct costs associated with the assessment, inventory and planning for a brownfields site, a local government may use up to 10 percent of its grant funds for certain other activities. They include:

- health monitoring of populations exposed to hazardous substances, pollutants or contaminants from a brownfields site;
- monitoring and enforcement of institutional controls used to prevent human exposure to any hazardous substances from the site;
- and related program development and implementation to oversee the assessment and cleanup of the site.

In addition, local governments will be able to spend a portion of the brownfields grants for loans to purchase environmental insurance or pay costs associated with program management. The grant funds cannot be used for administrative costs such as recordkeeping and retention and financial management systems and audits.

Facilities listed or proposed to be listed on EPA's National Priorities List are not eligible for brownfields funding and applicants must demonstrate in the application process that they are not a liable party in the contamination of the site.

RESEARCH BRIEFS

Each month, the committee's staff researches and prepares a number of "briefs" on several topics relevant to the Joint Conservation Committee's mission. Very often, these briefs include references to reports and further research on the topics so that readers may pursue issues on their own.

Will Climate Change Devastate Coastal Property Insurance?

— Tony M. Guerrieri, Research Analyst

Three years after Hurricane Katrina, state governments along the Gulf Coast and in other storm-prone areas of the country are facing a fundamental problem: how to keep business and homeowners insurance available and affordable in places deemed riskier all the time. According to a report by the advocacy group Environmental Defense, since Hurricane Katrina, private insurers have ratcheted up premiums for coastal homeowners or turned away new customers in areas where costly seaside development continues. Those policies are based on forecasts of more intense and frequent hurricanes and projected losses from growing development, which is becoming ever more luxurious and costly to replace.

The report, "*Blown Away: How Global Warming Is Eroding the Availability of Insurance Coverage in America's Coastal States*", examines the impact of hurricane-driven insurance premiums in nine Gulf of Mexico and Southeast Coast states (Florida, Louisiana, Texas, Mississippi, Alabama, Georgia, North and South Carolina, and Virginia). Insurance providers have dropped policies not only in hurricane-battered places along the Gulf, but in New York and other Northern states where hurricanes are less common but still a threat. The densely populated Northeast Corridor is becoming a growing concern for insurers who claim that hurricanes there would cause even bigger losses.

Nationwide, insurance premiums have risen an average of 46 percent between 2001 and 2006. This is partly due to higher real estate values, but the report suggests that increased risk from natural disasters, hurricanes, in particular, also plays a significant role. The following are among the report's findings regarding what has happened with premiums between 2001-2006:

- **Alabama** - Some premiums for homes along the coast rose more than ten-fold;
- **Florida** - Average homeowner policies increased by 77 percent, more than any other state;
- **Louisiana** - Home insurance premiums rose

- 65 percent, ranking the state fifth in the nation for rising homeowner costs;
- **Mississippi** - Average homeowner premiums climbed 63 percent, ranking the state 6th in the nation for increases;
- **South Carolina** - Homeowner premiums climbed an average of 56 percent;
- **Virginia** - Premiums have climbed an average of 67 percent, ranking the state among the top five for biggest premium increases; and
- **Texas** - Average premiums increased more than 50 percent.

And these increases are just averages. In many high-risk coastal areas, rates have tripled or quadrupled. For example, in Miami Beach, rates increased 500 percent between 2002 and 2006. In Alabama, the insurance premium for a 35-unit beachfront condominium building went up more than ten-fold, from \$35,000 to \$424,000.

The impacts of Hurricane Katrina are still being felt in the insurance industry...and not only in the Gulf Coast

Premiums are rising because risks are rising. Hurricane Andrew in 1992 caused \$26.5 billion in damages and pushed 12 insurance companies into insolvency. There were no major hurricanes for a while, so beachfront home buildings grew. Then in 2004, hurricanes Charley, Frances, Ivan, and Jeanne caused \$40 billion in damages with \$22.5 billion insured losses. That was bad enough, but 2005 saw hurricanes Katrina, Rita, and Wilma, which caused more than \$55 billion in insured losses.

The report warns that when insurance companies are not allowed to raise their rates enough to cover their risks, or when they are unable to buy enough "reinsurance" (insurance for insurance companies) to protect themselves, they simply stop writing policies. For example:

- Allstate, one of the nation's largest insurance

providers, no longer offers coverage to 40,000 coastal homeowners in New York. In Florida it shed 320,000 policies and no longer writes new policies statewide. It also stopped writing coverage in coastal areas of Texas, Louisiana, and Mississippi, and stopped covering wind damage in Texas.

- Nationwide Mutual stopped writing new homeowners' policies in Long Island, cancelled 35,000 policies in Florida, and requested a 71 percent increase in Florida homeowner rates. It also cut back on policies along the coast of Maryland and Virginia.
- State Farm is writing fewer policies all along the coastal U.S., and stopped coverage in five Florida counties.

Under pressure from residents who can no longer find affordable homeowners insurance - or any homeowners insurance for that matter - states are scrambling to fill the void left by private firms. In some cases, state-run insurance companies act as "insurers of last resort." But what incentive do homeowners have to move or retrofit (build on stilts, for instance) when they enjoy taxpayer subsidized premiums?

Some believe the federal government might be called upon in the event of severe losses. Washington, D. C. is already taking on additional risk through the National Flood Insurance Program. Under that program, insurance agents sell special government-backed policies that cover water damage from floods, including hurricanes. However, according to the report, outsized claims from hurricanes Katrina and Rita in 2005 helped push the program into \$17.5 billion of debt.

To download a copy of the 27-page Environmental Defense report, "*Blown Away: How Global Warming Is Eroding the Availability of Insurance Coverage in America's Coastal States*", log on to http://www.edf.org/documents/7301_BlownAway_insurancereport.pdf.

Report Shows Manufacturers Spent Billions on Pollution Abatement

– Craig D. Brooks, Executive Director

U.S. manufacturers spent more than \$26 billion in 2005 to make capital improvements to address pollution and for ongoing operating costs of pollution prevention and treatment, a recent Census Bureau report suggests. Capital expenditures – spending to install pollution controls - totaled \$5.9 billion, while operating costs, which include spending on labor, energy and materials, amounted to \$20.7 billion.

The report, "*Pollution Abatement Costs and Expenditures: 2005*", is the latest in a series of Census Bureau reports dealing with corporate spending on pollution prevention and treatment.

The *Pollution Abatement Costs and Expenditures* (PACE) survey, on which the report is based, was conducted regularly in the manufacturing sector from 1973 until 1994, but only twice since then, in 1999 and 2005. The report estimates pollution abatement costs broken down by type of medium such as air, water or solid waste. It also estimates cost by abatement activity, including treatment, prevention, recycling and disposal, and includes permits, fees, site cleanup and product design. The data in the report is from the 2005 PACE survey conducted by the Census Bureau under a joint partnership agreement with the Environmental Protection Agency. The report also contains information by state and industry sector.

Wonder what the manufacturing sector has been spending in pollution prevention and treatment? The "PACE" survey provides some insight

According to the report, pollution abatement expenditures amounted to \$5.9 billion in 2005. Of this total, more than \$3 billion was spent to treat and capture pollution and more than \$2 billion was attributed to pollution prevention. The remaining expenditures were attributed to recycling and disposal. Of the \$20.7 billion operating costs, \$8.6 billion was attributed to air emissions abatement, \$6.7 billion to water discharge abatement and \$5.3 billion to solid waste abatement. These operating costs included salaries, wages and benefits, as well as the purchase of materials and supplies, contract work, leasing and other purchased services.

The industries with the highest capital expenditures in 2005 were the petroleum and coal products industries with \$1.7 billion and chemical manufacturing with \$1.2 billion. The industries with the highest operating costs in 2005 were the chemical manufacturers with \$5.2 billion, followed by the petroleum and coal products industry with \$3.7 billion.

The states with the highest capital expenditures in 2005 were Texas with \$2.1 billion and Louisiana with \$488 million. The states with the highest operating costs were Texas with \$2.6 billion and California with \$1.8 billion.

However, the National Association of Manufacturers (NAM) suggests that the estimates in the report are too low and do not capture the total burden for manufacturers to comply with environmental regulations. NAM estimated total costs of compliance with environmental rules at \$69 billion in 2000 and calculated that figure rose to \$77 billion in 2004.

The survey includes approximately 20,000 plants classified in manufacturing industries and excludes plants with fewer than 20 employees.

More information on the PACE survey, including the *"Pollution Abatement Costs and Expenditures: 2005"* report is available at <http://www.census.gov/prod/2008pubs/ma200-05.pdf>.

Building Green May Be Cheapest Way to Slow Climate Change

- Tony M. Guerrieri, Research Analyst

Promoting the green design, construction, renovation and operation of buildings could cut North American greenhouse gas emissions that are fueling climate change more deeply, quickly and cheaply than any other available measure, according to a report by the tri-national Commission for Environmental Cooperation (CEC). The report, *"Green Building in North America: Opportunities and Challenges"*, also looks at other environmental benefits to green building and its potential to improve worker health and productivity.

Every year, the energy used by buildings in North America causes more than 2.2 billion tons of carbon dioxide to be released into the atmosphere, about 35 percent of the continent's greenhouse gas pollution output. The report says simply constructing more energy efficient buildings – and upgrading the insulation and windows in the existing ones – could save 1.7 billion tons by 2030, compared to a business-as-usual approach. A cut of that size would nearly equal the carbon dioxide emitted by the entire U.S. transportation sector in 2000.

According to the CEC report, in Canada, Mexico, and the United States, commercial and residential building operations account for about 20, 30, and 40 percent of the primary energy consumption, respectively. They typically also account for 20 to 25 percent of the landfill waste and five to 12 percent of the water consumption. The United States Green Building Council estimates that green building, on average, currently reduces energy use by 30 percent, carbon emissions by 35 percent, water use by 30 to 50 percent, and generates waste cost savings of 50 to 90 percent.

Examples of green building strategies include high-tech practices such as fluorescent lighting, geothermal heating, photovoltaic cell arrays and solar chimneys, and on-site cleaning and reuse of wastewater, as well as low-tech solutions such as green roofs, increased use of fresh air and natural light, and improved insulation.

Despite proven benefits, green building today accounts for only a small fraction of new construction

It is common now for more advanced green buildings to routinely reduce energy usage by 50 percent over conventional buildings, with the most efficient buildings now performing more than 70 percent better than conventional properties, according to the report. Despite proven environmental, economic and health benefits, however, green building today accounts for only a small fraction of new home and commercial building construction. Green buildings represent only two percent of the new commercial building market, less than one-half of one percent of the residential market in the United States and Canada, and less than that in Mexico.

Green buildings use less water, create less waste and are healthier for people and their productivity, boosting the benefits to governments and society as a whole. The annual cost of building-related sickness is estimated to be \$58 billion in the U.S., the report found. Green building has the potential to generate an additional \$200 billion annually in worker performance in the United States by creating offices with better indoor quality.

The CEC report identifies some barriers to green building, such as: split incentives (developer versus owner, owner versus occupant, etc.), higher perceived or actual first costs, various risks and uncertainties, lack of experienced workforce, lack of coordination and consistency in government policies affecting green buildings, and the lack of research investments.

The report recommends ways to accelerate the market uptake of green building and make it the standard practice for all new construction and renovation of existing buildings in North America. Among its recommendations, the report calls upon North American government, industry and non-governmental leaders to:

- Create national, multi-stakeholder task forces charged with achieving a vision for green building in North America;
- Support the creation of a North American set of principles and planning tools for green building;

- Set specific targets to achieve the most rapid possible adoption of green building in North America, including aggressive targets for carbon neutral or net zero-energy buildings, together with performance monitoring to track progress toward these targets;
- Enhance ongoing or new support for green building, including efforts to promote private sector investment and proper valuation methods; and
- Increase knowledge of green building through research and development, capacity building, and the use of labels and disclosures on green building performance.

The CEC was established by Canada, Mexico and the United States under the North American Free Trade Agreement to address continent-wide environmental issues. A copy of the 80-page CEC report, *“Green Building in North America: Opportunities and Challenges”*, is available at http://www.cec.org/files/PDF//GB_Report_EN.pdf.

EPA Addresses Climate Change Effects on Water

– Craig D. Brooks, Executive Director

The Environmental Protection Agency (EPA) has made available a preliminary report of the *“National Water Program Strategy: Response to Climate Change”*, which represents the National Water Program’s (NWP) initial effort to identify and evaluate potential impacts of climate change on clean water and drinking water programs and defines the actions that may be needed to respond to these impacts.

Climate change may have an impact on water resources and affect the programs designed to protect those resources

The NWP is a cooperative effort between federal, state, local and tribal governments to implement water laws such as the Clean Water Act and the Safe Drinking Water Act. They have been charged with protecting and restoring water quality in rivers, lakes and streams and improving the quality of coastal and ocean waters.

According to the report, climate change may have an impact on water resources and affect the programs designed to protect those resources. For example, shorelines are moving as a result of sea level changes, ocean chemistry is being altered in some areas, new patterns of rainfall and snowfall have led to changes in pollution levels, and warming water temperatures have altered aquatic systems.

The report focuses on the potential impacts that climate change may have on water resources and includes a set of five goals that may help with water program adaptation and management. They are:

1. Mitigating greenhouse gas emissions by expanding programs within the National Water Program that are related to carbon dioxide sequestration and supporting responsible operation for water treatment and delivery systems through the use of “best available science and technology”.
2. Assisting states in maintaining water programs and improving their effectiveness with potential climate change.
3. Strengthening the link between EPA water programs and climate change research.
4. Educating water program professionals and stakeholders on climate change impacts on water resources and water programs.
5. Establishing the management capability within the National Water Program to engage climate change challenges on a sustained basis.

There remains significant uncertainty about the exact scope and timing of climate change-related impacts on water resources, but the NWP and its partners are assessing emerging climate change information and evaluating potential impacts of climate change on water programs to best meet clean water and safe drinking water needs.

The report, *“National Water Program Strategy: Response to Climate Change”*, is available at <http://www.epa.gov/water/climatechange/index.html>.

News to Use in the Environmental Synopsis... share it with a friend

The *Environmental Synopsis* is issued monthly.

The newsletter examines timely issues concerning environmental protection and natural resources.

If someone you know would like to receive a copy of the *Synopsis* each month, please contact the Committee office at 717-787-7570.



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ON THE HORIZON . . .

A LOOK AT UPCOMING EVENTS

✓ Monday, June 16, 12 noon, Room 205, Matthew J. Ryan Building, Capitol complex, Harrisburg, PA - Environmental Issues Forum featuring a presentation on the services provided by the Pennsylvania Technical Assistance Program (PennTAP)

Environmental Issues Forums are open to the public. Please call the Committee office at (717) 787-7570 if you would like to attend.

COMMITTEE CHRONICLES . . .

REVIEW OF SOME MEMORABLE COMMITTEE EVENTS

Staff from the Joint Legislative Air and Water Pollution Control and Conservation Committee (Committee) recently visited the Spring Township, Snyder County waste transfer station in north central Pennsylvania to see how the station functioned and learn more about waste collection practices in rural areas. Committee staff was joined by representatives of the Department of Environmental Protection (DEP), Keep Pennsylvania Beautiful (KPB) and PA Cleanways.

The visit to the site, which included a recycling center in addition to a waste transfer facility, was hosted (photo at right) by Spring Township Supervisor Dale A. Bishop (left) and Supervisor Chairman Douglas M. Garrison (center), shown discussing operations with

Committee staffer Tony Guerrieri.

The station serves a wide

area, as much as a 15-mile radius, is open from 9 a.m. to 7 p.m. every Wednesday and has been in operation for about 20 years. There are provisions to accept and properly dispose of bulky items and approximately 40-50 tons of waste a month is hauled away by a private contractor.



The photo above shows the trash compactor which the township was able to purchase at a discount price from a local business.

In the photo at right, the attendees and supervisors posed for a picture in front of the main waste collection facility. From left to right are: PA Cleanways Director Shannon Reiter; DEP's John Lundsted and Todd Pejack; KPB Executive Director Julia Marano; Guerrieri; DEP's Michelle R. Ferguson; Supervisor Bishop; DEP Chief of the Division of Waste Minimization and Planning Larry Holley; and Supervisor Garrison.



Not only do these pests threaten trees as living organisms, but also the economic value of trees as a sustainable resource, one that is worth hundreds of billions of dollars.

In my letter, written on behalf of the Committee, I joined the organizations I mentioned above in urging an appropriation of \$45 million for FY 2009 to slow the expansion of the Emerald Ash Borer and to support research on successful management approaches. The Emerald Ash Borer threatens 12 species of ash across the continent, putting at risk the \$25 billion ash timber industry in the Northeast, street trees across the nation valued at \$20 to \$60 billion, and myriad trees found in our neighborhoods and parks. Pennsylvania forests contain approximately 1.6 billion cubic feet of white ash trees (five percent of total Pennsylvania forest volume), making it one of the more prominent species in the state. Ash is a common commercial timber species in Pennsylvania. Emerald Ash Borer was detected last year in western Pennsylvania, a discovery that led to the imposition of a quarantine on ash materials affecting the counties of Allegheny, Butler, Beaver and Lawrence and a statewide quarantine banning the importation of out-of-state firewood.

I also urged an appropriation of \$30 million for FY 2009 to complete eradication of the remaining populations of the Asian Longhorned Beetle. The Asian Longhorned Beetle threatens hardwood forests, the hardwood timber, maple syrup, and autumn foliage tourism industries dependent on these forests, and street trees across the nation valued at more than \$600 billion. The maple, poplar and ash trees endangered by the beetle are valuable commercial species prevalent in Pennsylvania. Eradication has been successful in Chicago, but populations in New York and New Jersey persist, and sufficient funding to complete eradication is essential.

My letter supported a request for \$10 million in appropriations for FY 2009 to contain a third damaging forest pest, the Sudden Oak Death pathogen (also called the Phytophthora leaf and stem blight pathogen). This disease is a major threat to the nation's nursery industry as it readily attacks species such as rhododendron and other common ornamentals. In addition, it threatens oaks in forests from the west coast to southern New England. Northern Red Oak is the third most abundant tree species in Pennsylvania forests, accounting for roughly 10 percent of forest volume. It is also the backbone of the state's forest products industry and its fruit is a critical source of food for many forest species. The requested funding would be used to update the existing quarantine, increase sampling and testing, and support a pilot project involving nursery regulation and inspection.

The Sirex Woodwasp is now found in four counties in Pennsylvania, and across much of New York State, as well as in Ontario, Canada. The Woodwasp threatens valuable pine timber resources. It is suggested that APHIS receive \$5 million in FY 2009 to implement programs to prevent movement of infested wood and implement biological control programs.

Adequate funding for pest control and eradication is important in part because Pennsylvania's landscape and nursery industry accounts for more than \$5 billion in annual sales, its products industry generates \$11 billion in sales annually, has an economic impact of \$17.5 billion, and the industry employs an estimated 64 thousand people with an annual payroll of \$2.4 billion. Pennsylvania's forests also support a multi-billion dollar recreation and tourism industry, and provide a diverse array of important environmental and quality-of-life benefits, such as the maintenance of biological diversity, carbon sequestration, high quality water resources, and an aesthetically-pleasing landscape.

Action now at the funding levels requested would help ensure that these forest pests do not reach populations so large as to threaten additional trees in our forests and communities, garden nursery stock, and related economic activities and ecological services worth hundreds of billions of dollars.

How to Contact The Joint Conservation Committee

Phone:
717-787-7570

Fax:
717-772-3836

Location:
Rm. 408, Finance Bldg.

Internet Website:
<http://jcc.legis.state.pa.us>

Mail:
Joint Conservation Committee
PA House of Representatives
P.O. Box 202254
Harrisburg, PA 17120-2254

2007 Annual Report Now Available

The Joint Legislative Air and Water Pollution Control and Conservation Committee recently released its 2007 Annual Report, a comprehensive review of the committee's activities for the past calendar year.

You may view the report on the "Reports" page of the committee's website at <http://jcc.legis.state.pa.us>, or call the committee office at 717-787-7570 if you would like a copy.

