



# ENVIRONMENTAL SYNOPSIS

## The Chairman's Corner

Rep. Scott E. Hutchinson, Chairman



**K**ermit the Frog had it right when he said, "It's not easy being green."

Green is a word being used perhaps more frequently today than ever before. That certainly is the case in the halls of government. But its frequent use does not make it any easier to understand, and it does not mean the same thing to all people.

For example, there are green jobs and there are green-collar jobs. Some people use the terms interchangeably, but many do not. There are green buildings, but there are differences of opinion over which certification standards should be used – the LEED standard or perhaps "Green Globes". Words like sustainability and acronyms like LCA (life-cycle assessment or analysis) pepper our conversations, news and e-mails, but sometimes their use is nothing more than "greenwashing." It's enough to upset one sufficiently to become green around the gills.

The semantics of all this green language would be humorous if it were not for the fact that millions (billions, actually) of dollars and millions of jobs are hanging in the balance. Going green is a direction that the federal and state governments are pursuing in order to help the economy rebound, to build a new economy and to bring about environmental change. What is cause for concern is whether there is a clear understanding of what green means and whether a consensus can be built about what green is, so that taxpayer dollars are spent wisely. There are also concerns that traditional Pennsylvania industries (i.e. the timber industry) do not get left behind in a battle over semantics.

At the top of the agenda, what exactly are green jobs and do they differ from green-collar jobs? Do green jobs include only scientists and engineers promoting green industries? Or does it include, for example, factory workers making parts for green equipment, roofers who install a green roof, repairmen at green facilities and hands-on recyclers sorting materials for green re-uses? The term is new enough that even "experts" in the field disagree sometimes. Robert Pollin, co-director of the Political Economy Research Institute at the University of Massachusetts, Amherst, takes it a step further: "There's no such thing; that's my definition," he says. "I'm greatly in favor of investing in things that will promote a

*(continued on page 8)*

### In This Issue...

- **The Chairman's Corner** .....p. 1
- **Notes From the Director** .....p. 2
- **Research Briefs** .....p. 3-6
- ✓ **Pennsylvania's Energy Efficiency Ranking**
- ✓ **Biofuel Pros and Cons**
- ✓ **Goin' Fishin'?**
- ✓ **The Future of Compact Development**
- **On The Horizon** .....p. 7
- **Special Note** .....p. 7



# NOTES FROM THE DIRECTOR

CRAIG D. BROOKS, EXECUTIVE DIRECTOR



The fiscal year 2010 federal appropriations bill for the Environmental Protection Agency would provide a substantial increase in funding for wastewater and drinking water programs and for the cleanup of hazardous sites. The legislation includes \$2.1 billion for the clean water state revolving loan fund program to finance local sewer system improvements, and \$1.38 billion for the drinking water revolving fund program aimed at improving drinking water treatment systems. The measure also includes \$157 million for direct grants to communities for water infrastructure.

In total, the Interior, Environment, and Related Agencies appropriations bill (H.R. 2996), approved by Congress in October 2009 includes \$3.6 billion to repair and replace aging clean water and drinking water treatment systems, an increase of \$2 billion from the previous fiscal year. These programs provide matching grants (80 percent federal; 20 percent state) to states capitalizing their own revolving funds for wastewater and drinking water treatment systems.

The legislation would provide \$1.5 billion for hazardous waste and toxic site cleanup programs, including \$605 million for superfund activities at more than 1,500 of the nation's hazardous waste sites. It would also set spending of \$641 million to protect the nation's great water bodies, including the Great Lakes, San Francisco Bay, Puget Sound and the Chesapeake Bay. The bulk of the funding, \$475 million, would go to the Great Lakes Initiative.

The bill would also impose a number of provisions on how the money could be used. For example, builders and contractors would have to pay prevailing wages on infrastructure projects that use federal revolving loan funds. Unions have praised the prevailing wage provision but contractors have criticized the measure because they say it would drive up the cost of construction. The contractors estimate an increase

of between five percent and 38 percent in the cost of public construction.

Historically, amendments to the 1987 Clean Water Act required prevailing wage to be applied to revolving loan projects through 1994, when the loans were expected to be phased out. States and local authorities could not come up with enough project funding, so Congress has appropriated these funds on an annual basis without the prevailing wage provision. Compromise language has limited the requirement to one year. Some trade associations suggested that their members already pay prevailing wage in their construction projects but were encouraged by the increase in infrastructure funding.

The appropriations bill would also require that a certain share of the funds

be devoted to "green" infrastructure projects and that some allowance for loan forgiveness be made to poorer communities. The spending bill would require that at least 20 percent of the clean water and drinking water revolving funds be used by states to address green infrastructure, water or energy efficiency improvements, or other environmentally innovative actions.

In addition, the legislation would require that states use at least 30 percent of the drinking water revolving funds and 30 percent of the clean water revolving funds to provide additional subsidies to eligible recipients for the forgiveness of principal, or for negative interest loans or grants to communities that cannot afford to pay back conventional loans. The provision only applies to the portion of the clean water revolving funds exceeding \$1 billion.

The provisions for green infrastructure and loan forgiveness of principal are similar to provisions in the \$787 billion economic stimulus bill signed into law in 2009. That bill also contained substantial funding for water infrastructure.

**The federal funding bill for clean water and drinking water systems totals \$3.6 billion – a \$2 billion increase from the previous year**

# 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.

## Scorecard: Pennsylvania Ranks 15th Nationally in Energy Efficiency

-- Tony M. Guerrieri, Research Analyst

States are making the most of energy efficiency as the cheapest, cleanest and quickest of all energy resources, according to a nationwide scorecard on energy efficiency policies, programs and practices from the American Council for an Energy Efficient Economy (ACEEE).

The report, *"The 2009 State Energy Efficiency Scorecard"*, is ACEEE's third edition of its annual state-by-state (including the District of Columbia) ranking on the adoption and implementation of energy efficiency policies. The report aims to recognize leadership among the states and identify best practices.

The scorecard examines six state energy efficiency policy categories: utility and public benefits programs and policies (20 points); transportation policies (eight points); building energy codes (seven points); state government initiatives (seven points); combined heat and power or CHP (five points); and appliance efficiency standards (three points). States are given points in each of the six categories and are ranked on their combined scores out of a possible 50 points. Overall, the report shows that states have shown improvement, with an average score of 17 points, up from 15 points in 2008.

California once again ranked as the state with the most aggressive energy efficiency policies, receiving 44.5 points (the only state with over 40 points). Rounding out the top ten were Massachusetts (39), Connecticut (37.5), Oregon (36.5), New York (34.5), Vermont (33.5), Washington (33), Minnesota (30.5), Rhode Island (27.5) and Maine (26). The top ten states are almost the same as in 2008, except that Rhode Island and Maine bumped Wisconsin (ranked 11th in 2009 with 24 points) and New Jersey (ranked 13th in 2009 with 23 points) out of the top ten.

The next 20 states have scores ranging from a high of 24 points to a low of 14 points. This group includes Pennsylvania whose 15th place ranking remained the same as in 2008, although its overall score increased from 17 points in 2008 to 22 points in 2009.

The Commonwealth excelled in two categories: building energy codes and CHP. Pennsylvania was tied in second place in each category, scoring six out of seven points in the former and four out of five in the latter. Its worst showing was zero on appliance efficiency standards.

Several states made strong moves up in the ranks from 2008 to 2009, including: Maine (up from 19 to 10); Colorado (24 to 16); Delaware (32 to 20); the District of Columbia (30 to 20); South Dakota (47 to 36); and Tennessee (46 to 38). The most improved states are stepping up their efforts in several ways, such as adopting new building energy codes and setting aggressive new energy savings targets, according to the report.

---

**Pennsylvania improved its score by five points in 2009, although it remained at number 15 in the rankings**

---

According to the report, the dubious distinction of being 50th goes to Wyoming. In 2008, Wyoming scored zeros in all energy efficiency categories but in 2009 "improved" to score a single point in the utility and public benefits program category. Meanwhile, North Dakota and Mississippi are in 49th place with 2.0 points each. Other states with the "most need to improve" are: Alabama (3.0), Nebraska (4.5), Alaska and West Virginia (6.0 each), Georgia (6.5), and Arkansas, Missouri and Louisiana (7.0 each).

In addition, there are signs of major efforts some states are making that will be reflected in the 2010 scorecard. For example, Pennsylvania, Michigan, Ohio and Delaware passed legislation in late 2008

---

or the first half of 2009 establishing Energy Efficiency Resource Standards, which set binding energy savings goals for utilities. The ACEEE report also highlights Pennsylvania's Act 129 which requires each electric distribution company to reduce energy consumption by a minimum of one percent by May 31, 2011, and three percent by May 31, 2013. Peak demand must be reduced by 4.5 percent by May 31, 2013 as well.

The ACEEE is a non-profit organization dedicated to advancing energy efficiency as a means of promoting both economic prosperity and environmental protection. The full report is available at: <http://aceee.org/pubs/e097.pdf?CFID=4209147&CFTOKEN=15297175>.

## Report Says Broader Assessment of Biofuels Needed

-- Craig D. Brooks, Executive Director

In 2007, the Energy Independence and Security Act expanded the renewable fuel standard (RFS) which requires increased use of ethanol and other biofuels from nine billion gallons in 2008 to 36 billion gallons in 2022. A report by the Government Accountability Office (GAO) suggests that Congress should require the Environmental Protection Agency (EPA) to conduct a more thorough analysis of the environmental effects of increasing biofuels production and consider changes to a tax credit (the Volumetric Ethanol Excise Tax Credit) designed to help the domestic ethanol industry.

The report, *"Biofuels: Potential Effects and Challenges of Required Increases in Production and Use"*, examines the effects of increased biofuels production on U.S. agriculture, environment and greenhouse gas emissions.

To meet the RFS, domestic biofuels production must increase significantly. But such increases will have uncertain effects for agriculture and the environment, the report says. For agriculture, many experts suggest that biofuels production has contributed to crop price increases as well as increases in prices for livestock and poultry feed, and to a lesser extent, food. This trend may continue as the RFS expands.

For the environment, the report suggests that increased biofuels production could impair water quality by increasing fertilizer runoff and soil erosion. Also, increased production could reduce water avail-

ability and adversely affect wildlife habitat. However, the extent of these effects is unknown and could be mitigated by such factors as improved crop yields, use of conservation techniques and improvements in biorefinery processing.

The Energy Independence and Security Act requires EPA to conduct a lifecycle analysis of each biofuel to assess the greenhouse gas emissions attributable to the fuel, allowing only fuels that reduce greenhouse gas emissions by 20 percent relative to gasoline over their lifecycles to be considered as renewable fuels. That analysis must assess emissions from growing the fuel crop to combustion in a motor vehicle engine. But it does not require an analysis of other environmental effects.

GAO suggests that a strategy is needed to assess a wider range of environmental impacts at all stages of the lifecycle, such as cultivation and harvesting of crops, transport, conversion, storage and use. This would ensure that all relevant environmental effects are considered concurrently with lifecycle greenhouse gas emissions.

---

### The report seeks to better assess the environmental impacts of biofuels production

---

Given the potential for increased biofuels production to further exacerbate existing environmental problems, GAO believes that assessing the viability of a biofuels feedstock will be incomplete without consideration of the related lifecycle environmental effects, the report says.

After 2022, the act requires EPA, in coordination with the departments of Energy and Agriculture, to establish renewable fuel standards based partly on impacts on other things such as air quality, wildlife habitat, water quality and water supply.

The report also suggests that the 45 cent per gallon federal Volumetric Ethanol Excise Tax Credit may no longer be needed. Domestic corn ethanol production has increased and is already near its effective RFS limit of 15 billion gallons per year for conventional ethanol. However, a separate \$1.01 tax credit is available for producing advanced cellulosic ethanol.

The GAO report is available at: <http://www.gao.gov/new.items/d09446.pdf>.

# EPA Study Reveals Widespread Fish Contamination in Lakes and Reservoirs

-- Tony M. Guerrieri, Research Analyst

A report by the U.S. Environmental Protection Agency (EPA) indicates that freshwater fish in about half the nation's lakes and reservoirs are estimated to be contaminated with mercury and toxic chemicals that could lead to serious health risks in human and aquatic life.

The EPA report, *"The National Study of Chemical Residues in Lake Fish Tissue"*, is a four-year national study showing, for the first time ever, the average concentrations of 268 persistent, bioaccumulative and toxic chemicals in American lake fish.

The EPA partnered with 47 states, three tribes and two other federal agencies to collect fish from 500 randomly selected lakes and reservoirs across the nation, including nine in Pennsylvania, ranging in size from 2.5 to more than 900,000 surface acres. The study excluded the Great Lakes and Great Salt Lake. Delaware is the only state in the lower 48 where no fish were tested.

The EPA said the study focused on lakes and reservoirs because they're environments where pollution and runoff easily accumulate. The survey was designed so samples would be representative of all American lakes. Two types of fish were tested per site: predators such as bass and trout, and bottom-dwellers such as catfish, carp and bullhead. The agency says its sample of 486 predators is representative of the situation in an estimated 76,559 lakes, while the sample of 395 bottom-dwellers is representative of an estimated 46,190 lakes.

---

## Nine Pennsylvania lakes were among those included in the study

---

Target chemicals for the study include two metals (mercury and five forms of arsenic). Mercury is both formed naturally in the environment and is also caused by industrial pollution releasing it into the air. It is a heavy metal and toxic to the brain and tissues of the body. When mercury gets into the water, it can be absorbed by aquatic organisms, which are then eaten by fish. The mercury can then build up in the fishes' tissues. When people eat those fish, they also consume the mercury.

The study also tested for more than 150 forms of polychlorinated biphenyls, or PCBs, toxic compounds that for years were used in the nation's electrical transformers and elsewhere. Other chemicals included 17 dioxins and furans (volatile chemicals), 46 pesticides, and 40 other semi-volatile organic compounds. The study sought to address concerns about recreational and subsistence anglers eating freshwater fish caught in lakes. These are fish whose good health properties may be negated if laced with mercury or other contaminants.

Of the 268 chemicals, mercury and PCBs were detected in all the fish samples collected. Dioxins and furans were found in 81 percent of the predator fish samples and 99 percent of the bottom-dweller samples. Other findings highlighted in the report include:

- **Mercury was detected most frequently; 49 percent (36,422) of the sampled lakes had fish with mercury tissue concentrations that exceeded the 300 parts per billion human health standard for mercury.**
- **About 17 percent (12,886) of the sampled lakes had fish with total PCB tissue concentrations that exceeded the 12 parts per billion human health standard.**
- **7.6 percent (5,856) of the sampled lakes had fish with dioxin and furan tissue concentrations that exceeded the 0.15 parts per trillion human health standard.**
- **1.7 percent (1,329) of the sampled lakes had fish with DDT tissue concentrations that exceeded the 69 parts per billion human health standard.**
- **0.3 percent (235) of the sampled lakes had chlordane tissue concentration that exceeded the 67 parts per billion human health standard.**

In Pennsylvania, fish were tested at nine sites: Crooked Creek Lake in Armstrong County; Frances Slocum State Park Lake in Luzerne County; Keystone Lake in Westmoreland County; Lake Sabula in Clearfield County; Pike Lake #3 in Pike County; Shenango River Lake in Mercer County; Whitney Lake in Wayne County; and two unnamed lakes in Franklin and Bradford counties. Since the report does not provide specific data on the Pennsylvania lakes samples, the public should follow the statewide advisories for all freshwater fish.

The "snapshot" of data from the study provides a starting point for measuring the success of efforts to clean up the nation's freshwater bodies. The data

also allows EPA to focus on areas of particular concern for chemical pollution, especially mercury and PCBs.

The 242-page EPA report is available at: <http://www.epa.gov/waterscience/fish/study/data/final-report.pdf>.

## NAS Panel Calls for “Compact Development”

-- Craig D. Brooks, Executive Director

Policies to promote more compact land development would reduce automobile use, energy consumption and greenhouse gas emissions, and should be encouraged, according to a report by the National Academy of Sciences (NAS). According to the report, *“Driving and the Built Environment: The Effects of Compact Development on Motorized Travel, Energy Use and CO2 Emissions”*, compact, mixed use development - individuals living in denser environments with jobs and shopping close by - could reduce the number of vehicle miles traveled by shortening trip lengths and by making walking, biking and public transit more viable alternatives to driving.

According to the report, approximately 80 percent of the U.S. population now lives in metropolitan areas, but population and employment are increasingly becoming decentralized. Transportation on U.S. roads and highways totaled approximately three trillion vehicle miles traveled in 2007 and consumed about 176,000 million gallons of gasoline. Gasoline consumption accounts for about 20 percent of the carbon dioxide emissions in the U. S.

Compact development could reduce vehicle miles traveled by 25 percent and reduce greenhouse gas emissions by 7 - 8 percent by 2030, and 8 - 11 percent by 2050. This would occur if 75 percent of new development is compact. If 25 percent of new development is compact, it would cut driving by 12 percent and would reduce greenhouse gas emissions by one percent above baseline emissions in 2030, and between 1.3 - 1.7 percent by 2050.

Compact development can encompass the following:

- **Cluster Development** - Produces attractive and marketable communities that allow building lots to be grouped on certain portions of a site, rather than spread uniformly across a site, leaving areas of open space. This type of development is often difficult in many localities.

- **Higher Density Development** - Uses land by building more homes on smaller land lots. This could include single family homes on smaller lots or attached homes or apartment buildings.

- **Mixed Use Development** - Can produce diverse and convenient communities with the added benefit of reducing traffic. By integrating different uses such as residences, offices and shopping, many daily vehicle trips can be eliminated or reduced in length.

- **Traditional Neighborhood Developments** - A type of community that mixes uses and housing types to create a form of small town where communities are built for walking and biking, and ideally allows residents to walk to shops, schools and transit stops.

According to the report, there are a number of obstacles standing in the way of compact development in the U.S. Compact development initiatives could meet resistance from local authorities responsible for zoning regulations, and existing homeowners are often at odds with the idea of compact development due to concerns about congestion, local taxes, and home values. In addition, adopting compact housing development would likely require changes in housing preferences, public infrastructure and transit, and a greater regional control of land use.

In spite of the obstacles, the report recommends encouraging mixed use development and setting an ambitious goal to address the contribution such plans could make to the nation’s environment and economy.

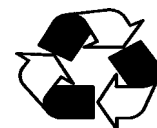
The report was compiled by the National Academy of Sciences’ Transportation Research Board and is available at: <http://nationalacademies.org/morenews/20090901a.html>.

### 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.



**Printed on  
Recycled  
Paper**

# ON THE HORIZON . . .

A LOOK AT UPCOMING EVENTS

✓ Monday, February 8, 2010, 12 noon, Room 205, Matthew J. Ryan Building, Capitol Complex, Harrisburg, PA – Environmental Issues Forum – Company officials from Regupol America of Lebanon, PA will offer a presentation on Regupol America’s state-of-the-art rubber recycling and manufacturing operation.

✓ Thursday, March 25, 2010, 10:00 a.m., Celebration Hall, 2280 Commercial Boulevard, State College, PA - Legislative Forestry Task Force Meeting

✓ Monday, April 19, 2010, 12 noon, Room G-50, K. Leroy Irvis Building, Capitol Complex, Harrisburg, PA – Environmental Issues Forum – PA Cleanways and the Center for Rural Pennsylvania will provide an Earth Day program focusing on PA Cleanways’ statewide illegal dumping survey and survey analysis, as well as plans for the Great American Cleanup.

Please call the Committee office at 717-787-7570 if you plan to attend the events.

Also, check the Committee website at <http://jcc.legis.state.pa.us> for events that may be added to the schedule.

## SPECIAL NOTE . . .

### Don't Forget...We Want to Hear From You Updating the Rolls...Mail, E-mail or Website???

As we did in December, we continue to review the Environmental Synopsis mailing list and take one more opportunity to remind readers of electronic options available to them to receive the Synopsis. For many, last month’s notice may have gotten lost in the year-end holiday shuffle.

If readers would like to change the method in which they receive the Synopsis from mailed hard copy to an e-mailed electronic version (or vice versa), **and have not already contacted our office**, please contact Lynn Mash in the Committee office either at 717-787-7570, or e-mail Lynn at [lmash@jcc.legis.state.pa.us](mailto:lmash@jcc.legis.state.pa.us) requesting to be removed from one list and added to the other. Remember to provide your e-mail address if necessary.

Readers who wish to report address changes or wish to simply be removed from the mailing (or e-mail) list, and have not already done so, should also contact Lynn.

Readers are also reminded that the Synopsis is available on the Committee website each month after the Synopsis’ printing and distribution. The website address is <http://jcc.legis.state.pa.us>.

For readers’ convenience, you may request an advisory e-mail be sent to you each month letting you know when the Synopsis has become available on the website, rather than you having to check when the latest edition has been posted. For that option, please contact Lynn, and provide your e-mail address when doing so.

Thank you to those readers who have already contacted our office.



clean environment...and those investments will all create jobs, and I don't really care what color they are."

Raquel Pinderhughes, a professor of urban studies at San Francisco State University, believes green jobs to be a catch-all term for people doing any kind of work that relates to improvements in environmental quality. But she also believes "green-collar" jobs are a subset of that group and says the term refers to specific manual labor opportunities open to low-skilled workers in green industries like waste composting, recycling collection and bicycle repair. She states, "The idea that there are certain entry-level positions people can be trained up for relatively quickly is a very important idea."

Still another school of thought is that espoused by Phil Angelides with the Apollo Alliance, a coalition of business, labor and environmental groups championing green employment. His definition? "It has to pay decent wages and benefits that can support a family. It has to be part of a real career path, with upward mobility. And it needs to reduce waste and pollution and benefit the environment."

All that is fine as far as it goes, but how then does government determine what green projects get funding, and how does government determine how many of the jobs that might be created are truly green? Accountability in funding and job creation is a must. After all, the Obama administration is talking about a \$150 billion investment and five million "green jobs" over 10 years.

---

**To learn more about greenwashing and see examples of it, check out the websites [www.greenwashingindex.com](http://www.greenwashingindex.com) and [www.terrachoice.com](http://www.terrachoice.com)**

---

And what of those who would "greenwash" their way into siphoning off money from the burgeoning green economy? Greenwashing is the making of false or misleading claims that a product or process is beneficial to the environment when the truth is something else again. There is a "greenwashing index" on the Internet on which consumers can post and rate advertisements believed to be examples of greenwashing. The firm TerraChoice also lists the "six sins of greenwashing" on its website. It's worth reading. As TerraChoice Vice-president Scot Case has been quoted as saying, "If you don't understand where a green claim comes from, check it out. There are a lot of companies trying to relieve people of the green in their wallet."

One thing that is clear is that green (or green-collar) jobs, the green economy, LCA, sustainability and other "green" terms are here to stay. Villanova University recently announced it is launching a green-degree program. Wal-Mart has joined the sustainability chorus. Federal stimulus funds are being used in Philadelphia for a pilot green jobs training program. Hospitals have begun programs to reuse and recycle medical equipment. Other examples can be readily found.

Given that green is here to stay, it is important that green things be carefully vetted to be certain they are good things as well. Remember, it's not always easy being green. There continues to be a need to clarify the meaning of green and to carefully qualify and quantify the benefits of green, but the discussion and debate is well worth it. If we do it right, who knows, the rest of the world just might be green with envy.

## 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



**Joint Legislative**  
Air and Water  
Pollution Control and  
Conservation  
Committee