

# ENVIRONMENTAL SYNOPSIS

## The Chairman's Corner

Rep. Scott E. Hutchinson, Chairman



Let's take a little quiz. Who leads the nation in abandoned mines considered to be dangerous or environmentally harmful? If you answered Pennsylvania, you're absolutely right. Pennsylvania has about 4,600 mines in those categories, about 4.5 times as many as the nation's top three coal mining states – Wyoming, West Virginia and Kentucky.

Question two. Of the \$3 billion of high priority health and safety hazards from abandoned mines in the nation, where do you think you would go to find the highest percentage of the hazards? Pennsylvania, you say? You're batting a thousand so far. More than \$1 billion worth – more than a third, in other words – are right here in the Commonwealth of PA.

Final question. The U.S. Department of the Interior estimates that more than 3.5 million Americans live less than a mile from a dangerous high priority abandoned coal site. Which state do you reckon has more such residents than any other? Those who answered Penn's Woods have a perfect score. Almost half of those at-risk Americans – about 1.5 million - are Pennsylvanians.

Given all that information, you would assume that Pennsylvania also receives the lion's share of funding to remediate abandoned mine problems. You would be wrong. Because the federal formula for distributing abandoned mine land (AML) funds is based on current coal production, states like Pennsylvania, where production is not what it was historically, see far fewer dollars than high production western states like Wyoming and others.

As U.S. Interior Secretary Gale Norton noted in a February 4 speech at the state Capitol, "Everyone in America has benefited from Pennsylvania coal for almost 300 years, but only Pennsylvanians have had to live – and sometimes die – with the consequences."

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A Legislative Service Agency of the Pennsylvania General Assembly

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# NOTES FROM THE DIRECTOR

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CRAIG D. BROOKS, DIRECTOR

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For several years now, the buzzword at the Pennsylvania Game Commission (PGC) has been "quality deer management". Quality deer management, according to the PGC, means bigger and healthier bucks. To others it means less and less deer.

Regardless of which side you're on, the facts are clear - too many deer can cause problems. This issue was addressed at a recent conference held in January 2004 by the Audubon Society, which included speakers DCNR Secretary Michael DiBerardinis, Agriculture Secretary Dennis Wolff, our own Chairman - Representative Scott Hutchinson, and PGC wildlife biologist Dr. Gary Alt. Dr. Alt, credited with bringing back black bear hunting in Pennsylvania, has been leading the charge to scale back the deer herd to within manageable limits.

Despite efforts to curb deer populations, Pennsylvania's white-tailed herd has grown 20 percent in the last five years and is up about one-third - to about 1.6 million - over the past decade. This works out to be about 70 deer per square mile of forested area in Pennsylvania. But how many deer is too many? There may not be a perfect number, but scientists believe that deer densities between 18 to 20 per square mile represent acceptable limits. However it's viewed, the virtual overabundance of white-tailed deer in Pennsylvania has threatened forest growth, wildlife diversity, economic health and public safety. For example, estimates suggest that more than 80,000 deer collisions occur annually in Pennsylvania resulting in approximately \$220 million in vehicle damage, not to mention the cost of removal of up to 60,000 road-killed deer from state highways.

And, the number of human fatalities from such crashes is also on the rise. Last year alone, a

dozen people were killed, compared with nine in 2001 and four in the late 1990's. Nationwide, the insurance industry paid about \$1 billion in deer-related claims involving collisions.

Forest health is also in jeopardy. Pennsylvania forests support a \$4 billion forests products industry that is essential to the state's economy. Overbrowsing by the deer herd has prevented the regeneration of large forested areas in the Commonwealth. Because seedlings are especially vulnerable to hungry deer, scientists at the Allegheny National Forest Laboratory have documented a lack of regeneration in many locations, including oak forests in the Northeast and hemlock forests in the Great Lakes region. Damage to ornamental trees, shrubs and gardens and the increased threat of Lyme disease are significant as well. In addition, browsing deer have affected ground nesting bird habitat and altered stream bank restoration projects done by local watershed groups using state funds.

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## **The virtual overabundance of white-tailed deer in Pennsylvania has threatened forest growth, wildlife diversity, economic health and public safety**

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So, how do we solve the problem? There are diverse opinions on the best way to manage deer populations and the Audubon's latest deer management conference attempted to bridge the social, academic, and political lines in an effort to answer this question, with an overriding consideration on the long-term ecological and environmental impact of deer on forest sustainability and health. The Audubon Society plans to release the information gathered at the conference in the near future. Stay tuned.

# 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.

## New Jersey Report Examines Health Risks From Air Pollution

— Tony M. Guerrieri, Research Analyst

New Jersey has air that makes people sick, according to a report by the New Jersey Public Interest Research Group (PIRG). Some people, including children, the elderly, and people with diseases like asthma, are particularly sensitive to contaminants in the air. Air pollution can make them sicker, reduce their lungs' ability to function, send them to the hospital, or even kill them.

According to the PIRG report, *"The Public Health Impact of Air Pollution in New Jersey"*, each year between 2,300 and 5,400 New Jersey residents die prematurely because of the effects of air pollution. The report indicates that this estimate accounts for between 5.4 percent and 7.7 percent of all deaths not caused by violence or accidents.

The report quantifies the impact of soot and smog pollution in New Jersey, from hospital admissions to sick days. The estimates were determined by using air pollution monitoring data from the U.S. Environmental Protection Agency, baseline health statistics from the New Jersey Department of Health and Senior Services, and a review of scientific studies of the connection between air pollution and health damage. These sources, taken together, indicated that thousands of New Jersey residents die prematurely because of soot in the air, and hundreds of thousands miss work because of air pollution induced respiratory illness.

The report found widespread damage to public health from air pollution extending well beyond premature death. According to the report, soot causes 7,800 to 15,300 hospital admissions for respiratory and cardiovascular disease, 450 to 9,500 new cases of chronic bronchitis, 330,000 to 1.4 million asthma attacks, 460,000 to 530,000 missed work days, 7.1 million to 9.7 million restricted activity days, and 14 million to 45 million increased symptom days (mild respiratory symptoms like shortness of breath or cough).

Additionally, the report states that every summer season, ground level ozone, or smog, causes 860 to 1,900 cases of adult onset asthma, 3,900 to 5,900 hospital admissions for respiratory disease, 640 to 12,000 emergency room visits for asthma, 110,000 to 310,000 asthma attacks, 960,000 to 1.7 million restricted activity days, and 2.4 million to 7.5 million increased symptom days.

Children are especially prone to health effects from air pollution. The report found that each year, air pollution causes 40 to 80 infants to die prematurely, 290 to 440 hospitalizations for pediatric asthma, 21,000 to 77,000 cases of acute bronchitis in children, 150,000 to 170,000 pediatric asthma attacks, and roughly 610,000 missed school days.

The pollutants examined in the report mainly come from the burning of fossil fuels such as gasoline and diesel fuel in motor vehicles and coal and natural gas in power plants. The report cites 1999 figures showing on-road and off-road motor vehicles and equipment produced 60 percent of the soot emissions, and automobiles and trucks 48 percent of particulate emissions and 31 percent of smog-forming emissions.

The report recommends a number of policies to reduce emissions from the largest sources, lessen pollution levels and improve public health, to include the following: cleaning up on-highway vehicles by installing particulate trapping filters on currently operating diesel engines and requiring auto manufacturers to produce less-polluting vehicles; reducing transportation emissions by encouraging better transit while lessening road-dependent land use practices and sprawl.

The report also recommends cleaning up upwind industrial facilities by restoring and enforcing the New Source Review provision of the Clean Air Act, and implementing a new, tough national cap on power plant emissions. The report concludes that while these policies will not fully eliminate air pollution and its impacts, they will yield progress.

A copy of the full report is available at the following Internet address: [http://njpirg.org/reports/AirPollution12\\_03.pdf](http://njpirg.org/reports/AirPollution12_03.pdf).

# Secure Drinking Water

— Jason H. Gross, Research Analyst

The Environmental Law Institute has released a report entitled “*Homeland Security and Drinking Water*”, intended to increase the understanding and awareness of homeland security activities and policies that affect drinking water at all levels of government. The report investigates the legal authority that addresses terrorism through specific homeland security legislation as well as broader environmental statutes that have homeland security implications.

Safe drinking water is a vital resource for human health and our everyday life. Because we all depend on clean water for nourishment and hygiene, water presents an attractive and potentially effective target for terrorist attacks. Because of concerns about the security of utilities after the events of 9-11, interest in securing the utility industry from attack has intensified. The report examines legal anti-terrorism measures, which would maximize protection for the nation’s population, natural resources, and drinking water from both terrorist and conventional threats. The challenge is to devise a system of governance and practice that not only can respond to homeland security needs and address related conventional needs, but also doesn’t limit public access to utilities. To meet the challenge, it is necessary to increase the understanding and awareness of how homeland security practices are designed and conducted.

Laws are designed to both protect critical infrastructure as well as punish its destruction or contamination. Environmental laws not originally designed to apply to terrorism may apply to the act of terrorism itself to the extent that the proscribed act involves the release of biological, chemical, or radiological agents into the water supply. Environmental laws may also apply to site-specific actions taken in response to a terrorist event, such as what remediation measures and sanctions are to be taken against the responsible party.

Environmental statutes are categorized based on the focus of the law as it pertains to homeland security issues. Laws focus on any of the following issues: control of substances and preventing their misuse; prospective review of specific government actions or policies; remediation and response to incidents; natural resource protection; and access to information. The report details how each individual law applies to specific situations.

The report identifies state action that can occur which will improve the security of drinking water. Model state legislation called the “Emergency Health Powers Act” has been created as a measure to facilitate the speedy adoption of state laws addressing homeland security. The model act is intended to provide states with powers

needed to detect and contain bioterrorism or naturally occurring disease outbreaks. Its structure reflects five basic health functions that can be facilitated by law:

- preparedness and comprehensive planning for a public health emergency;
- surveillance measures designed to detect and track public health emergencies;
- management of property that ensures adequate availability of vaccines, pharmaceuticals and hospitals, as well as the authority to abate public health hazards;
- protection of persons to the extent that the state can compel vaccination, testing, treatment, isolation and even quarantine when clearly necessary; and
- communicating clear and authoritative information to the public.

Several states have adopted individualized approaches that address the terrorism concerns stated above. Among them are water protection measures that are directly designed around the water resource, including assessments of source water for vulnerabilities and the establishment of public water supply protection programs. There are also crime and law enforcement measures that directly affect acts of terrorism, such as the criminalization of and establishment of criminal penalties for acts of terrorism. Examples of administrative actions taken to strengthen government capacity are the establishment of specific councils, task forces, and communities for addressing safety and security and measures for protecting sensitive information. Some states have adopted public health measures relating to emergency powers and preventing communicable diseases, and emergency preparedness measures for emergency planning and management response. The appropriation of funds, necessary for securing resources to address terrorism in connection with the measures discussed above, is also discussed.

For more information and a copy of the full report by the ELI please follow the link below: [http://www.elistore.org/reports\\_detail.asp?ID=10928&topic=Water](http://www.elistore.org/reports_detail.asp?ID=10928&topic=Water).

## 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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## Report Finds Economic Development Plans Ignore Mass Transit

— Tony M. Guerrieri, Research Analyst

Although states spend large amounts of money to improve and expand their public transportation systems while also working to attract business, many states do not make the connection between the two initiatives by emphasizing the location of business facilities near transit stations. That's the conclusion of a report by Good Jobs First, a Washington based nonprofit research center focusing on economic development.

The report, *"Missing the Bus: How States Fail to Connect Economic Development with Public Transportation"*, suggests that not one of the 50 states has a policy of tying subsidies for companies that locate facilities in metro areas to sites that are close to public transportation.

There is high job growth, particularly in the retail and service industries, in sprawling suburbs across the nation. Prospective low-income employees without cars have more difficulty getting to areas with new jobs. Sprawl effectively cuts central city residents off from regional labor markets, exacerbating the concentration of poverty in core areas, according to the report.

The report surveyed only state coordination efforts. In total, states have more than 1,500 economic development subsidy programs, such as loans, grants, and tax incentives, and spend, along with cities, more than \$50 billion a year for economic development. State spending for public transportation totaled \$11.6 billion in 2001 and federal funds, which flow through state and regional bodies, totaled \$7.3 billion in 2001. Yet, according to the report, states generally do not encourage or require companies receiving the subsidies to locate in transit accessible places.

Only four states – Connecticut, Maine, Minnesota, and Ohio – collect data that could help determine if their economic incentives are reducing or increasing access to jobs for workers who cannot afford a car. For example, Ohio's Enterprise Zone Program's annual report includes a table on relocation projects, which states the name of company, where the relocation began and ended, and how many jobs were moved. The other 46 states fail to collect any data on subsidized corporate relocations and, therefore, cannot determine if their economic development incentives are undermining job access for low-wage workers.

If jobs can be accessed only by automobile, low-income families are forced to spend an enormous amount of their household budgets on transportation. It is estimated that 40 percent of the household budget of a low-income family is spent on transportation.

In a handful of states, there are incidental connections between subsidies and access to transit. For example, in California, cities use block grants and other incentive funds to match federal transit dollars for promoting jobs and development adjacent to transit hubs. In Florida, state economic and transportation officials said that "leeway" is granted to companies that locate in areas that have more than one form of transportation available to them. This includes easing the permitting processes for eligible companies.

According to the report, with states now suffering their worst fiscal crises since the late 1940's, policymakers need to ensure that each program leverages the other to maximize returns on taxpayer investments. Improved coordination between state economic development offices and state departments of transportation would help fiscally strapped states maximize resources and ensure high transit ridership in both the short and long term. Among other things, high transit ridership helps improve passenger and freight traffic flows and helps curb air pollution and energy use, which may attract more business to a state.

The report recommends several solutions, including "Location Efficient Incentives" that would grant development subsidies only to companies relocating with areas linked by public transit. That would likely reduce congestion because more new jobs would be steered to locations near mass transit. In addition, the report recommends requiring corporations that receive the incentives to submit to the states information detailing whether their relocations are transit accessible.

The report, *"Missing the Bus: How States Fail to Connect Economic Development with Public Transit"*, is available on the Internet at <http://www.goodjobsfirst.org/pdf/bus.pdf>.



# Urban Sprawl Weakens Pennsylvania

— Jason H. Gross, Research Analyst

A report by the Brookings Institution entitled: *"Back to Prosperity: A Competitive Agenda for Renewing Pennsylvania"* examines the lingering effects of urban sprawl on the economy and environment of the commonwealth. The report focuses on Pennsylvania's growth and economic and employment changes, diminishing green areas and urban sprawl. According to the report, one of the primary problems facing Pennsylvania's environment is the shift in ecosystems, which occurs because of population growth and the mismanagement of sprawl.

The report discusses at length the economic and environmental strengths of Pennsylvania and the challenges to those strengths. According to the report some of Pennsylvania's fundamental assets are its natural areas and farmland. Pennsylvania has large metropolitan areas and world-class farm regions. Mountains and rivers and natural areas in the state maintain their natural appeal. The state's manufacturing sector contributes highly to the economy. The state also has a high percentage of residents who were born and raised in the state.

Although population growth may remain stable, a shift of households toward rural areas and green areas has quickly reduced the amount of natural areas in the commonwealth. Reduced open areas translate into fewer green areas that can filter rainwater, consume carbon dioxide and change it to breathable oxygen, and fewer green areas in which people can partake of recreational activities. The report hypothesizes that if population growth does not occur in a managed fashion it will continue to consume natural areas.

The report identifies several specific contributors to sprawl problems in regard to the commonwealth. The state boasts one of the most radical patterns of urban sprawl and abandonment of any state. During the 1990's Pennsylvania had the third slowest economic and population growth of any state. Even though the state is the sixth largest, the net migration loss of people was the fifth largest of total residents and the ninth largest percentage loss of young people aged 25 to 34. At the same time the commonwealth ranks second among states in the number of residents over age 65. According to the report, pay lags behind both the nation and other mid-Atlantic states. The report states an unusually large percentage of the state's workers (60 percent) toil under low-paying jobs with wages of less than \$27,000 per year. These issues result in a growing elderly population while at the same time maintaining a

high percentage of young wage earners who will be unable to support the growing elderly population with their tax earnings.

According to the report, Pennsylvania's miniscule economic growth is joined by a large amount of people moving out of urban centers into more traditionally rural areas. The commonwealth's population is decentralizing rapidly and accelerating a long-term shift in population outward away from urban centers. Job creation has also shifted outward. As a result, Pennsylvania's cities, towns and older suburbs are declining as a focal point of the economy while growth is shifting decisively toward outlying newer communities. This shift in population puts an ever-increasing burden on natural areas and the rural landscape.

A major consequence, says the report, is the rapid consumption of natural land. Despite the slow growth occurring in Pennsylvania's economy and young population, land consumption is on the rise. According to the report, development-as-usual is consuming the commonwealth's traditional rural landscape of farmland, forests, wetlands, and open spaces. As the years progress, the ultra-low-density development construction patterns erode Pennsylvania's productive landscape that is also the state's key source of competitive advantage. In the last 15 years the state has consumed land at an equivalent rate of 209 acres a day. Strangely enough, the 47 percent increase in Pennsylvania's urbanized footprint occurred between 1982 and 1997, which is a time when the population only grew 2.5 percent.

According to the report, development has been destroying some of the richest agricultural land anywhere. It notes the steady march of factory outlets, subdivisions, and industrial parks has caused the destruction of 420,000 acres of cropland between the years 1982 and 1997. The conversion of farmland has taken place where the pressures of urbanization are the greatest, the south-central and southeastern regions. These counties accounted for 40 percent of the state's prime farmland losses over the last two decades.

The consequences of Pennsylvania's trends are fiscally and economically damaging, undercutting the very places that possess the assets the state needs most to bolster its competitiveness. The third slowest growing state in the country developed the sixth largest amount of land. According to the report, that means the state is squandering a key source of competitive advantage: its superb natural assets.

For more information and a copy of the full report, please go to the following Internet address:  
[www.brookings.edu/pennsylvania](http://www.brookings.edu/pennsylvania).

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# ON THE HORIZON . . .

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A LOOK AT UPCOMING EVENTS

✓ **Monday, March 29, 12 noon, Hearing Room 1, North Office Building, Capitol complex, Harrisburg, PA - Environmental Issues Forum** (rescheduled from February 17). Pennsylvania Department of Conservation and Natural Resources (DCNR) Secretary Michael DiBerardinis will be the guest speaker. Sec. DiBerardinis will discuss the information gleaned from his series of meetings around the state last year, and what might be expected to be part of the department's action plan for 2004 and the future.

✓ **Monday, April 12, 12 noon, Hearing Room 1, North Office Building, Capitol complex, Harrisburg, PA - Environmental Issues Forum.** Pennsylvania Department of Environmental Protection (DEP) Secretary Kathleen A. McGinty will be the guest speaker. The topic of Sec. McGinty's presentation will be announced at a later date.

Environmental Issues Forums are open to the public. Please call the committee office at (717) 787-7570 if you would like to attend. Also, check out the committee website at <http://jcc.legis.state.pa.us> for upcoming forums as they are scheduled.

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# COMMITTEE CHRONICLES . . .

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REVIEW OF SOME MEMORABLE  
COMMITTEE EVENTS

As described in *The Chairman's Corner* on page one, the U.S. Department of the Interior Secretary Gale Norton held a press conference in the state Capitol rotunda to announce President Bush's plan to provide increased funding to Pennsylvania and other states with abandoned mine safety problems. Pennsylvania is the national "leader" in dangerous abandoned mines and in residents who live in close proximity to the mines - a dubious distinction.

Following the press conference, committee chairman Rep. Scott Hutchinson discussed the issue with Secretary Norton and with U.S. Congressman John Peterson (R-5<sup>th</sup>), who is introducing the legislation to provide Pennsylvania with a 47 percent annual increase in abandoned mine reclamation funds.



*Rep. Hutchinson (left) paused for a photo at the press conference with (l. to r.) U.S. Secretary of the Interior Gale Norton, U.S. Congressman John Peterson (R-5<sup>th</sup>) and U.S. Congressman Don Sherwood (R-10<sup>th</sup>).*

I'm happy to say that Secretary Norton was in Harrisburg to announce that the Bush administration wants to change the inequitable funding formula and provide more federal money to states – like Pennsylvania – that have the most serious abandoned mine problems. The revised formula Norton is touting would put additional funding emphasis on where the worst problems are. And, instead of considering only current production, historical production will be considered, as well.

If Congress approves the administration's recommendation, Pennsylvania stands to receive an increase of approximately \$11.4 million a year over the next 15 years to address AML problems. That would mean the commonwealth's AML problems would be addressed in 22 years instead of 60. The legislation has already been introduced by Pennsylvania Congressman John Peterson (R-5<sup>th</sup>) and PA Senator Arlen Specter (R).

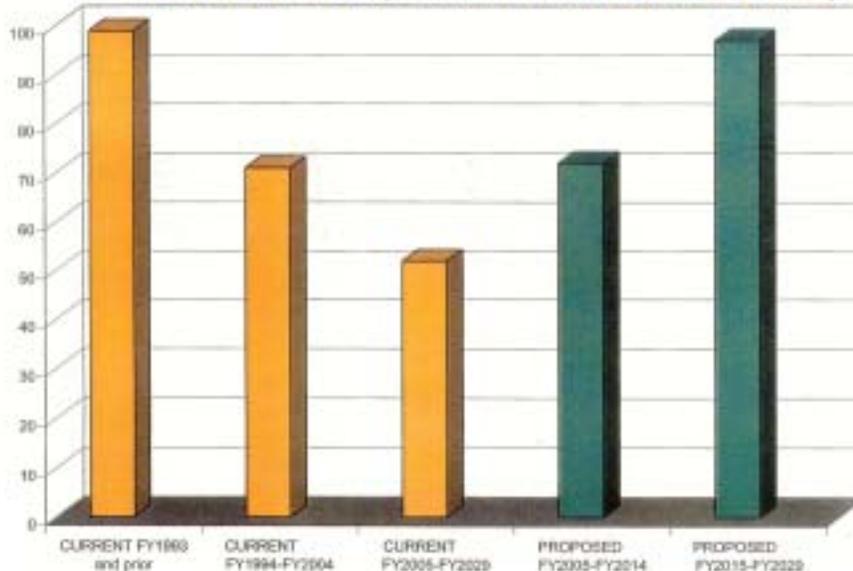
That is good news and it would help to address a problem that cries out for attention. Abandoned mine reclamation is a problem that chews up money and resources as fast or faster than the giant coal breakers chew up coal to provide fuel for our state and nation. AML problems go far beyond the cosmetics of filling a pit, recontouring some land and planting grass so that it looks pretty. The problems are far more serious and the solutions far more complex and important than that.

People often forget that abandoned mines are serious health and safety hazards, not just ugly sights. In the anthracite fields alone, the Interior Department cited at least 45 deaths and 19 injuries, many of them young people at play, at abandoned hard coal mine sites since 1974.

Among the many hazards abandoned mines present are deep vertical shafts, which are often unprotected and nearly invisible. There are deep pools of water that lure unsuspecting swimmers into unexpected depths, unforeseen cold temperatures, and which often hide dangers such as slick, steep walls and submerged equipment and rock ledges. Deadly gases lurk in underground passages, and seemingly safe entrances and supports to those passages are often accidents waiting to happen. Misfired or unfired explosives can still be found in abandoned mines and set off with a footstep or vibration. As happened in Centralia, abandoned mines are popular places to dump garbage, which can catch fire and destroy communities and neighborhoods. Acid mine drainage still flows freely from far too many abandoned workings, ruining water quality and streams and sabotaging recreational opportunities and fishing holes. Vertical cliffs or highwalls at open mine pits are unstable and can take a life with just one misstep.

So, while we pursue our fair share of increased funding to attack these problems, let's do what we can to improve safety. Check out the US. Department of Labor's Mine Safety and Health Administration (MSHA) "Stay Out – Stay Alive" campaign. It's a national public awareness campaign to warn children about exploring and playing on mine property. Go to <http://www.msha.gov/PLACES/PLACESHP.HTM> to check out the program's website. If you want to take part in the campaign, call MSHA at 202-693-9400. And, to report unsafe access to mine sites, call MSHA toll-free at 1-800-499-1038.

**PERCENTAGE of AML GRANT EXPENDITURES USED FOR COAL RECLAMATION (CURRENT AND PROPOSED LAWS)**



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