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# A Fresh Start for Pennsylvania

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26 steps that Governor Wolf can  
take to improve Pennsylvania's  
environment and economy

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January 2015

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## Introduction

After four years of disappointment, Pennsylvania's environmental, conservation, and energy policies are sorely in need of the "fresh start" that Governor Tom Wolf promises for his new administration.

Wolf will face Republican majorities in both the House and Senate. The General Assembly, working with Governor Wolf, will have immediate opportunities to strengthen environmental policies that, among other things, clean our air and water; protect public lands from gas development; make important strides on renewable energy production and energy efficiency; and provide new resources for conservation, open space, recreation, and environmental remediation. PennFuture will work with the Wolf administration and legislators on both sides of the aisle on behalf of these policies.

However, there is much that Governor Wolf and his administration can reasonably do on their own to protect the environment, conserve Penn's Woods, advance cleaner and more efficient energy policies, and more. These actions include a wide range of administrative actions and policy changes, and proposals for new regulations. Furthermore, the Wolf administration can appoint talented and passionate public servants to lead departments and deputates, set a new tone, and highlight new priorities.

This report highlights 26 policies or actions proposed by PennFuture that Governor Wolf can implement on environmental, conservation, energy, and related policies within his first 100 days in office. Some steps can be fully achieved in 100 days; others can be initiated with significant momentum. The proposals are broken down by cabinet department or commission.

The proposals are generally limited to 1 or 1 1/2 pages, but PennFuture staff is available to discuss the proposals in further detail. We look forward to the opportunity to advance conservation and the environment for all Pennsylvania citizens.

While the proposals are under PennFuture's name, we appreciate the input and feedback we received from a number of non-profit organizations.

## Executive Summary

Pennsylvania's environmental, conservation, and energy policies are sorely in need of a "fresh start." While some significant policy changes require bills to be passed or appropriations to be approved by the General Assembly, or orders to be issued by the Public Utility Commission, there are many important steps that Governor Wolf and his new administration can reasonably take on their own through administrative or regulatory action.

PennFuture staff have analyzed and evaluated potential environmental, conservation and energy policy actions that Governor Wolf can take or initiate, most within the first 100 days of his administration, which begins on January 20. The following 26 recommendations are organized by cabinet department.

### Department of Environmental Protection (DEP)

Governor Wolf and his DEP should take the following actions:

1. **Regulate methane emissions from the natural gas industry.** Governor Wolf should propose that the DEP develop, and the Environmental Quality Board pass, comprehensive regulations to reduce emissions of methane, a highly potent greenhouse gas, from natural gas drilling operations. These regulations should mandate more frequent inspections, increased maintenance and repair of equipment, and required retrofits of high-emitting equipment.
2. **Make robust efforts to reduce greenhouse gas emissions.** Governor Wolf should make climate change a priority for not only the DEP, but for the entire administration. This vital work needs to be bolstered and elevated in profile. The Wolf administration should immediately commence its climate planning and greenhouse gas reduction efforts in conjunction with the forthcoming requirements of the Pennsylvania Climate Change Act and the U.S. Environmental Protection Agency's (EPA) Clean Power Plan.
3. **Develop an air quality monitoring program around shale gas operations.** To identify air quality trends across the shale gas play, Governor Wolf should direct the DEP to work with other agencies and county governments to develop a long-term, statewide air quality monitoring program.
4. **Develop restoration standards and effective post-construction stormwater management at well sites.** To minimize permanent impacts of shale gas development activities, Governor Wolf should require the DEP to develop science-based standards to determine when well site "restoration" has been achieved and require post-construction stormwater analysis for all activities that "require restoration" unless restoration occurs immediately after earth disturbance activities cease.

5. **Prohibit new well site wastewater “pits” and strengthen regulations for other oil and gas fluid impoundments.**
6. **Revise and strengthen Chapter 78 rulemaking for oil and gas standards.** Governor Wolf should ensure that the DEP revise and strengthen the Chapter 78 oil and gas regulations proposed by the Corbett administration by addressing, among other things: protection of streams and waterways from drilling operations; storage of freshwater and other fluids related to fracking; and proper collection, analysis, and disposal of waste materials at well sites.
7. **Conduct cumulative impacts analyses of wetlands and stream crossings permit application reviews.** Governor Wolf and his DEP should ensure that thorough and meaningful cumulative impacts analyses are conducted under the DEP’s Chapter 105 regulations for wetlands and stream crossings projects.
8. **Reduce stormwater through municipal stormwater authorities and a model stormwater fee ordinance.** Governor Wolf should ensure that the DEP plays a leadership role in working with local governments to reduce stormwater and polluted runoff. The DEP should actively partner with local governments to promote formation of municipal stormwater authorities as allowed by Act 68 of 2013 and develop a model stormwater fee ordinance that would help local governments raise funds to construct and manage stormwater projects.
9. **Ensure that Pennsylvania meets its pollution reduction obligations under the Chesapeake Bay agreement.** To reduce pollution to the Chesapeake Bay watershed and ensure that Pennsylvania meets its legal commitments, Governor Wolf should take the following steps: a) raise the profile of Pennsylvania's Bay and overall clean water efforts, and highlight the benefits of cleaning up local rivers and streams; b) increase oversight of concentrated agricultural operations and provide more resources to the agricultural community for best management practices; c) ensure that his Department of Agriculture aggressively explores setting standards for the nitrogen and phosphorous content of lawn and turf fertilizer, and considers developing a certification process for lawn and turf care professionals for proper application and best management practices.
10. **Ensure that streams are appropriately and timely designated.** Governor Wolf should ensure that the DEP has adequate staff resources for High Quality (HQ) and Exceptional Value (EV) streams to receive their proper designations, and that the DEP responds to petitions for stream re-designations in a timely fashion.
11. **Develop new water well construction standards.** Governor Wolf should move to protect drinking water for millions of Pennsylvanians by having the DEP initiate a rulemaking that provides important and long-overdue standards for private water well construction that will protect human health and water resources. The regulation should

also include standards for decommissioning water wells.

12. **Promote homeowner investments in energy efficiency and renewable energy by greening the Multiple Listing Service (MLS).** Governor Wolf should establish a statewide MLS working group to issue guidance and recommendations for including appropriate energy efficiency and renewable energy features in real estate listings.
13. **Make state government an active partner in addressing local solar issues.** Governor Wolf should request that his DEP establish a statewide solar working group to focus on streamlining zoning, permitting, and codes, and to determine how solar attributes can be incorporated into the real estate MLS.
14. **Propose dedicated funding for the Pennsylvania Sunshine Solar Program.** Governor Wolf should propose a dedicated, long-term funding source or sources for the Pennsylvania Sunshine Solar Program in his 2015-16 budget proposal to be announced in March.
15. **Establish an inter-agency transmission planning work group to evaluate incorporation of wind energy into the grid and reduce the environmental impact of electric transmission.**
16. **Adopt policies and practices that encourage transparency of DEP decision-making throughout the organization.**

### **Department of Conservation and Natural Resources (DCNR)**

Governor Wolf and his DCNR should take the following actions:

1. **Prohibit further gas leasing of State Parks and State Forests.** Governor Wolf should immediately sign an executive order that prohibits further leasing of Pennsylvania State Parks and State Forests for natural gas development. The language should make it clear that the executive order applies to both surface and subsurface rights and to both State Parks and State Forests.
2. **Protect the Clarence Moore lands of the Loyalsock State Forest from natural gas development.** Governor Wolf and his DCNR should do everything in their power to protect these extraordinary lands from natural gas development, including the exhaustion of all viable legal strategies, given the Commonwealth's unusual control of much of the surface of the tract.
3. **Give the public a greater say in public lands decision-making on natural gas development.** Governor Wolf should direct his Secretary of the DCNR to develop regulation, and issue policy guidance in the interim, that requires the DCNR to provide notice and seek public input before authorizing any major unconventional gas development on or under public lands.

## Department of General Services (DGS)

Governor Wolf and his DGS should take the following actions:

1. **Require high-performance green building standards for state building projects.** Governor Wolf should issue an executive order to require high-performance green building standards for most construction projects involving buildings that are owned or substantially leased by the Commonwealth. The executive order should cover design, construction, and renovation standards and should apply to buildings over a certain square-footage threshold.
2. **Revive and reinvigorate Pennsylvania's highly successful Energy Savings Performance Contracting (ESPC) program.** Governor Wolf should establish an Energy Management Office to revive and reinvigorate the highly regarded Guaranteed Energy Savings Act program and related outreach activities that reduce energy use, cut pollution, and save money for municipalities, school districts, and state agencies.

## Department of Transportation (PennDOT)

Governor Wolf and his PennDOT should take the following actions:

1. **Prevent the Pennsylvania Turnpike Commission (PTC) from blasting an immense gash in the Allegheny Front to bypass the Allegheny Tunnel.** Governor Wolf and his Secretary of Transportation should do everything in their power to urge the PTC to reject any plan that would bypass the Allegheny Tunnel in Somerset County and create significant and needless risk to the area's water supplies and wildlife habitat. The PTC should be urged to consider an alternative plan that involves improving the existing tunnels or constructing one or more new tunnels.
2. **Promote bicycle and pedestrian transportation options and make bicycling safer in Pennsylvania.** Governor Wolf and his PennDOT should improve conditions for pedestrian and bicycle trips and encourage non-motorized transport in Pennsylvania through a suite of recommended changes.

## Pennsylvania Public Utility Commission (PUC)

Governor Wolf should work with the PUC by taking the following steps:

1. **Address dangers posed by oil bomb trains.** Governor Wolf should immediately sign an executive order to create an inter-agency working group that will develop a report within six to nine months on the risk posed to citizens and communities from dangerous and frequent oil trains that carry highly volatile cargoes across the Commonwealth and also develop a set of recommendations for action. The working group should work closely with the PUC and Governor Wolf should ask the PUC to conduct inspections to determine compliance with federal regulations under its jurisdiction.



2. **Establish an inter-agency transmission planning work group to evaluate incorporation of wind energy into the grid and reduce the environmental impact of electric transmission.**

### **Department of Labor and Industry (L&I)**

Governor Wolf and his Department of Labor and Industry should take the following action:

1. **Reform Pennsylvania's broken building codes review and adoption process.**

Governor Wolf should take immediate steps to reform Pennsylvania's broken building codes review and adoption process through a suite of recommended changes including appointing an L&I Deputy Secretary of Safety and Labor-Management Relations to monitor the Uniform Construction Code Review and Advisory Council's (RAC) review of the 2015 International Construction Codes.

## Recommendations for the Department of Environmental Protection (DEP)

### **Regulate methane emissions from the natural gas industry.**

#### **Recommendation**

Governor Wolf should propose that the DEP develop comprehensive regulations to reduce methane emissions from natural gas drilling operations.

#### **Benefits**

Reducing methane emissions from the oil and gas sector would slow the rate of climate change we experience now and in our children's lifetimes. It would also improve the health of Pennsylvanians, not only by slowing the occurrence rates of heat-related illnesses but also by reducing toxic smog in our air.

According to an analysis conducted by ICF International, effective and powerful methane mitigation would cost industry less than one penny per thousand cubic feet of produced natural gas yet would have the potential to reduce leaks by 40 percent over the next five years. As the fastest growing producer of natural gas, Pennsylvania can play a significant role in securing a safer future.

#### **Background**

There is broad agreement that methane emissions from natural gas development are a serious problem. Methane is a highly potent greenhouse gas and, absent adequate controls, methane leaks could undo many of natural gas' potential environmental benefits over other fossil fuels like coal. Methane accounts for nearly a third of the increased climate warming we are experiencing today. That warming sparks a domino effect that negatively impacts our health by causing increased occurrences of asthma, allergies, and other health problems. From an economic perspective, when this natural resource escapes from equipment or facilities, dollars and usable energy literally vanish into the air.

Currently, Pennsylvania does not directly regulate methane. Instead, we have a patchwork of state policies and federal rules that result in some reductions but fall far short of the comprehensive regulations Pennsylvania deserves.

The DEP should develop, and the Environmental Quality Board (EQB) should pass, comprehensive methane regulations that mandate more frequent inspections, increased maintenance and repair of equipment, and required retrofits of high-emitting equipment.

## **Make robust efforts to reduce greenhouse gas emissions.**

### **Recommendation**

Governor Wolf should make climate change a priority for not only the Department of Environmental Protection (DEP), but for the entire administration. This vital work needs to be bolstered and elevated in profile. The Wolf administration should immediately commence its climate planning and greenhouse gas reduction efforts in conjunction with the forthcoming requirements of the Pennsylvania Climate Change Act and the U.S. Environmental Protection Agency's (EPA) Clean Power Plan.

### **Benefits**

- Pennsylvania is the third largest state contributor to global warming pollution, trailing only California and Texas. A comprehensive and effective state effort will help the Commonwealth do its share to combat this critical issue.
- A robust state climate policy will make our economy most energy efficient, saving our citizens money. Reducing carbon pollution also reduces smog, ozone and other traditional air pollutants.

### **Background**

Pennsylvania's efforts to address climate change have taken a step backward under the Corbett administration. It was never clear that Governor Corbett and other key decision-makers in his administration understood the scientific consensus on global warming, let alone the need for urgent and comprehensive action. DEP's efforts on state requirements over the past four years have been minimal, tardy, and inadequately staffed. Currently, only two people in DEP's Bureau of Air Quality work on Climate Change Act requirements while other staff resources have been dedicated to resisting federal proposals. This raises serious questions as to whether the state currently has the capacity to meet its existing obligations and the expected challenges from upcoming federal requirements.

To meet these challenges, Pennsylvania needs to prioritize climate change initiatives. Within DEP, the administration could appoint a single individual responsible for coordinating programs and actions. This could involve, for example, reorganize the existing programs so the air, energy, and climate staff report to the same deputy secretary. Or, in the alternative, an existing office like that of the Executive Deputy Secretary for Programs could be tasked with coordination responsibility. In addition to the work within DEP, any state planning will require close cooperation with the Public Utility Commission and the incoming legislative liaison.

Recent modeling from our grid operator PJM has shown that a multi-state approach to reducing carbon pollution can be as much as 30 percent less expensive than a state specific plan. For this

reason, the administration should investigate joining the Regional Greenhouse Gas Initiative (RGGI) or a similar organization. This would not only simplify compliance with federal requirements, it would also bring money into the state that could support additional programs to reduce carbon pollution.

Because increases in energy efficiency will return money directly to consumers while lowering carbon pollution, Pennsylvania should focus on achievable efficiency measures. This could include building on the success of existing efficiency programs such as Pennsylvania's Act 129, bringing our building codes up to current standards and promoting energy efficiency financing programs such as Energy Savings Performance Contracting (ESPC), Keystone HELP, Property Assessed Clean Energy (PACE), and on-bill finance programs.

In addition to efficiency, Pennsylvania could do more to encourage renewable energy. While Pennsylvania's Alternative Energy Portfolio Standard (AEPS) program made the state an early leader, nearby states have since set higher targets for clean and renewable energy. By renewing its leadership in this field, Pennsylvania would create more jobs, lower energy prices, and reduce not just carbon pollution but protect public health by reducing air toxics, water pollution, and waste.

## **Develop an air quality monitoring program around shale gas operations.**

### **Recommendation**

To identify air quality trends across the shale gas play, Governor Wolf should direct the DEP to work with other agencies and county governments to develop a long-term, statewide air quality monitoring program.

### **Benefits**

A long-term, statewide air quality monitoring program would:

- ensure that Pennsylvania has the data needed to protect public health and the environment from potential negative impacts of shale gas development; and
- provide valid scientific data on which to base public policy decisions.

### **Background**

Pennsylvania's air quality monitoring program was largely designed to monitor air quality near population centers and major industrial sources in order to comply with federal ambient air quality standards. The current program did not anticipate the onset of the shale gas industry. Because of the way this industry has developed, its individual emission sources are not considered "major" sources under the Clean Air Act. That means most sources – wells and

compressor stations – are allowed to be permitted without air quality monitoring and cumulative impact assessments. In addition, ambient air monitoring near these sources is not conducted on an individual source basis.

Pennsylvania essentially lacks a program to monitor ambient air quality throughout the shale gas play. Data from other U.S. shale gas plays has shown that the industry has the ability to affect air quality across large, previously unaffected areas. Emissions from the shale gas industry in Pennsylvania will continue to grow significantly for several decades. While the DEP is supposedly pursuing a collection of longer-term air data from a single site in southwestern Pennsylvania, that study falls far short of the comprehensive long-term air data that should be collected across the state.

## **Develop restoration standards and effective post-construction stormwater management at well sites.**

### **Recommendation**

To minimize permanent impacts of unconventional gas development activities, Governor Wolf should require the DEP to develop science-based standards to determine when well site “restoration” has been achieved. The governor should also require post-construction stormwater analysis for all activities that “require restoration” unless restoration occurs immediately after earth disturbance activities cease.

### **Benefits**

Improved well site restoration and stormwater management practices will:

- help assure that thousands of acres of well sites will ultimately be returned to conditions comparable to pre-disturbance ecological conditions and not become post-industrial “grayfields;”
- reduce post-construction stormwater pollution from well sites while production is ongoing; and
- close two major loopholes in the DEP’s regulations for oil and gas activities.

### **Background**

#### **Lack of Restoration Standards**

Section 3216 of Act 13 requires the restoration of “well sites,” a term the DEP interprets to include a wide range of gas facilities. Well site restoration is critical to protection of the Commonwealth’s natural resources, however, the term “restoration” is undefined in Act 13 and the DEP has no regulatory standards to determine when a well site is “restored.” Consequently,

Act 13's "restoration" requirement is a hollow one that provides a false sense of security. The DEP should immediately develop stringent, science-based restoration standards. Until those standards become regulations, the DEP should develop guidance to explain that these standards will inform the DEP's discretion on restoration determinations.

### **Post-Construction Stormwater Management ("PCSM") Exemption for Activities that "Require Restoration."**

As the DEP now interprets section 3216, final restoration of a well site is not required until the last well on the site is plugged. Because well sites typically host multiple wells that are drilled over several years, it could be decades before many sites are restored. During production, these sites will be sources of post-construction stormwater, which can cause pollution and flooding. Under Chapter 102 of the DEP's regulations, well site operators must develop plans that show what Best Management Practices ("BMPs") will be used to manage post-construction stormwater during the production period.

But section 102.8, which was written before Pennsylvania had significant unconventional gas development activities, exempts activities that "require restoration" from detailed analysis designed to ensure that stormwater management practices will actually work while a well site is in production. As a result, well sites could produce significant, long-term post-construction stormwater pollution. The DEP could substantially close this loophole by interpreting "requires restoration" in section 102.8 to mean "requires restoration immediately after earth disturbance activities cease" and state its interpretation in a guidance document so it would be clear to operators that PCSM plans will not be acceptable without adequate demonstration that the post-construction stormwater practices will have long-term effectiveness.

### **Prohibit new well site wastewater "pits" and strengthen regulations for other oil and gas fluid impoundments.**

#### **Recommendation**

To prevent contamination of the Commonwealth's groundwater resources, the DEP should:

- prohibit well site "pits" for oil and gas wastewater;
- strengthen regulations for other types of oil and gas fluid impoundments;
- determine whether existing well site pits have had adverse impacts on groundwater and soil; and
- inventory and institute testing and monitoring requirements for fresh water impoundments.

## Benefits

Prohibiting new well site wastewater “pits” and strengthening regulations for other oil and gas fluid impoundments would eliminate unacceptable threats from oil and gas water storage.

## Background

In Pennsylvania, four types of impoundments can be used to store fluids used in, or produced by, oil and gas development activities.

### Well Site “Pits”

“Pits” are well-site impoundments used to store drilling and fracking wastes that are [exempted](#) from federal hazardous waste regulations but are regulated under the Pennsylvania [Solid Waste Management Act](#) (SWMA) as “residual waste.” “Pits” can be dug into the ground or can also be above-ground structures with raised embankments. “Pits” are regulated mainly under a set of standards in [25 Pa. Code 78.56](#) that are not adequate to protect groundwater from production waste contaminants. For example, they do not require groundwater monitoring wells, double liners, any form of leak detection, or any permits other than stormwater construction permits.

### Centralized Wastewater Impoundments

“Centralized impoundments” or “centralized impoundment dams” are wastewater impoundments that serve multiple well sites. For regulatory purposes, centralized impoundments are considered by the DEP to be located “on” well sites – whether they’re built at a well site or at a separate location. This allows the DEP to exempt these impoundments from its residual waste regulations. (At [25 Pa. Code 299.141-145](#). Under [25 Pa. Code 287.2\(g\)](#), impoundments “located on the well site” are regulated under oil and gas regulations instead of residual waste regulations). The DEP recognizes that centralized impoundments are “dams” under the [Pennsylvania Dam Safety and Encroachments Act](#) (DSEA) and requires individual permits, double liners, leak detection systems, groundwater monitoring, and compliance with the DSEA regulations (At [25 Pa. Code Chapter 105](#)) for them.

### Wastewater Impoundments Used in Off-Site Processing Operations

Some wastewater impoundments are owned and operated by companies that are not drillers – e.g., companies that have gotten into the business of storing, treating, and recycling wastewater from the oil and gas industry. These impoundments are regulated under the DEP’s residual waste regulations and the DSEA regulations (At 25 Pa. Code Chapter 105).

### “Fresh Water” Impoundments



Two kinds of impoundments are used to store “fresh water” for oil and gas operations: “jurisdictional” (i.e., regulated under section 693.4 of the DSEA because they exceed DSEA size criteria or otherwise pose threats to humans or natural resources) and “nonjurisdictional” (unregulated under the DSEA).

Jurisdictional fresh water impoundments require DSEA permits and must comply with regulatory standards at 25 Pa. Code Chapter 105. Nonjurisdictional impoundments need only stormwater construction permits and are subject only to “recommended standards.” The DEP’s residual waste general permit WMGR123 allows processed gas well wastewater to be stored in fresh water impoundments if it is “de-wasted” to meet certain pollutant limits. But WMGR123 does not require ongoing testing of the stored water to determine whether evaporation and stratification result in those limits being exceeded.

Approximately a year ago, the DEP proposed new design and construction standards for well-site wastewater “pits” and freshwater impoundments, respectively. The DEP also proposed to codify its non-regulatory standards for centralized wastewater impoundments. However, the proposed standards for well-site wastewater pits still would not require double liners, leak detection, or monitoring wells – they would remain inadequate to protect groundwater. If the DEP is not prepared to require commonsense protections for well-site wastewater pits (which could remain for years), these pits should be prohibited. The DEP’s proposed regulations for centralized wastewater impoundments should be made at least as stringent as the standards for other residual waste storage impoundments set forth in 25 Pa. Code Chapter 299. Because the current standards for well-site wastewater pits do not require reasonable measures to protect groundwater, the DEP should inventory all such pits and determine whether their use has resulted in pollution to soil and groundwater. And as long as the DEP allows freshwater impoundments to be used to store de-wasted wastewater, the DEP should require regular testing of those impoundments’ contents to ensure that pollutant levels are consistent with the DEP’s WMGR123 standards and inventory and regularly inspect those impoundments.

## **Revise and strengthen Chapter 78 rulemaking for oil and gas standards.**

### **Recommendation**

Governor Wolf should ensure that the DEP revise and strengthen the Chapter 78 oil and gas regulations proposed by the Corbett administration by addressing, among other things:

- protection of streams and waterways from drilling operations;
- storage of freshwater and other fluids related to fracking; and
- proper collection, analysis, and disposal of waste materials at well sites.



## Benefits

Strengthening Chapter 78 rules for oil and gas standards would provide significant additional protections for the natural resources of Pennsylvania and the health of its citizens.

## Background

In November 2013, the Environmental Quality Board proposed the first major revision in Pennsylvania's oil and regulations (At 25 Pa. Code Chapter 78) since 1989. The purpose of the regulations is to both implement the Act 13 natural gas drilling law passed by the General Assembly in 2012 and to codify a number of regulatory approaches the DEP has so far implemented only through the terms of permits.

### Detailed recommendations:

- DEP should prohibit the disposal of residual waste at drill sites. Because waste generated at oil and gas sites is exempt from the hazardous waste regulations, the hazardous waste can presently be managed as residual waste and disposed at well sites with a single synthetic liner and no long-term groundwater monitoring. These minimal protections are inadequate. Given the high risks posed by these mini landfills, the DEP should prohibit well site disposal of residual waste entirely.
- The prohibition on construction of fluid storage areas within 100 feet of certain water bodies should be extended to all water bodies.
- Fluids related to oil and gas development should be contained in engineered facilities designed specifically for the task, not "natural depressions."
- The definition of "seasonal high groundwater table" should be retained in the proposed regulations because the term continues to play a key role in regulating oil and gas activities.
- Permit applicants, not the DEP, should be responsible for determining whether proposed oil and gas operations would affect threatened or endangered species.
- The DEP should respond to comments received about a permit that may affect an important public resource. Proposed regulations allow for a public resource agency to receive notice of, and submit comments about, a proposed well permit that would affect its resources. Those regulations, however, do not require the DEP to respond to those comments. This is inadequate.
- The DEP should not compromise its obligation to protect the environment by balancing citizens' rights to a clean environment – as guaranteed by the Pennsylvania Constitution – against private oil and gas interests. Proposed regulations provide that even if the DEP determines a proposed well will have a probable adverse impact on a public resource, the

DEP cannot impose conditions that will prevent or mitigate that harm without first considering the impact of the condition on the individual mineral right owner's ability to "optimally" develop his or her oil and gas rights. This regulation inappropriately places the DEP, charged with the mission to protect and conserve Pennsylvania's environment, in the position of balancing protection of important public resources against individual property rights. So long as the DEP's actions do not cause a taking of private property, the DEP should be obligated to take whatever actions are necessary to condition permits in a manner that protects important public resources.

- The DEP's duty to investigate water pollution should extend to all oil and gas activities as defined in Act 13, not the much more limited list of "well site construction, drilling, alteration or operation activities" in the proposed regulations.
- Samples of waste materials to be disposed at well sites should have to be analyzed and submitted to the DEP to demonstrate, for example, that drill cuttings are not contaminated or that residual waste meets regulatory standards. Regulations should clearly state that this is a mandatory obligation.
- The DEP's proposed regulations for the road spreading of brine pose unacceptable threats to the Commonwealth's water resources – and would be unlawful.
- The DEP's proposed bonding regulations are inadequate because they do not ensure that well sites and impoundment sites will be finally restored before they are released from operators' bonds. Under Act 13, an operator can obtain a blanket \$600,000 bond that covers all of that operator's well sites in the Commonwealth. Despite the extremely low amount of this bonding requirement (and of all of Act 13's bonding requirements), the bond is supposed to secure all of the operator's legal duties regarding water supply replacement, restoration, and well plugging. The DEP may not have the power to require higher bond amounts than outlined in Act 13 but it can, and should, establish a process to ensure that operators are not released from liability for particular well sites until those sites are properly restored. However, DEP's proposed revised bonding regulations condition release from liability only on the filing of a certificate of plugging. Release from liability should also be conditioned on the adequate final restoration of the well site after the last well on the site has been plugged.

## **Conduct cumulative impacts analyses of wetlands and stream crossings permit application reviews.**

### **Recommendation**

Governor Wolf and his Secretary of Environmental Protection should ensure that thorough and meaningful cumulative impacts analyses are conducted under the DEP's Chapter 105 regulations

for wetlands and stream crossings projects.

### Benefits

- Strong cumulative impacts analyses can help ensure that the DEP focuses on the ‘big picture’ and recognizes the major cumulative effects of a series of seemingly minor projects.
- Focus on cumulative impacts could lead the DEP to require changes to proposed projects or mitigation for impacts to our water resources.
- Our proposal would not require legislative or formal executive action because cumulative impact assessment requirements already exist in the Chapter 105 regulations; it would require development of a technical guidance document and modification of the DEP’s application forms for Chapter 105 permits.

### Background

As the White House Council on Environmental Quality observed in its 1997 guidance on the National Environmental Policy Act, “Evidence is increasing that the most devastating environmental effects may result not from the direct effects of a particular action, but from the combination of individually minor effects of multiple actions over time.”

Assessing cumulative impacts while making individual permitting decisions is important to ensure that our environment does not suffer ‘death by a thousand cuts.’ Cumulative impacts analyses typically require consideration of other “past, present, and reasonably foreseeable future actions” within the geographic area to be impacted by the permitting action under consideration.

Because wetlands are critical for the protection of clean water and provide other ecological benefits, Chapter 105 regulations require an assessment of cumulative impacts when the DEP evaluates applications for water obstruction and encroachment permits that will affect wetlands. Before approving a permit for a project affecting exceptional value (“EV”) wetlands, the DEP must make a written finding that the “cumulative effect of this project and other projects will not result in the impairment of ... EV wetland resources.” (At 25 Pa. Code § 105.18a(a)(6)). Before approving a permit for a project in non-EV wetlands, DEP must find that the cumulative effect of the project will not result in a “major impairment” of the Commonwealth’s wetland resources. (At 25 Pa. Code § 105.18a(b)(6)).

Based on numerous file reviews by PennFuture, it appears that permit applicants usually conduct, and the DEP regularly accepts, very minimal cumulative impacts analyses that do not even identify other projects in the vicinity, let alone consider their cumulative impacts. These analyses do not provide enough information for a meaningful assessment of impacts on the Commonwealth’s wetland resources.

## **Reduce stormwater through municipal stormwater authorities and a model stormwater fee ordinance.**

### **Recommendation**

Governor Wolf should ensure that the DEP play a leadership role in working with local governments to reduce stormwater and polluted runoff.

- The DEP should actively partner with local governments and promote the formation of municipal stormwater authorities as allowed by Act 68 of 2013.
- The DEP should develop a model stormwater fee ordinance that would help local governments raise funds to construct and manage stormwater projects.

### **Benefits**

With its expertise, resources, and leadership, the DEP could help promote the creation of municipal stormwater authorities, especially on a watershed basis.

The DEP could provide a model stormwater fee ordinance template to help local governments raise revenue for local stormwater projects. The ordinance could use the tools provided by Act 123 of 2014 to create a fee structure that provides property owners an incentive to voluntarily reduce stormwater runoff through green infrastructure techniques.

### **Background**

Stormwater runoff is a widespread problem that can have a devastating impact on life, property, and communities. Stormwater is also one of the most significant sources of pollution to Pennsylvania's rivers and streams.

Pennsylvania's local governments have valuable tools to tackle stormwater and polluted runoff thanks to two laws proposed by PennFuture and passed by the General Assembly, with strong bipartisan support, in 2013 and 2014.

Act 68 of 2013 allows Pennsylvania municipalities to form stormwater authorities either individually or in partnership with other governments. Multi-municipal authorities will allow local governments to cooperatively tackle stormwater issues on a watershed basis. Stormwater authorities will also provide municipalities a potential source of stable and reliable funding for stormwater projects and planning as they work to fulfill their obligations under both the Pennsylvania Stormwater Management Act and the federal Clean Water Act.

Local governments in Allegheny, Cumberland, Dauphin, Lancaster, Montgomery, and other counties are considering the formation of municipal stormwater authorities. Hampden Township

in Cumberland County has already formed an authority and the city of Lancaster is exploring a regional stormwater authority with surrounding townships.

Act 123 of 2014 gives these stormwater authorities the option to establish programs that would allow, for example, a large property owner to lower their rates or charges by reducing impervious surfaces with the addition of green roofs, riparian buffers, or other features that reduce the flow of stormwater.

The DEP could play a valuable role by partnering with interested municipalities, perhaps in partnership with the Pennsylvania Municipal Authorities Association, to promote the creation of municipal stormwater authorities. The DEP could also create a model stormwater fee ordinance for stormwater authorities and eligible classes of municipalities such as Third Class Cities.

## **Ensure that Pennsylvania meets its pollution reduction obligations under the Chesapeake Bay agreement.**

### **Recommendation**

Reduce pollution to the Bay watershed from:

- **Agriculture**

The DEP oversight of agricultural operations must be increased, including non-CAFO (Concentrated Animal Feeding Operations) farming operations. During farm inspections, the DEP must enforce all regulatory requirements and utilize all available compliance tools. Sufficient funding for the DEP outreach and education, as well as technical and financial assistance to the agricultural community, must be ensured.

- **Stormwater: Shale gas development**

The DEP must ensure effective post-construction stormwater management (PCSM) by eliminating the PCSM exemption for activities that “require restoration.” *See page 13 of this document for a detailed analysis of this issue.*

- **Stormwater: Urban and suburban**

The DEP should take a leadership role in working with local governments to help promote formation of municipal stormwater authorities and should develop a model stormwater fee ordinance to ensure funding for local stormwater management projects. *See page 23 of this document for a detailed analysis of this issue.*

The Pennsylvania Department of Agriculture should aggressively explore setting standards for application and content of lawn/turf fertilizer, and consider developing a certification process for lawn care professionals.

### **Benefits**

By addressing all significant sources of pollution – stormwater, wastewater treatment, and agriculture – we will cut pollution levels, improve water quality in our local waters and the Bay, and have no single sector be responsible for more than its fair share.

### **Background**

States within the Chesapeake Bay watershed committed to sufficiently reduce pollutants in order to remove the Bay from the list of impaired waters by 2025, and to be 60 percent toward that goal by 2017. So far, Pennsylvania has had great success in reducing pollution from the wastewater treatment sector, but has fallen behind in meeting pollution reduction goals in the agriculture and stormwater sectors. We have fallen so far behind, in fact, that the Environmental Protection Agency (EPA) has downgraded the agricultural and stormwater sectors to “backstop level,” indicating the EPA believes intervention is necessary to get Pennsylvania back on track.

Polluted stormwater runoff is the only source of pollution in the Bay watershed that is growing. This is due to increased impervious surfaces and poor management. Stormwater can damage stream health, cause significant flooding and erosion, and carry a multitude of pollutants downstream. We have not implemented enough stormwater management practices to keep pace with our pollution reduction commitments.

Additionally, Pennsylvania expects to achieve three quarters of its nutrient and sediment reduction from the agricultural sector, which makes its implementation shortfalls in that sector especially problematic with respect to achieving its overall pollution reduction commitments and the ultimate goal of restoring the Bay.

In a recent investigation of DEP inspections at farming operations, Conservation Pennsylvania found a huge difference between the compliance rates documented at farming operations in DEP inspection reports (60 percent compliance) and those determined by Conservation Pennsylvania (13 percent compliance). The study also found 57 percent of the farms had a violation related to documentation and 25 percent of the farms had a water quality violation. Yet, only one inspection report noted a violation that resulted in a monetary penalty.

To make up for the shortfalls in pollution reductions from agriculture and stormwater, the EPA's backstop options include expanding the National Pollutant Discharge Elimination System (NPDES) permit coverage to currently unregulated sources; conditioning or redirecting grants; and requiring additional reductions from point sources such as sewage treatment plants (which are already doing more than their fair share).

## **Ensure that streams are appropriately and timely designated.**

### **Recommendation**

Governor Wolf should ensure that the DEP has adequate staff resources to ensure that streams receive appropriate stream designation under 25 Pa. Code Chapter 93.

- The DEP should have adequate staff designated: 1) to review stream re-designation petitions submitted by the public and by partner agencies and 2) to conduct stream surveys to determine appropriate regulatory designations.
- The DEP should revise and streamline its internal process for reviewing stream re-designation petitions.
- The DEP should respond to petitions for stream re-designations in a timely fashion and propose rulemaking packages to upgrade or downgrade streams to the Environmental Quality Board (EQB) at least three times per year.

### **Benefits**

Pennsylvania has abundant water resources, with more than 86,000 miles of streams. Protecting streams through anti-degradation policies and ensuring that streams have the appropriate regulatory designation prior to permitting development activities within the watershed is critical to protecting the high quality of the Commonwealth's water resources for all uses, today and into the future.

### **Background**

Pennsylvania has a detailed process for protecting the existing use and designated uses of all High Quality (HQ) and Exceptional Value (EV) waters. The public may petition the DEP to upgrade a stream to (or downgrade from) HQ or EV if sufficient data exists to support the requested stream re-designation. In such cases the DEP will conduct its own surveys to verify supporting data. Partner agencies such as the Pennsylvania Fish and Boat Commission may also petition the DEP to upgrade a stream designation. In these cases the DEP will review related data, but in most cases will not conduct its own surveys. The DEP regional office may also conduct its own stream surveys and make a recommendation for a stream re-designation. All



streams proposed for re-designation must ultimately be approved by the EQB.

The DEP has limited, if any, staff designated to conduct stream surveys and to engage in the lengthy internal review process. This circumstance often leads to significant delays in applying protections to streams that deserve regulatory protection. The DEP has not proposed any stream re-designation rulemakings to the EQB since September 2011. Since then, hundreds of miles of streams have been petitioned for stream designation upgrade, with no formal action by the DEP to re-designate these streams and apply regulatory protections.

## **Develop new water well construction standards.**

### **Recommendation**

Governor Wolf should instruct his Secretary of Environmental Protection to initiate a rulemaking by the Environmental Quality Board to provide important and long-overdue standards for private water well construction that will protect human health and water resources. The regulation should also include standards for decommissioning water wells.

### **Benefits**

Improved water well construction standards would:

- provide important and long overdue protections for human health and water resources;
- establish a basis for water well construction standards to be developed through a public rulemaking process; and
- ensure properly sited and constructed wells, which can help protect groundwater from contamination by preventing human influences such as contaminated surface runoff or leaching of bacteria from a septic system.

### **Background**

More than 3 million rural and suburban Pennsylvania residents rely on 1 million private water wells for their drinking water supplies, and 13,000 to 15,000 new wells are drilled annually. Only Michigan has a larger population served by private water supplies. Still, Pennsylvania remains one of only two states that lack statewide regulations for private well construction.

Improperly constructed water wells can lead to poor water quality by providing pathways for bacteria and contaminants from septic systems and polluted surface runoff. In a recent study by The Center for Rural Pennsylvania, 40 percent of 701 water wells sampled failed at least one health-based drinking water standard. In the study, inadequate well construction was strongly correlated to the presence of coliform bacteria, which indicates the potential for disease-causing bacteria to occur, and E.coli bacteria, a more serious health risk.



In 2014, the Pennsylvania House of Representatives overwhelmingly passed Rep. Ron Miller's House Bill 343, which would have required the Environmental Quality Board to develop and approve regulations to establish water well construction and decommissioning standards like those recommended by the American National Standards Institute and the National Ground Water Association. The Pennsylvania Groundwater Association, the state association of professional well drillers, has supported well construction standards for years.

## **Promote homeowner investments in energy efficiency and renewable energy by greening the Multiple Listing Service (MLS).**

### **Recommendation**

Governor Wolf should establish a statewide Multiple Listing Service (MLS) working group to issue guidance and recommendations for including appropriate energy efficiency and renewable energy features in real estate listings.

### **Benefits**

Greening the MLS promotes and protects homeowner investments in energy efficiency and renewable energy by recognizing them as features for the purpose of establishing comparable property sales and eventually leading to their fair valuation in home sale transactions.

### **Background**

The MLS is central to any region's residential real estate market and provides a system by which property features and attributes are listed and valued. It also serves as the reference point for "comparable home values" when a home is appraised. Currently, over 800 individual MLSs operate across the country yet fewer than 150 include a mechanism to note "green features" like efficient appliances (such as those rated by ENERGY STAR), home energy efficiency ratings (including HERS and LEED for homes), and renewable energy systems (such as solar or small wind) of a property.

Without the ability to include these features on an MLS, there is no mechanism for the value they add to a property to be recorded or to serve as a comparison point for future property sales. This can lead to leaving property owners with stranded energy efficiency or renewable energy investments in their homes.

Pennsylvania has 12 MLS territories but only one provides a mechanism to record "green features." The Governor's Energy Office in Colorado recognized the benefit of having MLS

services that include an up-to-date listing of a property's energy efficiency and green attributes. To assist the state's real estate industry in this modernization, that office convened an MLS working group, issued recommendations and guidance, and instituted a recognition system for MLS entities that adopt the recommendations.

## **Make state government an active partner in addressing local solar issues.**

### **Recommendation**

Governor Wolf should request that his Secretary of Environmental Protection establish a statewide solar working group to focus on streamlining zoning, permitting, and codes, and to determine how solar attributes can be incorporated into the real estate MLS.

### **Benefits**

A state-sponsored solar energy working group that provides guidance on municipal zoning, permitting, and inspection will have a lasting impact on the creditability of those resources. If adopted, the resources should streamline municipal costs and processes. Also, input from group members working with representatives of state departments should go far to join the patchwork of disparate recommendations and models currently available to municipalities.

### **Background**

The National Renewable Energy Laboratory (NREL) found that "soft" costs such as zoning and permitting fees and other non-hardware costs now make up the largest portion of solar installation costs by representing 64 percent of the total price for residential solar energy systems. Pennsylvania has over 2,500 municipal authorities, each with the ability to create its own zoning, permitting, and inspection requirements in addition to a range of permitting fees for solar projects. These municipal procedures often lack a thorough understanding of the nature of solar energy installations and impose unreasonable limitations, requirements, and fees that run counter to nationally accepted best practices. A survey of permit fees among 37 Pennsylvania municipalities revealed that the average \$450 cost of a Pennsylvania solar permit is almost twice the national average of \$250.

Several Pennsylvania programs, including a solar zoning working group convened by the Rendell administration, have attempted to provide guidance on appropriate municipal zoning and permitting. The depth and breadth of understanding of issues and solutions has become better understood as Pennsylvania's solar energy industry has matured. Projects that have sought to address these issues include the Department of Energy (DOE)-funded Rooftop Solar Challenge (RSC) led by PennFuture in western Pennsylvania, and a second iteration of the RSC led by the

Delaware Valley Regional Planning Commission (DVRPC) in eastern Pennsylvania, which is ongoing. County planning departments, universities, and private companies have also issued a patchwork of models, permits, and best practices. The state could benefit from a new working group that shares the expertise developed by these various projects with representatives from state agencies like the state Department of Labor & Industry (L&I) to issue a set of official recommendations and models for municipalities to consider.

## **Propose dedicated funding for the Pennsylvania Sunshine Solar Program.**

### **Recommendation**

Governor Wolf should propose a dedicated, long-term funding source or sources for the Pennsylvania Sunshine Solar Program in his 2015-16 budget proposal to be announced in March.

### **Benefits**

Through the establishment of a dedicated, long-term funding stream for the Pennsylvania Sunshine Solar Program, the state's solar industry and consumers alike would receive a consistent, long-term, positive market signal. This would result in cessation of the boom-and-bust trend that the state's solar industry has weathered over the last few years.

### **Background**

In 2008, the General Assembly passed, and Governor Rendell signed into law, the Alternative Energy Investment Act, which authorized a solar energy rebate program for Pennsylvania residents and businesses. As a result, the Pennsylvania Sunshine Solar Program distributed over \$100 million to consumers for over 8,000 solar thermal and photovoltaic (PV) projects from May 2009 to December 2013.

While the General Assembly must ultimately approve any budget proposal, Governor Wolf can significantly increase the chances of long-term funding approval for solar installations by including such funding in the budget proposal he submits to the General Assembly in March.

## **Establish an inter-agency transmission planning work group to evaluate incorporation of wind energy into the grid and reduce the environmental impact of electric transmission.**

*Also recommended for the PUC.*

### **Recommendation**

Governor Wolf should establish a transmission planning working group that should, at minimum,

include members of the Public Utility Commission (staff and at least one commissioner), the Governor's office, the majority and minority chairs of the House and Senate Environmental Resources and Energy Committees, the majority and minority chairs of the House Consumer Affairs Committee and the Senate Consumer Protection Committee, the Office of the Consumer Advocate, and the Department of Environmental Protection.

### **Benefits**

States with a renewable portfolio standard that have significantly increased use of renewable resources either have available transmission lines or have developed strategies to build this capacity. Establishing a transmission planning working group complements Pennsylvania's Alternative Energy Portfolio Standard and provides a framework for wind development planning. A transmission planning working group could also help reduce the environmental impact of new transmission and promote the use of national best practices.

### **Background**

Numerous studies have shown that it is reasonable to integrate large amounts of wind and other types of renewable energy into the current U.S. electricity transmission system. However, new high-voltage electric transmission lines may be required – and these lines create environmental impacts. Electricity from wind and solar sources is often generated in remote areas where resource potential is high. Transmission lines are needed to transport the electricity from those remote facilities to more heavily populated areas where the electricity is consumed.

## **Adopt policies and practices that encourage transparency of DEP decision-making throughout the organization.**

### **Recommendation**

In order to encourage improved decision-making and public confidence in the decisions of the organization, DEP should adopt policies and practices that foster open and transparent decision-making throughout the organization.

### **Benefits**

Improved transparency in decision-making would:

- improve agency credibility amongst the public, policymakers and the regulated community;
- increase participation in agency decision-making; and
- improve the quality of agency decisions.

### **Background**



Over the past several years, the DEP has failed to take measures that would improve transparency in its decision-making process. This lack of transparency has harmed the agency's credibility in the public eye. Examples include the manner and frequency with which DEP holds public meetings on proposed permit actions and policies: 1) Agency personnel regularly communicate informally with the regulated community, but do not have the same level of communication with citizen advocates; 2) Changes in the DEP's structure remove oil and gas operations from the regional offices so citizen advocates have less access to influential decision-makers; 3) The DEP has failed to review and develop a new policy on government openness and citizen participation; 4) Staff is not trained on public participation; 5) The DEP has failed to establish a public participation process that involves citizen advocates before the agency makes a decision instead of holding public hearings that end up being a justification for a predetermined decision.

The DEP should engage in a thorough evaluation of its public participation process, including review of existing policies, guidance committees, public communications, and public participation practices. The agency should engage the public in this review process and obtain input into their existing processes. The DEP should then make changes necessary to improve transparency and public participation in its decision-making.

## Recommendations for the Department of Conservation and Natural Resources (DCNR)

### **Prohibit further gas leasing of State Parks and State Forests.**

#### **Recommendation**

Governor Wolf should immediately sign an executive order that prohibits further leasing of Pennsylvania State Parks and State Forests for natural gas development. The language should make it clear that the executive order explicitly applies to both surface and subsurface rights and to both State Parks and State Forests.

#### **Benefits**

A new and stronger executive order would prohibit new leasing of State Forest and State Park lands for gas development, limit damage from ongoing gas development, and add protections for public lands, wildlife, ecological resources, and recreational opportunities.

#### **Background**

The natural gas industry already has access to over 700,000 acres of Pennsylvania State Forest lands – representing nearly one-third of the entire State Forest and nearly one-half of the 1.5 million acres that lie over the Marcellus Shale formation. The bulk of this access comes from over 385,000 acres of gas leases, primarily approved by the Rendell administration and the General Assembly, plus a lack of Commonwealth control of gas rights under approximately 300,000 acres of other public lands.

In late 2010, Governor Rendell signed an executive order that prohibited further leasing of lands owned and managed by the DCNR for gas development. The executive order was based on an exhaustive scientific study conducted by the DCNR in 2010. The study concluded that any further leasing of State Forest land could risk the wild character and ecological integrity of the State Forest system.

A Shale Gas Monitoring Report released by DCNR in April 2014 further underscores the need for a new leasing moratorium. The report included monitoring data collected through 2012 and highlighted the conversion of State Forest lands due to construction of 161 miles of new or expanded roads, 191 well pads, and 104 miles of pipeline corridors. Natural gas development on public lands is already causing a significant loss of wild and primitive places in the forest, and is forcing many recreational users of the forest to alter their plans or change their destination.

In May 2014, Governor Corbett announced that he would rescind the 2010 executive order on leasing and replace it with a new executive order that would allow new leasing just outside of

State Forests and, for the first time, allow leasing of State Parks. Pennsylvania's State Parks are already at risk for gas development because the Commonwealth only owns approximately 20 percent of the gas rights under parks.

## **Protect the Clarence Moore lands of the Loyalsock State Forest from natural gas development.**

### **Recommendation**

Governor Wolf should direct the DCNR to refrain from entering into a Surface Disturbance Management Agreement with Anadarko Petroleum Corporation and Southwestern Exploration and Production Company (collectively, the “companies”) for development of the Clarence Moore lands of the Loyalsock State Forest until the DCNR exhausts all viable legal strategies to prevent gas development on and under this property including full use of its rights to control surface activity on much of the tract.

### **Benefits**

Protecting the Clarence Moore lands from natural gas development would:

- preserve the unique ecological, recreational, and historical resources of the area;
- create a State Forest sanctuary from gas development activities in a part of the state where most State Forest areas are already available for development; and
- demonstrate that the Wolf Administration takes Article I, Section 27 of the Pennsylvania Constitution seriously and will work to advance its goals.

### **Background**

The Clarence Moore lands (named for a former owner) comprise some 25,621 acres of the Loyalsock State Forest in northern Lycoming County and are an ecological, recreational, and historical gem of Pennsylvania's State Forest system. These extraordinary lands contain the Rock Run (considered by many to be the state's most beautiful stream) watershed, several other Exceptional Value streams, the popular Old Loggers Path hiking trail, large tracts of interior forest, and a vital National Audubon Society Important Bird Area. Also, the portion of the Lycoming Creek watershed – which serves as the secondary drinking water supply for the City of Williamsport – that is located within this area of the Loyalsock State Forest is the only part of that watershed not open to gas development.

The Clarence Moore lands are “split estate” lands: The Commonwealth owns the surface but the companies own or control the oil and gas rights. Generally, where a split estate exists in Pennsylvania, the party that owns the oil and gas rights can make reasonable use of the surface

lands to extract the oil and gas beneath them. The Clarence Moore lands are an exception to this rule, however, because a state court interpretation of a provision in the Commonwealth's deed gives the DCNR the power to deny the companies access to almost 75 percent of the Clarence Moore lands. The Commonwealth also appears to have the legal power – again, through the exercise of property rights – to deny the companies rights-of-way for pipelines to transport gas from the 25 percent of the Clarence Moore lands where the companies *do* have normal “split estate” surface-use rights.

Given its property rights, the DCNR has the power to prevent gas development activities on all or most of the surface of the Clarence Moore lands. Taking into account the inevitable, permanent impacts of such activities, the DCNR has a duty under Article I, Section 27 of the Pennsylvania Constitution to use this power. However, current DCNR negotiations of a Surface Disturbance Management Agreement with the companies would open much of the surface of the Clarence Moore lands to development activities. The DCNR should be required immediately to cease negotiations with the companies until the Wolf administration can evaluate all relevant facts and legal precedent with the goal of preventing natural gas development in the Clarence Moore lands to the greatest extent possible.

## **Give the public a greater say in public lands decision-making on natural gas development.**

### **Recommendation**

Governor Wolf should direct his Secretary of Conservation and Natural Resources to develop regulation, and issue policy guidance in the interim, that requires the DCNR to provide notice and seek public input before authorizing any major unconventional gas development on or under public lands. Transparent and accountable regulation would govern any major new gas development not covered by a new executive order that would prohibit further leasing of State Forest and State Park lands for natural gas development.

At minimum, the regulation would provide for:

- a public comment period and a comment-response document provided by the DCNR after the submission of public comments;
- at least one public hearing or meeting; and
- public access, during the comment period, to proposed development plans and the DCNR's analysis of the effects of the potential development on ecological, recreational, wildlife, cultural, and aesthetic resources.



## Benefits

This regulation or policy will serve both the interests of the DCNR and the public to ensure that all Pennsylvanians have an opportunity to understand and have input into:

- proposed natural gas development on public lands;
- how this development would affect our State Parks and State Forests; and
- what is being done to ensure that adverse effects are being prevented or mitigated.

## Background

DCNR is required by law to manage State Forests and State Parks for the benefit of all Pennsylvanians, including generations yet to come. Given this stake in how public lands are managed, the public should have meaningful input into how the DCNR makes significant and far-reaching decisions about the management of these lands. However, the manner in which the DCNR has handled potential gas development in the Clarence Moore lands amply demonstrates that the agency is not required to publicly share vital information regarding proposed gas development on public lands or to engage the public in a meaningful way in its decision making.

Based on currently approved leases and the amount of acreage where the Commonwealth does not own mineral rights, there could already be as many as 4,000 to 8,000 shale gas wells drilled on state public lands. These wells will be accompanied by thousands of miles of roads and pipelines, and scores of impoundments, compressor stations, and other types of industrial infrastructure. The public should have a say in how the DCNR guides and limits development on public lands.

## Recommendations for the Department of General Services (DGS)

### **Require high-performance green building standards for state building projects.**

#### **Recommendation**

Governor Wolf should issue an executive order to require high-performance green building standards for most construction projects involving buildings that are owned or substantially leased by the Commonwealth. The executive order should cover design, construction, and renovation standards and apply to buildings over a certain square-footage threshold.

#### **Benefits**

High performance green building standards for state projects will:

- provide substantial long-term savings in energy bills, water bills, and other operational costs for Pennsylvania taxpayers;
- decrease pollution and solid waste, and contribute to healthier and more productive work environments; and
- enable Pennsylvania state government to serve as a model and leader for the rest of the state by promoting the use of green buildings, reducing energy costs, and using (and reusing) Pennsylvania products and building materials.

#### **Background**

Buildings account for approximately 41 percent of energy use, 73 percent of electricity consumption, and 14 percent of water use. Requiring high performance building standards in Commonwealth construction projects would lead to substantial savings in operating costs over the life of each building, saving taxpayers money on energy and water costs. These savings would come from more efficient lighting, greater use of natural light, more efficient heating and cooling systems, better insulated walls and roofs, more efficient use of water, use of systems that generate less wastewater, and decreased need for water and wastewater infrastructure and capacity.

Commonwealth building projects should be designed for long-term energy efficiency and high performance while taking into account the comfort, health, and productivity of occupants (or residents in the case of State System of Higher Education dormitories).

## **Revive and reinvigorate Pennsylvania’s highly successful Energy Savings Performance Contracting (ESPC) program.**

### **Recommendation**

Governor Wolf should establish an Energy Management Office to revive and reinvigorate the highly regarded Guaranteed Energy Savings Act (GESA) program and related outreach activities for municipalities, school districts, and state agencies. The office should be staffed with employees who collectively have broad public sector, private sector, and technical support experience.

### **Benefits**

GESA initiatives save money and energy, and reduce pollution. GESA programing, outreach activities, and support result in greater adoption of energy savings performance contracts as a strategy for government and public institutions to conserve funding.

### **Background**

Energy Savings Performance Contracting (ESPC) for government and institutional sectors allows significant reductions in upfront capital needs by financing energy and capital building improvements through long-term energy savings.

Pennsylvania’s Guaranteed Energy Savings Act gave government units (e.g. municipalities, school districts, state agencies) the authority to enter into energy savings performance contracts that enable energy and capital building upgrades to be financed through long-term energy savings. The Department of General Services’ (DGS) Energy Management Office, which facilitated ESPCs and provided technical assistance and other related services to school districts and municipalities, was eliminated in 2012 and the GESA program was suspended.

The GESA program saved Pennsylvanians energy and money. A 2010 DGS report showed approximately 69 projects underway, 41 projects under contract, 12 government agencies participating, and 23 ESCOs pre-qualified to engage in GESA activity between 2001 and 2010. GESA activities provided \$449 million in guaranteed energy savings to pay for \$379 million in project investments – ultimately resulting in a net savings of \$54 million for Pennsylvanians.

## Recommendations for the Department of Transportation (PennDOT)

### **Prevent the Pennsylvania Turnpike Commission (PTC) from blasting an immense gash in the Allegheny Front to bypass the Allegheny Tunnel.**

#### **Recommendation**

Governor Wolf and his Secretary of Transportation should do everything in their power to urge the Pennsylvania Turnpike Commission (PTC) to reject any plan that would bypass the Allegheny Tunnel on the Pennsylvania Turnpike in Somerset County and cut an immense gash through the Allegheny Front. The PTC should be urged to consider an alternative plan that involves improving the existing tunnels or constructing one or more new tunnels.

#### **Benefits**

Improving the existing Allegheny Tunnel tubes or boring at least one new tube would accommodate future growth in turnpike traffic while protecting and leaving intact the land and wildlife habitat above the tunnel. Maintaining a contiguous ridgeline along the Allegheny Mountain would ensure an essential migration route for plant and wildlife species. Protecting the headwater streams and springs in this area would ensure water quality for downstream users.

#### **Background**

The PTC is currently considering six alternatives to the existing Allegheny Tunnel and corresponding traffic configuration on both sides of the mountain. Of the alternatives, three options include cutting a large, open gash through the Allegheny Front – Pennsylvania's preeminent geological feature. The Mountain Field and Stream Club, PennFuture, and local citizens are opposed to an open cut through the mountain.

The Mountain Field and Stream Club has owned and managed 1,400 acres of land above the Allegheny Tunnel for over 40 years. In addition to being a vibrant community gathering space, the property provides essential habitat that includes woodlands and meadows, and helps protect streams and wetlands in the area. The Mountain Field and Stream Club helps stock local trout streams and has used its property to teach generations of children to fish.

An open gash through the Allegheny Mountain could:

- destroy hundreds of acres of forest, wetlands, and valuable wildlife habitat;
- disrupt an Indiana bat hibernaculum;
- cause permanent damage to the High Quality headwaters of both the Stonycreek River and the Raystown Branch of the Juniata River, and threaten native trout populations;

- risk contamination of the water supply for Berlin Borough, affecting several thousand residents as well as local businesses such as the Snyder of Berlin potato chip factory; and
- sever the contiguous ridgeline, which currently provides a migration route for both wildlife and plant species.

## **Promote bicycle and pedestrian transportation options and make bicycling safer in Pennsylvania.**

### **Recommendation**

Governor Wolf and his Department of Transportation (PennDOT) should improve conditions for pedestrian and bicycle trips and encourage the use of non-motorized transport in Pennsylvania via several key changes.

- Establish an Office of Smart Growth and require at least one staff member to have a background in bicycle and pedestrian facility implementation to ensure that non-motorized transportation is incorporated into the planning and work of the office.
- Ensure that the Secretary of Transportation convene a meeting of all PennDOT district executives to review best practices for reducing crashes, fatalities, and injuries for pedestrians and bicyclists. Findings should be included as part of an update to the Bicycle and Pedestrian Master Plan.
- Ensure that the Secretary of Transportation directs a comprehensive update of PennDOT's Bicycle and Pedestrian Master Plan, last updated in 2007. The update should include measurable goals in the areas of pedestrian and bicycle usage, fatality reduction, and facility construction. It should also identify opportunities and set goals to create and expand regional trail networks and corridors.

### **Benefits**

A robust statewide strategy to encourage and strengthen non-motorized transportation will make developed communities healthier, safer, and more attractive by reducing our carbon footprint, improving air quality, and conserving natural resources.

Crafting a statewide agenda around bicycle and pedestrian safety by identifying problem areas, proposing solutions, and setting goals for improvement could result in fewer hospital visits and more lives saved. As well, it can help mitigate the high percentage of bicycle- and pedestrian-related injuries and fatalities.

A comprehensive, updated, and data-driven Bicycle and Pedestrian Master Plan can help establish a long-term, statewide vision for transportation in Pennsylvania. The opportunity to

make walking and biking more attractive for short trips, and the emergence of regional trail networks, present ripe opportunities for growth for the Commonwealth in the area of non-motorized transportation.

### **Background**

State governments across the U.S. have been integrating principles of smart growth into planning efforts to mitigate urban sprawl, reduce energy use, and create healthy communities. Non-motorized transportation is a critical component of smart growth planning as one of its goals is to create communities that are walkable and bikeable.

Across Pennsylvania, 12 percent of all trips taken are by bicycle or on foot. Nationwide, 40 percent of all travel occurs within a distance of two miles. With proper infrastructure and support, the Commonwealth could help encourage the use of non-motorized transport, especially for trips of two miles or less.

In terms of recreational biking and walking, Pennsylvania has made some encouraging progress in the area of regional trail networks and corridors and now leads the nation in rails-to-trails miles. Our first-place designation should be promoted and protected.

Pennsylvania must make a significant effort to reduce crashes, injuries, and fatalities that involve bicyclists and pedestrians. In 2013, biking and walking incidents accounted for a combined total of 13.4 percent of the Commonwealth's traffic crash deaths. In that same year, 4,375 pedestrian-related crashes and 1,380 bicycle-related crashes were reported in Pennsylvania.

## Recommendations for the Public Utility Commission (PUC)

### **Address dangers posed by oil bomb trains.**

#### **Recommendation**

Governor Wolf should immediately sign an executive order to create an inter-agency working group that will develop a report within six to nine months on the risk posed to citizens and communities from dangerous and frequent oil trains that carry highly volatile cargoes across the Commonwealth, and also develop a set of recommendations for action. The working group should work closely with the PUC and Governor Wolf should ask the PUC to conduct inspections to determine compliance with federal regulations under its jurisdiction.

#### **Benefits**

Reducing the likelihood of a disaster caused by a crude-by-rail derailment protects public safety, public health, and the environment.

#### **Background**

Pennsylvanians are being exposed to unacceptable levels of risk as a result of volatile shale-based oil being shipped on railroads in outdated tanker cars throughout our state.

While the federal government has a significant role in overseeing our nation's railways, our state should be taking action to help address the situation. In the absence of action, our leaders are allowing rail carriers and the businesses they serve to shift the costs and risk of spills and accidents onto local communities. At least 12 significant derailments involving crude have occurred in North America since May 2013. The most devastating occurred in Lac-Mégantic, Quebec in July 2013 when 47 people died after a train carrying Bakken crude exploded. In 2014, dangerous derailments involving crude oil trains occurred in Philadelphia, Vandergrift, and McKeesport, Pennsylvania.

### **Establish an inter-agency transmission planning work group to evaluate incorporation of wind energy into the grid and reduce the environmental impact of electric transmission.**

*Also recommended for the DEP.*

#### **Recommendation**

Governor Wolf should establish a transmission planning working group that should, at minimum, include members of the Public Utility Commission (staff and at least one commissioner), the Governor's office, the majority and minority chairs of the House and Senate Environmental Resources and Energy Committees, the majority and minority chairs of the House Consumer

Affairs Committee and the Senate Consumer Protection Committee, the Office of the Consumer Advocate, and the Department of Environmental Protection.

### **Benefits**

States with a renewable portfolio standard that have significantly increased use of renewable resources either have available transmission lines or have developed strategies to build this capacity. Establishing a transmission planning working group complements Pennsylvania's Alternative Energy Portfolio Standard and provides a framework for wind development planning. A transmission planning working group could also help reduce the environmental impact of new transmission and promote the use of national best practices.

### **Background**

Numerous studies have shown that it is reasonable to integrate large amounts of wind and other types of renewable energy into the current U.S. electricity transmission system. However, new high-voltage electric transmission lines may be required – and these lines create environmental impacts. Electricity from wind and solar sources is often generated in remote areas where resource potential is high. Transmission lines are needed to transport the electricity from those remote facilities to more heavily populated areas where the electricity is consumed.



## Recommendations for the Department of Labor and Industry (L&I)

### Reform Pennsylvania's broken building codes review and adoption process.

#### Recommendation

Governor Wolf should take immediate steps to reform Pennsylvania's broken building code review and adoption process by:

- appointing a L&I Deputy Secretary of Safety and Labor-Management Relations to monitor the Uniform Construction Code Review and Advisory Council's (RAC) review of the 2015 International Construction Codes;
- appointing RAC members to fill any expired terms and replacing any unqualified RAC members with members who are qualified, supported by their statewide professional organizations, and supportive of up-to-date construction codes;
- instructing the Secretary of L&I to address the RAC members and convey that the Governor expects all of the 2012 and 2015 code changes to be adopted via an efficient, fair, and balanced process for code review; and
- assessing the RAC's proposed process for review of the 2015 codes for compliance with the requirements of the Uniform Construction Code.

#### Benefits

Updated building codes save consumers money, reduce energy use, and cut pollution while protecting homeowners, workers, and first responders.

#### Background

Model codes adopted by the International Code Council (ICC) promote safe, energy efficient, and resilient structures across the U.S. Previously, Pennsylvania automatically adopted nearly all changes to its statewide building code every three years as recommended by the ICC. But Act 1 of 2011 changed that by eliminating automatic code updates and requiring a two-thirds "super majority" vote of the RAC. Governor Corbett hand-picked industry members to serve on the RAC; many of these people hold firm to the belief that new codes should not be adopted. The RAC has now rejected hundreds of changes to the building codes recommended by the ICC. These rejected changes include safety improvements and energy code updates. Pennsylvania is now building to the 2009, not the 2012, codes. If this process doesn't change, Pennsylvania's building codes will remain anchored in the past.

The General Assembly must pass legislation to fix portions of our broken building code adoption process. However, Governor Wolf has the ability and opportunity to begin reforming the process within areas of his discretion and setting the stage for more comprehensive legislative action.