

PA COUNCIL OF TROUT UNLIMITED
POLICY ON OIL AND NATURAL GAS DEVELOPMENT
January 2014

This document succinctly conveys PATU's concerns and its policy regarding oil and natural gas development. Those who wish greater detail and guidance are referred to the companion document Guidance on Implementation of the PATU Policy on Oil and Natural Gas Development.

Scope and Purpose

The mission of the Pennsylvania Council of Trout Unlimited (PATU) is to conserve, protect, restore, and sustain Pennsylvania's coldwater fisheries and their watersheds, especially our wild trout resources. Central to this mission is the promotion of land use management that maximizes habitat conservation and minimizes impacts caused by land use activities, including oil and gas development. The vast majority of Pennsylvania's coldwater watersheds are underlain by oil and/or gas resources, necessitating thoughtful consideration of where and how development occurs in watersheds that sustain coldwater habitats. The purpose of this policy statement is to guide state council, its chapters and members, and others in conservation of coldwater aquatic ecosystems in places where oil and gas development, production and transportation are occurring. This policy is not intended to cover all forms of energy development, but rather to address oil and gas extraction by both conventional and unconventional means and the downstream activities between the points of extraction and consumption.

Background

Pennsylvania has a long history of energy resource extraction, including coal, oil and natural gas. Until early in the 21st century, oil and gas extraction were accomplished by conventional means. More recently, advancements in horizontal drilling and hydraulic fracturing technologies have unlocked oil and natural gas in shale formations (e.g., Marcellus and Utica Shales) that previously were not technically or economically feasible to develop. Such unconventional oil and gas development is now widespread in Pennsylvania.

PATU recognizes that development of Pennsylvania's oil and gas resources is important to the economies of the Commonwealth and the nation. Gasoline distilled from oil powers our cars, and natural gas may do so in the not too distant future. Natural gas heats our homes and businesses, fuels our factories, and increasingly is the fossil fuel of choice for generation of electricity. Clearly, oil and natural gas are firmly integrated into our lives.

While development of oil and gas resources in Pennsylvania has many benefits, it presents risks as well. Aspects of oil and gas development that present risks to the Commonwealth's coldwater resources include:

1. the impacts of earth disturbance, including erosion and sedimentation and the loss of forest canopy cover, which engenders loss of shade, diminished water infiltration and increased runoff;
2. water withdrawals and consumption;
3. wastewater disposal;

4. spills of pollutant bearing materials (both on-site and transportation-related); and
5. greenhouse gas emissions, which are a threat to the existing temperature regimes of coldwater streams.

In addition, there is much we do not yet know about the environmental impacts of widespread oil and gas development, which may include interactions among multiple forms of impact across large spatial scales. Therefore, PATU also is concerned about cumulative impacts and the effects of landscape-scale changes on coldwater resources.

Policy Statement

Good stewardship mandates that in reaping the benefits of oil and gas development we minimize the associated risks and adverse impacts to the extent practicable. Thus, PATU supports oil and gas development in suitable places, utilizing best management practices, and under the control of protective regulations supported by adequate permitting, monitoring, and enforcement.

There are places of exceptional ecological, recreational, scenic, or other value where surface disturbance associated with oil and gas development should be prohibited or restricted. Many of these areas are located on public lands (for example, the Hammersley Wild Area of the Susquehannock State Forest). Current laws and regulations do not afford adequate protections to these special places. PATU advocates a policy shift and encourages the legislative and executive branches of state government to identify and protect these areas.

We recognize that burning of natural gas results in lower greenhouse gas emissions than burning oil and coal. However, because emissions of carbon dioxide, methane and other greenhouse gases ultimately will alter the temperature regimes of coldwater streams and adversely impact their biota, PATU considers natural gas (a carbon-based fossil fuel) only a short-term solution to the energy needs of the Commonwealth and the nation. We strongly advocate that research and development efforts directed at sustainable production of energy be continued and strengthened.

PATU, its chapters, and individual members will work cooperatively and collaboratively with state government, energy developers, and others to prevent, reduce, or eliminate adverse impacts to coldwater resources and their watersheds. PATU also will work cooperatively with national TU and other conservation and sportsmen's organizations to influence the decisions of political leaders and government officials regarding laws, regulations, policies and other instruments that will ultimately reduce the impacts of oil and natural gas development on coldwater resources and their watersheds.

Recommendations

1. Because of the projected spatial density of oil and gas development, landscape-scale, and particularly watershed-scale, planning should be employed by both industry and state government to avoid a piecemeal approach to oil and gas development and to help preserve the ecological integrity of both terrestrial and aquatic ecosystems.
2. Pennsylvania state government should fund statewide, watershed-based environmental impact studies that include characterization of long-term and cumulative impacts on fish

and wildlife resources. Such studies should take advantage of other studies of limited scope already under way.

3. Pennsylvania DEP should update and formalize the regulation of water withdrawals so that permitting, on-site requirements, monitoring and enforcement are identical across the Commonwealth. Formal, statewide adoption of the regulatory and oversight programs of the Susquehanna River Basin Commission would accomplish this.
4. We acknowledge that the oil and gas industry has made significant progress in water recycle and reuse; however, treatment and disposal of wastewaters remains an issue. The oil and gas industry and the Commonwealth of Pennsylvania should jointly fund research efforts to develop better (i.e., economically and environmentally) technologies for treating drilling- and production-related waste fluids and more environmentally sound methods of disposal of both liquid and solid wastes, with a goal of zero discharge. The industry should conduct a program of research directed at reducing or eliminating water consumption during hydraulic fracturing.
5. We call upon the oil and gas industry to implement a program of continuous improvement, including development and implementation of new best management practices to continually reduce the environmental impacts on energy development. The chemical industry's Responsible® Care program might serve as a suitable model. At a minimum, such a program should address the following.
 - a. waste minimization
 - b. pollution prevention
 - c. water usage reduction
 - d. earth disturbance (i.e., footprint) reduction
 - e. transportation of materials, equipment, and wastes
 - f. natural gas transmission
 - g. root-cause analysis of environmental and safety incidents
6. In 2012 Pennsylvania enacted an impact fee on natural gas extraction. A significant portion of the impact fees received by counties and municipalities should be spent on conservation projects designed to ameliorate or offset the environmental impacts of oil and gas development. PATU will work with local governments, Conservation Districts, other conservation organizations, and others to identify and prioritize projects. A more transparent accounting system should be implemented.