



December 27, 2009

Bureau of Oil & Gas Regulation
NYSDEC Division of Mineral Resources
625 Broadway, Third Floor
Albany, NY 12233-6500

RE: Comments to dGEIS of Robin Krawitz, Executive Director of Otsego 2000

To Whom It May Concern:

My name is Robin Krawitz and I am the Executive Director of Otsego 2000 located in Otsego County, in the village of Cooperstown, New York. Otsego 2000 is a 501(c)(3) charitable organization whose mission is to protect the landscapes, valleys, villages, and farms of the Otsego Lake region constitute a unique confluence of historic, environmental, cultural, agricultural, rural, and scenic resources of New York State. I am a qualified architectural historian/ historian under the qualification standards codified by the U. S. Department of the Interior in 36 CFR 61 Appendix A with 29 years of experience in historic preservation.

My previous position was with the Delaware State Historic Preservation Office managing the National Register, Covenant and Easement, Architectural Survey and Certified Local Government programs. I was also responsible for the review of documents produced in compliance with federal environmental impact regulations. (My resume is included as Attachment 1.) I am personally familiar with the documents referenced below and request the New York State Department of Environmental Conservation (the "Department" or "DEC") consider them in connection with the Draft Supplemental Generic Environmental Impact Statement on the Oil, Gas and Solution Mining Regulatory Program, Well Permit Issuance for Horizontal Drilling And High-Volume Hydraulic Fracturing to Develop the Marcellus Shale and Other Low-Permeability Gas Reservoirs (dSGEIS) issued September 30, 2009. Most of the information referred is publically available and citations are provided; copies of all other referenced documents are included as attachments.

Otsego County: Rural Character

Otsego 2000 believes the Otsego Lake region is a masterpiece of nature which has remained rural and agricultural in nature since early settlement before the American Revolution. The landscape is made up of a series of ridges and valleys running generally northeast to southwest. Small hamlets dot the valleys surrounded by agricultural land. The ridges are generally forested. The State of New York is far and away the largest steward of land for conservation and recreation purposes in Otsego County,

maintaining 23,679 acres of land. There are two state parks, nineteen state forests and two state designated wildlife management areas in Otsego County. One third of the county land area is in agriculture, the principle agricultural activity is dairy farming.

Otsego County: Historic Assets

Otsego County has an extensive and rich collection of historic buildings, sites, structures, objects, and districts worthy of preservation and protection. One major focus of the work of Otsego 2000 has been the documentation and protection of the historic resources in the Otsego County. Protecting the historic fabric, including the scenic qualities of the landscape in which they are set is part of the mission of this organization. Our efforts culminated in the listing of the Glimmerglass Historic District in the New York State and National Registers of Historic Places (aka the Registers) at the national level of significance in 1999.

The Field Services Bureau of the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) maintains the state's inventory of historic resources and nominates significant properties to the Registers. Otsego County contains many recognized historic properties. Approximately 3956 contributing buildings are recognized in the county's 61 nominations to the Registers. This includes 12 historic districts recognizing the historic development of the hamlets, villages, and rural landscapes of the County. Although it may sound extensive, it is not a comprehensive list of properties worthy of preservation in Otsego County. Due to limitations of time and capacity, the county has never been comprehensively surveyed, the first step in identifying historic properties. Additionally, property owners have the right to disallow designation of their individual property.

Otsego County also has extensive archeological resources including sites associated with Native American habitation and other resources which no longer survive above ground. In the New York State Museum Bulletin published in September 1920, forty three general locations of archeological sites were identified in Otsego County located mainly along the extensive networks of water bodies across Otsego County. [The State Museum Bulletin Series is available at <http://www.nysl.nysed.gov/scandocs/museumbulletin.htm>]

Clearly many more have been identified since then but specific location of archeological sites are kept confidentially by the OPRHP because these resources are vulnerable to looting and vandalism. [Information on the historic resources of Otsego County from the files of OPRHP is publically available from the on-line tools section found on the web site: <http://nysparks.state.ny.us/shpo/online-tools/>]

National and International Significance

As documented by historian Jessie Ravage in the Glimmerglass Historic District nomination to the Registers, the Otsego Lake landscape is nationally and internationally important in part because this was one of the first landscapes of American environmental consciousness. The writings of James Fenimore Cooper were influenced by the European lament in the early 19th century for the loss of their native forests. Cooper's placement of his heroic novels in the Garden of Eden-like setting based on the Otsego Lake area he knew as a boy, venerated the landscape itself as the stage for the telling of American epic stories.

Susan Fenimore Cooper, the daughter of James Fenimore Cooper, is noted by historians as a pioneering conservationist, whose writings mourned the wholesale destruction of the forests to change the landscape to suit changing agricultural practices. In her book *Rural Hours*, Miss Cooper wrote about the importance of maintaining balance between using the bounty of the land and preserving the landscape. This abstract and literary concept of land preservation inspired the literal conservation of this landscape by the Edward Clark family beginning in the mid 19th Century. [The Glimmerglass Historic District National Register of Historic Places Nomination is publically available on line at: http://www.oprhp.state.ny.us/hpimaging/hp_view.asp?GroupView=6441].

Otsego County: Economy

The economy of Otsego County is based on agriculture, tourism, educational institutions, and medical facilities. The natural beauty and rural character of this county creates a unique quality of life for its permanent residents and many visitors. All of this is entirely dependent on protecting its water, land, forests and historic views and sites. The entire economic base of the region can and will be compromised through industrialization of the scale and risk proposed by the plans set forth in the dSGEIS.

Agriculture in Otsego County

Agriculture remains a critically important part of the economy of Otsego County with over 900 active farms that utilize 27.5% of the land area in the county. The agricultural sector of the Otsego County economy generated over \$50 million in products sold in 2007, the largest part of which is the dairy industry comprising about 70% of total agricultural production. Thirty percent of the county's land area is enrolled in agricultural districts through the designation program proscribed in the New York Agriculture and Markets Law § 25AA- Agricultural District Law as coordinated through the Otsego County Department of Planning. Active farming requires specific patterns of circulation through the landscape, involving the movement of equipment and livestock.

Tourism and Seasonal Use

Tourism is the fourth largest employment sector in Otsego County, generating 1 in 10 jobs here and bringing in \$20 million in tax revenue annually. Important cultural attractions such as the Baseball Hall of Fame, the New York State Historical Association's Fenimore Art Museum and Farmer's Museum, the annual Glimmerglass Opera festivals, and beautiful Lake Otsego, memorialized in the works of James Fenimore Cooper, draw between 335,000 and 500,000 visitors to Cooperstown annually. The area is also appealing to a thriving second home market. Approximately one in ten properties in Otsego County are categorized as "Seasonal, Recreational or Occasional Use" by the U.S. Census Bureau in the 2000 Census. (Attachment 2: U.S. Census Bureau Table DP-1. Profile of General Demographic Characteristics: 2000, Geographic area: Otsego County, New York)

Water Supplies

There are ten principle lakes in Otsego County, the largest of which is Otsego Lake, which is also the headwater of the Susquehanna River. Otsego, Canadarago and Wilbur lakes provide drinking water to the three largest communities in the county, Cooperstown, Richfield Springs, and Oneonta, respectively. There are also numerous natural and man-made ponds throughout Otsego County, as well

as plentiful supplies of groundwater. The total population of Otsego is over 61,000 and summer tourism brings in an additional 335,000 visitors. Half of this population gets their drinking water from lakes and reservoirs. In addition, there are forty water systems in Otsego County that serve a combined total of 30,809 people. Although precise locations for private wells are not tracked, approximately 24,102 individual well locations can be extrapolated from Otsego County's land use data, using the County's Emergency Responder Address System correlated to parcel data, land use coding and location outside the boundary of water districts.

The DEC's Previous Commitments to Protecting Otsego County's Unique Resources

The plans by the DEC to allow horizontal natural gas drilling with hydro-fracturing are particularly troubling as they are inconsistent with plans and reports put in place by the DEC itself to protect the important natural resources in this county including agricultural land, water resources and endangered species present in this watershed. In 1990, New York State initiated a formal Open Space Conservation Program to provide the public with opportunity to have input on land acquisition decisions made by DEC and OPRHP. By opening these processes to the public, Open Space Plans were produced to enumerate the goals and objectives of the state in its land acquisition strategies. On June 17, 2009 DEC released the 2009 New York State Open Space Conservation Plan, (Open Space Plan) [Document publically available at the DEC web site at http://www.dec.ny.gov/lands/47990.html#Complete_Plan]

According to DEC Commissioner Pete Grannis, who commented on the importance of this Plan in a DEC press release, ". . . the [Open Space] Plan focuses on four goals specifically including: connecting people with nature and recreation; and safeguarding the state's unique natural and cultural heritage." With him to announce the document was Commissioner Carol Ash of the Office of Parks, Recreation and Historic Preservation who added, "In these challenging times, we need to remember that the state's protected landscapes generate critical economic activity in the form of tourists' dollars and agricultural and forest products. The Open Space Plan provides a forward-looking approach to safeguarding New York's scenic, recreational, agricultural and ecological resources today and in the decades to come." (Press Release Publically available document on the web at <http://www.dec.ny.gov/press/55707.html>.)

Further, the plan establishes the important purposes for state involvement in land conservation efforts. These include, among others: 1) to protection of the diversity of plant and animal species, 2) to combat global climate change through stewardship of state forests for their role in carbon sequestration and air quality enhancement, 3) to protect the surface and underground drinking water supplies, and, 4) improve the quality of life and overall health in our State's communities. The goals of the 2009 New York Open Space Conservation Plan are inconsistent with the plans for natural gas extraction put forward in the dSGEIS and we specifically request the DEC to reconcile them before proceeding to issue any permits for natural gas extraction in Otsego County and its surrounding region.

Threatened, Rare, and Endangered Species in Otsego County

Historically, DEC has also led the way in statewide planning efforts and collection of information to identify and prioritize land that should be preserved for conservation of threatened/ rare/ endangered species. The waterways of Otsego County are home to two mollusk species and two amphibians which are considered threatened or of concern. These species types are very sensitive to

changes in the quality, temperature and flow of water. Otsego County is also home to eight state-identified threatened bird species. Clearing sections of forest land for drilling pads and infrastructure like pipelines, distribution systems and access roads will cause changes in run off loads, and disrupt habitat. Moreover, birds are attracted to open water, but open ponds for retaining flowback fluids and produced water will cause harm to the birds that may come into contact with it. Threatened plants species and their habitats in Otsego County will also be disrupted without consideration by the lax citing guidelines for this industrializing activity.

Restoring the landscape after drilling will not guarantee re-establishment of rare species displaced at the time of construction. This disruption of habitat is directly contrary to the goals enumerated in the 2009 New York State Open Space Conservation Plan, three of which are enumerated here: to protect habitat for the diversity of plant and animal species in order to ensure the protection of healthy, viable and sustainable ecosystems; to protect the state's water quality, including surface and underground drinking water supplies, lakes, streams and coastal and estuarine waters needed to sustain human life and aquatic ecosystems, to maintain an interconnected network of protected land and waters allowing wildlife to be able to shift range with climate change to follow natural migration pattern. We request DEC to explain how the dSCEIS will comply with the goals and protections called for by the Open Space Conservation Plan.

Local Roads and Infrastructure Capacity Insufficient

The majority of roads in Otsego County are not suitable for the increased heavy vehicle traffic as proposed in the dSCEIS. There is a total of 2,128 miles of public roads in Otsego County including 37 miles of Interstate highway (Interstate 88), 290 are State highway miles, 477 are County highway miles; and 1,324 are municipal road miles. While interstate roads and state highways were constructed to handle heavy traffic, the majority of the road network in Otsego County is maintained as county and municipal roads.

Many of these small local roads were constructed well before the invention of large tanker trucks and gas drilling rigs. Their bridges, culverts and road beds were not designed to handle the numbers of trips proposed by this drilling method. At present Otsego County does not have road use plans in place with respect to the projected increased use of roads to accommodate natural gas extraction as permitted by the dSCEIS. At this point is unclear what proportion of these roads could support the large tanker truck hauling of hazardous wastes which the dSCEIS contemplates and we ask the DEC to fund the work which will be necessary to plan for, inspect, and accomplish necessary repairs which such usage will require before the dSCEIS is adopted.

Private Land Protection Efforts Undermined

New York State has ninety two (92) active land trusts which implement private land protection through purchase of development rights, placement of conservation easements and sometimes outright purchase of real property. The Otsego Land Trust (OLT) is one of four such organizations working to protect the natural and cultural resources in the Upper Susquehanna watershed. The DEC awards grants through the New York State Conservation Partnership Program to enhance the capacity of land trusts around the state. Since 2003, DEC has invested \$133,665 in the Otsego Land Trust.

In 2008, the OLT produced its own land conservation plan to guide to identify areas of greatest concern and priority in the Otsego County area to focus their efforts. Using data from DEC, including identified wetland areas, trout spawning and trout streams (New York State classifications of protected streams based on water quality), data on rare species, prime agricultural soils, state protected lands, and other data sources, ten conservation areas were identified. This study produced detailed mapping enumerating the boundaries and detailed resource components of these ten areas of the county. Distributed widely across the county, these ten areas analysis provides important documentation about resource potential across Otsego County.

These maps indicate the dense nature of the resources worthy of protection and conservation across the disparate resource types. [Attachments 3-11. Nine maps produced for the Otsego Land Trust's Conservation Blueprint in 2008 by Kate A. McConnell: Attachment 3: Conservation Areas in the Upper Susquehanna Basin, Attachment 4: Otsego Lake Agricultural Resources, Attachment 5: Otsego Lake Agricultural Resources, Attachment 6: Otsego Lake Aquatic Resources, Attachment 7: Otsego Lake Terrestrial Resources, Attachment 8: Upper Otego Creek Terrestrial Resources, Attachment 9: Upper Otego Creek Aquatic Resources, Attachment 10: Butternut Valley Agricultural Resources, and Attachment 11: Butternut Valley Aquatic Resources] We ask DEC to require consideration of local land protection efforts in the siting process for permitting natural gas extraction infrastructure using horizontal hydraulic fracturing to not undermine these important investments in the protection of our environment.

Flood Plain Issues

The dSGEIS also does not address risks of contamination of ground water due to flooding. As the severe flood of 2006 showed, flood plain boundary determinations do not necessarily correlate to the areas that can be damaged by flood during extreme weather events. For example, the United States Geological Service (USGS) and Federal Emergency Management Agency (FEMA) prepared a detailed report on the damage caused by the flood of June 26-29, 2009 in the watersheds of the Susquehanna, the Delaware, and the Mohawk rivers. This 354 page report details the damage caused by this event, compares pre- and post flood conditions, and compares the damage from this event with the historical data available on previous flooding incidents in these three river basins.

The report also provides detailed reports of eighteen (18) Otsego County locations damaged by this catastrophic event. New maps are being drawn by FEMA based on the data recorded from this event. We urge the DEC to refrain from issuing any drilling permits in Otsego County until the revised flood plain data is secured. [Document available at: Suro, T.P., Firda, G.D. and Szabo, C.O. 2009, Flood of June 26-29, 2006, Mohawk, Delaware, and Susquehanna River Basins, New York: U.S. Geological Survey Open-File Report 2009-1063, 354p. Available online at <http://pubs.usgs.gov/ofr/2009/1063>.]

We urge the Department to consider each of the issues raised above before finalizing the dSGEIS. Indeed, we request that the dSGEIS be withdrawn until the matters addressed above can be adequately analyzed and incorporated in a revised draft and then resubmitted for public comment.

Respectfully submitted,

Robin Krawitz
Executive Director, Otsego 2000