I am writing on behalf of the Delaware-Otsego Audubon Soc. (DOAS) regarding the pending High Volume Hydraulic Fracturing Proposed Regulations. Please consider this communication as formal comments by our organization on these regulations.

The Delaware-Otsego Audubon Soc. is a Chapter of the National Audubon Soc. covering Delaware, Otsego, and portions of Chenango and Schoharie Counties in New York. Much of our Chapter area falls within the Marcellus shale regions, and our organization and members have serious concerns over the environmental impacts of hydraulic fracturing drilling in New York.

DOAS has adopted a formal position on hydraulic fracturing drilling, which is appended at the end of these comments.

We have previously submitted comments during the ongoing review process for this activity. Among our concerns are use of open storage pits for liquids associated with drilling; fragmentation of bird habitat from drilling pads, roads, pipelines and other facilities; and release of methane from drilling operations. Unfortunately, the proposed regulations do not adequately address these problems.

The regulations fall short in their consideration and evaluation of the use of open lagoons to store drilling fluids. As we pointed out in our earlier comments, these facilities pose a particular threat to waterfowl and other wildlife. The regulations do not clearly and unequivocally ban open lagoons. These manmade ponds will attract wildlife and expose them to chemicals and materials from the wells. Many of the known materials in these fluids are toxic, and the unknown materials may be even more so. The regulations should make clear that no fluids containing chemicals, drilling wastes, flowback materials, or any liquids other than clean water may be stored in open lagoons at drilling sites or elsewhere.

The cumulative issue of fragmentation of habitat from drilling operations is not considered in the regulations. This poses a significant threat to birds and other wildlife in central New York. The fragmentation and loss of habitat and the disturbances of noise and traffic will have an adverse affect on songbirds, some already at risk from habitat alteration and loss of wintering habitat. Species such as Wood Thrush, Black-throated Blue Warbler, Scarlet Tanager, and others, depend on unbroken tracts of forest to successfully breed. The roads, drilling pads, pipeline corridors, and other facilities associated with drilling activity will create corridors for nest predators and parasitic species for these forest interior birds. In addition, smaller patches of forest will result in reduced productivity for these species.

The group of birds in most rapid decline in central New York and in many other areas is grassland species. Henslow's Sparrow, Northern Harrier, Eastern Meadowlark, Bobolink, among other open country birds, have experienced precipitous declines in population and are considered threatened, endangered, or otherwise at risk. The presence and disturbance of drilling rigs, buildings and other facilities, as well as road

and pipeline construction will reduce even further the remaining suitable areas for these species. In some cases, populations may disappear completely from the region.

It is imperative that the regulations include a mechanism to evaluate the cumulative impact to the wildlife resources of the region, and require adequate protections.

Regarding escape of methane from drilling operations, the regulations are too lax, and oversight is lacking in addressing this major climate threat. Most recently, the National Oceanic and Atmospheric Administration has found leakage rates as high as 9% of natural gas production. Release of these quantities of a highly potent greenhouse gas is unacceptable for New York State, the nation and the world. The regulations should require a less than 0.5% leakage rate from hydraulic fracturing operations in the state. If the industry is unable to meet this standard, permits should not be issued.

We note that the Revised Draft Supplemental Generic Environmental Impact Statement includes recognition of these and other environmental impacts. However, the draft regulations in many cases do not take these impacts into account nor address them. For example, The Department states: "Significant adverse impacts to habitats, wildlife, and biodiversity from site disturbance associated with high-volume hydraulic fracturing in the Marcellus Shale region of New York will be unavoidable." The proposed mitigation that would require a higher level of review for specific drilling sites will only minimally lessen these adverse impacts, and even this document concludes that with implementation of this mitigation, " . . .the significant adverse impacts on habitat from high volume hydraulic fracturing would be partially mitigated."

This is an admission that drilling will have a large negative impact on wildlife and habitat. To allow this activity to proceed knowing that this will occur is an abdication of DEC's statutory responsibilities, and contrary to its mission. Unless the Department and drilling firms are able to significantly reduce these impacts through regulation, drilling should not be allowed in New York State.

In light of the fact that the SGEIS has not yet been completed, we ask that the draft regulations be withdrawn until such time as a SGEIS is finalized, and its findings can be considering in drafting adequate regulations.

Andrew Mason, Co-President

## **Delaware-Otsego Audubon Society, Inc.**

## POSITION ON GAS DRILLING AND HYDROFRACKING

With large scale gas drilling operations proposed for our chapter area of Otsego, Delaware, Chenango, and Schoharie Counties, the Delaware-Otsego Audubon Society herein states our position on gas drilling and hydrofracking wells.

Our concerns with hydrofracturing gas exploration and production deal with seven major areas.

- 1. Potential ground and surface water contamination from the many toxic chemicals used in hydrofracking the shale.
- 2. Storage and disposal of above ground production fluids, such as in open lagoons, or into nearby streams, or trucked to an unprepared wastewater treatment plant.
- 3. Impacts to wildlife and their habitats, including high-volume water withdrawals.
- 4. Damage to roads and other surface features such as forests, agricultural area and waterways.
- 5. Noise and air pollution.
- 6. Immediate and adequate response to any accidents or spills.
- 7. Cumulative social impacts of pipelines and wells (scenic beauty, rural character, tourism, taxes, property values, sports, agriculture)

Hundreds of wells are anticipated for our area, and this may change the region to a permanent industrial landscape. Potential contamination and depletion of water, and pollution of air, soil, and of farm and forest ecosystems could destroy the many resources available today. Water withdrawal and contamination are of special concern. The fragmentation and loss of habitats, and the disturbances of noise and traffic will have an adverse affect on birds and other wildlife, some already in precipitous decline.

The practice of injecting large quantities of toxic substances into the earth to physically fracture it and permanently leave behind damaged geology and foreign substances, is an assault on the very resources that sustain life. This damage will remain for millennia, and will threaten unseen future generations, as well as present-day humans and wildlife. Even with the most stringent controls and oversight, this activity is an unacceptable danger to our planet, with no environmental benefits. As such, we oppose hydrofracturing gas exploration and production in our region and elsewhere. We call upon the state of New York to permanently ban this practice.

Passed by unanimous vote of the Board of Directors 10/20/09