

January 10, 2012

New York State Department of Environmental Conservation

625 Broadway

Albany, NY 12233-6510

Attn: dSGEIS Comments

Commissioner Martens and Division of Mineral Resources staff:

Following below are comments by the Preservation League of New York State intended to inform the final SGEIS documents prepared by the Department of Environmental Conservation. The League believes the current DSGEIS lacks essential information and analysis in many critical areas related to historic resources, does not provide the requisite substantial evidence and thus fails to take the "hard look" required by the New York State Environmental Quality Review Act (SEQRA) to identify and address potential significant adverse impacts to New York State's historic and cultural resources.

### **Preservation League of New York State - Introduction**

Founded in 1974, the Preservation League of New York State is a statewide not-for-profit historic preservation advocacy organization. The Preservation League of New York State invests in people and projects that champion the essential role of preservation in community revitalization, sustainable economic growth, and the protection of our historic buildings and landscapes. We lead advocacy, economic development, and education programs all across the state.

Through a wide variety of grant-making, workshops, endangered property listings, and public policy work to establish incentives and programs that advance building rehabilitation, the Preservation League has a long history of supporting historic preservation efforts that identify and preserve historic buildings, communities and landscapes in the Marcellus Shale region counties. The regions of New York State that face exposure from the impacts of natural gas drilling are dotted with National and State Register-listed and eligible-for-listing historic structures and landscapes. These resources form the basis of authentic community character and heritage-based tourism; they are core components of an existing economy and quality of life.

We offer these comments of the current revised Draft Supplemental Generic Environmental Impact Statement documentation with the intent of further informing and improving NYS DEC's documentation, analyses and response in this documentation.

### **Section 106 of the National Historic Preservation Act**

Chapter 2 of the rDSGEIS document would benefit from a "Regulatory Overview" section, similar to Section 6.5.1 of the document (which details applicable federal and state oversight over air quality issues). The League notes for this record the extent of applicability of the National Historic Preservation Act (NHPA) to shale gas development projects.

The National Historic Preservation Act of 1966, as amended (16 U.S.C. 470) is the nation's primary historic preservation law. The act created the National Register of Historic Places, the official list of properties significant in the history, architecture, archeology and culture of the United States. The act also called for the creation of State Historic Preservation Offices (SHPOs) to administer the national program at the state level. In addition, any project that involves federal funds, licenses or permits is reviewed in accordance with Section 106, which establishes procedures to be followed by federal

agencies whose actions may directly or indirectly have an effect on historic properties and directs those agencies to consult with SHPO to assess those effects. Therefore, any approvals/permits/funding that are given by a federal agency must also be reviewed by SHPO.ö

Section 106<sup>1</sup> of the NHPA requires federal agencies to take into account the effects that their federally funded activities and programs have on significant historic properties. "Significant historic properties" are those properties that are included in, or eligible for, the National Register of Historic Places.

Among the federal agencies and programs related to shale gas development that may be subject to Section 106 reviews are:

- Environmental Protection Agency (EPA): Section 106 review required for all Underground Injection Control Program (UIC) permits issued in New York State.
- Federal Energy Regulatory Commission (FERC): Section 106 review required for permits for interstate natural gas pipelines and storage facilities.
- US Army Corps of Engineers (USACE) Clean Water Act (CWA) Section 404 permits: Section 106 review required for all Section 404 permits for disposal of dredged or fill materials for impacts to the waters of the United States.

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<sup>1</sup> *How does the Section 106 process work? A federal agency first determines if the proposed project activities are covered by Section 106 of the NHPA. If so, the agency initiates the Section 106 review process. Next, the federal agency gathers information to decide which properties, if any, in the project area are listed in or eligible for the National Register of Historic Places. If any properties in the project area are eligible, the agency then determines how these historic properties might be affected by the federally supported undertaking. If historic properties will be adversely affected, the agency consults with the other parties and explores alternatives to avoid or reduce harm to historic properties. If necessary, the agency obtains advisory comments from the ACHP. Finally, the federal agency works to reach an agreement with the SHPO (and the Advisory Council on Historic Preservation in some cases) on appropriate measures to deal with any adverse effects to the historic properties.*

*The Section 106 review process is explained in detail in federal regulations issued by the ACHP. These regulations appear in the U.S. Code of Federal Regulations at 36 CFR Part 800 and can be viewed [here](#).*

- US Forest Service: Special Use permits for hydrofracking-related projects in the National Forest lands, such as the Finger Lakes National Forest.
- EPA: Section 106 review is not required for National Pollution Discharge Elimination System (NPDES) permits, due to EPA delegation of permitting authority to NYS.

In Table 8.1, the rDSGEIS notes that USACE has federal authority to review permits that impact wetlands areas as well. USACE review of permits that denote potential impacts to delineated wetlands are also subject to Section 106 review. Other laws may also affect the processing of applications for Corps of Engineers permits. Among these laws are the National Environmental Policy Act, the Fish and Wildlife Coordination Act, the Wild and Scenic Rivers Act, and the Endangered Species Act.

Further details on which federal permits, approvals, or licenses may invoke Section 106 review are available in a September 21, 2011 memo issued by the Advisory Council on Historic Preservation, appended to this testimony. We request these references be incorporated into the final SGEIS documentation, and that the appropriate state agencies brief themselves on these consultation triggers.

### **The New York State Historic Preservation Act of 1980, Section 14.09**

ōThe New York State Historic Preservation Act of 1980 was established as a counterpart to the National Historic Preservation Act and declares historic preservation to be the public policy and in the public interest of the state. The act created the New York State Register of Historic Places, the official list of sites, buildings, structures, areas or objects significant in the history, architecture, archeology or culture of the state, its communities or the nation. [Section 14.09 of] í the act also requires state agencies to consult with the SHPO if it appears that any projects

being planned may or will cause any change, beneficial or adverse, in the quality of any historic, architectural, archeological or cultural property that is listed on the National Register of Historic Places or listed on the State Register or that is determined to be eligible for listing on the State Register. It requires state agencies, to the fullest extent practicable, consistent with other provisions of the law, to avoid or mitigate adverse impacts to such properties, to explore all feasible and prudent alternatives and to give due consideration to feasible and prudent plans that would avoid or mitigate adverse impacts to such property. The act also establishes agency preservation officers within state agencies for the purpose of implementing these provisions.ö

The 14.09 review is a state-level review process in New York state that is triggered when state funds are used or state licenses or permits are required for actions that may impact properties listed on the National or State Register or a property that is eligible for listing.

The SGEIS document should acknowledge Section 14.09 as a separate and distinct review process for all future permits related to hydrofracking in the Marcellus and Utica shale formations. A firm commitment from NYS DEC that all permit applications will be subject to Section 14.09 review by OPRHP should be stated in this document. To ease administration of Section 14.09 review requirements, OPRHP should:

- Establish a historic and cultural resource survey standard that can be implemented at each permit site.
- Work with NYS DEC to provide permit applicants and municipalities with guidance on local and regional resource identification, as per DEP-00-2, öAssessing and Mitigating Visual Impacts.ö The SGEIS document should note what mechanisms NYS DEC and OPRHP suggest for identifying and protecting ösignificant scenic and aestheticö resources that are not yet designated by local, state, or federal designation.

**Re: 1.5.2 Intra-/Inter-agency Coordination**

This section should provide greater detail on the document development, review and comment role of individual state agencies, rather than the current statement that “other State agencies also provided assistance.” In particular, given concerns and questions the League has about later sections of the rDSGEIS, details regarding the review and comment by the State Historic Preservation Office (SHPO) and/or Office of Parks, Recreation and Historic Preservation should be detailed.

It is our understanding that the State Historic Preservation Office is submitting agency comments on behalf of the Office of Parks, Recreation and Historic Preservation. As their role in potential future permitting is clearly established in Section 14.09 of the State Historic Preservation Act, their efforts to inform this rDSGEIS document are welcomed.

**Re: 1.7.14 State Forests, State Wildlife Management Areas and State Parks**

*“Surface disturbance associated with high-volume hydraulic fracturing would not be allowed on State-owned lands administered by the Department, including but not limited to State Forests and State Wildlife Management Areas, because it is inconsistent with the suite of purposes for which those lands have been acquired. Current Office of Parks, Recreation and Historic Preservation (OPRHP) policy would impose a similar restriction on State Parks.”*

- The Preservation League supports this ban on high-volume hydraulic fracturing on State-owned lands administered by NYS DEC.
- OPRHP policy imposing similar restrictions on State Parks lands should be codified; its status in this document is not clear.
- It is not clear if the ban on drilling on state-owned land prohibits drilling on private property in holdings within the boundaries of State-owned lands or prevents drilling access from private in holdings to shale reserves under State-owned lands. This should

be clarified in the final SGEIS. The League supports a complete ban on drilling within the boundaries of state-owned lands.

#### **Re: 2.4.12 Visual Resources**

*“For the purposes of impact analysis, visual resources located within the areas underlain by the Marcellus and Utica Shales in New York may be considered representative of the types of visual resources that would be encountered statewide. Therefore, this section describes the existing federally and state-designated visual resources within the boundaries of this area in New York.”*

- Emphasis added, above. The attempt to identify and quantify impacts to visual resources for this documentation is limited to the footprint of the Marcellus and Utica Shale geology underlying the 30 counties that are the focus of environmental impacts in this document. This is not always clear in subsequent tables and narration, and bears clarification throughout these sections of the final SGEIS document.

#### **Re: 2.4.12.1 Historic Properties and Cultural Resources**

*“This section discusses historic properties and other cultural resources that are considered visual resources per NYSDEC Program Policy DEP-00-2, including properties listed in the National and State Registers of Historic Places (including National Historic Landmarks), state historic sites, state historic parks, and state heritage areas (formerly urban cultural parks) (NYSDEC 2000).*

*“A property on or eligible for inclusion in the National or State Register of Historic Places (16 U.S.C. §470a et seq., Parks, Recreation and Historic Preservation Law Section 14.07) Historic properties are defined as those properties that have been listed in, or determined eligible for listing in, the NRHP (Advisory Council on Historic Preservation 2011). The NRHP, which is the official list of the nation’s historic places worthy of preservation, was established under the National Historic Preservation Act of 1966, as amended (NPS 2011a; OPRHP 2011a). In general, historic properties are 50 years old or older, and they retain much of their original appearance, because of the integrity of their location, design, setting, materials, workmanship, feeling, and association (OPRHP 2011a).*

*“The National Park Service (NPS) maintains a database of properties listed in the NRHP. (This database does not include information for other properties determined to be eligible for listing in the NRHP.) At least 1,050 NRHP-listed properties have been identified within the area underlain by the Marcellus and Utica Shales in New York (Table 2.92) (NPS 2011b, ESRI 2011). The*

*significance of properties listed or eligible for listing on the NRHP may be derived in varying degrees from scenic or aesthetic qualities that may be considered visually sensitive.”*

- These listed and eligible properties are potential triggers for Section 106 consultation under certain federal agency actions under the provisions of the National Historic Preservation Act, outlined earlier in this document. It would be appropriate to reference Section 106 in this section of the final SGEIS.
- The cited 1050 properties represent a significant undercount of historic resources in the RDSGEIS. See our comments on Table 2.92, below.
- This section does not specifically discuss historic bridges listed on or eligible for the National Register. NYS DOT’s Historic Bridge Management Program<sup>2</sup> and related resources should be discussed in this section and bridge locations should be mapped for the purpose of informing sections of the SGEIS document that address transportation impacts and potential mitigation, such as in Section 6.11.3 of the rDSGEIS document.

*“The State Register of Historic Places, which is the official list of New York State’s historic places worthy of preservation, was established under the New York State Historic Preservation Act of 1980. The eligibility criteria for properties listed in the State Register of Historic Places are the same as the eligibility criteria for the NRHP (OPRHP 2011a). The OPRHP maintains the database of records for properties listed in, or determined eligible for listing in, the State and National Registers of Historic Places (OPRHP 2011b). Over 250,000 properties located across New York State are included in this database, and the database provides information on whether the properties have been evaluated for State and/or National Register eligibility, and if evaluated, the eligibility status of the resource (OPRHP 2011c). The significance of properties listed or eligible for listing in the State Register of Historic Places may be derived in varying degrees from scenic or aesthetic qualities that may be considered visually sensitive.”*

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<sup>2</sup> In 1999, the New York State Department of Transportation, in coordination with the Federal Highway Administration and the New York State Historic Preservation Office initiated a statewide inventory of historic bridges. The three-year project updated a previous inventory of pre-1925 bridges conducted in the 1980s. The scope of the current inventory includes bridges built prior to 1961 that are located on public highways, including both state and locally-owned bridges. As a result of this effort, over 6,600 bridges were evaluated for eligibility for listing in the National Register of Historic Places. A total statewide population of nearly 600 historic bridges has been identified.

- The State Historic Preservation Office (SHPO) maintains a database of National Register-eligible (NR-e) properties in their State Preservation Historical Information Network Exchange (SPHINX). The final SGEIS should reflect more specific NR-e data on a county-by-county basis in the study area.
- The absence of this data from the RDSGEIS document indicates a significant oversight by Ecology & Environment and NYS DEC as authors of this document. It also underscores the need for an active role by OPRHP in reviewing and commenting on this document to inform the final SGEIS.

**Re: Table 2.92 - Number of NRHP-Listed Historic Properties within the Area Underlain by the Marcellus and Utica Shales in New York**

This table over-simplifies and undercounts historic resource identification in the Marcellus and Utica Shale regions of New York State. As a result, it under-represents the extent of potential site-specific and community-wide historic resource impacts that will result from high-volume hydraulic fracturing.

There is a cascading set of consequences for this document from such a dramatic undercount, ranging from an inadequate analysis of potential mitigation measures to address historic site impacts to a discounting of the number and extent of historic resource reviews required by the State Historic Preservation Office and the staffing hours required to conduct such review.

- The Preservation League suggests the SGEIS include an expanded version of Table 2.92 to include the following categories:

County	Number of NR-listed Districts	Number of NR-listed Structures - Districts	Number of NR-listed Structures - Individual Listings	Number of NR-Eligible Structures - Districts	Number of NR-Eligible Structures – Individual Listings
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Attached to our testimony is the League's initial research to correct and refine the number of National Register of Historic Places (NRHP) properties within the boundaries of the Marcellus

and Utica Shale formations. This data is derived from National Park Service and State Historic Preservation Office databases available via the Internet. Ecology & Environment, working in conjunction with NYS DEC and the SHPO can further refine these numbers through use of GIS-based analysis.

**Re: Figure 2.11: Visually Sensitive Areas Associated with Historic Properties and Cultural Resources**

This map serves to convey the general distribution of the referenced resources, but notably does not make a distinction between National Register Districts and individual listings, and does not map the distribution of National Register-eligible districts or individual listings. As such, it does not convey the full extent or density of historic structures and other landmarks that will be focal points for survey work, impact assessments and potential mitigation measures required by the environmental reviews of hydrofracking. Nor does it serve as an accurate predictor for gas companies as to where potential enhanced siting reviews may be prompted by these resources.

**Re: 2.4.12.2 Parks and Other Recreation Areas**

This section should note that Special Use permits related to natural gas drilling in the Finger Lakes National Forest in Seneca and Schuyler counties would trigger Section 106 review per the National Historic Preservation Act.

**Re: 2.4.12.4 Additional Designated Scenic or Other Areas**

This section includes references to National and State Scenic Byway listings. It should be noted that these designations and their resultant management plans for these include viewsheds, not just the linear corridor of the road itself. Additionally, the US Route 20 State Scenic Byway ó a 108 mile long corridor between Duanesburg, Schenectady County and LaFayette, Onondaga County, and roughly at and parallel to the northern boundary of the Marcellus and Utica Shale region, is not depicted in Figure 2.14, although it is listed in Table 2.100.

## Chapter 6 POTENTIAL ENVIRONMENTAL IMPACTS

### Re: 6.12 and 7.12 Community Character Impacts

*“High-volume hydraulic fracturing operations could potentially have a significant impact on the character of communities where drilling and production activities would occur. Both short-term and long-term, impacts could result if this potentially large-scale industry were to start operations.”*

The rDSGEIS indicates that the rapid growth of hydraulic fracturing operations could adversely impact local community character, but fails to set forth a mechanism to mitigate this potentially significant adverse impact. Where local land use law does not expressly prohibit gas drilling, the Department should consider a regulatory scheme which would incorporate municipal input to determine if an “excessive number” of hydraulic fracturing operations are being located in a particular community.

The rDSGEIS acknowledges that rapid hydraulic fracturing growth could cause adverse community character impacts, stating that “[s]low, moderate growth of the industry, if it were spread over several years, would generate much less acute impacts than rapid expansion over a limited time.” The rDSGEIS, however, commits only that “the Department will monitor the pace and concentration of development throughout the state to mitigate adverse impacts,” and “consult with local jurisdictions, as well as applicants, to reconcile the timing of development with the needs of the communities.” Without any discussion or analysis of review criteria, the rDSGEIS states that “[w]here appropriate the Department would impose specific construction windows within well construction permits in order to ensure that drilling activity and its cumulative adverse socioeconomic effects are not unduly concentrated in a specific geographic area.”

It is unclear how NYS DEC would be alerted to the fact that hydraulic fracturing development may be reaching a tipping point in a particular community. The proposed regulations do not

require applicants to provide any information relating the number of approved or pending applications for hydraulic fracturing for the affected municipality.

- NYS DEC regulations should require this information of all applicants before any hydraulic fracturing application can be deemed complete. The regulations must mandate that municipalities be informed of every application filed within their jurisdictions.

### **Re: 6.9 Visual Impacts**

*These visual impacts would typically result from the introduction of new landscape features into the existing settings surrounding well pad locations that are inconsistent with (i.e., different from) existing landscape features in material, form, and function. The introduction of these new landscape features would result in changes to visual resources or visually sensitive areas and would be perceived as negative or detrimental by regulating agencies and/or the viewing public.*

*The visual impacts of horizontal drilling and high-volume hydraulic fracturing would result from four general on-site processes associated with the development of viable well locations: construction, well development (drilling and fracturing), operation or production, and postproduction reclamation. The greatest visual impacts would be associated with the construction of well pads and associated facilities, which would create new long-term features within surrounding landscapes, and well drilling and completion activities at viable well locations, which would be temporary and short-term in nature. Additional off-site activities could also result in visual impacts, including the presence of increased workforce personnel and vehicular traffic, and the use of existing or development of new off-site staging areas or contractor/storage yards.*

The finalized SGEIS document should acknowledge Section 14.09 as a separate and distinct review process for all future permits related to hydrofracking in the Marcellus and Utica shale formations. A firm commitment from NYS DEC that any permit applications will be subject to Section 14.09 review by OPRHP should be stated in this document. This would assist in assessment of potential impacts related to well pad and related support facilities.

## **Re: 6.9.6 Assessment of Visual Impacts using NYSDEC Policy and Guidance**

The Department's Guidance Memorandum only compels site specific review where the viewsheds of "designated aesthetic resources" may be impacted. The designated aesthetic resources covered by the Guidance Memorandum include only a limited universe of resources that meet certain State and federal criteria, such as properties on or eligible for inclusion on the National or State Historic Registers. Neither the rDSGEIS nor the proposed regulations set forth any mechanism for identifying, let alone protecting, visual resources that do not technically qualify as "designated aesthetic resources."

The proposed regulations appear entirely silent on this issue. The rDSGEIS suggests that local agencies would be prepared to identify all visually and historically sensitive resources in their communities in an advance of any permit applications. The rDSGEIS suggests resources identified in this manner would trigger formal visual assessment in accordance with the Guidance Memorandum. However, the proposed regulations do not appear to require applicants to provide an inventory of aesthetic resources, as the Department's Guidance Memorandum requires. As such, it is unclear what would trigger these site specific visual impacts reviews.

- DEC should compel applicants via regulations to contact local jurisdictions to determine from them sensitive visual resources prior to the submittal of permit applications to NYS DEC.

Additionally, permit specific visual and historic impacts analysis should consider the cumulative impacts of hydraulic fracturing on visual resources. Again, municipalities should have the opportunity, upon notice of an application, to alert the Department of any concerns that a particular application may, by virtue of cumulative impacts with other applications or previously permitted projects, adversely impact visual resources.

### **Re: 6.11.3 Damage to Local Roads, Bridges, and other Infrastructure**

*Actual costs associated with local roads and bridges cannot be determined because these costs are a factor of (1) the number, location, and density of wells; (2) the actual truck routes and truck volumes; (3) the existing condition of the roadway; (4) the specific characteristics of the road or bridge (e.g., the number of lanes, width, pavement type, drainage type, appurtenances, etc.); and (5) the type of treatment warranted.*

*“However, based on a sample of 147 local bridges with a condition rating of 6 (i.e., Fair to Poor) in Broome, Chemung, and Tioga counties, estimates of replacement costs could range from \$100,000 to \$24 million per bridge, and averaged \$1.5 million per bridge. The NYSDOT estimates that bridges with a condition rating of 6 or below would be impacted by the projected increase in truck traffic, resulting in accelerated deterioration, and warrant replacement. Because these routes were often built to lower standards, heavy trucks would have a much greater impact than other types of traffic.*

*“...however, based on a sample of 166 state bridges with a condition rating of 6 (i.e., Fair to Poor) in Broome, Chemung, and Tioga counties, estimates of replacement costs could range from \$100,000 to \$31 million per bridge, and averaged \$3.3 million per bridge. The NYSDOT estimates that bridges with a condition rating of 6 or below would be impacted by the projected increase in truck traffic, resulting in accelerated deterioration, and warrant replacement.*

*“Depending on the volume and location of high-volume hydraulic fracturing, there is a possibility that a number of bridges and certain segments of state roads would require higher levels of maintenance and possibly replacement.”*

A quick review of National Register-listed or National Register-eligible bridges in the Marcellus Shale region suggests as many as 156 historic bridges could be impacted by changes to local or regional traffic patterns from hydrofracking development. This represents one-quarter of the total statewide historic bridge inventory identified in the January 2002 “Evaluation of National Register Eligibility, prepared for New York State Department of Transportation and the Federal Highway Administration.”<sup>3</sup>

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<sup>3</sup> Report available here: <https://www.dot.ny.gov/divisions/engineering/environmental-analysis/repository/nationalregistereligibilityreport.pdf>.

In the "Purpose" Section of the New York State Department of Transportation Historic Bridge Management Plan<sup>4</sup>, it is noted that

State Bridges listed in, or eligible for listing in, the National Register of Historic Places (National Register) are afforded a degree of protection under state and federal historic preservation laws that require agencies to take into account the effect of projects on historic properties

These laws recognize the value of preserving physical components of the nation's history. In consideration of the important place that bridges hold in New York's engineering and cultural heritage, New York State Department of Transportation (NYSDOT), in cooperation with the Federal Highway Administration (FHWA) and the State Historic Preservation Office (SHPO), developed this management plan for the state's historic bridges. Through use of the plan, NYSDOT intends to provide state-owned historic bridges with the greatest possible chance of survival consistent with transportation needs. Local bridge owners are also encouraged to consider the greatest level of protection feasible for eligible bridges by following the recommendations outlined in this plan.

This plan's purpose is to encourage maintenance and rehabilitation of bridges that are eligible for, or listed in, the National Register in New York and to outline goals, objectives, and recommendations for the management of this population of bridges.

- Section 6.11.3 should include a specific acknowledgement of the historic bridges in the SGEIS study area, as well as NYS's stated responsibilities to encourage maintenance and rehabilitation of the bridges in this inventory.
- An specific inventory of the historic bridges in the study area should be included in section 2.4.12: Historic Properties and Cultural Resources.

## **Chapter 7 EXISTING AND RECOMMENDED MITIGATION MEASURES**

### **Re: 7.9 Visual Mitigation Measures**

*Generally, mitigation measures would be developed in consultation between Department staff and well operators and would be site-specific, or project-specific where multiple sites are a part of the project design. Depending on the location of the well pad and the resource potentially impacted, it may also be necessary to consult with additional state and federal regulatory agencies to develop measures to mitigate visual impacts on specific types of visual resources or*

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<sup>4</sup> Report available here: <https://www.dot.ny.gov/divisions/engineering/environmental-analysis/repository/historicbridgemanagementplan.pdf?nd=nysdot>

*visually sensitive areas, including but not limited to the New York State Historic Preservation Officer for NRHP-listed or -eligible historic properties; consultation with the National Park Service for National Historic Landmarks (NHLs) and National Natural Landmarks (NNLs); consultation with the U.S. Fish and Wildlife Service for National Wildlife Management Areas; consultation with the NYSDOT for state-designated Scenic Byways, etc.; and consultation with local (town, county, or regional) agencies for locally designated visual resources or visually sensitive areas that were identified on the EAF.*

The finalized SGEIS document should acknowledge Section 14.09 as a separate and distinct review process for any future permits related to hydrofracking in the Marcellus and Utica shale formations. A firm commitment from NYS DEC that all permit applications will be subject to Section 14.09 review by OPRHP should be stated in this document. This would assist in assessment and mitigation of potential impacts related to well pad and related support facilities.

### **Re: 7.9.1 Design and Siting Measures**

Elsewhere in the rDSGEIS documentation, the state has determined that surface drilling would be prohibited on state-owned land, noting that such lands include many of the types of visual resources or visually sensitive areas discussed in Section 2.4. NYS DEC notes at 7.9.1 that:

*“Implementing this siting measure would result in the exclusion from surface drilling of many resources and areas that may be designated or used, in part or in whole, for their scenic qualities, thereby decreasing the potential for direct visual impacts of surface drilling on such resources or areas. The implementation of design and siting measures would also minimize indirect impacts on visual resources or visually-sensitive areas that are outside of, but in close proximity to, areas where drilling is proposed.”*

Historic structures and landscapes require an equal level of recognition and protection in the SGEIS document:

- Surface drilling in National Register-listed and National Register-eligible districts should be prohibited.
- Surface drilling adjacent to National Register-listed and National Register-eligible districts, structures and sites should be buffered by a maximum possible distance; the 100-foot minimum buffer from structures established in the 1992 GEIS documentation is insufficient to prevent visual and other impacts to such sites. A one-thousand foot buffer is noted in section 7.10.3 as requiring special evaluation for noise mitigation

*“For example, the use of multi-well pads for horizontal drilling and hydraulic fracturing is a*

*design and siting measure that incorporates both relocation and downsizing techniques by installing more than one well in one location. The benefit of the multi-well pad is that it decreases the overall number of pads in the surrounding landscapes, which would result in the decreased potential for impacts on visual resources or visually sensitive areas during the construction, development, production, and reclamation phases.”*

Given the extraordinary cumulative impacts required to prepare for and conduct drilling operations for any one bore at a multi-well pad, it is inappropriate for NYS DEC to claim a significant advantage from such consolidation as a representation of significant mitigation.

## **7.11 Transportation Mitigation Measures**

### **Re: 7.11.1.1 Development of Transportation Plans, Baseline Surveys, and Traffic Studies**

*“No permit should be issued until the Department and the NYSDOT are satisfied that the Transportation Plan is adequate to ensure that the traffic associated with the activity can be conducted safely and would reduce the impacts from truck traffic on local road systems to the maximum extent feasible.”*

- Transportation plans and road use agreements should denote locations of key roadside features and aesthetics such as stone walls, landscape elements, and road geometry that provide context and setting to local and regional roads ó these are key elements of community character that should be identified and protected in such plans.
- Due to weight limits associated with older, historic bridges, transportation plans should closely monitor proposed routing over routes that include historic bridges to avoid traffic loads and traffic frequency that would threaten the structural integrity of these historic structures. Close coordination with NYS DOT is required to avoid or minimize impacts to approximately 156 historic bridges in the Marcellus Shale region.

## **Chapter 8 PERMIT PROCESS AND REGULATORY COORDINATION**

### **8.1 Interagency Coordination**

*“Table 8.1, together with Table 15.1 of the 1992 GEIS, shows the spectrum of government authorities that oversee various aspects of well drilling and hydraulic fracturing.”*

The final SGEIS document should acknowledge Section 14.09 as a separate and distinct review process for all future siting permits related to hydrofracking in the Marcellus and Utica shale formations. A firm commitment from NYS DEC that all permit applications will be subject to

Section 14.09 review by OPRHP should be stated in this document. As such, Table 8.1 should denote that OPRHP has a secondary (õSö) role in well siting and related components, as noted in Section 8.1.2.

### **Conclusion**

NYS DEC must complete data collection and analytic work that is necessary to ensure that high-volume hydraulic hydrofracturing only occur where it poses no irreversible impact to the quality of the human environment. Included in this commitment to protect environmental quality is protection and stewardship of New York State's rich legacy of historic and cultural resources.

Given the reported volume of public comment on necessary revisions to the DSGEIS, until the Preservation League and public at large is given the opportunity to review and comment on the Final SGEIS, we note that our lawful right to comment has not been granted. As such, NYS DEC should make special provisions to ensure that the public is granted the opportunity to comment on pending revisions that the NYS DEC must make to complete this analysis.