



JON S. CORZINE
Governor

State of New Jersey
Highlands Water Protection and Planning Council
100 North Road (Route 513)
Chester, New Jersey 07930-2322
(908) 879-6737
(908) 879-4205 (fax)
www.highlands.state.nj.us



JOHN R. WEINGART
Chairman

EILEEN SWAN
Executive Director

MEETING AGENDA

Thursday, February 26, 2009 - 4:00 p.m.

1. CALL TO ORDER
2. ROLL CALL
3. OPEN PUBLIC MEETINGS ACT
4. PLEDGE OF ALLEGIANCE
5. APPROVAL OF MINUTES – January 15, 2009
6. CHAIRMAN'S REPORT (and Council Member Reports)
7. PRESENTATION - PSE&G overview of the Susquehanna-Roseland Project
(There will be no Council action on this matter)
8. EXECUTIVE DIRECTOR'S REPORT
 - a. Update on 2009 Plan Conformance Grant Program
 - b. Update on Municipal Build-Out Analysis
 - c. Highlands Municipal Master Plan Element
9. CONSIDERATION OF RESOLUTION – *Approval of Certain Planning Assistance Grants* - (voting matter with public comment)
10. CONSIDERATION OF RESOLUTION – *Approval of Contract for Critical Habitat Conservation and Management Consultant* - (voting matter with public comment)
11. CONSIDERATION OF RESOLUTION – *Approval of Grant Program and Contract for Water Use and Conservation Management Planning* - (voting matter with public comment)
12. PUBLIC COMMENTS (*please note – the Council requests that public comments be limited to three (3) minutes per person. Questions raised in this period will not be responded to at this time but, where feasible, will be followed up by the Council and its staff.*)
13. EXECUTIVE SESSION (if deemed necessary)
14. ADJOURN

NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
MINUTES OF THE MEETING OF FEBRUARY 26, 2009

PRESENT

JOHN WEINGART) CHAIRMAN

ELIZABETH CALABRESE)
TRACY CARLUCCIO)
BILL COGGER)
JANICE KOVACH)
MIMI LETTS)
DEBBIE PASQUARELLI)
JACK SCHRIER)
TAHESHA WAY)

COUNCIL MEMBERS

TELECONFERENCE

ERIK PETERSON)

ABSENT

KURT ALSTEDE)
GLEN VETRANO)
SCOTT WHITENACK

CALL TO ORDER

The Chairman of the Council, John Weingart, called the 82nd meeting of the New Jersey Highlands Water Protection and Planning Council to order at 4:10 pm.

ROLL CALL

The members introduced themselves.

OPEN PUBLIC MEETINGS ACT

Chairman Weingart announced that the meeting was called in accordance with the Open Public meetings Act, N.J.S.A. 10:4-6 and that the Highlands Council had sent written notice of the time, date, and location of this meeting to pertinent newspapers or circulation throughout the State and posted on the Highlands Council website.

APPROVAL OF MINUTES OF January 15, 2009

Mr. Schrier introduced the motion to approve the minutes. Mr. Cogger seconded the motion. Mr. Vetrano, Mr. Alstede, Ms. Pasquarelli, Mr. Peterson and Mr. Whitenack were absent. All other members present voted to approve. The minutes were APPROVED.

CHAIRMAN'S REPORT

Chairman Weingart noted that the Resolutions for consideration would be taken first on the agenda as several members needed to leave. He also mentioned that there had been no action as yet on the vacancies on the Highlands Council, but that the Governor's Appointments Office was examining the issues.

NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
MINUTES OF THE MEETING OF FEBRUARY 26, 2009

Mr. Schrier mentioned that an event co-sponsored by the Morris County Advisory Committee on Women, of which he was a founding member, was honoring a 91 year old feminist and that Janice Kovach was attending.

AUDIT COMMITTEE

Ms. Calabrese, as a follow-up to her previous report noted that she had, with the concurrence of the Audit Committee, signed a letter of agreement for Mercadien to perform the audit for the fiscal year ending June 30, 2008. The fee will not exceed \$7,000. She also mentioned that she had a copy of the letter if any of the other Council Members wanted to review it. *Ms. Pasquarelli joined the meeting.* Ms. Swan added that the monies allocated by previous Council resolution were adequate to cover this expenditure so that no additional resolution would be necessary.

EXECUTIVE DIRECTORS REPORT

Ms. Swan began her presentation with a discussion of an RMP Update request from Mount Olive Township that had been received and processed. The RMP Update involved the factual correction of the Land Use Capability Map to acknowledge information submitted by Mount Olive documenting that the area had been used as a sanitary landfill between the years of 1966 and 1981. In addition, the information submitted by the township documents that the area was placed on the U.S. Environmental Protection Agency's National Priorities List of Superfund Sites in 1982, and that after remediation was completed in 2004, the U.S. Environmental Protection Agency removed the area from the National Priorities List. Finally, the information demonstrates that a methane venting system, concrete drainage channels and monitoring wells remain on the subject area.

The area was previously classified as Existing Community Zone – Environmentally Constrained. The Highlands Council's GIS-based model, Land Use Analysis Decision Support System (LANDS), initially found a majority of the subject area to have indicators of both Protection and Existing Community Zones. This occurred because a majority of this area had been classified by NJDEP 2002 Land Use Land Cover Classification Code as "Barren" (7000 Series). Given this classification under the land use land cover data, LANDS classified the subject area as Existing Community Zone – Environmentally Constrained. Based on the comprehensiveness of the information submitted, it was determined that subject area should be classified as Land Use Land Cover Classification "Mixed Urban or Built-Up Land" (1600). As a result of this Land Use Land Cover Classification change, it was appropriate to process an RMP Update and reclassify the subject area as Existing Community Zone. Ms. Swan, stated that Council staff will research similar land uses to see if similar circumstances exist and merit review for RMP Updates.

She continued with a review of the Plan Conformance process stating that to date, 70 of the 88 municipalities have approved a Notice of Intent and five of the seven counties have approved a Notice of Intent for the Preservation Area. In addition, staff will meet with the two Preservation Area municipalities (Green and Roxbury) that have yet to file a Notice of Intent. Staff has also met with the county planning staff to discuss County Plan Conformance.

Next, Ms. Swan discussed the status of Planning Grants. Of the 88 municipalities, 68 have applied for a total of \$1,014,767 in Initial Assessment Grants. She continued with the status of the 2009

NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
MINUTES OF THE MEETING OF FEBRUARY 26, 2009

Plan Conformance Grants Program and noted that 50 municipalities have applied for a total of \$2,500,000. This program allocates between \$50,000 to \$100,000 for each municipality.

Mr. Schrier asked when the Module 2 will be released. Ms. Swan explained that the Module 2 release was dependent on receipt of the Module 1 data whose deadline is February 27th. There have been some municipalities asking for extensions, but there will be informational sessions scheduled for Module 2 when the data has been processed.

RESOLUTIONS

I. CONSIDERATION OF RESOLUTION – Approval of Certain Planning Assistance Grants - (voting matter with public comment)

Mr. Cogger introduced the motion to approve the resolution. Ms. Kovach seconded the motion. Messrs. Alstede, Peterson, Vetrano and Whitenack were absent.

The Highlands Council initiated a grant application process for Initial Assessment grants to municipalities and counties within the seven Highlands Counties in furtherance of Plan Conformance, in an annual amount not to exceed \$1,500,000. Council staff reviewed the following grant applications and recommend grants for Council consideration:

1. Alpha Borough – Requesting \$15,000. This is their first grant request. They have also simultaneously applied for the 2009 Plan Conformance Grant.
2. Frelinghuysen Township – Requesting \$15,000. This is their first grant request.
3. High Bridge Borough – Requesting \$15,000. This is their first grant request.
4. Kinnelon Borough – Requesting \$15,000. This is their first grant request. They have also simultaneously applied for the 2009 Plan Conformance Grant.
5. Mansfield Township – Requesting \$15,000. This is their first grant request. They have also simultaneously applied for the 2009 Plan Conformance Grant.
6. Milford Borough – Requesting \$15,000. This is their first grant request. They have also simultaneously applied for the 2009 Plan Conformance Grant.
7. Oxford Township – Requesting \$15,000. Previously they had received a MP3 Grant for \$65,000 with a resolution date of 10/6/05, an execution date of 1/5/06 and a payment date of 9/26/06 for \$32,500. They have also simultaneously applied for the 2009 Plan Conformance Grant.
8. Pequannock Township – Requesting \$15,000. Previously they had received a COAH Grant for \$7,500 with a resolution date of 10/6/05 and an execution date of 12/19/05. As of this date, they have not submitted their COAH acceptance letter and so have not

NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
MINUTES OF THE MEETING OF FEBRUARY 26, 2009

yet been paid out. They have also simultaneously applied for the 2009 Plan Conformance Grant.

9. Phillipsburg – Requesting \$15,000. This is their first grant request. They have also simultaneously applied for the 2009 Plan Conformance Grant.
10. Riverdale Borough – Requesting \$15,000. Previously they had received a COAH Round 3 Grant for \$7,500 with a resolution date of 10/6/05, an execution date of 3/20/06 and a payment date of 5/15/06.
11. Roxbury Township – Requesting \$15,000. Previously they had received a COAH Round 3 Grant for \$7,500 with a resolution date of 10/6/05, an execution date of 12/2/05 and a payment date of 5/15/06.
12. Wharton Borough – Requesting \$15,000. Previously they had received a COAH Round 3 Grant for \$7,500 with a resolution date of 10/6/05, an execution date of 12/2/05 and a payment date of 6/28/06.
13. Hunterdon County – Requesting \$15,000. Previously they had received two Sustainable Agriculture Grants:

IPM Grant for \$75,000 (with option of renewal for a second year) with a resolution date of 2/15/07, an execution date of 9/11/07 and a payment date of 1/14/09. The County is currently in the process of reapplying for an additional year of funding and expansion of the Integrated Pest Management project.

Local Agricultural Marketing Initiative for \$50,000 with a resolution date of 2/15/07, an execution date of 3/24/08, and a payment date of 5/13/08 for \$26,724 with an option to renew for a second year of funding.
14. Warren County – Requesting \$15,000. Previously they had received a CP3 Grant (Parcel Data) for \$57,000 with a resolution date of 12/1/05, an execution date of 12/19/05 and payment dates of: 3/9/07 (\$28,500), 4/8/08 (\$14,250), and 12/16/08 (\$14,250).

There was no public comment. *All members present approved and the resolutions were APPROVED.*

II. CONSIDERATION OF RESOLUTION – Approval of Contract for Critical Habitat Conservation and Management Consultant - (voting matter with public comment)

Ms. Carluccio introduced the motion to approve this resolution. Ms. Kovach seconded it. Messrs. Alstede, Peterson, Vetrano, and Whitenack were absent.

NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
MINUTES OF THE MEETING OF FEBRUARY 26, 2009

Ms. Swan introduced the resolution discussing the need for a Critical Habitat Consultant in a consulting capacity. She indicated that there had been a Request for Qualifications (RFQ) sent out on November 6, 2008 and a Request for Proposal (RFP) on January 16, 2009 seeking proposals addressing Literature Review, Mitigation Strategies, New Mitigation Concepts, and Mitigation Examples. Ms. Swan recognized the work of Erin Lynam and Chris Ross in this area working with Dan Van Abs and noted that the importance of this measure was to be prepared with guidance for long term planning initiatives. The staff review resulted in a recommendation of Biohabitats Inc. for a contract not to exceed \$85,000 using a subcontractor A.D. Marble. She noted that the timetable for completion would be eight months.

PUBLIC COMMENT ON THIS RESOLUTION

David Shope, Lebanon Township

Mr. Shope commented that all activities should apply only to public lands.

Wilma Frey, NJCF

She asked that the Technical Advisory Committee be reconvened so that the public could participate in the process.

All members present voted to approve the resolution. The resolution was APPROVED.

III. CONSIDERATION OF RESOLUTION – Approval of Grant Program and Contract for Water Use and Conservation Management Planning - (voting matter with public comment)

Ms. Swan showed a slide of the Net Water Availability by HUC 14 demonstrating that nearly two-thirds of the region is in water deficit from small to very large. She noted that the Highlands Regional Master Plan requires the development of Water Use and Conservation Management Plans for all Highlands watersheds and that Executive Order 114 issued by Governor Corzine ordered NJDEP to ensure that now water allocation permit or Water Quality Management Plan amendments were approved absent these plans in deficit areas outside of the Existing Community Zone. She recognized the work of Jim Hutzelmann working with Dan Van Abs on water availability issues.

The Highlands Council issued a Request for Proposal (RFP) seeking detailed proposals addressing Water Use and Conservation Management Plan Pilot Project for ten project areas affecting up to twenty HUC 14 subwatersheds in Highlands municipalities or counties that represent the spectrum of deficit issues in the Highlands Region. The other component of this work is a water use management grant program to work with municipalities and counties for technical and financial assistance in their development of plans to conform to the Regional Master Plan. She mentioned that the staff recommendation was to contract with Camp, Dresser and McKee with a subcontract with Suburban Consulting (who had previously worked with the Council on the plan for the Town of Clinton) for an amount not to exceed \$500,000.

Mr. Schrier introduced a motion to approve this resolution. Ms. Calabrese seconded the motion. Messrs. Alstede, Vetrano and Whitenack were absent.

NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
MINUTES OF THE MEETING OF FEBRUARY 26, 2009

There were several comments and questions regarding the changes in the provisions with respect to the Executive Order 114 including the definition of a municipal plan not including a neighboring municipality. This provision recognizes that the boundaries of the HUC 14's are not the same as the municipal boundaries and that a municipality that completes a plan is not responsible for the section of the HUC 14 that is not within its municipal boundaries. Ms. Pasquarelli asked where the funding for the grant program came from and expressed her concern about the recommendation coming from the staff without benefit of the Council committee work. Ms. Swan responded that the grant funding for the entire project will be allocated from the Highlands Protection Fund.

PUBLIC COMMENT ON THIS RESOLUTION

David Peifer, ANJEC

He asked if the proposed contractors had both been vetted for conflicts of interest. Mr. Borden replied that they had been.

Helen Heinrich, NJ Farm Bureau

She asked the amount of the contract. It is not to exceed \$500,000.

David Shope, Lebanon Township

He indicated his objection to the determination of the methodology of water deficit without surface water being considered and wants surface water included.

MR. PETERSON JOINED THE MEETING BY TELECONFERENCE.

Mr. Peterson abstained. Ms. Pasquarelli voted no. The other members present voted to approve. The resolution was APPROVED.

PRESENTATION BY PSE&G AND PJM

Chairman Weingart stated that the next item would be a presentation by PSE&G and PJM.

Ms. Carluccio recused herself from the PSE&G presentation as her organization is involved in the project.

Mr. Don McCloskey, Director of Environmental Strategy and Policy for PSE&G introduced the presentation by Steve Herling, Vice President of System Planning for PJM. Mr. McCloskey noted that at the PSE&G presentation in December, he had presented an overview of the Susquehanna-Roseland Project, but there had been many questions about need so that Mr. Herling's presentation would focus on the need for the project.

Mr. Herling gave an overview of PJM, its member companies, area served (13 states plus D.C.), miles of transmission lines (56,250) and annual energy generated (729,000 GWh). He discussed the key relationships with the Federal Energy Regulatory Commission (FERC), North American Electric Reliability Corporation (NERC), and State Public Utility Commissions. He described the responsibilities of the various entities: PJM – responsible for the grid and planning, PSE&G and other owners – responsible for running the system and maintaining the facilities. FERC regulates PJM and NERC is responsible for establishing standards that are mandatory and carry significant penalties if not followed.

NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
MINUTES OF THE MEETING OF FEBRUARY 26, 2009

Mr. Schrier asked what the relationship was with the State Public Utilities and Mr. Herling indicated that the relationship was very interactive and that he meets with the staff of Board of Public Utilities (BPU) monthly. Mr. Schrier asked who had the final say in the determination of need and Mr. Herling replied that it was BPU.

Mr. Herling then provided an overview of how the need process was determined including: a major factor of load growth, efficiency of the system, aging infrastructure and planning out 15 years. He reviewed the different load conditions under which the system was evaluated from total operation to severe summer conditions.

Chairman Weingart asked about the planning timeframe. Mr. Herling described the timeframe as initially 5 years then outward to 15 years. Mr. Herling continued with a discussion of generation and deliverability. Chairman Weingart also inquired as to the accuracy of the forecasts used in planning. Mr. Herling described the forecasting as "pretty close" to the forecasts in the econometric models used. There was a brief discussion of another upgrade from 230K to 500K in Southwest Pennsylvania through West Virginia to Virginia.

Ms. Pasquarelli asked when the Council would vote on the consistency determination and Ms. Swan noted that it would be up to the Chairman to schedule the matter for the agenda for the upcoming meetings. She mentioned that staff is continuing to share information with sister agencies. Ms. Pasquarelli also asked if the public comments would be available to the Council members prior to the action and Ms. Swan assured her that the comments would be distributed to the Council members.

PUBLIC COMMENT

Eliot Ruga, New Jersey Highlands Coalition

Mr. Ruga submitted written comments regarding the Cultural Resources Study for the PSE&G Transmission Line, including two maps that he had prepared.

Ms. Carluccio left the meeting.

Wilma Frey, New Jersey Conservation Foundation

She urged that the public comments on the proposed PSE&G project be put on the website. She also asked that her written comments submitted to Highlands Council staff on January 30, 2009 regarding the PSE&G project be made a part of the public record of this meeting. She also noted that the document from Wolff and Sampson was limited in scope and did not address the impacts of access routes in the evaluation of the project.

Tom Hill, Stop the Lines

He represents a grass roots organization formed to stop the PSE&G project. He commented that he did not believe that there as a need for additional electricity and is concerned with the environmental impacts from construction on the surface ground water. He also expressed concern about the cost of the project to the consumer.

Betsy Kohn, Co-Chair Sierra Club North Jersey Group

NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
MINUTES OF THE MEETING OF FEBRUARY 26, 2009

Ms. Kohn submitted written comments and urged that the Highlands Council reject the PSE&G project.

John Niemasz, Fredon Township

He described his town as having the power lines near his school. He represents *Fredon Parents against the lines* focusing on environmental and health and safety issues. He questioned the need for the PSE&G project asking if the need was independently verified and stated that he was an electrical engineer and that he questioned the methodology for determining that need and testing the grid.

Ms. Kovach left the meeting.

Mark Zakutansky, New Jersey Highlands Coalition

He raised the issue of why PSE&G was not using the same environmentally friendly technology construction approach proposed for East Hanover for the 24 acre Jefferson Township switching station. He quoted the engineer that PSE&G had hired to design the switching stations. He also stated his concerns over the towers falling down in extreme weather related conditions resulting in a public health and safety issue. He asked that the PJM presentation be posted on the Highlands Council website.

Dave Peifer, ANJEC

With respect to the PSE&G project, he reported that ANJEC staff had reviewed the staff report and found it very thorough. He does not agree with PSE&G's narrow interpretation of the exemption #11 language. He suggested an energy section be added to the Regional Master Plan noting that the Highlands Region had historically been crisscrossed with pipelines and power lines. He emphasized that the RMP should be a positive document to encourage energy sources for the Highlands. He submitted his written comments on the Highlands Environmental Resource Inventory.

Daniel Moore, Lake Hopatcong, Jefferson Township

He spoke to the need issue and the 23 violations in the need model. He mentioned smart grid technology and asked how many of those violations could be mitigated with that technology.

The Chair asked if there were any other comments related to PSE&G.

Don McCloskey, PSE&G

He mentioned that PSE&G was prepared to answer additional questions in other forums.

Steve Herling, PJM

He is also responsible for interconnection to the grid. He reviewed the issue raised as to the power being "dirty", he explained the breakdown of power: 40% wind; 40% gas, 7% nuclear. The remaining is coal, biomass, hydro and solar. He noted that PJM had participated in a study with the Dept. of Energy. PJM is also working on a project for 20% energy delivery from wind.

The Chair encouraged comments on issues other than the PSE&G project

Cynthia MacGonagle, Bethlehem Township

She complimented the Council for hiring a consultant on critical habitat and encouraged the consultant to review the Endangered and Non-game Species Program document.

NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
MINUTES OF THE MEETING OF FEBRUARY 26, 2009

David Shope, Lebanon Township

He observed that it was hypocritical that people objecting to extending power lines were the same people getting Highlands water and that who are the same ones who encourage loss of property value in the preservation area. He cited a NY Times article from Jeff Tittel talking about the Highlands being like Yosemite. He commented that Yosemite is a National Park where no one lives compared to the Highlands where many people live.

Joe Mikulewicz, Chatham Borough Council President

He also is representing the NJ Council of Farmers and Communities. He thanked Council for a grant from the Highlands Council to help build farmers markets. He noted that there was another grant application going to come before the Council. He brought some brochures on farmers markets (25 in region). He spoke the mission of the farmers' organization to protect and enhance agriculture and do educational programs. They also provide assistance with the WHIP program. The group inspects farms working with the NJ Department of Agriculture and wants to ensure that the public knows that the products are Jersey Fresh. He described spring tours that his group conducts for the public.

John Pierson, Fredon Township

He asked that PSE&G gave additional comments today and asked that the written public comments period be extended to give the public a chance to rebut. He noted his concerns with the selection of the route selected for the power lines and the demand issues presented by PSE&G. He mentioned the nationwide trend for power is decreasing. He does not want Highlands compromised for a two day peak demand period.

Ted Wisinski, Fredon Township

He raised the issue that PSE&G had left the building.

Mr. Weingart indicated that PSE&G had left when the public comments on the PSE&G matter had been completed. He announced that the next meeting will be March 19th at 1 pm and that the Highlands Development Credit Bank Board of Directors will be meeting on March 5 at 1pm.

The meeting was adjourned at 6:10 pm.

TRUE COPY

CERTIFICATION

I hereby certify that the foregoing is a true copy of the minutes of the meeting of the Highlands Water Protection and Planning Council.

Date: 3/20/09

Name: Paula M. Dees
Paula M. Dees Executive Assistant

NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
 MINUTES OF THE MEETING OF FEBRUARY 26, 2009

Vote on the Approval of these Minutes

	<u>Motion</u>	<u>Second</u>	<u>Yes</u>	<u>No</u>	<u>Abstain</u>	<u>Absent</u>
Councilmember Alstede	_____	_____	_____	_____	_____	_____ ✓
Councilmember Calabrese	_____ ✓	_____	_____ ✓	_____	_____	_____
Councilmember Carluccio	_____	_____	_____ ✓	_____	_____	_____
Councilmember Cogger	_____	_____	_____ ✓	_____	_____	_____
Councilmember Kovach	_____	_____	_____ ✓	_____	_____	_____
Councilmember Letts	_____	_____ ✓	_____ ✓	_____	_____	_____
Councilmember Pasquarelli	_____	_____	_____	_____	_____ ✓	_____
Councilmember Peterson	_____	_____	_____	_____	_____	_____ ✓
Councilmember Schrier	_____	_____	_____ ✓	_____	_____	_____
Councilmember Vetrano	_____	_____	_____	_____	_____	_____ ✓
Councilmember Way	_____	_____	_____ ✓	_____	_____	_____
Councilmember Whitenack	_____	_____	_____ ✓	_____	_____	_____
Councilmember Weingart	_____	_____	_____ ✓	_____	_____	_____

PUBLIC COMMENTS SUBMITTED



Quick Facts from the 2007 Census of Agriculture for New Jersey

The New Jersey Agricultural Statistics Service wishes to thank all farmers and ranchers who responded to the 2007 Census of Agriculture.

The Census of Agriculture provides a detailed look at agriculture in each of the Nation's 3,000 plus counties. Data available in electronic format on the Internet, printed, and CD-ROM, provide a complete statistical picture of U.S. farms and ranches every 5 years.

For more information contact:

NASS Customer Service Center
Census of Agriculture
 Room 5829, South Building
 1400 Independence Avenue, SW
 Washington, DC 20250
 1-800-727-9540
 Email – nass@nass.usda.gov
www.usda.gov/nass/

New Jersey
Agricultural Statistic Service
 Rm. 205 Health and Agriculture Building
 P. O. Box 330
 Trenton, NJ 08625
 1-800-328-0179
 Email – nass-nj@nass.usda.gov
www.nass.usda.gov/nj/

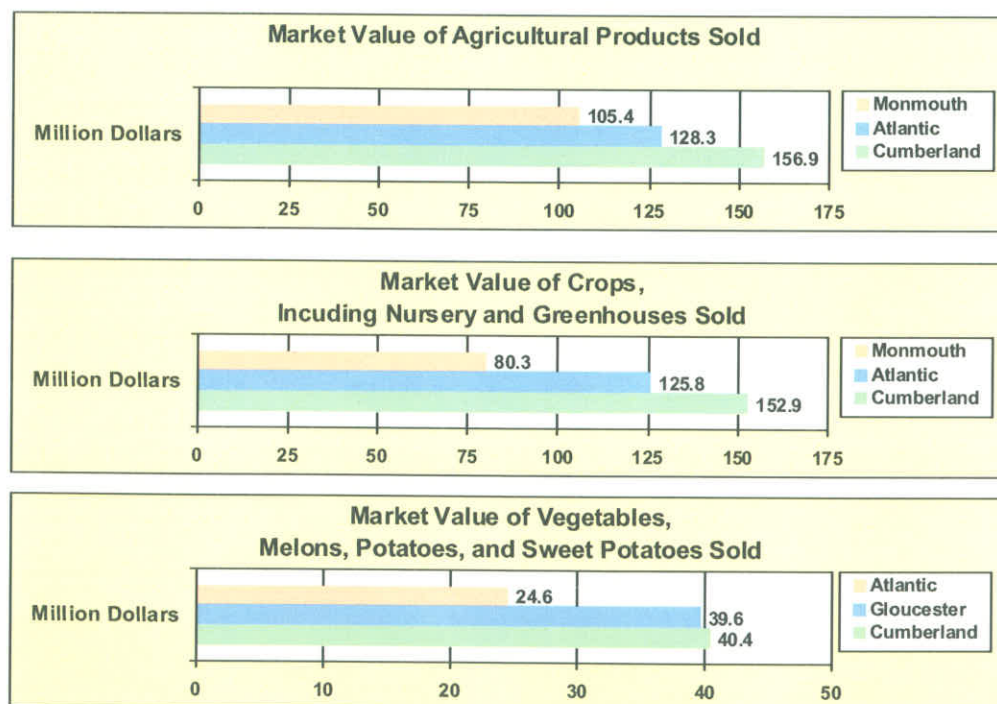
Item	New Jersey		Percent Change	United States		Percent Change
	2007	2002		2007	2002	
Number of Farms	10,327	9,924	4	2,204,792	2,128,982	4
Land in Farms (acres)	733,450	805,682	(9)	922,095,840	938,279,056	(2)
Average Size of Farms (acres)	71	81	(13)	418	441	(5)
Total Cropland (acres)	488,697	547,668	(11)	406,424,909	434,164,946	6
Harvested Cropland (acres)	415,542	444,670	(7)	309,607,601	302,697,252	2
Estimated Market Value of Land and Buildings						
Average per Farm (dollars)	1,089,883	741,808	47	791,138	537,833	47
Average per Acre (dollars)	15,346	9,245	66	1,892	1,213	56
Market Value of Agricultural Products Sold (\$1,000)						
Average per Farm	95,564	75,561	26	134,807	94,245	43
Crops Including Nursery/Greenhouse Crops (\$1,000)	851,653	657,494	30	143,657,928	95,151,954	51
Crops as Percent of Total Products Sold	86.3	87.7	(2)	48.3	47.4	2
Livestock, Poultry, and Their Products (\$1,000)	135,233	92,378	46	153,562,563	105,494,401	46
Livestock as Percent of Total Products Sold	13.7	12.3	11	51.7	52.6	(2)

New Jersey Land Area, Land in Farms, and Market Value of Agricultural Products Sold by Selected Groups, by County, 2007

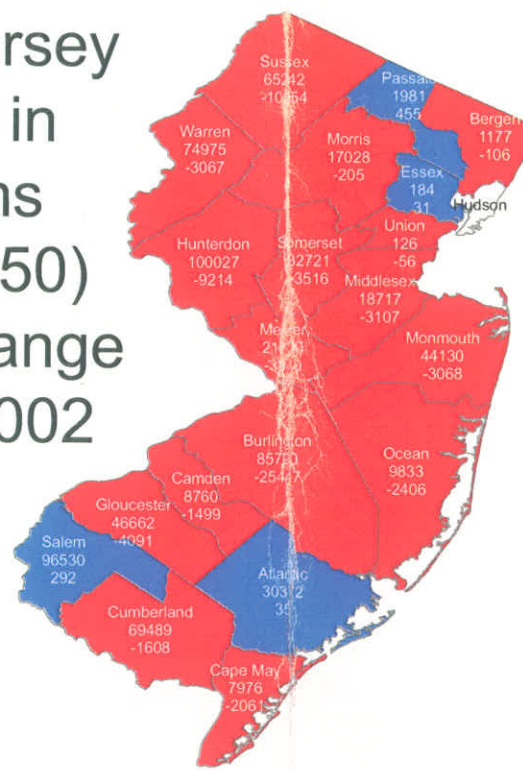
New Jersey Counties	Approximate Land Area	Land in Farms	Land in Farms as a % of Land Area in County	% of Total Land in Farms	Market Value of Agricultural Products Sold (\$1,000)	Average Per Farm (Dollars)	% of Total Products Sold	Field Crops, Hay, and Other Crops (\$1,000)	% of Total Crops Sold	Vegetables, Melons, Potatoes, & Sweet Potatoes Sold (\$1,000)	% of Total Vegetables Sold	Fruit, Tree Nuts, and Berries Sold (\$1,000)	% of Total Fruit Sold	Nursery, Greenhouse, Floriculture, and Sod Sold (\$1,000)	% of Total Nursery Sold	Livestock, Poultry, and Livestock Products Sold (\$1,000)	% of Total Livestock Sold	Christmas Trees Sold (\$1,000)	% of Total Trees Sold	Direct Sales to Consumers for Human Consumption (\$1,000)	% of Total Direct Sales	Organically Grown Sales (\$1,000)	% of Total Organic Sales	Income from Farm Related Sources (\$1,000)	% of Total Farm Related Sales
North District																									
Bergen	149,869	1,177	0.8	0.2	8,694	97,685	0.9	(D)	N/A	(D)	N/A	129	0.1	7,660	1.7	309	0.2	(D)	N/A	466	1.5	(D)	N/A	2,223	2.4
Essex	80,811	184	0.2	0.2	710	54,631	0.1	701	0.9	(D)	N/A	(D)	N/A	(D)	N/A	10	(Z)	---	---	(D)	N/A	---	---	676	0.7
Hudson	29,880	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hunterdon	275,163	100,027	36.4	13.6	69,745	42,973	7.1	10,718	14.0	2,649	1.5	2,664	1.8	44,347	10.0	9,070	6.7	295	11.3	3,315	11.0	191	4.5	8,617	9.3
Morris	300,155	17,028	5.7	2.3	27,312	64,720	2.8	990	1.3	3,164	1.7	944	0.6	17,942	4.1	4,185	3.1	88	3.4	3,111	10.3	33	0.8	6,629	7.2
Passaic	118,587	1,981	1.7	0.3	6,318	61,343	0.6	(D)	N/A	621	0.3	(D)	N/A	5,340	1.2	264	0.2	(D)	N/A	361	1.2	24	0.6	600	0.6
Somerset	195,000	32,721	16.8	4.5	18,911	42,496	1.9	2,534	3.3	370	0.2	308	0.2	6,344	1.4	9,281	6.9	75	2.9	658	2.2	161	3.8	3,327	3.6
Sussex	333,603	65,242	19.6	8.9	21,242	20,040	2.2	3,633	4.7	1,911	1.1	1,060	0.7	4,800	1.1	9,433	7.0	405	15.5	1,530	5.1	45	1.1	5,688	6.1
Union	66,105	126	.2	(Z)	2,483	165,549	0.3	(D)	---	(D)	N/A	(D)	N/A	(D)	N/A	16	(Z)	---	---	(D)	N/A	---	---	(D)	N/A
Warren	229,035	74,975	32.7	10.2	75,477	80,897	7.6	(D)	---	7,114	3.9	(D)	N/A	22,053	5.0	31,855	23.6	361	13.8	1,952	6.5	564	13.3	3,772	4.1
Central District																									
Burlington	514,927	85,790	16.7	11.7	86,302	93,603	8.7	9,857	12.9	10,054	5.5	25,148	17.0	35,199	7.9	5,769	4.3	276	10.6	921	3.1	234	5.5	10,254	11.1
Mercer	144,596	21,730	15.0	3.0	18,646	59,956	1.9	2,945	3.8	2,718	1.5	1,318	0.9	7,979	1.8	3,635	2.7	51	2.0	3,250	10.8	(D)	N/A	2,738	3.0
Middlesex	198,220	18,717	9.4	2.5	41,854	177,346	4.2	3,871	5.1	3,226	1.8	379	0.3	32,406	7.3	1,647	1.2	326	12.5	1,711	5.7	(D)	N/A	1,972	2.1
Monmouth	302,040	44,130	14.6	6.0	105,413	113,104	10.7	3,686	4.8	8,650	4.8	2,440	1.6	65,181	14.7	25,142	19.0	314	12.0	2,061	6.8	41	1.0	21,948	23.7
Ocean	407,217	9,833	2.4	1.3	11,515	45,159	1.2	303	0.4	2,059	1.1	1,236	0.8	5,645	1.3	2,200	1.6	74	2.8	403	1.3	(D)	N/A	1,797	1.9
South District																									
Atlantic	359,087	30,372	8.5	4.1	128,339	257,193	13.0	333	0.4	24,601	13.6	83,247	56.3	17,521	4.0	2,520	1.9	118	4.5	2,962	9.8	775	18.2	5,427	5.9
Camden	142,271	8,760	6.2	1.2	18,554	82,464	1.9	271	0.4	7,472	4.1	2,683	1.8	7,921	1.8	190	0.1	18	0.7	1,347	4.5	95	2.2	(D)	N/A
Cape May	163,319	7,976	4.9	1.1	14,586	72,567	1.5	(D)	N/A	1,641	0.9	711	0.5	11,558	2.6	552	0.4	(D)	N/A	424	1.4	7	0.2	1,486	1.6
Cumberland	313,150	69,489	22.2	9.5	156,939	255,186	15.9	6,441	8.4	40,436	22.3	7,252	4.9	98,744	22.3	4,022	3.0	44	1.7	1,319	4.4	(D)	N/A	2,453	2.6
Gloucester	207,820	46,662	22.5	6.4	93,883	140,333	9.5	3,125	4.1	39,616	21.8	13,395	9.1	31,824	7.2	5,839	4.3	83	3.2	3,008	10.0	(D)	N/A	2,365	2.6
Salem	216,243	96,530	44.6	13.2	79,962	105,351	8.1	(D)	N/A	24,464	13.5	(D)	N/A	17,536	4.0	19,296	14.3	20	0.8	1,173	3.9	47	1.1	6,763	7.3
New Jersey	4,747,096	733,450	15.5		986,885	95,564		76,611		181,453		147,933		442,953		135,233		2,612		30,106		4,250		92,697	

(D) = Withheld to avoid disclosing data for individual farms.
(Z) = Percent is less than a tenth of a percent.

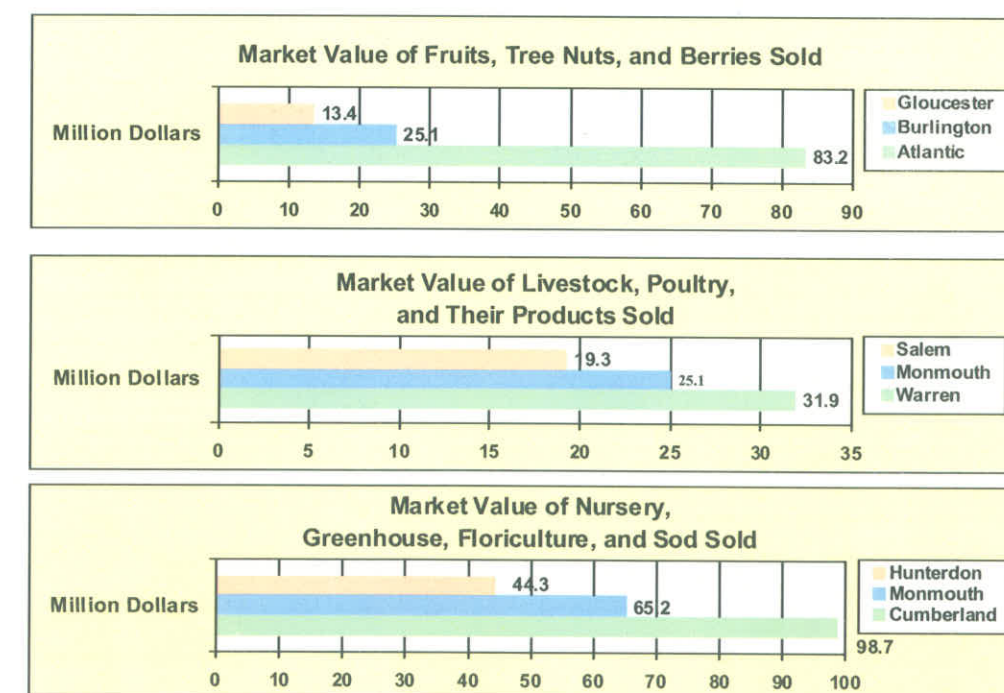
Top 3 Counties for Selected Items: 2007

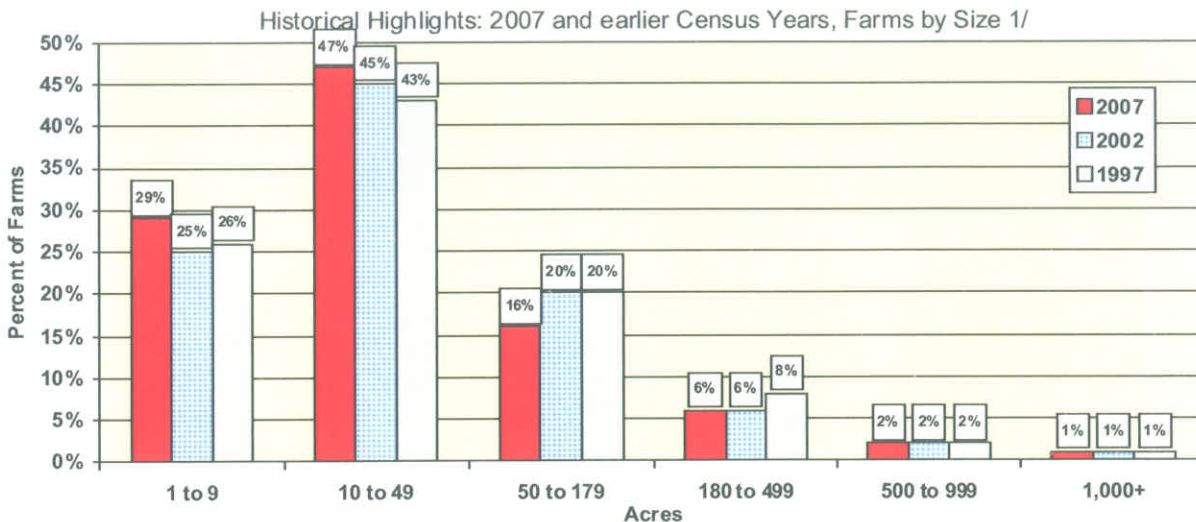


New Jersey Land in Farms (733,450) and Change from 2002



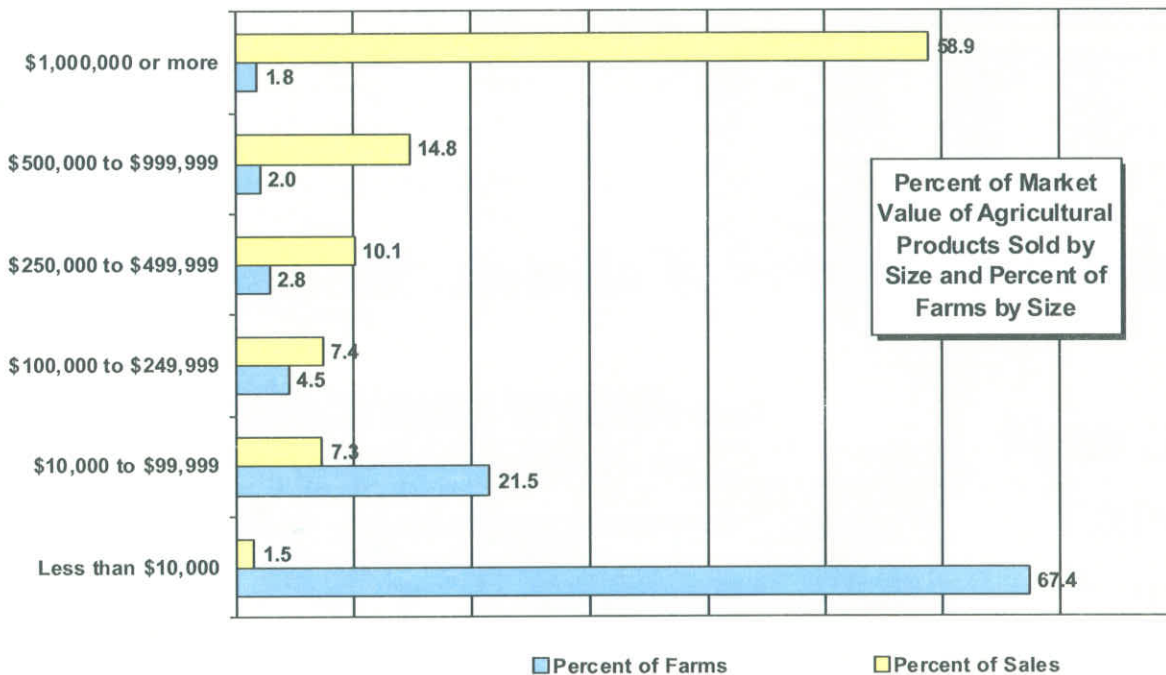
Top 3 Counties for Selected Items: 2007



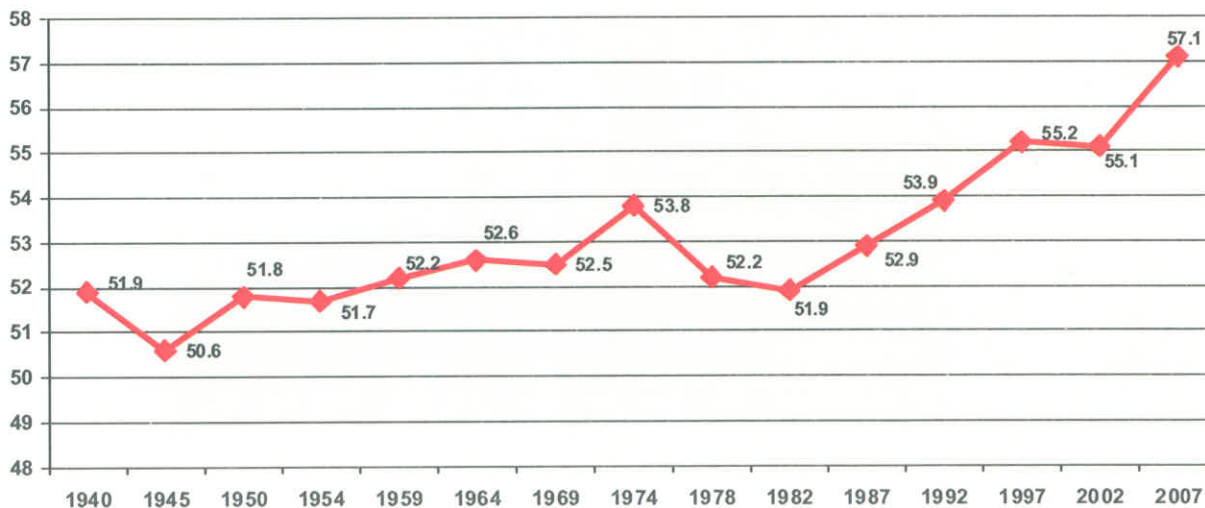


1/ Total for a given year may not add to 100 percent due to rounding.

Distribution of New Jersey Farms by Size and Market Value of Agricultural Products Sold by Size Group, 2007



Average Age of New Jersey Farmers



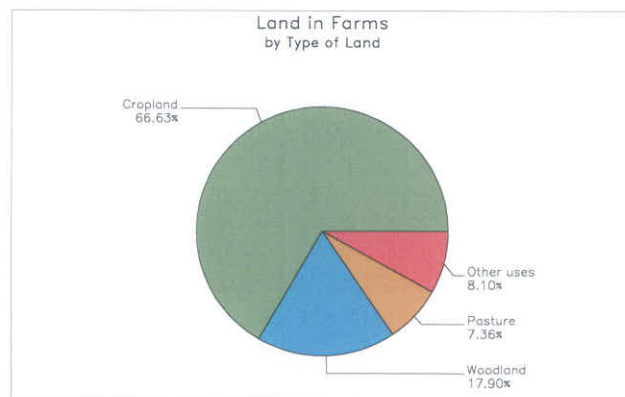
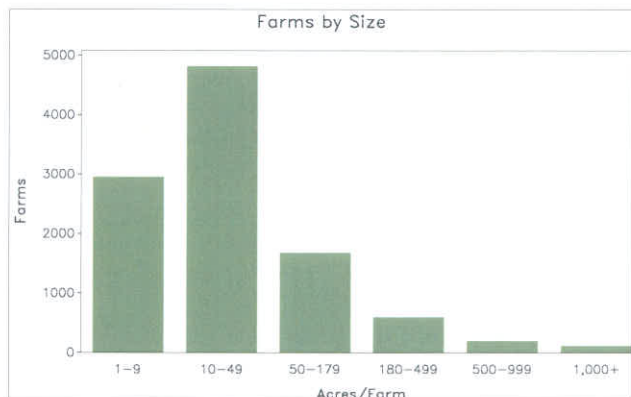
2007 CENSUS OF AGRICULTURE

State Profile



New Jersey

	2007	2002	% change
Number of Farms	10,327	9,924	+ 4
Land in Farms	733,450 acres	805,682 acres	- 9
Average Size of Farm	71 acres	81 acres	- 13
Market Value of Production	\$986,885,000	\$749,872,000	+ 32
Crop Sales \$851,653,000 (86 percent)			
Livestock Sales \$135,233,000 (14 percent)			
Average Per Farm	\$95,564	\$75,561	+ 26
Government Payments	\$6,988,000	\$4,441,000	+ 57
Average Per Farm	\$8,154	\$7,630	+ 7



2007 CENSUS OF AGRICULTURE

State Profile

New Jersey

Ranked items within U.S., 2007

Item	Quantity	U.S. Rank	Universe ¹
MARKET VALUE OF AGRICULTURAL PRODUCTS SOLD (\$1,000)			
Total value of agricultural products sold	986,885	40	50
Value of crops including nursery and greenhouse	851,653	33	50
Value of livestock, poultry, and their products	135,233	45	50
VALUE OF SALES BY COMMODITY GROUP (\$1,000)			
Grains, oilseeds, dry beans, and dry peas	59,860	38	50
Tobacco	(-)	(-)	17
Cotton and cottonseed	(-)	(-)	17
Vegetables, melons, potatoes and sweet potatoes	181,543	15	50
Fruits, tree nuts, and berries	147,933	12	50
Nursery, greenhouse, floriculture, and sod	442,953	9	50
Cut Christmas trees and short rotation woody crops	2,612	22	49
Other crops and hay	16,751	44	50
Poultry and eggs	33,044	38	50
Cattle and calves	9,559	45	50
Milk and other dairy products from cows	34,091	44	50
Hogs and pigs	2,349	38	50
Sheep, goats, and their products	1,784	41	50
Horses, ponies, mules, burros, and donkeys	33,732	9	50
Aquaculture	6,637	26	50
Other animals and other animal products	14,036	24	50
TOP LIVESTOCK INVENTORY ITEMS (number)			
Layers	1,560,177	35	50
Pheasants	196,852	7	50
Ducks	(D)	(D)	50
Quail	76,622	15	49
Cattle and calves	38,198	46	50
TOP CROP ITEMS (acres)			
Forage-land used for all hay and haylage, grass silage, and greenchop	115,669	43	50
Corn for grain	81,556	33	49
Soybeans for beans	79,218	29	40
Vegetables harvested, all	54,062	19	50
Wheat for grain, all	27,991	39	47

Other State Highlights

Economic Characteristics	Quantity	Operator Characteristics	Quantity
Farms by value of sales		Principal operators by primary occupation:	
Less than \$1,000	3,194	Farming	4,626
\$1,000 to \$2,499	1,754	Other	5,701
\$2,500 to \$4,999	999	Principal operators by sex:	
\$5,000 to \$9,999	1,007	Male	8,066
\$10,000 to \$19,999	806	Female	2,261
\$20,000 to \$24,999	302	Average age of principal operator (years)	57.1
\$25,000 to \$39,999	468	All operators ² by race:	
\$40,000 to \$49,999	188	American Indian or Alaska Native	32
\$50,000 to \$99,999	462	Asian	147
\$100,000 to \$249,999	461	Black or African American	92
\$250,000 to \$499,999	286	Native Hawaiian or Other Pacific Islander	5
\$500,000 or more	400	White	15,599
Total farm production expenses (\$1,000)	835,211	More than one race	61
Average per farm (\$)	80,876	All operators ² of Spanish, Hispanic, or Latino Origin	207
Net cash farm income of operation (\$1,000)	251,360		
Average per farm (\$)	24,340		

(D) Cannot be disclosed. See "Census of Agriculture, Volume 1, Geographic Area Series" for complete footnotes.

¹ Universe is number of states in U.S. with item.

² Data were collected for a maximum of three operators per farm.

Betsy Kohn, Co-Chair, Sierra Club North Jersey Group
Highlands Council Meeting, Feb. 26, 2009, Chester, NJ

The New Jersey Sierra Club asks the Highlands Council to reject the Susquehanna-Roseland power line expansion because it is inconsistent with both the Highlands Act and the Regional Master Plan. We are concerned that this project will cause irreparable harm to the water, forests, wildlife, and scenic and recreational resources in the Highlands.

PSE&G argues that this project is "a utility line upgrade" and as such is exempt under the Highlands Act, further arguing that this vitiates the need to determine the project's consistency with the RMP. We adamantly disagree.

To call this power line expansion an "upgrade" defies common sense and reality.

PSE&G is proposing to build a 500-kilovolt transmission line – more than twice the size and scope of the existing 230-kilovolt line. This means they will dismantle the existing towers and build new gigantic towers averaging 195 feet in height, more than twice the average height of the existing towers. They will install new and larger and heavier transmission lines and dig down about 40-60 feet to lay the foundation to anchor each giant tower. Needless to say, there will be extensive disturbance of the natural landscape due to the clearing of hundreds of trees, blasting, bulldozing, excavating, and other major disruptions including miles of access roads for trucks to haul in heavy equipment.

A project of this scale is not just an upgrade; it is a massive new construction project, and as such it requires the highest level of review by the Highlands Council to determine if it is consistent with both the RMP and the Highlands Act.

We are also concerned about threats to the Highlands environment and public health posed by more generation of coal-based electricity. PSE&G says this project is needed to meet the rising demand for electricity over recent years which is expected to continue to grow.

Demand for electricity may have risen in recent years but so has public awareness of the need to move away from coal-based power to clean alternative energy sources. New Jersey is front and center on this. Its Energy Master Plan aims to cut electricity demand by 20 per cent by 2020 by expanding clean alternative sources and energy efficiency. What we don't need or want is more polluting coal-based electricity that

increases carbon emissions, asthma rates and mercury contamination in the environment. It's time for PSE&G to get with the program and stop trying to peddle dirty coal power in New Jersey.

As my colleague Mike Herson points out, we have 21st Century energy problems and PSE&G is giving us a 19th Century dirty coal project that ultimately will only pollute Highlands' watersheds.

Because of these concerns, we strongly urge the Council to recommend against any exemption for the Susquehanna-Roseland power line expansion to ensure continued protection of the Highlands.

Comments submitted at Highlands Council Meeting
on February 26, 2009 by Betsy Kohn from New Jersey
Sierra Club. Page 2 of 2.



NEW JERSEY HIGHLANDS COALITION

508 Main St. Boonton, NJ 07005 • 973-588-7190 • www.njhighlandscoalition.org

We have received a copy of the Cultural Resources Study for the PSE&G Transmission Line, by the Louis Berger Group on behalf of PSE&G, in compliance with section 106 review procedures. Our limited resources allowed us to focus on only one township within the study area, Jefferson. If Jefferson is any indication of the thoroughness of the study, it will be found inadequate in identifying the cultural, historic and archaeological resources within the fifteen municipalities through which the line is proposed to cross, and it fails to even nominally avoid or minimize impacts to the few cultural resources it has identified, or offer any plan for mitigation.

I have prepared 2 maps that I will submit with my written comments. Map #1 is a composite of the Berger study, a 1986 Morris County Cultural Survey conducted by Acroterion and the Highlands Interactive Map showing Archaeological Grids. Berger has identified only two resources, the Weldon Mine and a Queen Anne style residence on Weldon Road. Eight additional resources had been identified in the 1986 Acroterion study.

Areas of Potential Effect (APE), which are shown on both maps, are areas of potential adverse affects to historical and cultural resources. They have been arbitrarily limited to a ¼ mile radius from each proposed structure and 500' from an access road. In reality, 200' towers, built on 1200' ridgelines in Jefferson, some requiring FAA beacons, will have adverse visual impacts on cultural resources many miles away. Access roads and new tower locations pass through Highlands mapped archaeological grid points without any recognition, nor attempt to avoid, minimize or plan for mitigation.

This area of the Highlands has a number of abandoned mines, including the Weldon Mine, as shown on the first map and the Hurd Mine, somewhere in the vicinity of Hurdtown, near the southeastern shore of Lake Shawnee. Within these mines, iron ore ran diagonally and were thus mined thousands of feet diagonally. The 1977 publication, *Abandoned Magnetite Iron Mines of NJ* states, "...in the last 15 to 20 years, 20 to 25 buried openings have suddenly collapsed, leaving a deep opening. The status of the other lost openings must be suspect... if these areas are developed without considering the old mines, serious problems could arise in the future...The Mine Safety Act was amended to include abandoned mines in late 1973." I bring this to your attention because there may be a public health and safety issue in constructing new towers or driving heavy equipment over access roads in the vicinity of abandoned mines that have been neither mapped nor otherwise addressed by PSE&G.

On the Map #2, Berger correctly identifies five cultural resources that appear in the Morris County Survey of Cultural Resources. The Upper Longwood Forge Historic District, in the lake valley will have 200' towers looming over it at tower ground elevations of 800', 1100' and 1200', yet is shown just outside the rather stingy ¼ mile APE. Even within the APE, a new tower is proposed virtually on top of 2 mapped resources.

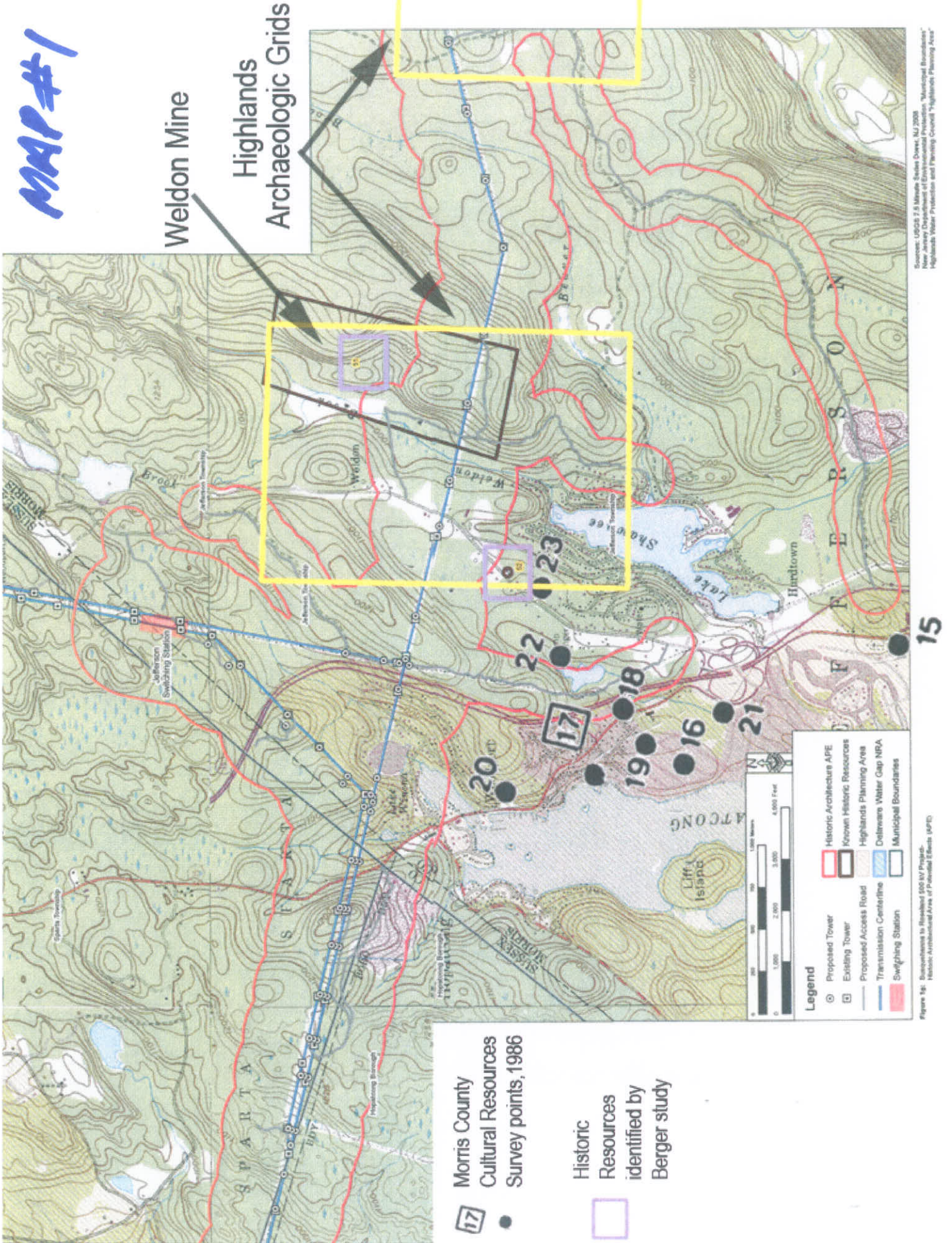
We have reason to question PSE&G's commitment to first avoid, secondly minimize, and lastly mitigate the effects of their project on Highlands Cultural Resources. The New Jersey Highlands Coalition will work with SHPO to help correct these deficiencies and we applaud the Highlands Council for its initial determination of "Inconsistent" for Historic, Cultural, Archaeological and Scenic Resources.



Elliott Ruga
NJ Highlands Coalition
February 26, 2009

ⁱ NJ Department of Labor and Industry, Division of Workplace Standards, Office of Safety and Compliance, *Abandoned Magnetite Iron Mines of New Jersey*, Trenton, 1977

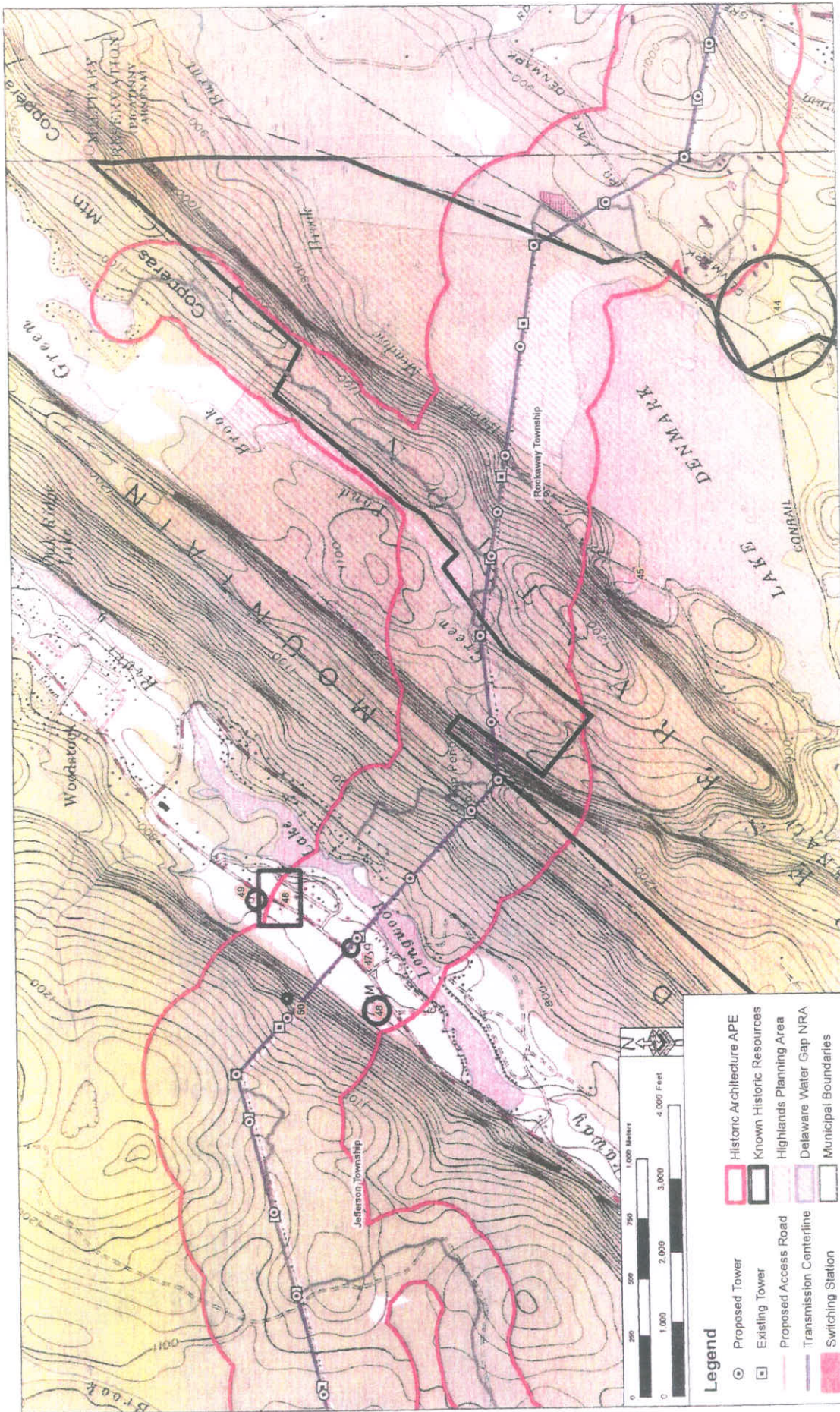
MAP #1



Source: USGS 7.5 Minute Series Data, NJ 2008
 USGS 7.5 Minute Series Data, NJ 2008
 Highlands Water Protection and Planning Council, "Highlands Planning Area"

Comments submitted at Highlands Council Meeting on February 26, 2009 by Elliot Ruga from New Jersey Highlands Coalition. Page 4 of 4.

MAP # 2



Sources: USGS 7.5 Minute Series Boonton, NJ 2006 and Dover, NJ 2008
New Jersey Department of Environmental Protection "Municipal Boundaries"
Highlands Water Protection and Planning Council "Highlands Planning Area"

Figure 1f: Susquehanna to Roseland 500 kV Project - Historic Architectural Area of Potential Effects (APE)

- 46 Devil's Punch Bowl
- 47 Talmadge Schoolhouse
- 48 Talmadge Archaeological and Historical Complex
- 49 Upper Longwood Forge Historic District
- 50 Grand Bee Rock Shelter

1



New Jersey Conservation
F O U N D A T I O N

Bamboo Brook, 170 Longview Road
Far Hills, NJ 07932
908.234.1225 fax 908.234-1189

January 30, 2009

Ms. Christine M. Ross, Senior Resource Management Specialist
Highlands Water Protection and Planning Council
100 North Road
Chester, New Jersey 07930-2322

via email chris.ross@highlands.state.nj.us

CC:

Ms. Eileen Swan, Executive Director, New Jersey Highlands Council
Mr. Tom Borden, Chief Counsel, New Jersey Highlands Council
Mr. Mark Mauriello, Commissioner, NJDEP
Mr. Larry Baier, Director, Watershed Management, NJDEP
Ms. Terry Pilawski, Chief, Bureau of Watershed Regulation, NJDEP
Mr. Robert J. Cartica, Office of Natural Lands Management, NJDEP

**RE: PSE&G Susquehanna-Roseland 500-kv Transmission Line Expansion Project
Highlands Applicability Determination (HAD) and Exemption Request
Highlands Regional Master Plan Consistency Determination Review**

Dear Ms. Ross:

Please accept the comments of New Jersey Conservation Foundation (**NJCF**) on the Draft Highlands Council Highlands Regional Master Plan Consistency Determination of the project. PSE&G seeks exemption #11 from the Highlands Act, the NJDEP Highlands rules for the Preservation Area, and the Highlands Regional Master Plan standards and policies, which exempts the “routine maintenance and operations, rehabilitation, preservation, reconstruction, repair, or upgrade of public utility lines, rights-of-way, or systems, by a public utility, *provided that the activity is consistent with the goals and purposes of*” the Highlands Act. P.L. 2004, Chapter 120, C.13:20-28 Exemptions.

The Highlands Council review of the project is in support of decision-making by the Council and the NJDEP regarding whether the application meets the consistency standard of eligibility for Exemption # 11. New Jersey Conservation Foundation supports the Draft Highlands Council Conclusion that the proposed activities are inconsistent with the Highlands Act, the Highlands Regional Master Plan, and NJDEP rules for the Preservation Area. However, in addition to the

inconsistencies identified by the Council's Draft RMP Consistency Determination, our review of the project application has identified additional deficiencies that result in inconsistencies beyond those identified by the Council. We also offer in our comments some information and analysis pertinent to the Highlands Act goals and purposes discussed.

I. The PSE&G Application for a Highlands Applicability Determination and Exemption from the Highlands Act is incomplete, which could lead to incorrect conclusions regarding the project's impact. Incomplete sections, in the order in which they appear in the application, include:

- **Required information regarding the cost of the project was not provided.**

Section 1. General Highlands Applicant Information requests "the total project or activity cost for this application is \$ ____." This was left blank.

- **Blocks and lots required were not provided.**

Section 1.6 requests lots and blocks for the project. Lots and blocks for the construction access routes were not submitted. The proposed access routes are an integral part of the project as described by the applicant in the HAD application: Part III, Project Description and Purpose, 2.0 Description of Proposed Activities -- "2) construction of temporary access roads." *The lots and blocks for the access routes must be submitted as part of the application in order to accurately assess the impact of the project.*

- **The total acreage of the project site is significantly understated.**

Sec. 1.6.F. requests the "total acreage of project site." The response provided is 520 acres. HAD Application, pg. 2; also Pg. III-4, Table I, Total Acreage column. *Our calculations indicate that the total Highlands acreage of the project is between 730 acres and 820 acres or more.** See below.

The applicant states that the proposed project will involve four main efforts: "1) upgrade the existing 230 KV transmission line...2) construction of temporary access roads; 3) construction of a new switching station ...and 4) removal of existing 230KV transmission line and structures." Description of Proposed Activities, Pg III-1.

The definition of "project site" has, it appears, been narrowly interpreted by the applicant, to include only the existing right-of-way, the new switching station and the *travel surfaces* of the construction access routes. The definition of "project site" should include all Highlands areas utilized for the project, whether or not they are owned by PSE&G, and whether use of the site is considered permanent or temporary. Additional components should include areas adjacent to the access routes that are impacted by tree removal, construction equipment or compaction; equipment or materials storage or staging areas, and the area within a "limit of work" line. No "limit of work" line is indicated on the maps submitted. The "limit of work," a standard feature of site plans and construction drawings, includes areas where vegetation is to be cleared, where equipment or materials are to be stored or stockpiled, for example, topsoil, rock removed by blasting, construction aggregates, new tower components, old tower components to be removed, as well as areas subject to soil compaction from vehicles and heavy equipment, both within and outside the existing right-of-way. All of these must be included in the "total acreage of the project site" for the application to be considered complete.

* Our calculation of the total project acreage was derived based on 26 miles total length of the existing 150' right-of-way within the Highlands Region (473 acres), plus the Jefferson switching station (157 acres), plus 20 miles of access routes between 40' and 80' in width. Additional staging or construction sites have not been added. See Appendix A for more details.

- **The required site plan(s) has not been provided.**

Information required by the HAD application includes "A *site plan* certified by the appropriate licensed New Jersey Professional showing the existing and proposed public utility lines, rights of way, or systems." Section III. Highlands Preservation Area Regulatory Requirement Applicability Determination, Exemption Application Requirements, number 11, page 10. ***The required site plan - or the multiple site plans that would be required for a project of this size - have not been provided.*** The application submitted does not provide the level of detail expected in site plans.

Also required is "a written description of the work to be conducted, the purpose of the activity and how that purpose is consistent with the Highlands Water Protection and Planning Act." Section III, number 11. The written description is inadequate for a project of this magnitude.

II. The goals and purposes of the Highlands Water Protection and Planning Act, with which we believe the project is inconsistent, are stated below. P.L. 2004, Ch. 120.

General goals and purposes of the Highlands Act are found in the Legislature's findings and declarations:

"2. The Legislature further finds and declares that the New Jersey Highlands... contains other exceptional natural resources such as clean air, contiguous forest lands, wetlands, pristine watersheds, and habitat for fauna and flora, includes many sites of historic significance, and provides abundant recreational opportunities for the citizens of the State... the protection of the New Jersey Highlands, because of its vital link to the future of the State's drinking water supplies and other key natural resources, is an issue of State level importance...;"

"The Legislature therefore determines...that it is in the public interest of all the citizens of the State of New Jersey to enact legislation setting forth a comprehensive approach to the protection of the water and other natural resources of the New Jersey Highlands; that this comprehensive approach should consist of the identification of a preservation area of the New Jersey Highlands that would be subjected to stringent water and natural resource protection standards, policies, planning, and regulation; that this comprehensive approach should also consist of the establishment of a Highlands Water Protection and Planning Council charged with the preparation of a regional master plan for the preservation area in the New Jersey Highlands as well as for the region in general; ...that all such aforementioned measures should be guided, in heart, mind, and spirit, by an abiding and generously given commitment to protecting the incomparable water resources and natural beauty of the New Jersey Highlands so as to preserve

them intact, in trust, forever for the pleasure, enjoyment, and use of future generations..." C. 13:20-2

Section 13 of the Highlands Act addresses goals of regional master plan: *"the goal of the regional master plan with respect to the entire Highlands Region shall be to protect and enhance the significant values of the resources thereof in a manner which is consistent with the purposes and provisions of this act."* C.13:20-1.a.

Highlands Act goals for the Preservation Area include:

"(2) preserve extensive and, to the maximum extent possible, contiguous areas of land in its natural state, thereby ensuring the continuation of a Highlands environment which contains the unique and significant natural, scenic and other resources representative of the Highlands Region;

(3) protect the natural, scenic, and other resources of the Highlands Region, including but not limited to contiguous forests, wetlands, vegetated stream corridors, steep slopes, and critical habitat for fauna and flora;

(5) preserve outdoor recreation opportunities...on publicly owned land; and

(9) prohibit or limit to the maximum extent possible construction or development which is incompatible with preservation of this unique area." C.13:20-10.b.

The majority of the proposed transmission line upgrade and construction lies within the Preservation Area, and is thus subject to these goals.

Planning Area goals of the Highlands Act include:

"(2) preserve to the maximum extent possible any environmentally sensitive lands and other lands needed for recreation and conservation purposes; and

(3) protect and maintain the essential character of the Highlands environment..." C.13:20-10.c.

III. RMP Consistency Determination, PART 1. NATURAL RESOURCES.

SUBPART B. Highlands Open Waters and Riparian Areas.

Because incomplete information was provided in the HAD application, the following Highlands Council findings of "consistent" or "not applicable" should be changed to "inconsistent."

Objective 1D4c: No storm water management plans or wetland L.O.I.s were provided with the application.

Objective 1D4d: The information provided was not detailed enough or was not submitted to assess the increased area of disturbance within Highlands Open Waters buffers within the R.O.W., the switching station, and the access routes.

Objective 1D5a: Identification and mapping of Highlands Riparian Areas "by site specific analysis" was not submitted by the applicant.

Objective 1D5f: No information regarding a Regional Stormwater Plan was submitted.

Objective 1D5g: The application does not identify or implement opportunities “where the restoration and enhancement of previously impaired Riparian Areas are feasible and appropriate as mitigation to any allowable modification to Riparian Area requirements.” It is clear that the planned upgrade as proposed will modify Riparian Areas in many places; but the applicant has not addressed this opportunity.

Additional instances that should be deemed inconsistent include: **Objective 1L5a, Objective 2D4g, 2G2, 2G3b, 2G5a, 2G5b, 2H4a, and 2H5c.** In all cases, specific information has not been provided to the Council. All other applications have been evaluated based on information, designs and plans provided to the Council. Incomplete information should be judged Inconsistent.

IV. RMP Consistency Determination: PART 1. NATURAL RESOURCES, SUBPART D, CRITICAL HABITAT.

The Highlands Act protects not only animal and plant organisms, but their habitat as well. The NJDEP Highlands rules for the Preservation Area state “*The Department shall not issue a HPAA [Highlands Preservation Area Approval] unless it determines that the proposed activity will not jeopardize the continued existence of, or result in the likelihood of the destruction or adverse modification of habitat for any rare, threatened or endangered species of animal or plant.*” N.J.A.C. 7:38-3.11

The HAD application significantly understates the potential and likely impacts of the PSE&G proposed transmission line upgrade project on rare, threatened and endangered species of animals and their habitat and does not acknowledge any potential impacts on rare and endangered plant species and their habitat. It is thus inconsistent with Highlands Act goals and purposes regarding the protection of natural resources.

1. The Highlands Council RMP consistency determination should be broadened to include the full spectrum of rare, threatened and endangered species of both animals and plants, and their habitat, that are impacted by the project in its entirety. Currently, the RMP consistency determination notes only the 18 rare, threatened and endangered species of wildlife that are listed in the PSE&G HAD application. This list of 18 species is incomplete.

In June 2008, New Jersey’s Natural Heritage Program provided PSE&G, upon request, data from the Natural Heritage Database and the Landscape Project (Version 3), having “checked for occurrences of any rare wildlife species or wildlife habitat within one mile of the referenced site.” The list of animal species provided by the Natural Heritage Program contained 64 species, 58 species on Table 1 “on referenced site,” plus six additional species on Table 2 “additional species within 1 mile of referenced site.” HAD application, Appendix D, Agency Correspondence. Letter from Herbert Lord, Natural Heritage Program, to Herbert Pollock, PSE&G, June 27, 2008.

PSE&G mentioned in its narrative only 18 animal species it identified “within the ROW and Jefferson switching station.” HAD application, pg. IV-6; Table 2. pg. IV-8. Approximately 47 other rare, threatened and endangered wildlife species whose habitat DEP had identified within

the project area were omitted. See list of species omitted below.* PSE&G also specifically did not address impacts on animal species and habitat from more than 20 miles of construction access routes.

*Rare, threatened and endangered animal species habitat identified by NJDEP Natural Lands Management but omitted by PSE&G in its application narrative were: *silver-bordered fritillary, arrowhead spiketail, black-billed cuckoo, blackburnian warbler, black-throated green warbler, blue-headed vireo, blue-spotted salamander, bobolink, broad-winged hawk, brown thrasher, brush-tipped emerald, Canada warbler, cerulean warbler, creeper, eastern box turtle, eastern meadowlark, eastern small-footed myotis, Fowler's toad, grasshopper sparrow, harpoon clubtail, hooded warbler, Jefferson salamander, Kennedy's emerald, Kentucky warbler, least bittern, least flycatcher, long-eared owl, New England bluet, northern harrier, northern metalmark, northern parula, norther spring salamander, rapid clubtail, spatterdock darner, spotted turtle, Williamson's emerald, and wood thrush*, plus an additional six species within one mile of the site, including the *cliff swallow, pied-billed grebe, sable clubtail, savannah sparrow, ski-tailed emerald and triangle floater*.

2. The RMP consistency determination should recognize the potentially severe impacts of the transmission line upgrade on migratory birds and their habitat.

The PSE&G HAD application states that PSE&G “will construct the new towers and switching station in accordance with the ***Suggested Practices for Avian Protection on Power Lines: the State of the Art in 2006*** and will implement an Avian Protection Plan (APP) in accordance with guidelines from the Avian Power Line Interaction Committee. Through these efforts PSE&G will minimize the potential for harm to migratory birds, including large raptors.” HAD IV-7. We have obtained and reviewed this document; it deals primarily with avian electrocutions and design standards to minimize electrocutions, which generally occur with larger birds. Utilizing minimization principles to avoid perching, electrocution, and daytime collisions does not satisfy the goals and purposes of the Highlands Act, the NJDEP Highlands rules and the Highlands Regional Master Plan regarding habitat protection. The report does not deal with night migration issues, except to estimate that annually 174 million birds are killed by collisions with power lines, and many of these would occur at night.

The Avian Power Line Interaction Committee (APLIC) and the Edison Electric Institute published two “State of the Art” volumes (1994 and 2006) regarding migrating birds and their interactions with power lines. The earlier study, ***Mitigating Bird Collisions With Power Lines: The State Of The Art in 1994***, is more relevant to the issue of transmission line upgrade impacts on migratory birds, especially conservation of neotropical songbirds in the New Jersey Highlands and the impact of night collisions on rare Highland bird populations.

Scores of species of birds migrate through the New Jersey Highlands at night during complete darkness. They are at risk from the proposed PSE&G electric transmission line structures that will be doubled in height and be accompanied by an increased number of multiple wires. Of these, 33 are rare, threatened or endangered bird species. Their habitat is protected by the New Jersey Highlands Act and the DEP Highlands rules. The APLIC biologists recognize that healthy populations of birds can absorb individual deaths without detriment to the survival of a local population, but losses via power line collisions can pose serious impacts to the probability

of survival in declining populations (1994, Chapter 2, page 8). These impacts cannot be dismissed in light of the goals, purposes and protections of the Highlands Act, rules and RMP.

3. Migratory bird habitat includes an aerial component that requires protection.

It must be recognized that *aerial migratory habitat* is a significant and integral component of habitat for any rare avian migratory species population. Protection of this habitat is included under the goals and purposes of the Highlands Act, the DEP Highlands rules and the Highlands Regional Master Plan, which protect the habitat of endangered, threatened and rare species (“species of special concern”).

The New Jersey Highlands are literally an ocean of birds during spring and fall migration, being located at a key juncture along the Atlantic flyway and the eastern edge of the Appalachian Mountains. For nearly one hundred years, birdwatchers have been drawn to various locations in New Jersey to observe “fallouts” of thousands upon thousands of birds. These spectacular migratory phenomena occur because in New Jersey there is a unique juxtaposition of moving frontal system winds combined with close proximity to mountainous and coastal geography. These attributes frequently combine to create nocturnal flight conditions where birds must cut short a migratory flight and descend upon Highlands forests, as warm maritime winds collide with cold continental fronts over New Jersey. Whether in fall, when migratory flocks coalesce over New Jersey as they head south from New England and interior Canada, or in spring, when flocks are just beginning to branch out towards both interior Canadian destinations and New England as they head north up the Appalachian spine and the Atlantic coast, the New Jersey Highlands host a tidal wave of migratory birds.

The Highlands Regional Master Plan *Ecosystem Management Technical Report 2008* recognizes that the forested ridges of the Highlands comprise a significant neotropical migratory bird flyway:

“in addition to habitat for rare, threatened and endangered wildlife and plant species, the region’s forests exist within a major bird migratory flyway, connecting wintering habitat in Central and South America with breeding grounds in northern latitudes. One-quarter of all neotropical bird species found in the United States are found in the Highlands and half of the total number of species that breed in the Highlands are neotropical migrants. Many of these species are forest-interior breeding species. Interior forests in the Highlands provide critical habitat for species including red-eyed vireo, American redstart and Eastern pee-wee. ***Two-thirds of migrant birds that use eastern migratory flyways are believed to be in serious decline.*** (Emphasis added .) Several species, including northeastern populations of wood thrush, Kentucky warbler, black-throated blue warbler, and cerulean warbler are in rapid decline. One reason for migratory bird species decline is loss of habitat through forest fragmentation and development pressures.” P. 38.

Birds can and often do migrate at great heights above 800 feet, but during inclement weather can be found flying very close to the ground. (Gauthreaux, 1972). Furthermore, the New Jersey Highlands are frequently the beginning and endpoints of migratory flights, where birds by necessity will be at altitudes that interact with structures of the heights proposed. Most importantly, the 31 species of rare Highlands breeding birds will not be restricted to high

cruising altitudes. Since these 31 species are resident breeding birds, they will begin and terminate their migratory flights close to or within the proposed power line corridor.

Excluding electrocutions of birds that intentionally land on power lines, and only considering avian deaths caused by flying into “invisible” structures and lines during the dark or during poor visibility, power line collisions were estimated to kill 174 million birds per year in the US (Curry and Kerlinger, NWCC, 2001 from pages 6-7, Suggested Practices for Avian Protection on Power Lines, 2006). This is obviously a gross estimate, based on projections of a relatively small amount of data over a vast network of power lines, which works out to many hundreds of bird deaths annually per mile. Consider though, that many power lines are in areas with little habitat value and away from critical habitat or flyways, or run parallel to migratory flight paths, where impacts are much less likely than in the Highlands (1994, Chapter 3, page 17)

With migratory bird densities among the highest in the world, the potential in the Highlands forests clearly exists for a tall, east-west running power line, perpendicular to the migratory path, to kill many hundreds or perhaps even thousands of birds per mile per year.

An approach must be developed to understand, analyze, evaluate and define the risk posed to populations of rare avian species created by the potential habitat degradation of their migratory flyway. Careful habitat assessments can be made to determine the most likely areas for scientific monitoring of the proposed corridor. Since a smaller power line is already in place and the corridor is cleared, Forward-Looking Infra-Red (**FLIR**) detection systems (1994, Chapter 4, p. 30) can be utilized to monitor selected critical migratory habitats, to begin to estimate the likely future impacts of the proposed taller and larger power transmission system.

Any impacts to this aerial habitat component must be considered in evaluating whether PSE&G’s application for a HAD and exemption meets the standard of consistency with the goals and objectives of the Highlands Act, NJDEP rules and Highlands RMP policies, objectives and standards. Any impacts, whether intended or not, to aerial migratory habitat must also be included in developing and implementing Highlands RMP “avoidance, minimization, or mitigation” policies and standards.

It should also be recognized that the federal Migratory Bird Treaty Act of 1918 (MBTA) (16 U.S.C. 703-712), which is administered by the US Fish and Wildlife Service, is the legal cornerstone of migratory bird conservation and protection in the United States. This federal law protects almost all native avian species in the United States and prohibits “taking,” or killing them. The MBTA is a strict liability statute, meaning that proof of intent is not required in the prosecution of a “taking” violation. “Take” in this context means to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect. (2006, EEI, Chapter 3, p. 19).

4.Impacts of the power line upgrade on Night Migrant Birds will be especially severe, and should be recognized by the Council’s RMP Consistency Determination and the NJDEP.

New Jersey Conservation Foundation ecologist Dr. Emile DeVito has identified the rare birds that migrate *at night* through the New Jersey Highlands. Rare night-migrating birds are those that would be most endangered by the significantly increased height of the transmission towers

and significantly increased number of wires strung between them. Currently, there are 33 rare night migrants, species that New Jersey has designated as Endangered, Threatened, or Rare (of “Special Concern”),* but more species are poised to be added to the rare bird list, as the NJDEP Endangered and Non-game Species Program has endorsed numerous additions that are expected to be published soon in the *New Jersey Register*. Of the 33 rare night migrant species, 31 breed in the Highlands and would be highly likely to have their local populations impacted even if they interact only infrequently with the power line.

* Rare (SC), Threatened (T), and Endangered (E), 33 bird species that migrate through the New Jersey Highlands at night (31 species breed here) include: *American Bittern, Barn Owl, Blackburnian Warbler, Black-throated Blue Warbler, Black-throated Green warbler, Blue-headed Vireo, Bobolink, Brown Thrasher, Canada Warbler, Cerulean Warbler, Common Moorhen, Common Nighthawk, Eastern Meadowlark, Golden-winged Warbler, Grasshopper Sparrow, Gray-cheeked Thrush, Hooded Warbler, Horned Lark, King Rail, Least Bittern, Least Flycatcher, Nashville Warbler, Northern Parula, Pied-billed Grebe, Sora, Spotted Sandpiper, Veery, Virginia Rail, Whip-poor-will, Winter Wren, Wood Thrush, Worm-eating Warbler and Yellow-breasted Chat*. Source: NJ Endangered and Nongame Species Program: Special Concern – Species Status Listing (Oct. 2008).

The applicant must be required to study and evaluate the increased risk to these species posed by the proposed taller transmission line structures. Migration of particular species is concentrated by habitat and geographic features (EEI, 1994, Chapter 3, p. 17), and there will be locations along this route that will be “collision maxima” for certain rare species. Since the proposed route along the existing right-of-way cannot be moved away from trouble spots that are identified by research, should the project proceed, appropriate mitigation will need to be designed and implemented by the applicant. In order to fully evaluate the risks to migratory birds, ideally data should be collected for a considerable period of time, both along the existing structures in appropriately chosen critical locations and under existing structures as tall as those proposed in comparable critical locations, with as many wires as this project proposes, to determine appropriate mitigation requirements.

As an historical precedent in New Jersey, impacts on common species of fish at the water intake of the Salem Nuclear Plant were considered and mitigated for in PSE&G’s Delaware Bay Estuary Enhancement Program. Aerial habitat degradation and population impacts to rare migratory Highlands birds must be similarly considered and implemented.

5. Impacts of the proposed project on Rare and Endangered Plants and their habitat, including four Natural Heritage Priority sites, must be addressed in the Council’s RMP consistency determination and by the NJDEP.

As noted earlier, the Highlands Act, NJDEP rules and Highlands RMP policies protect not only animals and their habitat, but also plant organisms and their habitat as well. The proposed transmission line project is likely to “jeopardize the continued existence of, or result in the likelihood of the destruction or adverse modification of habitat” for rare and endangered species of plants. N.J.A.C. 7:38-3.11

The Highlands provides habitat for at least 137 species of Rare and Endangered plants. (RMP *Ecosystem Management Technical Report*, Appendix E. 2008) Although the Natural Heritage Program provided PSE&G with information about 22 Endangered plant species likely to be found in the vicinity of the proposed project* (HAD, Appendix D, Agency correspondence) the PSE&G HAD/Exemption application does not address, identify or discuss potential impacts or mitigation of the project on any rare or endangered plants, plant habitat sites, or the four designated Natural Heritage Priority Sites within the Highlands Region that are directly affected by the proposed project. (HAD, PART IV, Section 3.0, Subsection 3.3. Pg. IV-6)

*List of 21 Endangered plant species “possibly on project site, based on search of Natural Heritage Database, rare plant species and ecological communities currently recorded in the NJ Natural Heritage Database:” *Stiff Club-moss, Bog Rosemary, Rush Aster, Glade Fern, Water-marigold, Water Sedge, Labrador Marsh Bedstraw, Small Bedstraw, Featherfoil, Shrubby St. John's-wort, Large-leaf Holly, Pale Laurel, Common Water-milfoil, Illinois Pondweed, Robbin's Pondweed, Rhodora, Arum-leaf Arrowhead, Bog Willow, Small Burr-reed, Arborvitae, Seaside Arrow-grass.* Letter from Herbert. A. Lord, Natural Heritage Program, to Herbert Pollock, PSE&G, June 27, 2008.

6. Four Natural Heritage Priority Sites are impacted by the transmission line upgrade.

1. Green Pond Mountain Natural Heritage Priority Site (Rockaway and Jefferson Townships, Morris County): Two proposed access routes (Appendix A, 13 and 14), neither of which were identified in the HAD application document, and which total nearly 2 ¾ miles in length, are located on the border of or entirely within the *Green Pond Mountain Natural Heritage Priority Site*. The Priority Site is an extensive matrix of forests, talus slopes, wooded wetlands and aquatic plant communities on Green Pond Mountain that contains habitat for a concentration of state critically imperiled, imperiled and rare plant species, and which has a Biodiversity Rank of B4V1. Rare palustrine and terrestrial plant species include Virginia Snakeroot, Mountain Spleenwort, Purple Bittercress, Soft-leaf Sedge, Featherfoil, Large-leaf Holly, Tall Cinquefoil and a data sensitive species or ecological community.

2. Lake Denmark Natural Heritage Priority Site (Rockaway Township, Morris County): Directly adjacent and to the east of the Green Pond Mountain Natural Heritage Priority Site is the *Lake Denmark Natural Heritage Priority Site*. The existing transmission right-of-way and two proposed access routes (Appendix A, 15. Access route 45 and 16. Access route 46) totaling more than 4/5 mile, lie within this Heritage Priority Site. The Lake Denmark Natural Heritage Site consists of the watershed of the large glaciated lake, with its adjacent herbaceous, shrubby and forested wetlands. The Priority Site contains excellent populations of state-imperiled and other rare species, with a Biodiversity Rank of B4V1. Endangered and Rare terrestrial plant species include Climbing Fumitory, Fine-nerve Sedge, and Wood Lily (*Lilium philadelphicum*). Endangered and Rare palustrine, lacustrine and riverine species include Featherfoil, Floatingheart, Robbin's Pondweed, Small Burr-reed, Flat-leaf Bladderwort and Purple Bladderwort.

Picatunny Arsenal:

Both of the two Natural Heritage Priority Sites above are located in the the biologically sensitive and species-rich northern portion of Picatunny Arsenal. In addition to Endangered plants, for

example, Picatinny Arsenal is rich in Odonata, dragonflies and damselflies. Odonata diversity on the installation “is exceptional, representing more than half the number of known species in any other state or province in North America.” (Carle 1995) For example, the rare New England bluet (*Enallagma laterale*) is a federal Candidate Species. The global range of this species in the northeastern US contains only 40 sites. The largest population occupies portions of Denmark Lake. Another dragonfly species is known from only one other site within the state. (Draft Integrated Natural Resources Management Plan, Picatinny Arsenal, United State Army Environmental Center, June 2000. Pg. 25).

3. Splitrock Reservoir Natural Heritage Priority Site (Rockaway Township, Morris County): The proposed construction access route on steep, unpaved Splitrock Road directly abuts the Splitrock Reservoir Natural Heritage Priority Site, located on the west side of Splitrock Reservoir and encompassing much of Farny State Park as well as some adjacent unpreserved lands. The Priority Site contains the only documented occurrence of an unnamed plant species that is critically imperiled in New Jersey. Containing mixed deciduous woodlands with steep and rocky slopes, plus several permanent and intermittent Category One streams, the Natural Heritage Site provides contiguous habitat for the imperiled plant species, including lands that drain toward that habitat.

4. Valhalla Glen Natural Heritage Priority Site, Montville Township, Morris County: The *Valhalla Hemlock Glen Natural Heritage Priority Site* is transected by nearly 2000’ of the existing transmission right-of-way. Construction impacts could be severe. Lying north of Lake Valhalla, the Glen consists of rocky slopes in a hemlock ravine and associated wetlands along a small stream. Valhalla Glen contains a good occurrence of a state imperiled plant species, the Blunt-lobe Grape Fern. It is rated Biodiversity Rank B5V4. .

V. Re: RMP Consistency Determination. PART I. NATURAL RESOURCES.
Subpart E. Land Preservation and Stewardship

NJCF supports Council staff’s opinion that that construction of access roads would result in long-lasting (if not permanent) disturbance.

VI. Re: RMP Consistency Determination. PART 4. HISTORIC, CULTURAL, ARCHAEOLOGICAL, AND SCENIC RESOURCES

NJCF agrees with Council staff that the HAD application has not addressed scenic resource protection goals. It is clear that a primary goal of the Highlands Act is the protection of the Highlands’ scenic quality. The preservation of “natural beauty, in trust, forever...” is an exhortation in the legislative findings, while the Act’s goals for the regional master plan in the Preservation Area *twice* direct preservation of “natural and scenic resources.” C.13:20-10.b. Planning Area goals include the protection and maintenance of “the essential character” of the Highlands – what many would call the scenic character. C.13.13:20-10.c. As a first step in the implementation of these goals, the DEP rules require consideration of impacts on public lands, which are designated as scenic and recreational resources, and the Highlands RMP has established its baseline Regional Scenic Resource Inventory consisting of preserved public lands.

Protection of the Farny Highlands – a 20-year Goal and Story of Accomplishments

Apart from the Sparta Mountain Greenway in Sparta and Byram Townships, most of the area in the Highlands through which the proposed transmission line upgrade runs is located in Morris County in an area called the Farny Highlands. The Farny Highlands is a 30,000 acre mountainous headwaters forest in northern Morris County, which has been known as one of the “Highlands Critical Treasures” since 1993. A Plan to protect its water supplies and to preserve its forests was completed in 1991. Sponsored by the Morris County Park Commission and staffed by Diane Nelson, participants included the NJ Division of Parks and Forests, NJ Fish and Wildlife Service, Office of Natural Lands, League to Save Open Space, Morris County Parks and Conservation Foundation, Morris County Trust for Historic Preservation, New Jersey Conservation Foundation, Protect our Wetlands, Water and Woods (POWWW), Trust for Public Land, and Upper Rockaway River Watershed Association. (Farny Highlands Watershed. A Plan to Protect Water Supplies and to Preserve Forests. July 1991)

The Plan noted that “This forested area is also noteworthy for its scenic beauty as well as plentiful water supply.” The Farny Highlands Watershed Plan identified ten threatened lands, nearly all of which have been preserved in the 17 years since. These lands included “Jersey City” (now the Rockaway River Wildlife Management Area), Copperas Ridge (now the Wildcat Wildlife Management Area), Oak Trails, Mount Hope, Oak Meadow, Woodland Estates, Sammis, Society Hill, Dixon’s Pond and Buck Mountain (now Buck Mountain State Park). Several of the sites have been incorporated into Wildcat Ridge WMA. Additional lands proposed for acquisition included Bear Rock, Rock Pear and Turkey Mountain. These places have been preserved. Still, there is work to be done.

The efforts of many individuals and organizations and governmental entities, as well as substantial public and private funding, have resulted in the protection of tens of thousands of acres of Highlands forest habitat, much of it over the past twenty or thirty years. These lands, and the public who enjoy them, believe that when land is purchased for preservation, it is protected forever. These expectations, along with the goals and purposes of the Highlands Act which enshrined them into law, must be respected as the Highlands Council and the NJDEP evaluate the consistency of the transmission upgrade project and all its many facets with the Highlands Act.

It is noteworthy how many tracts of preserved lands will be impacted by this project.

The transmission line on the existing right-of-way, the proposed Jefferson Switching Station and the associated construction access roads traverse, abut or directly impact many preserved public lands. The proposed “temporary” access routes will cause direct severe and long-term impacts on many public and private preserved lands. Other lands will be scenically impacted. In addition to the lands listed in the Council’s Consistency Determination, we have identified other nearby impacted lands on our maps. These include municipal land in Byram Township; Liffy Island Municipal Park in Hopatcong; Shawnee Trail Park in Jefferson Township; Camp Hudsonia, Lake Ames Park, Upper Hibernia Tract, Splitrock Reservoir Conservation Easement, the Farny/Copperas Ridge County Acquisition and pending farmland preservation in Rockaway Township; Buck Mountain State Park, Lake Rickabear Camp (private), and Rock Pear Mountain in Kinnelon; Forest Park in Boonton; and Turkey Mountain (part of Pyramid Mountain Park),

Stony Brook and Bonnevieu Muncipal Parks and Troy Meadows in Montville. Other tracts will be impacted as well.

Just a couple of the many special places in the Highlands

To give a sense of what a couple of these special places are like, we draw on Morris County park brochures.

- **Mahlon Dickerson County Reservation** - Mahlon Dickerson is described as “primarily a natural area” dedicated in 1967. The park is the largest facility in the Morris County Park System, encompassing over 3,200 acres of “beautiful near wilderness and recreational areas.” One of its outstanding features is the 1,300 foot elevation Headley Overlook, one of the highest points in the Morris County Park System, whose views will be substantially affected by the proposed transmission upgrade. In addition to an extensive network of trails within the park, the long-distance Highlands Trail extends from Sparta Mountain on the north, to the Headley Overlook, Saffin Pond, and on the Winona Trail to Route 15. ***The Winona Trail/Highlands Trail is one of the planned construction access routes.***
- **Pyramid Mountain Natural Historical Area** – Located in Kinnelon Borough and Montville Township, Pyramid or High Mountain (elev. 934’) is the steepest and most dramatic of several parallel hills: Rock Pear Mountain and the Stony Brook Mountains to northwest, and Turkey Mountain to the southeast. Much of this area has been preserved over the past 20 years. The Morris County Park Commission brochure states “thanks to a remarkable coalition of citizen groups, conservation organizations, corporations and government agencies, the general public is welcome to enjoy the spectacular wilderness known as Pyramid Mountain Natural Historical Area. More than 1,000 acres of rugged trails, fields, forests, rock outcroppings and wetlands provide the visitor with a wide range of geological and ecological experiences. Cherished by naturalists, this wilderness area is a significant wildlife sanctuary. Along its many trails, you will discover special points of interest, including a unique glacial erratic, known as Tripod Rock, a multi-ton boulder which is balanced on three smaller boulders, and deposited by the Wisconsin Glacier over 18,000 years ago, and an overlook which has a magnificent view of the New York City skyline.” ***This overlook is barely 1000’ from the proposed PSE&G transmission line upgrade, with its doubled height towers and construction route.***

The Highlands Millennium Trail, the Farny Highlands Trail Network, and many other trails in the Highlands region will be impacted.

The Highlands Millennium Trail is a long-distance trail that extends some 150 miles from the Hudson River to the Delaware. It received federal recognition in 2000 as New Jersey’s Millennium Trail. The Farny Highlands Trail Network is planned to consist of 50 miles of hiking trails that connect with the Highlands Trail. Today, the Farny Highlands Trail extends from Route 23 south around Splitrock Reservoir to Hibernia, on Green Pond Road (Rt. 513). Views south across Splitrock Reservoir will include higher power towers. Many other trails in the northern Highlands will be directly or scenically impacted. Scenic viewpoints are a very important part of the recreational trail experience in northern New Jersey, and impacts from the doubled height of the proposed new towers are likely to be severe. NJCF has played a leadership

role in the creation and stewardship of many preserved areas and the Highlands Trail, through its land preservation expertise, policy initiatives, coordination and leadership.

Thank you for the opportunity to comment on the Highlands RMP Consistency Review. Please do not hesitate to contact us if you would like further information.

Sincerely,

Wilma E. Frey
Senior Policy Manager

Emile D. DeVito, Ph.D.
Manager, Science and Stewardship

(Prepared with the invaluable mapping assistance of Tanya Nolte, NJCF GIS Manager)

BA, Zoology, Rutgers University, 1981
PhD, Ecology, University of Wisconsin, 1988
Post-Doctoral studies in bird-plant interaction, Rutgers University, 1989
Visiting Professor in General Ecology and Vertebrate Zoology, Rutgers University, 1989
Adjunct Professor, Vertebrate Zoology, Rutgers University, 2008
New Jersey Conservation Foundation, July 1989 to Present
Trustee, NJ Natural Lands Trust (15 years)
NJ Endangered and Nongame Species Committee (12 years)
Pinelands Commission Forest Advisory Committee
Smithsonian Migratory Bird Council

Wilma E. Frey,

Landscape Architecture Program (undergraduate), University of Michigan
Master in Landscape Architecture, Harvard University
Master of Public Administration, Harvard University
New Jersey Conservation Foundation, 1990 - present
Rails-to-Trails Conservancy, Northeast Regional Coordinator, 1989
Consultant to The Wilderness Society, Grand Canyon Trust, Sierra Club Washington D.C.
Sierra Club Northeast Region Washington Representative
Landscape Architect in private practice
Chair, Sierra Club, New England Chapter
Tewksbury Township, Environmental Commission

Appendix A:

Map Analysis: Description of Construction Access Routes associated with proposed PSE&G Susquehanna-Roseland 500kV Transmission Line Construction

The proposed access routes, included on the PSE&G shape file information provided to NJCF by the Highlands Council, were mapped and evaluated for their impacts on preserved lands and Natural Heritage Priority Sites, as well as impacts on Critical Habitat, Highlands Open Waters Protection Areas, Wetlands/Wetlands Protection Areas, and Steep Slopes. All measurements in feet are approximate and rounded to the nearest ten or hundred.

- A. Access Route #? – Byram Twp., 360’ north off Sandra Lane. Contains steep slopes.
- B. Access Route #? – Byram Twp. On ROW, off Bridget Way.
- C. Access Route #? - Byram Twp. East and west off Sussex Co. Route 605. 820’ long.
- D. Access Route #? – Byram Twp. West off Tomahawk Road. Access route is located IN Tomahawk Park, in a riparian/wetland area. 90’ or 150’ long.
- E. Access Route 78 - Sparta and Byram Twps. Southeast off Tomahawk Road, 2700’ or 1410’ long (alternate routes?). Crosses Critical Habitat, Wetlands some steep slopes.
- F. Access Route 36(?) – Sparta Twp/Sussex County boundary. South from Newstar Ridge Rd. and between two houses on apparent long driveway. 3,260’ long through Critical Habitat, into wetland buffer area.
- 1. Access Route 35: - Hopatcong Borough and Sparta Twp. West off Rt. 181, partially located in quarry. 8,020’ long. Impacts approx. 2000 feet of wetlands/wetlands protection area near or in the ROW, where three towers are located in wetlands/buffer. Impacts Highlands Trail?
- 2. Access route #? – Sparta, Jefferson and Hopatcong? 1,670’ long. Impacts Highlands Open Water Protection Area and Critical Habitat for entire length.
- 3. Access route #? - Jefferson Twp. 450’ long in Critical Habitat area.
- 4. Access route 76. – Jefferson Twp. The access route to the proposed Jefferson Switching Station is to be located on the Winona Trail, currently a trail for “biking and foot traffic only” in Morris County’s Mahlon Dickerson Reservation. The route includes over a mile (5,380’) on preserved land in the Reservation, plus an additional one-sixth mile (880’) abutting Mahlon Dickerson. The entire length is located in upland Critical Habitat.
- 5. Access route 37 – Jefferson Twp. Parallels Rt. 15 south of Mahlon Dickerson. Over a mile long (1.13 mi., 5,900’), with over four-fifths mile (4470’) directly adjacent to Camp Jefferson

preserved land. Entire access route is located in Critical Habitat, Highlands Wetlands/Wetland Protection Area and Highlands Open Water Protection Area, and also crosses slopes over 15%.

6. Access route #? – Jefferson Twp. West off Weldon Rd., 370' long, goes through Wetlands/Wetlands Protection Area

7. Access route #? – Jefferson Twp. East off Weldon Rd., one-tenth mile (570') long, entire length through Critical Habitat.

8. Access route 75A (plus 38?) (Jefferson Twp.) – Route heads east off Weldon Road into preserved lands – Mahlon-Dickerson Reservation and Rockaway River State WMA. The entire length (3/4 mile, 3930') is located in preserved land, with two-fifths mile (2030') in Mahlon-Dickerson Reservation and over 1/3 mile (1900') in Rockaway River WMA. The segment in Mahlon-Dickerson is entirely in Wetlands/Wetlands Protection Area and Critical Habitat, and crosses slopes greater than 10% in a riparian corridor. The segment in Rockaway River WMA, located parallel to but off the right-of-way, is entirely in upland Critical Habitat.

9. Access route 40. (Jefferson Twp.) The route heads east off Route 15 near Heller's Lane, with a total length of over three miles (3.3 miles, 17,280 feet), of which two-fifths (1.31 miles, 6900 feet) runs through preserved lands – the Rockaway River WMA - while an additional nearly two miles (10,380') goes through contiguous, undisturbed forestlands in the Preservation Area. The entire route is located in Critical Habitat, with over a third in the Wetlands/Wetlands Protection Area.

10. Access route #? in Jefferson Twp. located primarily on the right-of-way.

11. Access route # ? – Off Morris Co. Route 699. 180' long, in Critical Habitat.

12. Access route # ? - Off Longwood Lake Road. 220' long, in Critical Habitat and Highlands Open Water Protection Area.

Green Pond Mountain Natural Heritage Priority Site (Rockaway and Jefferson Townships, Morris County): The following two proposed access routes (13 and 14), which total nearly 2 3/4 miles in length, are located entirely within the ***Green Pond Mountain Natural Heritage Priority Site***. These long access routes are not depicted or numbered on the HAD application map.

13. Access route #? – Nearly a mile in length (5000 feet), this proposed access route adjacent and parallel to the boundary of Picatinny Arsenal slips between Rockaway and Jefferson Townships. The route enters in a Highlands Open Water Protection Area, then travels within upland forested Critical Habitat located between steep, rocky slopes on the side of Green Pond Mountain.

14. Access route #? – Located nearly entirely within the Picatinny Arsenal in Rockaway Township, the access route heads west off Denmark Road, reaching the transmission right-of-way in approximately 1.75 miles (9250 feet). The route skirts the lower elevations of Green Pond Mountain, traveling through Critical Habitat and almost entirely within the Highlands Wetlands/Wetland Protection Area, at times crossing steep slopes within the riparian corridor.

The segment of the route within the ROW, 610' in length, winds its way up the steep side of Green Pond Mountain. Construction impacts, e.g. erosion, could be severe. The height of taller towers as they cross Green Pond Mountain could be exceptionally damaging to migrating birds.

Lake Denmark Natural Heritage Priority Site (Rockaway Township, Morris County):

Directly adjacent and to the east of the Green Pond Mountain Natural Heritage Priority Site is the *Lake Denmark Natural Heritage Priority Site*, which consists of the watershed of the large glaciated lake, with its adjacent herbaceous, shrubby and forested wetlands. The Priority Site contains excellent populations of state-imperiled and other rare species. The existing transmission line right-of-way and the following two proposed access routes (15 and 16) lie within the Lake Denmark Natural Heritage Priority Site.

15. Access route 45, Rockaway Township – Nearly one-fifth of a mile long (970'), the proposed route lies entirely within the Lake Denmark Natural Heritage Priority Site and the Picatinny Arsenal. At tower #?, the existing transmission line ROW heading east crosses through the Lake Denmark Priority Site, which comprises Highlands Wetlands and Wetland Protection Area more than a mile in extent. Lake Denmark is a Critical Habitat area that provides habitat for many threatened, endangered and rare species, including a globally endangered dragonfly, the lateral Bluet (*Enallagma laterale*).

16. Access route 46, Rockaway Township - The two-thirds mile long (3410') access route heading west off Denmark Road is located entirely within the Lake Denmark Natural Heritage Priority Site, and also impacts preserved lands, the Wildcat Ridge Wildlife Management Area. Approximately 10% of the proposed route is located within Wildcat Ridge. The entire route is located within Critical Habitat and the Highlands Wetlands/Wetland Protection Area.

17. Access route 48, Rockaway Township – Located off Denmark Road and heading east, the half-mile long access route (2570') is situated in Critical Habitat and entirely within the Highlands Wetlands/Wetland Protection Area.

18. Access route 74, Rockaway Township – Located off Rolling Ridge Road, the 600' access route crosses Critical Habitat and some steep slopes near a residential area.

19. Access route #?, Rockaway Township – Bearing east from County Route 513 (Green Pond Road), the one-half mile long access route (2660 feet) is located on the existing ROW in the Wildcat Ridge State Wildlife Management Area. The ROW is entirely within Critical Wildlife Habitat and Highlands Wetlands/Wetlands Protection Area, and includes steep slopes in the riparian area.

20. Access route #?, Rockaway Township – A 540' long access route west off Upper Hibernia Road is located in Critical Habitat and Wetlands/Wetlands Protection Area.

21. Access route #?, Rockaway Township – A 540' access route east of Upper Hibernia Road is located on preserved land - the Wildcat Ridge Wildlife Management Area - as well as Critical Wildlife Habitat.

22. Access route #?, Rockaway Township – Heading southwest off Splitrock Road, the 7/10 mile (3740') route goes through Critical Habitat upland forest with several steep slope areas. An additional 1/6 mile (790') of access on the ROW is located in a conservation easement with Wetlands. This route is depicted on the HAD application as an existing dirt road rather than an “improved” access route

23. Access route 49, Rockaway Township – The quarter mile long access route (1480') is comprised of a segment of Splitrock Road, which is narrow and unpaved, with over 20% slope at this point. Splitrock Road skirts the edge of the ***Splitrock Reservoir Natural Heritage Priority Site***, and also impacts a Highlands Open Waters Protection Area.

Splitrock Reservoir Natural Heritage Priority Site (Rockaway Township, Morris County):
The Splitrock Reservoir Natural Heritage Priority Site, located adjacent to Splitrock Reservoir and encompassing much of Farny State Park as well as some adjacent lands, contains the only documented occurrence of a plant species that is critically imperiled in the state.

24. Access route #?, Rockaway Township – The 500' long access route off Splitrock Road is located on the ROW on conservation eased lands.

25. Access route #?, Rockaway Township – Headed east off Splitrock Road, the 530' access route is located on the existing ROW within preserved Wildcat Wildlife Management Area lands, and Critical Habitat..

26. Access route 50, Rockaway Township – Two access route segments total 330' in length. Located on the existing ROW off Splitrock Road, both segments are on farmland in the final round of preservation, and in Critical Habitat.

27. Access route #?, Rockaway Township – Located off Splitrock Road, 800' goes northeast, of which nearly one-third (240') is on preserved land (conservation easement). Two-thirds of a one-fifth mile (1110') segment on the ROW (700') is on land preserved with a conservation easement. The route is nearly entirely in the Wetlands/Wetland Protection and Highlands Open Water Protection Areas.

28. Access route 51, Kinnelon Borough – Totaling nearly 1 ¾ miles (8950') in length, this access route has two points of contact with existing roads. From the south, Hillcrest Road, a one-half mile (2480') access route heads for the existing ROW through forested upland Critical Habitat. From the east off Morris County Route 618, 1.2 miles (6470 feet) push through Camp Rickabear, a nonprofit preserved property. This segment is almost entirely located in Wetland Protection Area and Critical Habitat.

29 Access route 53, Boonton Township – An access route heads east off County Route 618 some 830 feet through forested Wetlands Protection Area.

30. Access route #?, Boonton and Montville Townships – The access route consists of an extension northeast of Kinkaid Road that consists of one-quarter mile (1300 feet) through Critical Habitat to the existing ROW.

31. Access route #?, Montville Twp. – Two-fifths mile (2090') of access route entirely within preserved Pyramid Mountain Natural Historic Area are located only partially on the existing ROW, with less than half on or close to the ROW. Wetlands Protection and Critical Habitat areas are impacted.

32. Access route 72, Montville Township – Heading west off Rt. 511, an access route totals three fourths of a mile (4150') in length, over half of which is located in Morris County's Pyramid Mtn. Natural Historic Area. Over half of the access route (2170') is not located on the ROW. The ROW with its proposed transmission towers doubled in size appears to run directly south of the most prominent and steep part of Pyramid Mountain (Lucy's Overlook?)

32B. Access route #?, Montville Township – The proposed access route from High Mountain Court extends 520' through Critical Habitat and Wetlands.

33. Access route #?, Montville Township – Heading east off Rte. 511, south of the Taylortown Reservoir, the (6470') , with one-fifth mile (1200 feet) along the ROW located entirely in Wetlands Protection Area, directly adjacent to Turkey Mountain, in Pyramid Mtn. Natural Historic Area.

Valhalla Glen Natural Heritage Priority Site, Montville Township, Morris County:

34. The ROW continues east/southeast in Montville, crossing the Valhalla Hemlock Glen Natural Heritage Priority Site for a distance of about 2000 feet.

2. Jefferson Switching Station Impacts

1. The Jefferson Switching Station is located on a finger of forested, undevelopd private land owned by PSE&G that extends northeast directly between the Weldon Brook State WMA in Sussex County and Mahlon Dickerson Reservation in Morris County. The station itself is located in Morris County.
2. Severe impacts on the preserved land, on water supply/quality, and wildlife habitat would be created by:
 - 7.7 acres of impervious cover ("densely packed gravel and concrete") where the station is located
 - a new power line route parallel to an existing line that would entail removal of a minimum of 20.4 acres of forest
 - Expansion of the corridor from 175' to about 400' in width

3. Analysis of project area and area of disturbance

Total length of ROW within Highlands = 26 miles (GIS analysis)

26 miles X 5,280' = 137,280' length X 150' (width of ROW) = 20,592,000 square feet

divided by 43,560' (an acre) = 473 acres in ROW alone

+ 157 acres in Jefferson Switching Station property

+ 97 or 194 acres - Access Routes area

Total Project Area: 727 to 824 Acres estimated range. **Possibly larger. The construction machinery will be HUGE.**

Acreage of Access Routes:

There are over 20 miles of access routes not on the right-of-way (determined through map analysis).

20 miles X 5,280' = 105,600 feet of access routes

Alternate widths:

Estimate Minimum Width: 16' travel way plus 12' each side = 40' width impacted

Width 40' x Length 105,600' = 4,224,000 square feet divided by 43,560 (acre) = 96.9 acres

Estimated Maximum Width: 30' travel way plus 25' each side = 80' width of impacted area

Width 80' x Length 105,600' = 8,448,000 square feet, divided by 43,560 (acre) = 194 acres

“Disturbance” greatly understated on HAD chart. (Table 1).

Talking Points Highlands Council Meeting Feb.26, 2009

Contact:
David Peifer
Highlands Project Director
ANJEC
(973)539-7547
dpeifer@anjec.org

Draft ERI Document

ANJEC has submitted extensive comments on the Draft ERI (Bedminster) and looks forward to a continuing dialogue with the Council to make ecologically based planning a reality in the region. ANJEC recognizes the substantial time, and manpower constraints facing the staff and Council. We are also equally aware of the limitations existing at the local level.

It may well be possible to achieve some desired improvements during the Full Conformance process.

Our primary concerns are:

- Accessibility of information (writing style and format)
- The assumption that “digital literacy” levels are sufficient in the region
- Lack of a “regional context” in the presentation
- Lack of detail about Highlands Resources present in the municipality
- Lack of basic, commonly included components (e.g. Geology and Soils)
- Lack of specific local detail (e.g. Historic and Cultural Resources)

PSE&G Susquehanna Roseland Transmission Line

ANJEC strongly supports the findings of the Staff Report and urges the Council to embrace the work done to date. While it is clear that the applicant has made efforts to minimize traditional environmental impacts by route selection, it is also clear that the mandates of the Highlands Act and the Goals, Policies, and Objectives of the Highlands Regional Master Plan go well beyond those traditionally employed in project review.

ANJEC believes that the language in Exemption 11 (“provided that the activity is consistent with the goals and purposes of this Act”) was designed by the legislature to control the scale, type, and unanticipated impacts from a range of power related projects. The project as presently configured will indeed impact Highlands Resources as noted in the staff report.

We do not concur with the applicant's narrow reading of the exemption language. The Council must make a determination as to what "consistency with the goals and purposes of the Act" means. Rationally, this can only be done by subjecting applications to a full review and comparison with the RMP. The staff has acted correctly and we urge the Council to support the staff report.

The consequence will be that, denied the exemption, the applicant will proceed to the the HPPA stage with the DEP and the applicant may seek waivers, although presently these may be too narrowly constructed to accommodate such a project configuration..

We urge the Council to protect the Highlands Region using all the scope at its disposal. We sincerely hope that the NJ DEP deny the exemption, partly based in the Council's thorough review.

The Need For an Energy Section in the RMP

In previous comments, ANJEC has suggested that the Council should include an energy section in the RMP. We now review this request.

Recent events have demonstrated that energy facilities and proposed facilities may have substantial impacts on Highlands Resources. To date, these projects include the Mt. Hope Biomass facility, the PSE&G Susquehanna-Roseland Transmission Line, The Tennessee Gas Pipeline and the Riverbank-Sparta pumped storage hydro project. These projects may conflict with the protection of Highlands Resources in fundamental ways.

The existing RMP was not designed to provide a policy framework for energy project evaluation nor does it set standards of acceptability.

The region is crisscrossed by a network of in-ground and above ground energy facilities including oil and gas pipelines, electric transmission lines, both high voltage and local electrical distribution systems, and telephone, and cable systems. These systems are vital infrastructure elements that pose both constraints and opportunities for development.

Historically, these rights of way were placed to move products or information across the region from the densely populated New York-North Jersey area to Pennsylvania, New York State and beyond. Indeed, the New Jersey Highlands region hosted both the first long distance telephone line (A.T.&T.Long Lines), the Transcontinental Waveguide, the forerunner of broadband microwave communication, oil pipelines constructed by Standard Oil and Tidewater Oil in the late 19th c. and the first integrated long distance power pool in the world, the PJM Interconnection. It is highly unlikely that these historic patterns will be abandoned. It is far more likely that they will be strengthened and elaborated.

Growth and change in these patterns will be driven by our response to global warming, the desire for energy independence and the rapidly accelerating needs of information transfer. Changes in these systems will, without doubt, have impacts on the Highlands Region. As illustrated by the PSE&G proposal, direct, site specific impacts will include

deforestation, soil disturbance, erosion, sedimentation, habitat alteration, and the alteration of views and vistas. Other projects will pose additional concerns.

The Council should be concerned with eliminating, mitigating or controlling these site specific impacts. A RMP energy component must, at a minimum, provide for review of these on-site impacts. However, this “narrow view”, based on control and mitigation is not sufficient to address the energy future of the region. A more expansive view would include goals policies and objectives that define how the Highlands region will contribute to the attainment of the New Jersey Energy Master Plan, and the New Jersey Greenhouse Gas initiative. Development of distributed renewable energy sources such as solar, wind and low head hydro will undoubtedly take place in the region but could be facilitated and guided by appropriate policies that could minimize conflicts created by energy development and the other goals of the Highlands Act. The role that the Highlands forests and agricultural soils play in carbon sequestration should be developed and enhanced. There are numerous other efforts that, if properly facilitated, would enable New Jersey to reach its energy objectives as set out in the Energy Master Plan.

Far from being a “negative” force to stifle change, an energy element could be a positive factor in assuring the sustainability of the Highlands Region and the State as a whole.

**Comments and Suggestions
Highlands Environmental Resource Inventory for
Bedminster Township, 2009**

Association of New Jersey Environmental Commissions

**Prepared by
David Peifer
Highlands Project Director
Feb. 9, 2009**

**Contact: (973) 539-7547 ex 12
dpeifer@anjec.org**

I. Introduction

ANJEC is pleased to submit these comments and suggestions on the Highlands Environmental Resource Inventory. The Association recognizes the time, budget and manpower constraints facing the Council and agrees that an efficient process is required. However, in addition, we note that municipalities have substantial requirements to achieve basic conformance and perhaps even more substantial requirements to come during full conformance. Thus, our comments are directed at improving the document, urging additional inclusions, either by the Council directly or as guided recommendations by the Council.

Environmental Resource Inventories (ERIs) are fundamental to achieving the potential of environmentally based planning and management, including planning future land uses, facilitating environmentally sound redevelopment, open space protection, water resource management, scenic quality control and the protection of historic and cultural resources. The use of ERIs also facilitates protection and enhancement of local community character.

ANJEC continues to fund the preparation of ERIs through our Planning Grants Program and routinely advises municipalities throughout New Jersey in both their preparation and use. ANJEC makes available our Resource Paper, "The Environmental Resource Inventory: ERI", on our website at www.anjec.org. Our experience in this area is considerable, but has been focused primarily at the municipal process.

ANJEC recognizes that the Highlands planning process differs in important ways from the normal municipal processes. First, the Highlands effort is regional in scale, greatly exceeding the spatial reach normally found at the municipal level. Secondly, due to the multiple purposes described in the Highlands Act, the nature and extent of the environmental data compiled are extensive and wide ranging.

However, the actual implementation of the Highlands Act will largely rest with municipalities throughout the region. Thus, as the Council prepares to transmit environmental resource inventory data to municipalities, it must remain mindful of municipal needs, skills and experiences.

Conversely, the Council has its particular needs, which the inventory must serve. In particular, municipalities have been required to accomplish specific tasks and produce specific deliverables as part of the process of Plan Conformance. The Highlands ERI must serve both the needs of municipalities and those of the Council by providing the objective basis for master plan revision, ordinance revision and the development of the various requirements of Plan Conformance.

ANJEC greatly appreciates the extensive work done by the Council staff in gathering and analyzing data from many various sources in the preparation of the Highlands ERI. ANJEC also understands that the document is to serve a "template" for all Highlands municipalities to not only achieve "Basic" and "Full" Conformance but also to administer the land use process and a meet a host of other environmental management needs over a protracted time period.

Although ANJEC recognizes that the time pressures the Council faces, ANJEC believes the ERI should be the first step in environmentally based planning. The Council should not pursue such

planning efforts as Build Out Analyses without the benefit of a comprehensive ERI to inform the process.

II. General Comments

- **The Council must address the varying degrees of environmental understanding, analytical skills and technological knowledge that will be encountered across the Highlands Region when relying exclusively on a digital format for geographic information.**

We understand that the Council will rely primarily on a digital format and a web-based system to distribute information to municipalities. ANJEC believes that technically these products are superior to paper-based products *when the intended users are familiar with environmental analysis in general and with the advantages and limitations of a digital format.*

However, municipal officials and staff have different levels of understanding about ERIs and a diversity of responses to the data distributed. Municipal experience in the region may range from municipalities with no ERI to those that have fully functional digital products. Far from being the “best case scenario”, experience indicates digital ERIs may actually be less “*effective*”¹ than good paper-based ERIs. This is due to the paper products’ ease of use, portability, clarity, and the degree of participatory “buy-in” that typically takes place in their preparation as compared to the inaccessibility or “remoteness” of a digital product.

Conversely, digital ERIs tend to become “expert products” that are created and used by municipal experts such as planners, engineers, attorneys or other special consultants. The conversion to an expert product increases the need for effective communication between the volunteer municipal officials (planning board and environmental commission members) and the municipality’s paid experts. The skills required to maintain effective communication cannot be viewed as a “given” in all cases.

Simply transferring a digital product to paper product users who are not familiar with the format will nearly always result in reduced effectiveness at the municipal level.

ANJEC also notes that the amount of money allocated through the Conformance Grant Program for ERI costs is a very modest \$2,000 per municipality. The Council should be concerned with training potential users, primarily environmental commission and planning board members, in the conduct of environmental analysis, the use of the ERI and the use of geographic information systems. Such training should be on-going and be repeated at periodic intervals.

¹ *The degree of “effectiveness” of an ERI is judged in this report by:*

- *How often the ERI is consulted during the administration of the municipality’s land use program.*
- *The degree of support provided by the ERI to other municipal programs (e.g. open space preservation).*
- *The use of the ERI in litigation avoidance or in successfully defending the municipality’s land use program from legal challenge.*
- *The degree that the ERI informs private land use decisions and proposals.*
- *The degree to which the ERI is used in education and public outreach.*

- **The Council should commit to on-going repeated training in the use of ERIs, environmental analysis, and the use of geographic information systems.**

III. Reading Level, Sentence Structure and Clarity

ANJEC has had substantial experience preparing training materials for local appointed officials, including environmental commissions, planning boards, open space committees and others. Critical elements in designing these materials include simple sentence structure, appropriate reading level, and correct assessment of the users' knowledge level.

These factors are more important if the product is designed for direct application, say during site plan review, rather than as a general or background educational product. ANJEC believes that the Highlands ERI will be used directly and thus should be written in a style that is readily accessible by interested laypersons, as opposed to professional practitioners.

As noted in testimony regarding the RMP, ANJEC has been concerned about the accessibility of the information presented. We believe that the ERI poses a more critical clarity problem since it is intended to be used by municipal volunteers.

We selected two passages from the text provided and reviewed them for "reading ease" and grade level (Flesch-Kincaid) using the commonly available tools in Microsoft Word (spelling and grammar tool). The first passage is the Introduction. The purposes of an introduction in such a document are to develop interest and commitment in the reader's mind and to establish the legitimacy of the document.

The first passage reads:

The Highlands Water Protection and Planning Act (Highlands Act) recognizes the need for all levels of government to coordinate in order to achieve a regional approach to land use planning for the protection and enhancement of the resources in the Highlands Region. To realize this objective, the Highlands Water Protection and Planning Council (Council) was assigned the task of creating a Regional Master Plan (RMP) establishing goals, policies and objectives by which the counties and municipalities of the Highlands Region may implement the intent of the Act. Conformance with the RMP is required throughout the Preservation Area, and is voluntary within the Planning Area. Plan Conformance includes the revision of local master plans and development regulation, as applicable to the development and use of land, as may be necessary in order to conform them to the RMP. The Highlands Council has determined that Plan conformance requires conformance with all mandatory aspects of the RMP, but the Plan also includes additional components such as discretionary opportunities for development that a county or municipality may adopt or not, as it deems appropriate. The Plan Conformance Guidelines set forth a blueprint for constituent counties and municipalities to realize this task with clear direction and ample financial assistance from the Highlands Council. It provides detailed information on the process and procedures or petitioning the Highlands Council for Plan Conformance.

The passage is 225 words in length, far too long for a single paragraph. It contains only seven sentences averaging 32.1 words per sentence, far too complex and too long. More critically, the reading ease rating was 22.6, far more difficult than the Harvard Law Review that normally ranks in the low 30s. The grade level rating was 18.6, exceeding the Masters Degree level. Overall, the passage is too complex and written at too high a level of understanding to serve the purposes of an introduction.

Similar problems exist in the sections of the report that will have direct practical application at the municipal level. ANJEC reviewed a second passage from the Lakes management discussion that reads:

Efforts to protect, restore and enhance the water quality of Highlands lakes and to protect the unique character of Highlands lake communities require a mapping of lake resources to facilitate land use and water resource planning. The Highlands Council has established a Lake Management Area around all Highlands Region lakes of greater than ten acres in size. The Lake Management Area is that area around lakes which includes the following tiers of lake management appropriate to management strategies that help protect lake water quality and community value from the impacts of present and future development:

- *A Shoreland Protection Tier consisting of an area measured 300 foot or the first property line perpendicular from the shoreline of the lake;*
- *A Water Quality Management Tier consisting of an area measured 1,000 foot perpendicular from the shoreline of the lake, including the Shoreland Protection Tier;*
- *A Scenic Resources Tier consisting of an area measured 300 to 1,000 foot perpendicular from the shoreline of the lake, scaled based upon the view distance from the opposite shoreline, and determined through the size and layout of the lake, with wider portions of lakes having longer view distances; and*
- *A Lake Watershed Tier consisting of the entire land area draining to the lake, through the evaluation of drainage areas using LiDAR topographic analyses or other topographic data where LiDAR data are not available.*

This passage has a cognitive problem found in the first bullet point (see below, Comments by Section) and the repeated use of the singular “foot” where the plural “feet” should be used.

This passage contains 226 words while the average sentence contains 30.3 words. This is nearly as complex as the first passage and too complex for the task. Additionally, the reading ease was quite difficult at 29.1 and the grade level was above that of students with a four year college education (16.7).

- **The Council should carefully review these types of documents intended for municipal use and re-write and edit them to assure that the information is clear and accessible for the intended audience.**

IV. Lack of Expressed Regional Relationships

The Council is faced with a difficult problem in that it must project and maintain a regional focus while relying on local implementation. It is fair to say that a “regional consciousness” has yet to

be developed in the Highlands area. Thus, creating and maintaining this level of thinking at the local level is an important objective of the ERI. Conversely, municipal thinking has, in practice been almost exclusively directed at local concerns. Indeed, this local focus is the cause of problems region-wide cited in the Highlands Act.

The document does not explain how Bedminster “fits” within the overall Highlands Region. For example, most of Bedminster is of relatively low elevation and gentle relief as compared to the southern Highlands in general. These topographic contrasts produce dramatic vistas when viewed from the higher elevations to the North (Chester Twp), West (Tewksbury Twp) and East (Peapack Gladstone), and Far Hills.

Bedminster is at the southerly limit of the Highlands Region. The water flowing through Bedminster (Black River and North Branch Raritan) leaves the Highlands Region well before it is picked up for water supply at Bound Brook.

Historically Bedminster contained no iron mining activity or iron production and was primarily settled by agriculturists. Beginning in the second decade of the 20th century, wealthy individuals purchased individual family farms and combined them to create large landholdings. This history has resulted in a cultural landscape and a community character that differs significantly from other Highlands communities.

- **The ERI should discuss the each municipality’s significance in the region as a whole, including similarities, differences and unique characteristics.**

IV. Lack of Local Analysis

An important overall objective of the Highlands ERI is creating a local understanding of the Highlands Resources present in the municipality. ANJEC recommends that the ERI include a discussion of each of the defined Highlands Resources as they appear in the municipality. In this way users will begin to develop understandings both of the local importance of these resources and their regional significance. ANJEC also recognizes that this will be a fairly time consuming process, requiring individual analyses for each municipality. Preparation of these analyses could be deferred to the “Full Conformance” process since, by then, local officials will be more familiar with the concept of Highlands Resources

While the document provides some information as to the nature of the natural resources present in the municipality, little or no text describes these resources from the local perspective. Without this kind of information, users will not be able to develop and understanding of the natural resources within their control.

One example is the carbonate rock map (Figure 15) that shows an area of carbonate rock in the northwest of the municipality. Checking with the NJGS I-Map data, this formation is “*Passaic formation, limestone clast, conglomerate facies,*” (JTrpcl).

While it may be reasonable to map this unit with the other carbonate rocks, its age, physical and mineralogical characteristics are vastly different from the other rock types included in the

carbonate rock mapping. This formation is highly unlikely to develop karst conditions, has very poor water yields, is much more consolidated and poses severe restrictions for excavation.

The nature and character of this “carbonate rock” as defined by the Council’s mapping should be discussed. Policy responses for this rock type can and should differ than those for other carbonate rocks. We also question including this formation in the carbonate rock mapping. Indeed, it is possible to produce a further analysis of the carbonate rock units to indicate susceptibility to karst development as recommended in the RMP.

It is possible to discuss many of the factors shown from a more detailed local perspective, the carbonate rock example is but one example.

- **The Council should provide text and, where necessary additional map sets to further describe Highlands Resources from the local perspective.**

VII. Mapping Comments (In General).

ANJEC does not presently know what size maps will be provided to municipalities. ANJEC also understands that digital files will be available. However, the maps included in the document are far too small to facilitate most project review processes.

- **Larger format maps will be necessary.**

1. Context Issues

The examples shown for Bedminster provide some degree of context for the municipality by showing portions of adjoining communities. However, the design does not show adequate area to the north (Chester Twp.). The world “appears to end” to the south where areas outside the Highlands contain no data (white area). It is likely that additional planning concerns will be created in these adjacent areas. Some of these concerns, such as water consumption, may impact the Highlands region. While the Highlands boundaries should be clearly shown, the Council should provide data where available for adjoining areas outside the Highlands.

- **The Council should take care to show the overall surrounding context adequately, and provide data for adjoining areas outside the municipality, perhaps selecting a standard fixed distance.**

2. Basic Cartographic Issues

ANJEC notes that the scale of Figure 1 is 1”=.981 miles while that of Figure 2 is 1”=.995 miles. This should be corrected.

- **All maps in the series should be of the same scale unless an increase or decrease is necessary for clarity.**
- **An appropriate scale bar should be provided on all maps.**
- **The title of the map should appear in a more prominent location, preferably at the top of the page.**

- **Data attribution should appear on each map or, if too complex, in an easy look-up section.**
- **The transmission of specific maps should always include GIS metadata.**
- **Some form of geographic grid, either latitude longitude, state plane coordinates or UTM coordinates should be included as “tick marks on the edges of the maps.**

3. Map Design Issues

- **The use of the aerial photographs as a base on all maps results in poor design and is not necessary in some cases.**

The gray scale values of the aerial also cause color shifts that make interpretation of the legend colors difficult.

- **More attention also needs to be paid to color selection (separation) and the ability of a variety of displays (various monitor screens and printers) to reproduce the colors.**
- **The use of overlays projected onto the aerial should not obscure the aerial or the background should be changed. (See Figures 6 and 10 and 12)**

VII. Comments by Section

- **Each section of the report should be numbered to facilitate reference and review.**

1. Introduction

- **This section is poorly written, confusing and does not “lead” the reader into the report (see above, Section III).**

2. Purpose and Scope

This discussion appears to confuse the purposes of an ERI *in general* with the specific purposes of the Highlands ERI. The Highlands ERI is a “purpose designed” product, not a wholly objective “*compilation of text and visual information about the natural resource characteristics and environmental features of an area*”². The section would make clear that what is being provided is not a complete ERI but is rather is data and information necessary to support Basic Conformance. Municipalities should be encouraged to provide more complete inventories and supported with assistance and funding. In most cases these tasks can be accommodated in the Full Conformance Process if they are identified during Basic Conformance.

- **Municipalities should be encouraged to review their existing ERIs to identify updates and changes needed. Additionally, a discussion of the advantages of a digital format should be provided, since the Council intends to rely on this technology.**

² *The Environmental Resource Inventory: ERI*, Association of New Jersey Environmental Commissions, p. 2., www.anjec.org.

ANJEC has traditionally recommended a list of topics for inclusion in local ERIs. Comparing these recommendations to the contents of the Highlands ERI reveals what ANJEC believes to be *critical deficiencies* in the Highlands ERI. These include:

3. Geology

While the Highlands ERI information and the RMP provide some geologic information, it is confined solely to Carbonate Rock. ANJEC has previously suggested that complete information at a regional scale be provided in the RMP. ANJEC recognizes the map composition difficulties of such a presentation. However, in lieu of this, geologic information should be provided at the local level during Plan Conformance.

Geologic information is *fundamental* to resource inventories since it determines, to a greater or lesser degree, the topography of the region, the types and nature of soils present, the general landforms, the pattern of waterways, and the availability of groundwater.

Geologic considerations are routinely addressed in the process of development review in areas ranging from grading plans to site suitability for foundations, to name only two.

Both mapping (bedrock geology) and text (explanatory for users) is required. Other information such as surficial geology, water yield characteristics, economic mineral extraction points (active mines, and quarries as well as historic mine locations), structural information (faults and folds) is often included.

- **Since active mining operations are exempt from the Highlands Act when confined to property so designated in 2004, the Council should provide lot and block information for qualifying exempt mine properties.**

Some geologic formations contain natural contaminants or conditions of concern. Issues in the Highlands include radioactivity (especially radon), arsenic, and asbestos. Water quality issues are also related to natural geologic conditions. “Aggressive water” (soft and acidic) is associated with some geologic formations while hardness, odors, and taste problems occur in association with others.

- **Ideally, the Council should supply complete geologic data to municipalities. They are readily available in digital format from NJGS. Alternatively the Council could provide contact information to data sources (NJGS, USGS).**

An excellent educational presentation is available on-line (www.state.nj.us/dep/njgs/enviroed/freedwn/HighlandsVFT.pdf) from NJGS, “Geologic History and Virtual Field Trip of the New Jersey Highlands”.

4. Soils

While the RMP and the presentations supplied as part of the ERI utilize soils information for several analyses, there is no presentation of basic soils information nor is there any interpretation of soil data for community development, ecological management or agriculture. Soils information is a fundamental part of any municipal ERI and should always be included. Data are

readily available on-line from the Natural Resources Conservation Service website (<http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>).

From the regional perspective, a map of Soil Associations would be valuable and would avoid the design problems caused by the dense polygon data of individual soil types. However, from a local perspective individual soil polygons (with labels) must be shown.

There are many possible interpreted maps and tables that can be produced from the SSURGO data base. The Council should consult with municipalities about what interpretations are appropriate.

Municipalities at a minimum are generally interested in:

- Depth to Seasonal Water Table
- Depth to Bedrock
- Erodibility (k-Fact)
- Limitations for:
 - Dwelling foundations with basements
 - Dwelling foundations without basements
 - Lawns, Landscaping and Golf Fairways
 - Local Roads and Streets
 - Shallow Excavations
 - Septic Systems
 - Small Commercial Buildings

Other highly useful analyses are available to assist in agricultural planning, habitat management and to answer engineering feasibility questions.

- **A great many other soil analyses can be run and may be useful for the particular concerns of individual towns but all towns in the Highlands Region should either be provided with this basic soil information or be directed to acquire it in the ERI revision process.**

5. Highlands Region

- **This section should instruct municipalities that the boundaries of the Highlands region and those of the Preservation and Planning Areas are fixed by the legislation and cannot be modified during the Conformance Process.**

There is still considerable confusion at the municipal level about the relative jurisdictions of the NJ DEP and the Council.

- **The relationship between the NJ DEP processes and those of the Highlands Council should be described (e.g. Council review of wastewater management plans and proposed amendments).**
- **Reference should be made to the Region-wide Goals for the Preservation and Planning Area (RMP, Table 2.1, p.37).**

- **This section should state that the Technical Papers are a part of the RMP and a listing of these should be provided.**

6. Land Use Capability Map Series

ANJEC has previously commented about using the term “zone” to describe the several policy areas on the LUCM. Recent contacts with municipalities have confirmed that this term is creating considerable confusion.

Municipalities have certain understandings related to the term, the most dominant of which is that they expect a dwelling unit density number or a commercial FAR to accompany the term. Once municipal officials move beyond this initial problem, they appear to be very troubled about how to envision day to day land management decisions in the overlay context. This confusion will continue to cause delay in the Conformance process.

By calling the maps, “capability maps” the impression is given that the zones are “suitable” for specified uses. In reality, they are primarily depictions of existing conditions, rather than evaluations of suitability. This fact should be made clear.

Where capability map zones extend beyond the municipality, some discussion should be provided so that the municipality can see how it fits into the regional context. A discussion of the pattern and implications of these designations should be provided.

6. Highlands Subwatersheds

This section introduces three concepts that may be unfamiliar to local officials: “watershed”, HUC-14 and stream order. These concepts need to be explained carefully to prevent confusion. This will probably require additional graphics to illustrate the “nested hierarchy” of watersheds, the concept of stream order and the full extent of HUC 14 areas if they exceed the municipal boundary. Explaining the ecological significance of stream order is crucial as is linking the concept to intermittent streams, headwaters and the definitions of Highlands Open Waters. There is a common understanding that “little streams” are less important than “big streams”. This perception continues to frustrate efforts directed at headwaters protection, a major objective of the RMP. The reasons for selecting HUC 14 areas as a planning focus and the definition of the term should be provided in the text.

There is a humorous typo at the end of line two, “slop”, should read “slope”.

7. Forest Resources

This section should indicate that the dominant post glacial vegetative cover of the region was forest. Some discussion of the history of forest cover should be provided since, in many areas of the region, deforestation occurred early and accompanied effective European settlement. The recovery of forests, primarily in the 20th C. should be discussed as a trend to be reinforced.

Three Figures (4, 5, 6) support the forest resources presentation. These should be re-ordered showing the “objective” land cover (Figure 5) first, followed by Figures 4 and 6. Figure 4

should be re-titled as Highlands Forest Resource Area to indicate that it was defined by the process described in the narrative.

Where forest resource areas exceed municipal boundaries, discussion of the larger forest areas should be provided. A discussion of the *pattern* of forested lands within the municipality should be provided. This discussion should include analysis of fragmentation and opportunities and provide techniques to restore contiguity to forest blocks. Despite the fact that the Council's regional level analysis has identified the larger forest blocks, municipalities may have numerous opportunities to preserve and link smaller forested areas to these blocks and should be encouraged to do so.

8. Highlands Open Waters and Riparian Areas.

The differences between the definitions of Highlands Open Waters and State Open Waters should be provided. This is necessary because many local officials are familiar with the term "open waters" in the context of the NJ DEP wetlands rules and may not be aware of the more comprehensive and inclusive definition provided by the Highlands Open Waters definition.

As municipal officials review the mapping of the streams in their municipality, they will compare their existing mapping to that provided by the Council. Streams will appear where none were shown before and registration may be different. In the discussion about the preparation of the Highlands Open Waters Inventory, these changes should be discussed and the Council data should be presented as a superior product.

A discussion of how the Highlands buffer requirements differ from NJ DEP requirements should be provided for Highlands Open Waters in the Planning Area.

This section should make clear that the mitigation opportunity applies only in specific cases and should not be featured so strongly in the presentation. Adherence to the 300' buffer should be the preferred outcome. One alternative is to refer the reader to a separate document describing the mitigation process, including the "functional values analysis".

9. Steep Slopes Protection

The introductory discussion (para. 1) mentions ridgelines, yet there is no further discussion of this issue. Ridgeline protection is a necessary component of the RMP but will prove difficult to implement unless a definition and some form of spatial mapping is provided.

Steep slope protection will be a new concept in some municipalities, particularly as developed by the RMP. The initial discussion should present how a steep slope is calculated as percentage with accompanying graphics. Measurement of slope by degrees should be disposed of. Limitations of the 10 meter DEM data should be described. A graphic comparing a DEM delineation to a LiDAR based delineation at the lot level should be provided. A map showing the delineation of steep slopes within a riparian area (using LiDAR) should also be provided to accompany the text.

It is unclear from the presentation when and how a municipality can obtain the LiDAR derived slope mapping for their jurisdiction.

Figure 9 is generally illegible.

10. Critical Habitat

Critical habitat protection will likely prove to be one of the more difficult tasks for municipalities. The discussion provided lacks clarity and specificity. Initially (para.1) critical habitat protection is conflated with biodiversity. These are related but separate concepts. In the case of Bedminster (Figure 10) the bulk of the municipality is shown as critical habitat yet there is no exposition as to what is present where nor is there any discussion of policies necessary to protect the wildlife. Although page 18 provides a list of species present it does not include aquatic species such as native Brook Trout or the various mussel species now of concern. The ERI should provide a list of the species using the critical habitats and identify critical habitat elements for protection.

11. Land Preservation and Stewardship

This presentation is one of the weaker portions of the ERI. Municipalities should be provided with specific guidance on how to supplement the limited data contained in the Council's regional analysis. The total acreage preserved and their locations are critical factors in build-out analysis and available land calculations. Considerable difficulty will be encountered in defining open space, unless a standard definition is applied.

In the case of Bedminster there is considerably more restricted land than shown on Figure 13. These restrictions include several conservation easements held by private non-profit conservation organizations. Their locations are available through Green Acres or directly in digital form from the organizations.

Often these restrictions are in the form of conservation easements that do not necessarily restrict *all* development of the property and may allow the construction of a primary residence, accessory housing or agricultural structures. Thus the restricted land is not technically "*undevelopable*" but rather has a *reduced development potential*. One notable conservation restriction not shown is the conservation easement on the Trump National golf course. Although this restriction allows the use of the land for golf course, other uses are prohibited. The area involved is almost one square mile. The restriction is held by Bedminster Township.

Additionally, for many years many municipalities have been acquiring conservation easements as part of their subdivision process. These easements are often linear in nature following water courses or wetland areas. Mapping or even calculating the acreage of these unbuildable areas will require substantial effort on the part of many municipalities. The Council should provide guidance and assistance in locating, mapping, and compiling these restrictions. ANJEC suggests that this potentially time consuming task be made part of Full Conformance.

12. Conservation Priority Areas

The use of the same legend color for "High" priority areas and municipal boundaries (Fig 14) should be avoided to prevent confusion. A display of Conservation Priority area *currently*

preserved would be of utility to the municipality (combine Fig. 14 with revised Fig. 13 information).

13. Carbonate Rock

As discussed above, this discussion should include a discussion of the nature and characteristics of the carbonate rock present in the municipality by geologic formation. Conditions may vary widely among the rock types included by the Council in its carbonate rock mapping. The municipality should know these differences.

Because the RMP called for additional, more specific mapping of carbonate rock, areas that drain to carbonate rock, and specific features (e.g. sinkhole locations), ANJEC believes that Council should provide these data in the ERI for Full Conformance..

14. Lake Management

The reference to “the first lot perpendicular to the shore” in the first bulleted point is confusing and unclear. Should this read “parallel”? In addition to the problems discussed above, ANJEC is concerned with the inclusion of the Lake Watershed Tier (“the entire land area draining to the lake” in the Lake Management Area. Does this definition intend that the entire drainage area of a lake is to be included in the Lake Management Area? For example, would the entire drainage of the North Branch of the Raritan River upstream of Ravine Lake in Far Hills be included, or the entire South Branch Raritan drainage upstream of Lake Solitude in High Bridge? On reading of the plain language, this would appear to be the case.

15. Net Water Availability

Several problems are evident on Figure 16. The use of the aerial background produces a color shift in the -.09-0.00 classification. The map shows a greenish tone that does not seem to appear on the legend.

- **A less intrusive background would eliminate this problem.**

The reader is expected to iterate between Fig. 3 and fig. 16.

- **It would be much clearer if the HUC designation appeared on Figure 16.**

ANJEC has previously commented that the quintile breaks were too coarse on the regional mapping to inform policy response to deficits. It appears that the same breaks are now applied at the local level.

- **Since the Council knows precisely the magnitude of the surplus or deficit in each HUC (Table p16) a more informative breakdown (finer distinction) could be applied at the local level.**
- **The Table on p. 26 should specify the units in the New Water Availability column.**

Although standard among water resource planners, MGD may not be the appropriate scale of unit for such small land areas or for comprehension by local officials. Exactly how much water is -0.32797431 mgd? Perhaps it would be better to express this as “a deficit of 327,974.31 gpd”.

- **A discussion and of the *relative surplus and deficit conditions in the municipality should be provided.***

This discussion should also include some analysis as to the causes of the particular conditions. Use of a more intuitive color scheme (spotlight-reds-yellows-greens) could be used.

16. Prime Ground Water Recharge Areas

This subject is likely to be highly controversial in many municipalities and should be treated with great care. Some communities may have already delineated prime groundwater recharge areas using different methodologies. The definition of “prime” has often proved contentious.

- **The discussion should also address the problems resulting from a “top of rock” model (GSR-32) and expectations of quantifying deep aquifer recharge (drinking water well supplies completed into the bedrock).**

This has been a cognitive problem from the early development of the RMP and remains so now. Given the time, staff, data, and financial constraints facing the Council, ANJEC continues to support the use of GSR-32.

- **It is important to state clearly that except in very rare cases, all dry land surfaces contribute some degree of recharge. Water bodies and wetlands (perhaps counter-intuitively for local officials) are regarded by GSR-32 as non-recharge areas.**
- **These points should be clarified.**
- **The use of the 40% threshold number should be explained as well as the use of the drought of record values in the calculation.**
- **The importance of forest landcover in the GSR-32 model should be discussed since the mapping provided (Fig. 17) appears to correspond to forested areas.**
- **Figure 17 should include HUC 14 boundaries and labels.**

17. Water Quality

- **In the chart on p.30 does “n/a” mean “not attained” or “not applicable”?**
- **A discussion of the “Parameters Not Attained” should be provided to inform management responses.**
- **Where relationships exist, such as that between phosphorous and sediment, these should be discussed.**
- **Figure 18 also exhibits the color shift caused by the use of the aerial photo background.**

Municipalities should be encouraged to monitor water quality data with technical advice from NJDEP and to provide appropriate QAQC protocols for their data for inclusion in the map and discussion.

18. Wellhead Protection

- **A discussion as to the limitations of the fixed radius delineation method should be provided where such areas appear in a municipality.**

- **Municipalities should be cautioned against instituting wellhead protection ordinances based on fixed radius data.**
- **Links to the wellhead protection program's (NJGS) delineation technical paper and DEP Source Water Protection data should be provided.**
- **In municipalities where delineated wellhead areas appear in carbonate rock additional considerations should be recommended.**
- **Specific information on the individual public community wells (from the source Water Protection Program or as otherwise known) should be provided.**

While not specifically covered by the wellhead protection program, individual private wells are of considerable importance in Bedminster and region wide.

- **Figure 19 should include the self supplied area as an "area of groundwater concern".**
- **Municipalities should be encouraged to complete advanced wellhead protection studies of all public community wells, and non-public community wells.**

19. Septic System Yield

This section will be of considerable interest to municipal officials due to concerns over allowable zoning densities. While the methodology used is well described, ANJEC continues to have concerns relating to nitrate loads from agricultural uses and other non-septic sources. However these concerns are addressed to some degree by the low threshold numbers used.

- **This section should be accompanied by a map of the data shown in the Table on p. 34.**

It would also be useful and important to show background nitrate levels currently existing and areas served by non-DGW central sewer systems.

20. Agricultural Resources

ANJEC agrees that the data layer of preserved farmland may need to be updated. The Council should be aware that since this layer was used in a series of analyses, such changes may also require re-running other analyses.

- **The list of the Important Farmland soils types (Prime, Statewide, etc.) as they are present in the municipality should appear in the report.**

Ideally these would be discussed in a Soils section, not presently included in the Highlands ERI.

- **The maps supporting this section should be re-ordered to move the reader from the objective depictions toward policy. The preferred map order is Fig. 22, Fig 23, Fig. 21 followed by Figure 20.**

Many desirable agricultural conservation practices can be used to achieve the goals, policies and objectives of the Highlands RMP. Some discussion about establishing stream buffers in defined riparian corridors, afforestation and reforestation to join forest blocks, and retirement of marginal soils from active cropping (establishing pasture or forest) should be discussed in this section. A series of maps could readily be produced to support these efforts.

21. Historic, Cultural and Archeological Resources

RMP data in these subject areas is severely limited.

- **Municipalities should be encouraged to include local and county survey data, historic information from EIS documents, DOT reports and Section 106 reviews.**

It is important to note that sites are continually becoming eligible or are being destroyed and that historic designation requires a thorough understanding of the resource universe in the municipality. Thus:

- **Municipalities should be encouraged to conduct cultural resource inventories and to re-visit these at periodic intervals rather than relying exclusively on SHPO updates.**

Several types of historic resources have relevance to other areas of Highlands resource protection. These include:

Historic Iron Mines:

In addition to their historic value, these sites are implicated in groundwater contamination, structural instability, water supply development and energy considerations production proposals.

- **The locations of abandoned iron mines are part of the RMP and should be transmitted to municipalities either as cultural features or as an addition to a geology section.**

Examples: Mt Hope Mine, Scrub Oaks Mine, Ringwood Ford Motor Site

Abandoned Railroad Rights of Way:

These sites may possibly be re-activated and if intact are exempt. They may also provide alternative transportation and recreational trail possibilities. ANJEC notes that the Bedminster mapping does not include an abandoned right of way (Rockaway Valley Railroad abandoned c. 1917) that is a part of the municipality's Greenway Plan.

- **Complete data on abandoned railroad beds should be included in the cultural data transmitted to municipalities**

Example: Rockaway Valley Railroad right of way (Whitehouse Station to Morristown)

Bridges:

Many historic bridges remain in the region. County and State agencies rated some of these as deficient. These structures are potential "stimulus package" targets. Bridges also control storm water discharges to streams and stream access points. Each bridge across a waterway represents the intersection of a potential negative impact with Highlands waters. Bridges are often important scenic elements as viewed from the roadway and from the water body.

- **Municipalities should be urged to consult with county and state transportation planners to map and inventory historic bridges as part of their cultural resource data.**
- **Bridge replacements should always use "context sensitive design", evaluate opportunities to improve storm water quality and to provide water access.**
- **Where historic bridges are to be destroyed, they should be documented and photographed.**

Examples: Califon (over South Branch Raritan, sensitive re-construction), Clinton, Main street over the south Branch Raritan, protected, numerous others at risk, region-wide

Dams:

There are many old dams in the region. These structures are often targeted for removal as being structurally deficient and non-compliant or for ecological reasons (fish passage, water quality and thermal impacts). Yet many are vital historic components and are unappreciated resources providing recreational and scenic amenity.

- **Dams should be mapped and discussed based on their hazard rating and degree of conformance with the DEP Dam Safety Program, and historic recreational and scenic value.**

Example: Lake Solitude Dam, High Bridge

Historic Industrial Facilities

Many Brownfields sites and other known contaminated sites are associated with historic industries.

- **Where known, such locations should be mapped to assure that historic values are protected in redevelopment and environmental remediation projects encouraged by the RMP.**

Example: Oxford Textile

22. Scenic Resources

This section is among the weakest in the Highlands ERI due to the approach used in the RMP. Protection of scenic quality will also be one of the least understood subjects at the municipal level.

- **Municipalities should be provided technical guidance in the Nomination, Evaluation and Inventory process of scenic resources in their communities.**
- **Where municipalities and counties have identified scenic roads, scenic road networks or other special scenic designations, these should be included in the Highlands ERI.**

23. Contaminated Sites

This section generally is adequate.

- **However, the section should reference Objective 1K4f concerning contaminated sites in karst areas.**

24. Infrastructure

A. Water Supply Utility

The yellow highlighted passage on page 40 appears to indicate a capacity figure for “the existing areas served.” ANJEC is unclear if this is the full system capacity, a sub-regional number or a local availability number. For local planning *actual capacity available* in the municipality should be disclosed. While water may be available in the system, constraints posed by topography, pump capacity, available head, storage and pipe size may pose important constraints or opportunity to local delivery.

- **The Council should further refine their data to reflect actual water deliverable to the municipality.**

- **ANJEC notes that a substantial part of water supply infrastructure is not indicated on Figure 27.**

Elizabethtown Water operates a 1MG storage facility (tank) at Hamilton Farm. This storage facility is connected to a main running westward to Pottersville. We believe this to be an 8" line. Several properties along Pottersville Rd. (the Preservation Area boundary) are served by this line. The line's location may be obscured by the boundary line. Water is distributed to Pottersville Village in both Bedminster and Tewksbury Townships. Not shown is a main (believed to be 6") running southeasterly from Pottersville terminating in the Dunwalke Farm property southwest of the intersection of Larger Cross Rd and Long Lane. It is believed that the Pottersville Elizabethtown supply well shown in Figure 19 is also connected to this system. A dead end main shown on Fig 27 of unknown size runs westerly from Pottersville up the valley of Hollow Brook into Tewksbury Twp. This is shown correctly on the map. It is a remnant of the former Pottersville water company that drew its supply from a reservoir (now abandoned) in Tewksbury.

B. Wastewater Utility

- **ANJEC makes a similar comment concerning the actual availability of sewer capacity as above in Water supply Utility section. It is unclear from the presentation if the available capacities presented refer to the utilities' total service area or to Bedminster. This needs to be clarified to assist local planning.**
- **In areas served by sewer facilities holding NJPDES Permits, ANJEC requests that the Highlands ERI include information on the existing capacity, and permit compliance history, including violations and penalties, past current and pending.**
- **ANJEC notes that there are several privately owned DGWs in the municipality.**
- **Hamilton Farm Golf Club, Trump National Golf Club and fiddler's elbow Country Club**

C. Roadway and Transit

There is no new useful information that is not commonly known presented in this section. Capacity ratings and conditions would be of help.

Respectfully Submitted
David Peifer
2/20/09

For PJM presentation please go to the link listed:

http://www.highlands.state.nj.us/njhighlands/about/calend/2009_meetings/022609_pjm_highlands.pdf

HIGHLANDS REGIONAL



MASTER PLAN
2008

Highlands Council Meeting

February 26, 2009



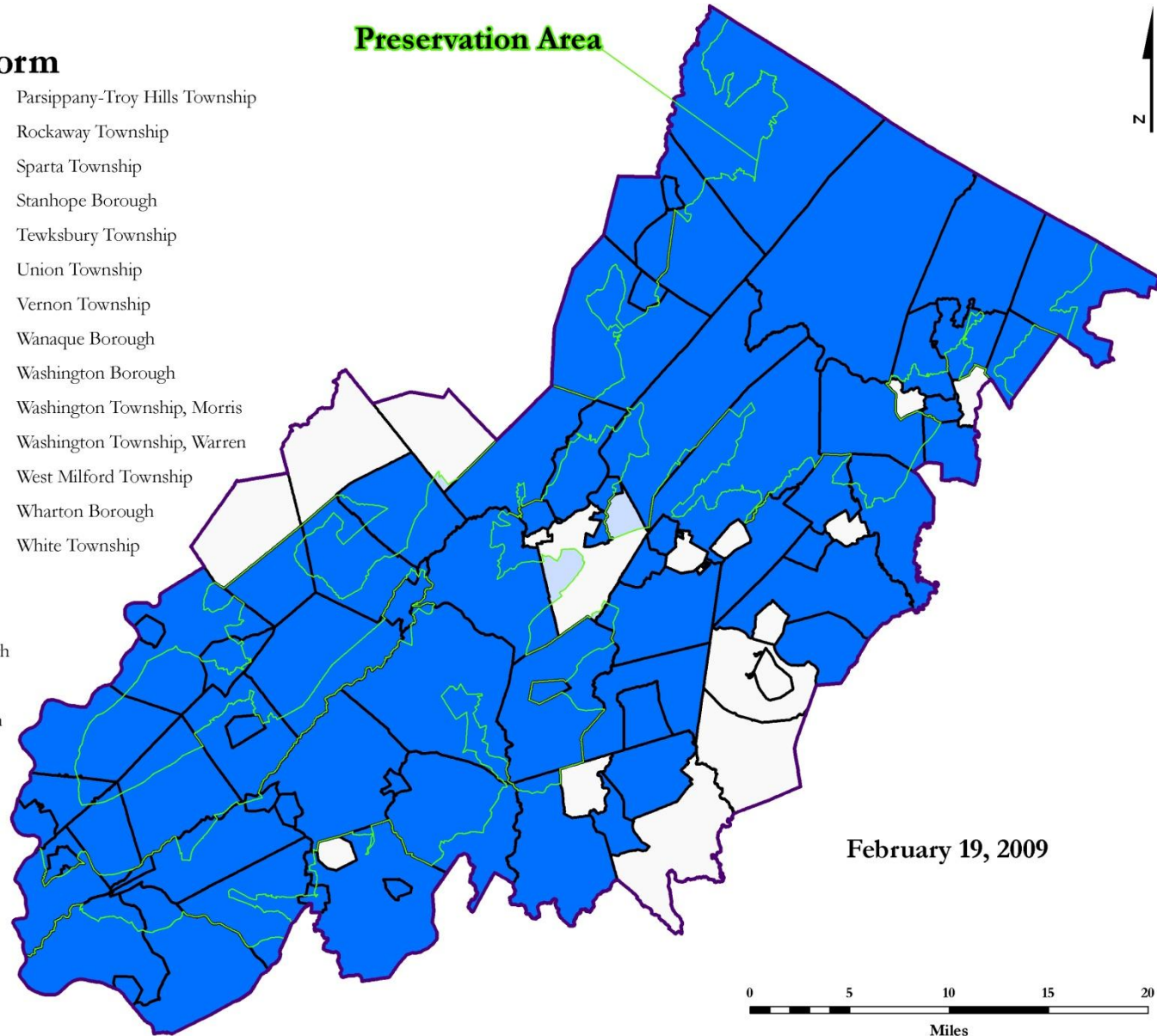
Plan Conformance

- To date, 70 of the 88 municipalities in the Highlands Region have approved a Notice of Intent.
- Highlands Council staff met with the two Preservation Area municipalities that have yet to file the Notice (Green and Roxbury).
- Of the seven Highlands counties, five have approved a Notice of Intent for the Preservation Area.
- Highlands Council staff met with the county planning staff to discuss County Plan Conformance.

Plan Conformance

Notice of Intent to Conform

- | | | |
|-----------------------|-------------------------|--------------------------------|
| Alexandria Township | Holland Township | Parsippany-Troy Hills Township |
| Allamuchy Township | Hopatcong Borough | Rockaway Township |
| Alpha Borough | Independence Township | Sparta Township |
| Bedminster Township | Jefferson Township | Stanhope Borough |
| Belvidere Town | Kinnelon Borough | Tewksbury Township |
| Bernardsville Borough | Lebanon Borough | Union Township |
| Bethlehem Township | Lebanon Township | Vernon Township |
| Bloomington Borough | Liberty Township | Wanaque Borough |
| Bloomsbury Borough | Lopatcong Township | Washington Borough |
| Boonton Township | Mahwah Township | Washington Township, Morris |
| Byram Township | Mansfield Township | Washington Township, Warren |
| Califon Borough | Mendham Borough | West Milford Township |
| Chester Borough | Mendham Township | Wharton Borough |
| Chester Township | Milford Borough | White Township |
| Clinton Town | Mine Hill Township | |
| Clinton Township | Montville Township | |
| Denville Township | Mount Arlington Borough | |
| Far Hills Borough | Mount Olive Township | |
| Franklin Borough | Mountain Lakes Borough | |
| Franklin Township | Oakland Borough | |
| Glen Gardner Borough | Ogdensburg Borough | |
| Greenwich Township | Oxford Township | |
| Hackettstown Town | Pequannock Township | |
| Hamburg Borough | Phillipsburg Town | |
| Hampton Borough | Pohatcong Township | |
| Hanover Township | Randolph Township | |
| Hardyston Township | Ringwood Borough | |
| Harmony Township | Riverdale Borough | |



February 19, 2009

Planning Grants

- **Status of the Initial Assessment Grants Program - the \$1.5 million program that allocates up to \$15,000 each for Highlands municipalities and counties:**

68 municipalities have applied for a total of \$1,014,767

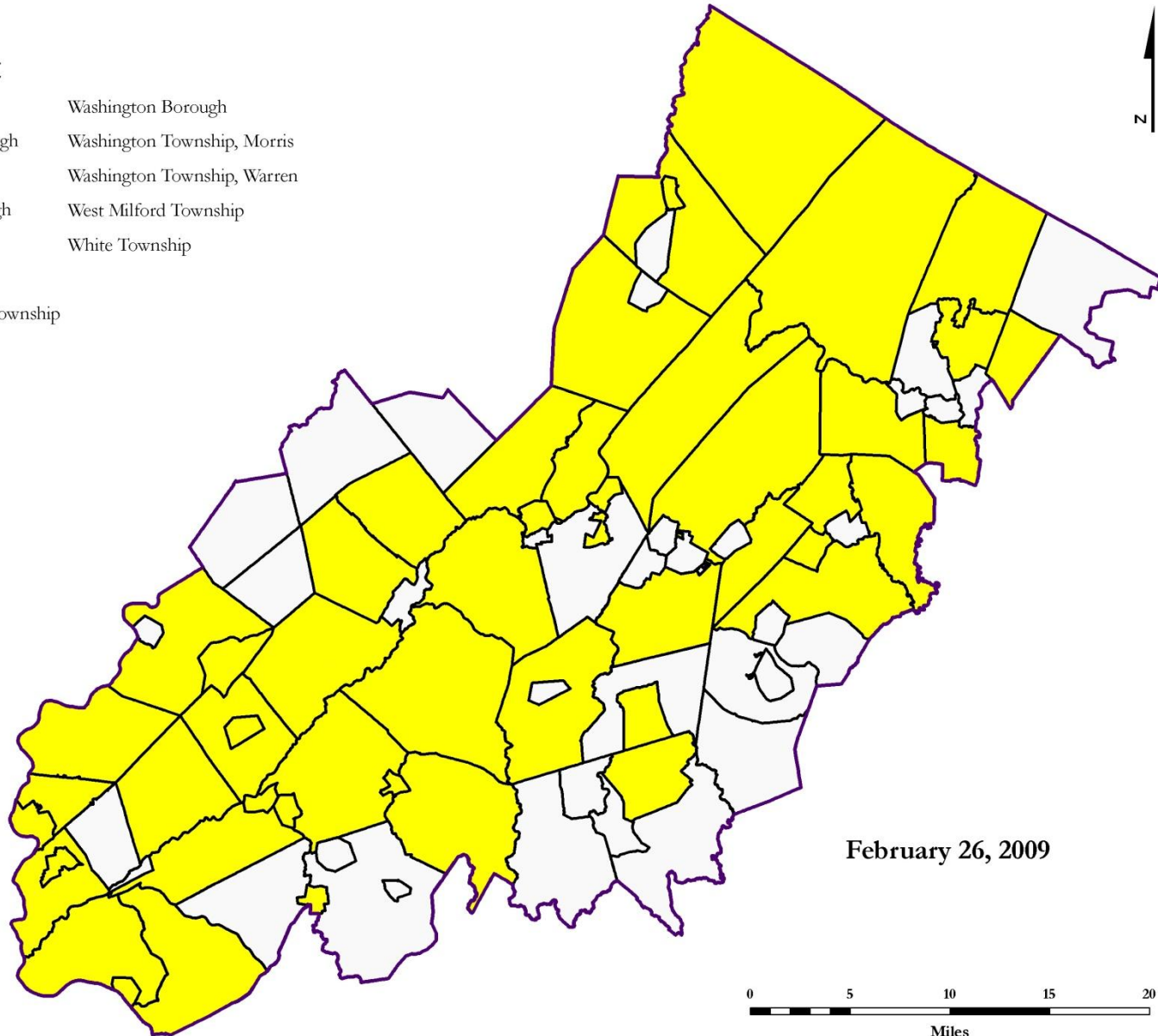
- **Status of the 2009 Plan Conformance Grants Program - the \$7.5 million program that allocates between \$50,000 to \$100,000 each for Highlands municipalities:**

50 municipalities have applied for a total of \$2,500,000

Plan Conformance

Plan Conformance Grant

- | | | |
|-----------------------|--------------------------------|-----------------------------|
| Alexandria Township | Montville Township | Washington Borough |
| Allamuchy Township | Mount Arlington Borough | Washington Township, Morris |
| Alpha Borough | Mount Olive Township | Washington Township, Warren |
| Bernardsville Borough | Mountain Lakes Borough | West Milford Township |
| Bethlehem Township | Oakland Borough | White Township |
| Boonton Township | Oxford Township | |
| Byram Township | Parsippany-Troy Hills Township | |
| Califon Borough | Pequannock Township | |
| Chester Township | Phillipsburg Town | |
| Clinton Town | Pohatcong Township | |
| Denville Township | Randolph Township | |
| Franklin Township | Ringwood Borough | |
| Glen Gardner Borough | Rockaway Township | |
| Hamburg Borough | Sparta Township | |
| Hampton Borough | Stanhope Borough | |
| Hardyston Township | Tewksbury Township | |
| Harmony Township | Vernon Township | |
| Holland Township | Wanaque Borough | |
| Hopatcong Borough | | |
| Independence Township | | |
| Jefferson Township | | |
| Kinnelon Borough | | |
| Lebanon Township | | |
| Lopatcong Township | | |
| Mansfield Township | | |
| Mendham Borough | | |
| Milford Borough | | |

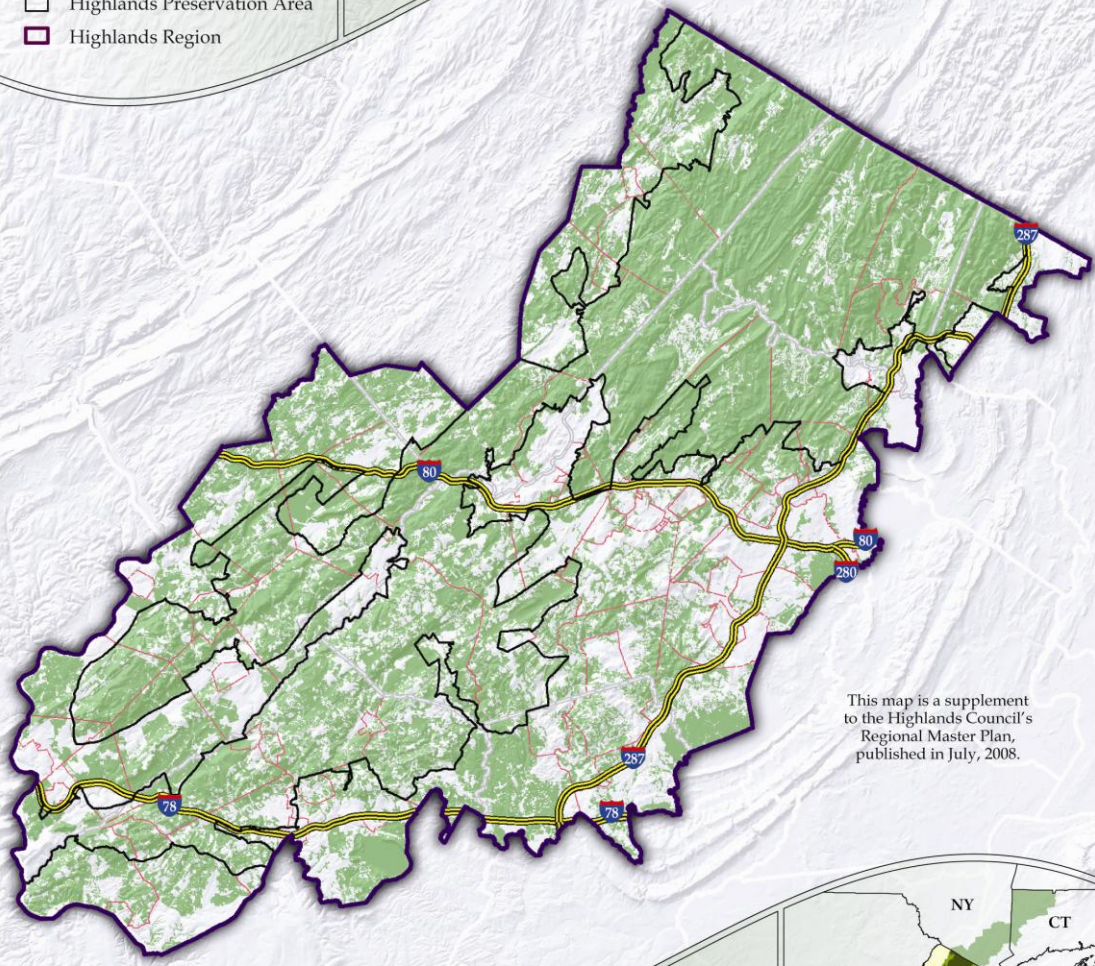


Critical Wildlife Habitat



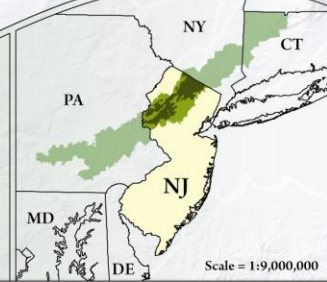
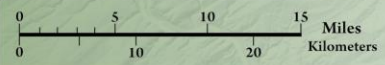
Critical Wildlife Habitat

- Interstate Highways
- County Boundaries
- Municipal Boundaries
- Highlands Preservation Area
- Highlands Region



This map is a supplement to the Highlands Council's Regional Master Plan, published in July, 2008.

Scale = 1:555,000



Scale = 1:9,000,000

Critical Habitat Consultant

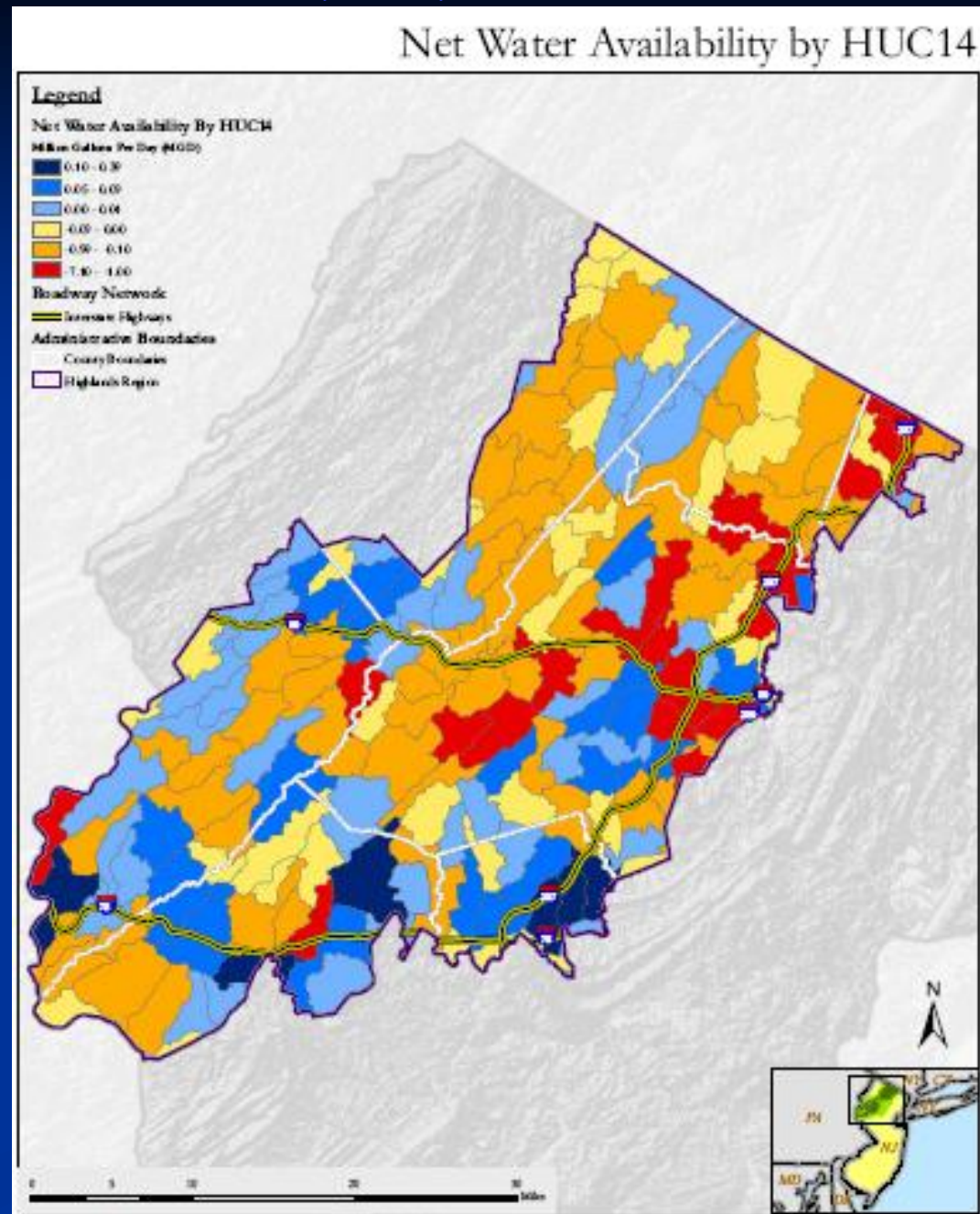
Need for Consulting Services - The Highlands Regional Master Plan requires the development of a Critical Habitat Conservation and Management Plan. Consulting services are required to assist the Highlands Council in the development of guidance.

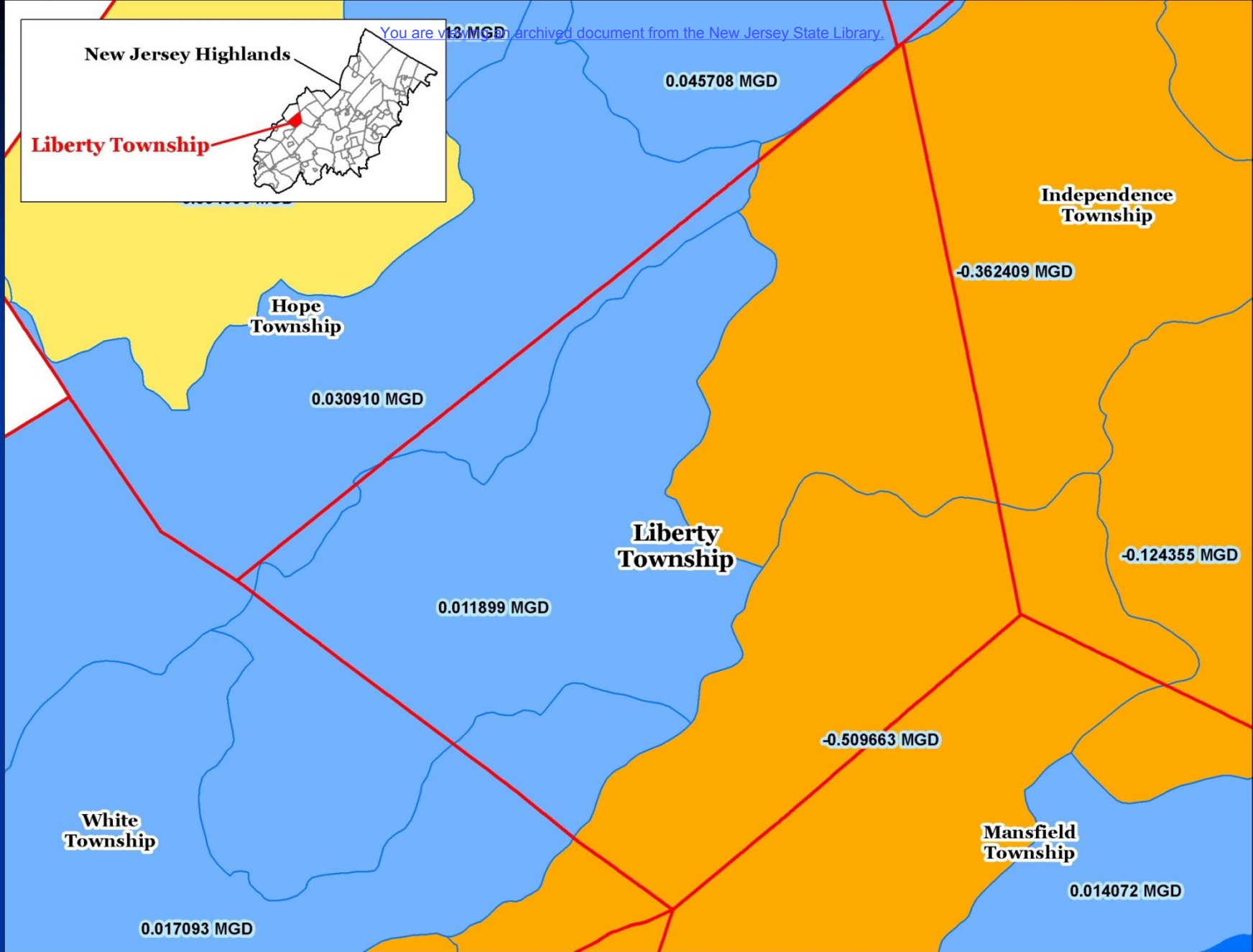
November 6, 2008 - Request for Qualifications sought the qualifications of firms to advise and assist the Highlands Council. Seeking firms with extensive expertise in rare, threatened, and endangered wildlife and plant species habitat conservation and mitigation.

January 16, 2009 - Request for Proposal sought detailed proposals addressing Literature Review, Mitigation Strategies, New Mitigation Concepts, and Mitigation Examples.

Availability Results

- Nearly two-thirds of region in water deficit, from small to very large
- RMP Requirements:
 - Water Use and Conservation Management Plans
 - Mitigation for new water uses (125% to 200%)
 - New water uses strictly limited
 - Creation or worsening of deficits prohibited





Net Water Availability

Grant Program and Consultant for Water Use and Conservation Management Planning

Need for Program - The Highlands Regional Master Plan requires the development of Water Use and Conservation Management Plans for all Highlands watersheds. Governor Corzine's Executive Order 114 also ordered NJDEP to ensure that no water allocation permit or Water Quality Management Plan amendment were approved absent these plans in deficit areas outside of the Existing Community Zone. Grants and consulting services are required to assist the Highlands Council in the development of these plans.

October 20, 2008 - Request for Proposal sought detailed proposals addressing Water Use and Conservation Management Plan Pilot Project for ten pilot project areas affecting up to twenty HUC14 subwatersheds in Highlands municipalities or counties that represent the spectrum of deficit issues in the Highlands Region



RESOLUTION 2009-11
NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
APPROVAL OF INITIAL ASSESSMENT GRANT
TO ALPHA BOROUGH

WHEREAS, the Highlands Water Protection and Planning Act (Highlands Act) has created a public body corporate and politic with corporate succession known as the Highlands Water Protection and Planning Council (Highlands Council); and

WHEREAS, the Highlands Act authorizes the Highlands Council to enter into any and all agreements or contracts, execute any and all instruments to carry out any power, duty or responsibility under the Highlands Act; and

WHEREAS, Section 18 of the Highlands Act authorizes the Highlands Council to make available grants and other financial and technical assistance to municipalities and counties in furtherance of the Regional Master Plan; and

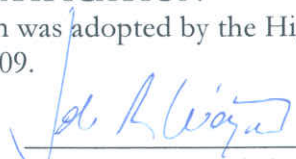
WHEREAS, on February 28, 2008 the Highlands Council by Resolution 2008-4 authorized the initiation of a grant application process for Initial Assessment grants to municipalities and counties within the Highlands Region in furtherance of Plan Conformance, in an annual amount not to exceed \$1,500,000; and

WHEREAS, the Highlands Council staff has reviewed the following grant application and recommends approval by the Highlands Council;

NOW, THEREFORE, BE IT RESOLVED by the Highlands Council that the Executive Director, or her designee, is hereby authorized to enter into a grant agreement with Alpha Borough for an Initial Assessment Grant in an amount not to exceed \$15,000, provided that the Executive Director may authorize additional amounts under this agreement pursuant to her authority under the Highlands Council Bylaws.

CERTIFICATION

I hereby certify that the foregoing Resolution was adopted by the Highlands Council at its regular meeting held on the 26th day of February, 2009.



John Weingart, Chairman

RESOLUTION 2009-11
NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
APPROVAL OF INITIAL ASSESSMENT GRANT
TO ALPHA BOROUGH

<u>Vote on the Approval of this Resolution</u>	<u>Motion</u>	<u>Second</u>	<u>Yes</u>	<u>No</u>	<u>Abstain</u>	<u>Absent</u>
Councilmember Alstede	_____	_____	_____	_____	_____	✓
Councilmember Calabrese	_____	_____	✓	_____	_____	_____
Councilmember Carluccio	_____	_____	✓	_____	_____	_____
Councilmember Cogger	✓	_____	✓	_____	_____	_____
Councilmember Kovach	_____	✓	✓	_____	_____	_____
Councilmember Letts	_____	_____	✓	_____	_____	_____
Councilmember Pasquarelli	_____	_____	✓	_____	_____	_____
Councilmember Peterson	_____	_____	_____	_____	_____	✓
Councilmember Schrier	_____	_____	✓	_____	_____	_____
Councilmember Vetrano	_____	_____	_____	_____	_____	✓
Councilmember Way	_____	_____	✓	_____	_____	_____
Councilmember Whitenack	_____	_____	_____	_____	_____	✓
Councilmember Weingart	_____	_____	✓	_____	_____	_____

RESOLUTION 2009-12
NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
APPROVAL OF INITIAL ASSESSMENT GRANT
TO FRELINGHUYSEN TOWNSHIP

WHEREAS, the Highlands Water Protection and Planning Act (Highlands Act) has created a public body corporate and politic with corporate succession known as the Highlands Water Protection and Planning Council (Highlands Council); and

WHEREAS, the Highlands Act authorizes the Highlands Council to enter into any and all agreements or contracts, execute any and all instruments to carry out any power, duty or responsibility under the Highlands Act; and

WHEREAS, Section 18 of the Highlands Act authorizes the Highlands Council to make available grants and other financial and technical assistance to municipalities and counties in furtherance of the Regional Master Plan; and

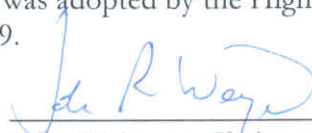
WHEREAS, on February 28, 2008 the Highlands Council by Resolution 2008-4 authorized the initiation of a grant application process for Initial Assessment grants to municipalities and counties within the Highlands Region in furtherance of Plan Conformance, in an annual amount not to exceed \$1,500,000; and

WHEREAS, the Highlands Council staff has reviewed the following grant application and recommends approval by the Highlands Council;

NOW, THEREFORE, BE IT RESOLVED by the Highlands Council that the Executive Director, or her designee, is hereby authorized to enter into a grant agreement with Frelinghuysen Township for an Initial Assessment Grant in an amount not to exceed \$15,000, provided that the Executive Director may authorize additional amounts under this agreement pursuant to her authority under the Highlands Council Bylaws.

CERTIFICATION

I hereby certify that the foregoing Resolution was adopted by the Highlands Council at its regular meeting held on the 26th day of February, 2009.



John Weingart, Chairman

RESOLUTION 2009-12
NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
APPROVAL OF INITIAL ASSESSMENT GRANT
TO FRELINGHUYSEN TOWNSHIP

<u>Vote on the Approval of this Resolution</u>	<u>Motion</u>	<u>Second</u>	<u>Yes</u>	<u>No</u>	<u>Abstain</u>	<u>Absent</u>
Councilmember Alstede	_____	_____	_____	_____	_____	✓
Councilmember Calabrese	_____	_____	✓	_____	_____	_____
Councilmember Carluccio	_____	_____	✓	_____	_____	_____
Councilmember Cogger	✓	_____	✓	_____	_____	_____
Councilmember Kovach	_____	✓	✓	_____	_____	_____
Councilmember Letts	_____	_____	✓	_____	_____	_____
Councilmember Pasquarelli	_____	_____	✓	_____	_____	_____
Councilmember Peterson	_____	_____	_____	_____	_____	✓
Councilmember Schrier	_____	_____	✓	_____	_____	_____
Councilmember Vetrano	_____	_____	_____	_____	_____	✓
Councilmember Way	_____	_____	✓	_____	_____	_____
Councilmember Whitenack	_____	_____	_____	_____	_____	✓
Councilmember Weingart	_____	_____	✓	_____	_____	_____

RESOLUTION 2009-13
NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
APPROVAL OF INITIAL ASSESSMENT GRANT
TO HIGH BRIDGE BOROUGH

WHEREAS, the Highlands Water Protection and Planning Act (Highlands Act) has created a public body corporate and politic with corporate succession known as the Highlands Water Protection and Planning Council (Highlands Council); and

WHEREAS, the Highlands Act authorizes the Highlands Council to enter into any and all agreements or contracts, execute any and all instruments to carry out any power, duty or responsibility under the Highlands Act; and

WHEREAS, Section 18 of the Highlands Act authorizes the Highlands Council to make available grants and other financial and technical assistance to municipalities and counties in furtherance of the Regional Master Plan; and

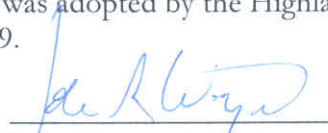
WHEREAS, on February 28, 2008 the Highlands Council by Resolution 2008-4 authorized the initiation of a grant application process for Initial Assessment grants to municipalities and counties within the Highlands Region in furtherance of Plan Conformance, in an annual amount not to exceed \$1,500,000; and

WHEREAS, the Highlands Council staff has reviewed the following grant application and recommends approval by the Highlands Council;

NOW, THEREFORE, BE IT RESOLVED by the Highlands Council that the Executive Director, or her designee, is hereby authorized to enter into a grant agreement with High Bridge Borough for an Initial Assessment Grant in an amount not to exceed \$15,000, provided that the Executive Director may authorize additional amounts under this agreement pursuant to her authority under the Highlands Council Bylaws.

CERTIFICATION

I hereby certify that the foregoing Resolution was adopted by the Highlands Council at its regular meeting held on the 26th day of February, 2009.



John Weingart, Chairman

RESOLUTION 2009-13
NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
APPROVAL OF INITIAL ASSESSMENT GRANT
TO HIGH BRIDGE BOROUGH

<u>Vote on the Approval of this Resolution</u>	<u>Motion</u>	<u>Second</u>	<u>Yes</u>	<u>No</u>	<u>Abstain</u>	<u>Absent</u>
Councilmember Alstede						✓
Councilmember Calabrese			✓			
Councilmember Carluccio			✓			
Councilmember Cogger	✓		✓			
Councilmember Kovach		✓	✓			
Councilmember Letts			✓			
Councilmember Pasquarelli			✓			
Councilmember Peterson						✓
Councilmember Schrier			✓			
Councilmember Vetrano						✓
Councilmember Way			✓			
Councilmember Whitenack						✓
Councilmember Weingart			✓			

RESOLUTION 2009-14
NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
APPROVAL OF INITIAL ASSESSMENT GRANT
TO KINNELON BOROUGH

WHEREAS, the Highlands Water Protection and Planning Act (Highlands Act) has created a public body corporate and politic with corporate succession known as the Highlands Water Protection and Planning Council (Highlands Council); and

WHEREAS, the Highlands Act authorizes the Highlands Council to enter into any and all agreements or contracts, execute any and all instruments to carry out any power, duty or responsibility under the Highlands Act; and

WHEREAS, Section 18 of the Highlands Act authorizes the Highlands Council to make available grants and other financial and technical assistance to municipalities and counties in furtherance of the Regional Master Plan; and

WHEREAS, on February 28, 2008 the Highlands Council by Resolution 2008-4 authorized the initiation of a grant application process for Initial Assessment grants to municipalities and counties within the Highlands Region in furtherance of Plan Conformance, in an annual amount not to exceed \$1,500,000; and

WHEREAS, the Highlands Council staff has reviewed the following grant application and recommends approval by the Highlands Council;

NOW, THEREFORE, BE IT RESOLVED by the Highlands Council that the Executive Director, or her designee, is hereby authorized to enter into a grant agreement with Kinnelon Borough for an Initial Assessment Grant in an amount not to exceed \$15,000, provided that the Executive Director may authorize additional amounts under this agreement pursuant to her authority under the Highlands Council Bylaws.

CERTIFICATION

I hereby certify that the foregoing Resolution was adopted by the Highlands Council at its regular meeting held on the 26th day of February, 2009.



John Weingart, Chairman

RESOLUTION 2009-14
NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
APPROVAL OF INITIAL ASSESSMENT GRANT
TO KINNELON BOROUGH

<u>Vote on the Approval of this Resolution</u>	<u>Motion</u>	<u>Second</u>	<u>Yes</u>	<u>No</u>	<u>Abstain</u>	<u>Absent</u>
Councilmember Alstede	_____	_____	_____	_____	_____	✓ _____
Councilmember Calabrese	_____	_____	✓ _____	_____	_____	_____
Councilmember Carluccio	_____	_____	✓ _____	_____	_____	_____
Councilmember Cogger	✓ _____	_____	✓ _____	_____	_____	_____
Councilmember Kovach	_____	✓ _____	✓ _____	_____	_____	_____
Councilmember Letts	_____	_____	✓ _____	_____	_____	_____
Councilmember Pasquarelli	_____	_____	✓ _____	_____	_____	_____
Councilmember Peterson	_____	_____	_____	_____	_____	✓ _____
Councilmember Schrier	_____	_____	✓ _____	_____	_____	_____
Councilmember Vetrano	_____	_____	_____	_____	_____	✓ _____
Councilmember Way	_____	_____	✓ _____	_____	_____	_____
Councilmember Whitenack	_____	_____	_____	_____	_____	✓ _____
Councilmember Weingart	_____	_____	✓ _____	_____	_____	_____

RESOLUTION 2009-15
NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
APPROVAL OF INITIAL ASSESSMENT GRANT
TO MANSFIELD TOWNSHIP

WHEREAS, the Highlands Water Protection and Planning Act (Highlands Act) has created a public body corporate and politic with corporate succession known as the Highlands Water Protection and Planning Council (Highlands Council); and

WHEREAS, the Highlands Act authorizes the Highlands Council to enter into any and all agreements or contracts, execute any and all instruments to carry out any power, duty or responsibility under the Highlands Act; and

WHEREAS, Section 18 of the Highlands Act authorizes the Highlands Council to make available grants and other financial and technical assistance to municipalities and counties in furtherance of the Regional Master Plan; and

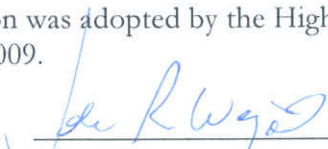
WHEREAS, on February 28, 2008 the Highlands Council by Resolution 2008-4 authorized the initiation of a grant application process for Initial Assessment grants to municipalities and counties within the Highlands Region in furtherance of Plan Conformance, in an annual amount not to exceed \$1,500,000; and

WHEREAS, the Highlands Council staff has reviewed the following grant application and recommends approval by the Highlands Council;

NOW, THEREFORE, BE IT RESOLVED by the Highlands Council that the Executive Director, or her designee, is hereby authorized to enter into a grant agreement with Mansfield Township for an Initial Assessment Grant in an amount not to exceed \$15,000, provided that the Executive Director may authorize additional amounts under this agreement pursuant to her authority under the Highlands Council Bylaws.

CERTIFICATION

I hereby certify that the foregoing Resolution was adopted by the Highlands Council at its regular meeting held on the 26th day of February, 2009.



John Weingart, Chairman

RESOLUTION 2009-15
NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
APPROVAL OF INITIAL ASSESSMENT GRANT
TO MANSFIELD TOWNSHIP

<u>Vote on the Approval of this Resolution</u>	<u>Motion</u>	<u>Second</u>	<u>Yes</u>	<u>No</u>	<u>Abstain</u>	<u>Absent</u>
Councilmember Alstede	_____	_____	_____	_____	_____	✓
Councilmember Calabrese	_____	_____	✓	_____	_____	_____
Councilmember Carluccio	_____	_____	✓	_____	_____	_____
Councilmember Cogger	✓	_____	✓	_____	_____	_____
Councilmember Kovach	_____	✓	✓	_____	_____	_____
Councilmember Letts	_____	_____	✓	_____	_____	_____
Councilmember Pasquarelli	_____	_____	✓	_____	_____	_____
Councilmember Peterson	_____	_____	_____	_____	_____	✓
Councilmember Schrier	_____	_____	✓	_____	_____	_____
Councilmember Vetrano	_____	_____	_____	_____	_____	✓
Councilmember Way	_____	_____	✓	_____	_____	_____
Councilmember Whitenack	_____	_____	_____	_____	_____	✓
Councilmember Weingart	_____	_____	✓	_____	_____	_____

RESOLUTION 2009-16
NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
APPROVAL OF INITIAL ASSESSMENT GRANT
TO MILFORD BOROUGH

WHEREAS, the Highlands Water Protection and Planning Act (Highlands Act) has created a public body corporate and politic with corporate succession known as the Highlands Water Protection and Planning Council (Highlands Council); and

WHEREAS, the Highlands Act authorizes the Highlands Council to enter into any and all agreements or contracts, execute any and all instruments to carry out any power, duty or responsibility under the Highlands Act; and

WHEREAS, Section 18 of the Highlands Act authorizes the Highlands Council to make available grants and other financial and technical assistance to municipalities and counties in furtherance of the Regional Master Plan; and

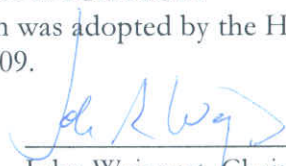
WHEREAS, on February 28, 2008 the Highlands Council by Resolution 2008-4 authorized the initiation of a grant application process for Initial Assessment grants to municipalities and counties within the Highlands Region in furtherance of Plan Conformance, in an annual amount not to exceed \$1,500,000; and

WHEREAS, the Highlands Council staff has reviewed the following grant application and recommends approval by the Highlands Council;

NOW, THEREFORE, BE IT RESOLVED by the Highlands Council that the Executive Director, or her designee, is hereby authorized to enter into a grant agreement with Milford Borough for an Initial Assessment Grant in an amount not to exceed \$15,000, provided that the Executive Director may authorize additional amounts under this agreement pursuant to her authority under the Highlands Council Bylaws.

CERTIFICATION

I hereby certify that the foregoing Resolution was adopted by the Highlands Council at its regular meeting held on the 26th day of February, 2009.



John Weingart, Chairman

RESOLUTION 2009-16
NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
APPROVAL OF INITIAL ASSESSMENT GRANT
TO MILFORD BOROUGH

<u>Vote on the Approval of this Resolution</u>	<u>Motion</u>	<u>Second</u>	<u>Yes</u>	<u>No</u>	<u>Abstain</u>	<u>Absent</u>
Councilmember Alstede						✓
Councilmember Calabrese			✓			
Councilmember Carluccio			✓			
Councilmember Cogger	✓		✓			
Councilmember Kovach		✓	✓			
Councilmember Letts			✓			
Councilmember Pasquarelli			✓			
Councilmember Peterson						✓
Councilmember Schrier			✓			
Councilmember Vetrano						✓
Councilmember Way			✓			
Councilmember Whitenack						✓
Councilmember Weingart			✓			

RESOLUTION 2009-17
NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
APPROVAL OF INITIAL ASSESSMENT GRANT
TO OXFORD TOWNSHIP

WHEREAS, the Highlands Water Protection and Planning Act (Highlands Act) has created a public body corporate and politic with corporate succession known as the Highlands Water Protection and Planning Council (Highlands Council); and

WHEREAS, the Highlands Act authorizes the Highlands Council to enter into any and all agreements or contracts, execute any and all instruments to carry out any power, duty or responsibility under the Highlands Act; and

WHEREAS, Section 18 of the Highlands Act authorizes the Highlands Council to make available grants and other financial and technical assistance to municipalities and counties in furtherance of the Regional Master Plan; and

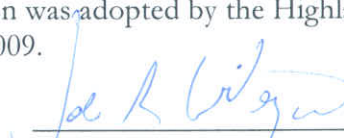
WHEREAS, on February 28, 2008 the Highlands Council by Resolution 2008-4 authorized the initiation of a grant application process for Initial Assessment grants to municipalities and counties within the Highlands Region in furtherance of Plan Conformance, in an annual amount not to exceed \$1,500,000; and

WHEREAS, the Highlands Council staff has reviewed the following grant application and recommends approval by the Highlands Council;

NOW, THEREFORE, BE IT RESOLVED by the Highlands Council that the Executive Director, or her designee, is hereby authorized to enter into a grant agreement with Oxford Township for an Initial Assessment Grant in an amount not to exceed \$15,000, provided that the Executive Director may authorize additional amounts under this agreement pursuant to her authority under the Highlands Council Bylaws.

CERTIFICATION

I hereby certify that the foregoing Resolution was adopted by the Highlands Council at its regular meeting held on the 26th day of February, 2009.



John Weingart, Chairman

RESOLUTION 2009-17
NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
APPROVAL OF INITIAL ASSESSMENT GRANT
TO OXFORD TOWNSHIP

<u>Vote on the Approval of this Resolution</u>	<u>Motion</u>	<u>Second</u>	<u>Yes</u>	<u>No</u>	<u>Abstain</u>	<u>Absent</u>
Councilmember Alstede	_____	_____	_____	_____	_____	✓
Councilmember Calabrese	_____	_____	✓	_____	_____	_____
Councilmember Carluccio	_____	_____	✓	_____	_____	_____
Councilmember Cogger	✓	_____	✓	_____	_____	_____
Councilmember Kovach	_____	✓	✓	_____	_____	_____
Councilmember Letts	_____	_____	✓	_____	_____	_____
Councilmember Pasquarelli	_____	_____	✓	_____	_____	_____
Councilmember Peterson	_____	_____	_____	_____	_____	✓
Councilmember Schrier	_____	_____	✓	_____	_____	_____
Councilmember Vetrano	_____	_____	_____	_____	_____	✓
Councilmember Way	_____	_____	✓	_____	_____	_____
Councilmember Whitenack	_____	_____	_____	_____	_____	✓
Councilmember Weingart	_____	_____	✓	_____	_____	_____

RESOLUTION 2009-18
NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
APPROVAL OF INITIAL ASSESSMENT GRANT
TO PEQUANNOCK TOWNSHIP

WHEREAS, the Highlands Water Protection and Planning Act (Highlands Act) has created a public body corporate and politic with corporate succession known as the Highlands Water Protection and Planning Council (Highlands Council); and

WHEREAS, the Highlands Act authorizes the Highlands Council to enter into any and all agreements or contracts, execute any and all instruments to carry out any power, duty or responsibility under the Highlands Act; and

WHEREAS, Section 18 of the Highlands Act authorizes the Highlands Council to make available grants and other financial and technical assistance to municipalities and counties in furtherance of the Regional Master Plan; and

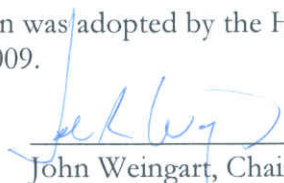
WHEREAS, on February 28, 2008 the Highlands Council by Resolution 2008-4 authorized the initiation of a grant application process for Initial Assessment grants to municipalities and counties within the Highlands Region in furtherance of Plan Conformance, in an annual amount not to exceed \$1,500,000; and

WHEREAS, the Highlands Council staff has reviewed the following grant application and recommends approval by the Highlands Council;

NOW, THEREFORE, BE IT RESOLVED by the Highlands Council that the Executive Director, or her designee, is hereby authorized to enter into a grant agreement with Pequannock Township for an Initial Assessment Grant in an amount not to exceed \$15,000, provided that the Executive Director may authorize additional amounts under this agreement pursuant to her authority under the Highlands Council Bylaws.

CERTIFICATION

I hereby certify that the foregoing Resolution was adopted by the Highlands Council at its regular meeting held on the 26th day of February, 2009.



John Weingart, Chairman

RESOLUTION 2009-18
NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
APPROVAL OF INITIAL ASSESSMENT GRANT
TO PEQUANNOCK TOWNSHIP

<u>Vote on the Approval of this Resolution</u>	<u>Motion</u>	<u>Second</u>	<u>Yes</u>	<u>No</u>	<u>Abstain</u>	<u>Absent</u>
Councilmember Alstede						✓
Councilmember Calabrese			✓			
Councilmember Carluccio			✓			
Councilmember Cogger	✓		✓			
Councilmember Kovach		✓	✓			
Councilmember Letts			✓			
Councilmember Pasquarelli			✓			
Councilmember Peterson						✓
Councilmember Schrier			✓			
Councilmember Vetrano						✓
Councilmember Way			✓			
Councilmember Whitenack						✓
Councilmember Weingart			✓			

RESOLUTION 2009-19
NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
APPROVAL OF INITIAL ASSESSMENT GRANT
TO PHILLIPSBURG TOWN

WHEREAS, the Highlands Water Protection and Planning Act (Highlands Act) has created a public body corporate and politic with corporate succession known as the Highlands Water Protection and Planning Council (Highlands Council); and

WHEREAS, the Highlands Act authorizes the Highlands Council to enter into any and all agreements or contracts, execute any and all instruments to carry out any power, duty or responsibility under the Highlands Act; and

WHEREAS, Section 18 of the Highlands Act authorizes the Highlands Council to make available grants and other financial and technical assistance to municipalities and counties in furtherance of the Regional Master Plan; and

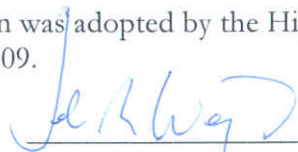
WHEREAS, on February 28, 2008 the Highlands Council by Resolution 2008-4 authorized the initiation of a grant application process for Initial Assessment grants to municipalities and counties within the Highlands Region in furtherance of Plan Conformance, in an annual amount not to exceed \$1,500,000; and

WHEREAS, the Highlands Council staff has reviewed the following grant application and recommends approval by the Highlands Council;

NOW, THEREFORE, BE IT RESOLVED by the Highlands Council that the Executive Director, or her designee, is hereby authorized to enter into a grant agreement with Phillipsburg Town for an Initial Assessment Grant in an amount not to exceed \$15,000, provided that the Executive Director may authorize additional amounts under this agreement pursuant to her authority under the Highlands Council Bylaws.

CERTIFICATION

I hereby certify that the foregoing Resolution was adopted by the Highlands Council at its regular meeting held on the 26th day of February, 2009.



John Weingart, Chairman

RESOLUTION 2009-19
NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
APPROVAL OF INITIAL ASSESSMENT GRANT
TO PHILLIPSBURG TOWN

<u>Vote on the Approval of this Resolution</u>	<u>Motion</u>	<u>Second</u>	<u>Yes</u>	<u>No</u>	<u>Abstain</u>	<u>Absent</u>
Councilmember Alstede	_____	_____	_____	_____	_____	✓
Councilmember Calabrese	_____	_____	✓	_____	_____	_____
Councilmember Carluccio	_____	_____	✓	_____	_____	_____
Councilmember Cogger	✓	_____	✓	_____	_____	_____
Councilmember Kovach	_____	✓	✓	_____	_____	_____
Councilmember Letts	_____	_____	✓	_____	_____	_____
Councilmember Pasquarelli	_____	_____	✓	_____	_____	_____
Councilmember Peterson	_____	_____	_____	_____	_____	✓
Councilmember Schrier	_____	_____	✓	_____	_____	_____
Councilmember Vetrano	_____	_____	_____	_____	_____	✓
Councilmember Way	_____	_____	✓	_____	_____	_____
Councilmember Whitenack	_____	_____	_____	_____	_____	✓
Councilmember Weingart	_____	_____	✓	_____	_____	_____

RESOLUTION 2009-20
NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
APPROVAL OF INITIAL ASSESSMENT GRANT
TO RIVERDALE BOROUGH

WHEREAS, the Highlands Water Protection and Planning Act (Highlands Act) has created a public body corporate and politic with corporate succession known as the Highlands Water Protection and Planning Council (Highlands Council); and

WHEREAS, the Highlands Act authorizes the Highlands Council to enter into any and all agreements or contracts, execute any and all instruments to carry out any power, duty or responsibility under the Highlands Act; and

WHEREAS, Section 18 of the Highlands Act authorizes the Highlands Council to make available grants and other financial and technical assistance to municipalities and counties in furtherance of the Regional Master Plan; and

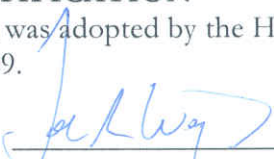
WHEREAS, on February 28, 2008 the Highlands Council by Resolution 2008-4 authorized the initiation of a grant application process for Initial Assessment grants to municipalities and counties within the Highlands Region in furtherance of Plan Conformance, in an annual amount not to exceed \$1,500,000; and

WHEREAS, the Highlands Council staff has reviewed the following grant application and recommends approval by the Highlands Council;

NOW, THEREFORE, BE IT RESOLVED by the Highlands Council that the Executive Director, or her designee, is hereby authorized to enter into a grant agreement with Riverdale Borough for an Initial Assessment Grant in an amount not to exceed \$15,000, provided that the Executive Director may authorize additional amounts under this agreement pursuant to her authority under the Highlands Council Bylaws.

CERTIFICATION

I hereby certify that the foregoing Resolution was adopted by the Highlands Council at its regular meeting held on the 26th day of February, 2009.



John Weingart, Chairman

RESOLUTION 2009-20
NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
APPROVAL OF INITIAL ASSESSMENT GRANT
TO RIVERDALE BOROUGH

<u>Vote on the Approval of this Resolution</u>	<u>Motion</u>	<u>Second</u>	<u>Yes</u>	<u>No</u>	<u>Abstain</u>	<u>Absent</u>
Councilmember Alstede	_____	_____	_____	_____	_____	✓
Councilmember Calabrese	_____	_____	✓	_____	_____	_____
Councilmember Carluccio	_____	_____	✓	_____	_____	_____
Councilmember Cogger	✓	_____	✓	_____	_____	_____
Councilmember Kovach	_____	✓	✓	_____	_____	_____
Councilmember Letts	_____	_____	✓	_____	_____	_____
Councilmember Pasquarelli	_____	_____	✓	_____	_____	_____
Councilmember Peterson	_____	_____	_____	_____	_____	✓
Councilmember Schrier	_____	_____	✓	_____	_____	_____
Councilmember Vetrano	_____	_____	_____	_____	_____	✓
Councilmember Way	_____	_____	✓	_____	_____	_____
Councilmember Whitenack	_____	_____	_____	_____	_____	✓
Councilmember Weingart	_____	_____	✓	_____	_____	_____

RESOLUTION 2009-21
NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
APPROVAL OF INITIAL ASSESSMENT GRANT
TO ROXBURY TOWNSHIP

WHEREAS, the Highlands Water Protection and Planning Act (Highlands Act) has created a public body corporate and politic with corporate succession known as the Highlands Water Protection and Planning Council (Highlands Council); and

WHEREAS, the Highlands Act authorizes the Highlands Council to enter into any and all agreements or contracts, execute any and all instruments to carry out any power, duty or responsibility under the Highlands Act; and

WHEREAS, Section 18 of the Highlands Act authorizes the Highlands Council to make available grants and other financial and technical assistance to municipalities and counties in furtherance of the Regional Master Plan; and

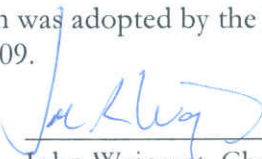
WHEREAS, on February 28, 2008 the Highlands Council by Resolution 2008-4 authorized the initiation of a grant application process for Initial Assessment grants to municipalities and counties within the Highlands Region in furtherance of Plan Conformance, in an annual amount not to exceed \$1,500,000; and

WHEREAS, the Highlands Council staff has reviewed the following grant application and recommends approval by the Highlands Council;

NOW, THEREFORE, BE IT RESOLVED by the Highlands Council that the Executive Director, or her designee, is hereby authorized to enter into a grant agreement with Roxbury Township for an Initial Assessment Grant in an amount not to exceed \$15,000, provided that the Executive Director may authorize additional amounts under this agreement pursuant to her authority under the Highlands Council Bylaws.

CERTIFICATION

I hereby certify that the foregoing Resolution was adopted by the Highlands Council at its regular meeting held on the 26th day of February, 2009.



John Weingart, Chairman

RESOLUTION 2009-21
NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
APPROVAL OF INITIAL ASSESSMENT GRANT
TO ROXBURY TOWNSHIP

<u>Vote on the Approval of this Resolution</u>	<u>Motion</u>	<u>Second</u>	<u>Yes</u>	<u>No</u>	<u>Abstain</u>	<u>Absent</u>
Councilmember Alstede	_____	_____	_____	_____	_____	✓
Councilmember Calabrese	_____	_____	✓	_____	_____	_____
Councilmember Carluccio	_____	_____	✓	_____	_____	_____
Councilmember Cogger	✓	_____	✓	_____	_____	_____
Councilmember Kovach	_____	✓	✓	_____	_____	_____
Councilmember Letts	_____	_____	✓	_____	_____	_____
Councilmember Pasquarelli	_____	_____	✓	_____	_____	_____
Councilmember Peterson	_____	_____	_____	_____	_____	✓
Councilmember Schrier	_____	_____	✓	_____	_____	_____
Councilmember Vetrano	_____	_____	_____	_____	_____	✓
Councilmember Way	_____	_____	✓	_____	_____	_____
Councilmember Whitenack	_____	_____	_____	_____	_____	✓
Councilmember Weingart	_____	_____	✓	_____	_____	_____

RESOLUTION 2009-22
NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
APPROVAL OF INITIAL ASSESSMENT GRANT
TO WHARTON BOROUGH

WHEREAS, the Highlands Water Protection and Planning Act (Highlands Act) has created a public body corporate and politic with corporate succession known as the Highlands Water Protection and Planning Council (Highlands Council); and

WHEREAS, the Highlands Act authorizes the Highlands Council to enter into any and all agreements or contracts, execute any and all instruments to carry out any power, duty or responsibility under the Highlands Act; and

WHEREAS, Section 18 of the Highlands Act authorizes the Highlands Council to make available grants and other financial and technical assistance to municipalities and counties in furtherance of the Regional Master Plan; and

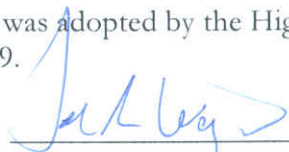
WHEREAS, on February 28, 2008 the Highlands Council by Resolution 2008-4 authorized the initiation of a grant application process for Initial Assessment grants to municipalities and counties within the Highlands Region in furtherance of Plan Conformance, in an annual amount not to exceed \$1,500,000; and

WHEREAS, the Highlands Council staff has reviewed the following grant application and recommends approval by the Highlands Council;

NOW, THEREFORE, BE IT RESOLVED by the Highlands Council that the Executive Director, or her designee, is hereby authorized to enter into a grant agreement with Wharton Borough for an Initial Assessment Grant in an amount not to exceed \$15,000, provided that the Executive Director may authorize additional amounts under this agreement pursuant to her authority under the Highlands Council Bylaws.

CERTIFICATION

I hereby certify that the foregoing Resolution was adopted by the Highlands Council at its regular meeting held on the 26th day of February, 2009.



John Weingart, Chairman

RESOLUTION 2009-22
NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
APPROVAL OF INITIAL ASSESSMENT GRANT
TO WHARTON BOROUGH

<u>Vote on the Approval of this Resolution</u>	<u>Motion</u>	<u>Second</u>	<u>Yes</u>	<u>No</u>	<u>Abstain</u>	<u>Absent</u>
Councilmember Alstede						✓
Councilmember Calabrese			✓			
Councilmember Carluccio			✓			
Councilmember Cogger	✓		✓			
Councilmember Kovach		✓	✓			
Councilmember Letts			✓			
Councilmember Pasquarelli			✓			
Councilmember Peterson						✓
Councilmember Schrier			✓			
Councilmember Vetrano						✓
Councilmember Way			✓			
Councilmember Whitenack						✓
Councilmember Weingart			✓			

RESOLUTION 2009-23
NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
APPROVAL OF INITIAL ASSESSMENT GRANT
TO HUNTERDON COUNTY

WHEREAS, the Highlands Water Protection and Planning Act (Highlands Act) has created a public body corporate and politic with corporate succession known as the Highlands Water Protection and Planning Council (Highlands Council); and

WHEREAS, the Highlands Act authorizes the Highlands Council to enter into any and all agreements or contracts, execute any and all instruments to carry out any power, duty or responsibility under the Highlands Act; and

WHEREAS, Section 18 of the Highlands Act authorizes the Highlands Council to make available grants and other financial and technical assistance to municipalities and counties in furtherance of the Regional Master Plan; and

WHEREAS, on February 28, 2008 the Highlands Council by Resolution 2008-4 authorized the initiation of a grant application process for Initial Assessment grants to municipalities and counties within the Highlands Region in furtherance of Plan Conformance, in an annual amount not to exceed \$1,500,000; and

WHEREAS, the Highlands Council staff has reviewed the following grant application and recommends approval by the Highlands Council;

NOW, THEREFORE, BE IT RESOLVED by the Highlands Council that the Executive Director, or her designee, is hereby authorized to enter into a grant agreement with Hunterdon County for an Initial Assessment Grant in an amount not to exceed \$15,000, provided that the Executive Director may authorize additional amounts under this agreement pursuant to her authority under the Highlands Council Bylaws.

CERTIFICATION

I hereby certify that the foregoing Resolution was adopted by the Highlands Council at its regular meeting held on the 26th day of February, 2009.



John Weingart, Chairman

RESOLUTION 2009-23
NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
APPROVAL OF INITIAL ASSESSMENT GRANT
TO HUNTERDON COUNTY

<u>Vote on the Approval of this Resolution</u>	<u>Motion</u>	<u>Second</u>	<u>Yes</u>	<u>No</u>	<u>Abstain</u>	<u>Absent</u>
Councilmember Alstede						✓
Councilmember Calabrese			✓			
Councilmember Carluccio			✓			
Councilmember Cogger	✓		✓			
Councilmember Kovach		✓	✓			
Councilmember Letts			✓			
Councilmember Pasquarelli			✓			
Councilmember Peterson						✓
Councilmember Schrier			✓			
Councilmember Vetrano						✓
Councilmember Way			✓			
Councilmember Whitenack						✓
Councilmember Weingart			✓			

RESOLUTION 2009-24
NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
APPROVAL OF INITIAL ASSESSMENT GRANT
TO WARREN COUNTY

WHEREAS, the Highlands Water Protection and Planning Act (Highlands Act) has created a public body corporate and politic with corporate succession known as the Highlands Water Protection and Planning Council (Highlands Council); and

WHEREAS, the Highlands Act authorizes the Highlands Council to enter into any and all agreements or contracts, execute any and all instruments to carry out any power, duty or responsibility under the Highlands Act; and

WHEREAS, Section 18 of the Highlands Act authorizes the Highlands Council to make available grants and other financial and technical assistance to municipalities and counties in furtherance of the Regional Master Plan; and

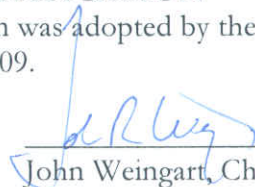
WHEREAS, on February 28, 2008 the Highlands Council by Resolution 2008-4 authorized the initiation of a grant application process for Initial Assessment grants to municipalities and counties within the Highlands Region in furtherance of Plan Conformance, in an annual amount not to exceed \$1,500,000; and

WHEREAS, the Highlands Council staff has reviewed the following grant application and recommends approval by the Highlands Council;

NOW, THEREFORE, BE IT RESOLVED by the Highlands Council that the Executive Director, or her designee, is hereby authorized to enter into a grant agreement with Warren County for an Initial Assessment Grant in an amount not to exceed \$15,000, provided that the Executive Director may authorize additional amounts under this agreement pursuant to her authority under the Highlands Council Bylaws.

CERTIFICATION

I hereby certify that the foregoing Resolution was adopted by the Highlands Council at its regular meeting held on the 26th day of February, 2009.



John Weingart, Chairman

RESOLUTION 2009-24
NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
APPROVAL OF INITIAL ASSESSMENT GRANT
TO WARREN COUNTY

<u>Vote on the Approval of this Resolution</u>	<u>Motion</u>	<u>Second</u>	<u>Yes</u>	<u>No</u>	<u>Abstain</u>	<u>Absent</u>
Councilmember Alstede	_____	_____	_____	_____	_____	✓
Councilmember Calabrese	_____	_____	✓	_____	_____	_____
Councilmember Carluccio	_____	_____	✓	_____	_____	_____
Councilmember Cogger	✓	_____	✓	_____	_____	_____
Councilmember Kovach	_____	✓	✓	_____	_____	_____
Councilmember Letts	_____	_____	✓	_____	_____	_____
Councilmember Pasquarelli	_____	_____	✓	_____	_____	_____
Councilmember Peterson	_____	_____	_____	_____	_____	✓
Councilmember Schrier	_____	_____	✓	_____	_____	_____
Councilmember Vetrano	_____	_____	_____	_____	_____	✓
Councilmember Way	_____	_____	✓	_____	_____	_____
Councilmember Whitenack	_____	_____	_____	_____	_____	✓
Councilmember Weingart	_____	_____	✓	_____	_____	_____

RESOLUTION 2009-25
NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
APPROVAL OF CONTRACT FOR CRITICAL HABITAT CONSERVATION AND
MANAGEMENT CONSULTANT

WHEREAS, the Highlands Water Protection and Planning Act (Highlands Act) has created a public body corporate and politic with corporate succession known as the Highlands Water Protection and Planning Council (Highlands Council); and

WHEREAS, Section 6.g of the Highlands Act authorizes the Highlands Council to enter into any and all agreements or contracts to effectuate the purposes of the Highlands Act; and

WHEREAS, on July 17, 2008, the Highlands Council adopted Resolution 2008-27 thereby adopting the Highlands Regional Master Plan (RMP); and

WHEREAS, the RMP includes goals, policies, and objectives; specifically Policy 1F5 establishing a Critical Habitat Conservation and Management Program through a Critical Habitat Conservation and Management Plan; and

WHEREAS, to support the Highlands Council in the development of Critical Habitat Conservation and Management Program and Plan, the Highlands Council prepared a Request for Qualifications (RFQ), dated November 6, 2008, seeking the qualifications of firms to advise and assist the Highlands Council; and

WHEREAS, seven firms submitted responses and qualifications prior to the deadline of December 5, 2008; and

WHEREAS, the Highlands Council staff evaluated the qualifications of the firms and identified the top three qualifying firms based on work experience and professional qualifications; and

WHEREAS, the Highlands Council prepared a Request for Proposal (RFP), dated January 16, 2009, and sought a detailed proposal from the top three qualifying firms that responded to the RFQ; and

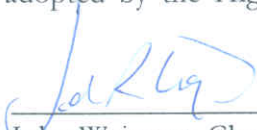
WHEREAS, the firms submitted responses and proposals prior to the deadline of February 6, 2009; and

WHEREAS, the Highlands Council staff evaluated the qualifications and proposals of the applicants and recommended that Biohabitats, Inc. (Biohabitats) is best suited to meet the needs articulated by the Highlands Council's RFP and further recommends that the Highlands Council authorize the Executive Director to enter a contract with Biohabitats for critical habitat conservation and management consulting services;

NOW, THEREFORE, BE IT RESOLVED by the Highlands Council that the Executive Director, or her designee, is hereby authorized to enter into a contract with Biohabitats for an amount not to exceed \$85,000, provided that the Executive Director may authorize additional amounts under this contract pursuant to her authority under the Highlands Council Bylaws.

CERTIFICATION

I hereby certify that the foregoing Resolution was adopted by the Highlands Council at its regular meeting held on the 26th day of February 26, 2009.



John Weingart, Chairman

Vote on the Approval of this Resolution

	<u>Motion</u>	<u>Second</u>	<u>Yes</u>	<u>No</u>	<u>Abstain</u>	<u>Absent</u>
Councilmember Alstede	_____	_____	_____	_____	_____	✓
Councilmember Calabrese	_____	_____	✓	_____	_____	_____
Councilmember Carluccio	✓	_____	✓	_____	_____	_____
Councilmember Cogger	_____	_____	✓	_____	_____	_____
Councilmember Kovach	_____	✓	✓	_____	_____	_____
Councilmember Letts	_____	_____	✓	_____	_____	_____
Councilmember Pasquarelli	_____	_____	✓	_____	_____	_____
Councilmember Peterson	_____	_____	_____	_____	_____	✓
Councilmember Schrier	_____	_____	✓	_____	_____	_____
Councilmember Vetrano	_____	_____	_____	_____	_____	✓
Councilmember Way	_____	_____	✓	_____	_____	_____
Councilmember Whitenack	_____	_____	_____	_____	_____	✓
Councilmember Weingart	_____	_____	✓	_____	_____	_____

RESOLUTION 2009-26

NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL APPROVAL OF GRANT PROGRAM AND CONTRACT FOR WATER USE AND CONSERVATION MANAGEMENT PLANNING

WHEREAS, on July 17, 2008, the Highlands Council adopted Resolution 2008-27 thereby adopting the Highlands Regional Master Plan (RMP); and

WHEREAS, the RMP includes a goal to protect, restore and enhance water quality and quantity of surface and ground waters (Goal 2B); and

WHEREAS, the RMP includes Objective 2B8c requiring the development of Water Use and Conservation Management Plans through municipal Plan Conformance for all watersheds in order to meet the policies and objectives of Goal 2B; and

WHEREAS, the RMP includes a resource assessment of the water availability of the Highlands subwatersheds (the 14 digit Hydrologic Unit Code or HUC14) and the net water availability has been calculated for all 183 HUC14 subwatersheds of the Highlands Region and 114 are in deficit based on usage data and applicable RMP thresholds; and

WHEREAS, on September 5, 2008, Governor Corzine issued Executive Order 114 ordering the New Jersey Department of Environmental Protection to take appropriate action to ensure that no water allocation permit is issued for any development, and no approval is given to any portion of a Water Quality Management Plan amendment, in the Protection Zone, the Conservation Zone, or the Environmentally-Constrained Sub-Zones, within a HUC14 subwatershed that is in, or anticipated to be in, a deficit of net water availability, as identified by the Highlands Plan, until such time that a Municipal Water Use and Conservation Management Plan, consistent with the policies in the Highlands Plan, has been approved by the Highlands Council and has been fully implemented; and

WHEREAS, in order to address the complexity of subwatershed planning, to develop and implement Water Use and Conservation Management Plans, and to address the mandates of Executive Order 114, the Highlands Council may provide technical and financial assistance to municipalities and counties pursuant to Section 18.b of the Highlands Act using the Highlands Protection Fund; and

WHEREAS, the Highlands Council staff recommends that the Highlands Council create a Water Use and Conservation Management Plan Grants Program in which the Executive Director is authorized to provide technical assistance and to enter into a Grant Agreement with any municipality or county and that the Executive Director be required to report at regular meetings of the Highlands Council all grants approved and the status of this grants program;

WHEREAS, to support the Highlands Council in the development of guidance and pilot projects regarding Water Use and Conservation Management Plans, on October 26, 2008 the Highlands Council prepared a Request for Proposal (RFP) seeking a firm to advise and assist the Highlands Council; and

WHEREAS, several firms submitted responses and qualifications submittals prior to the deadline of December 5, 2008; and

WHEREAS, the Highlands Council staff evaluated the proposals and qualifications of the applicants and recommends that Camp Dresser & McKee, Inc. is best suited to meet the needs articulated by the Highlands Council's RFP and further recommends that the Highlands Council authorize the Executive

RESOLUTION 2009-26
NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
APPROVAL OF GRANT PROGRAM AND CONTRACT FOR WATER USE AND
CONSERVATION MANAGEMENT PLANNING

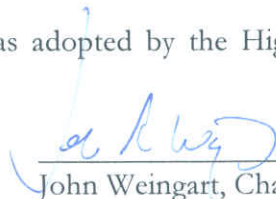
Director to enter a contract with Camp Dresser & McKee, Inc. for the development of Water Use and Conservation Management Plan consulting services;

NOW, THEREFORE, BE IT RESOLVED by the Highlands Council that:

1. The Executive Director, or her designee, is hereby authorized to develop and implement a Water Use and Conservation Management Plan Grants Program in an amount not to exceed \$1 million;
2. The Executive Director, or her designee, is hereby authorized to enter a grant agreement under the Water Use and Conservation Management Plan Grants Program with any Highlands municipality or county;
3. The Executive Director, or her designee, is hereby authorized to enter into a contract with Camp Dresser & McKee, Inc. to develop a Water Use and Conservation Management Plan Pilot Project for ten pilot project areas affecting up to twenty HUC14 subwatersheds in Highlands municipalities or counties for an amount not to exceed \$500,000 of the total amount in the Grants Program, provided that the Executive Director may authorize additional amounts under this contract pursuant to her authority under the Highlands Council Bylaws;
4. The Executive Director, or her designee, is hereby authorized to develop and implement a process for the solicitation and distribution of grants or other support to Highlands municipalities and counties that require assistance in developing their Water Use and Conservation Management Plans regarding areas not included within the ten pilots of the Water Use and Conservation Management Plan Pilot Project, for the remaining amount in the Grants Program, provided that the Executive Director may authorize additional amounts under this agreement pursuant to her authority under the Highlands Council Bylaws; and
5. The Executive Director, or her designee, shall report to the Highlands Council all approved grants and the status of the Water Use and Conservation Management Plan Grants Program at regular meetings of the Highlands Council.

CERTIFICATION

I hereby certify that the foregoing Resolution was adopted by the Highlands Council at its regular meeting held on the 26th day of February, 2009.



John Weingart, Chairman

RESOLUTION 2009-26
NEW JERSEY HIGHLANDS WATER PROTECTION AND PLANNING COUNCIL
APPROVAL OF GRANT PROGRAM AND CONTRACT FOR WATER USE AND
CONSERVATION MANAGEMENT PLANNING

Vote on the Approval of this Resolution

	<u>Motion</u>	<u>Second</u>	<u>Yes</u>	<u>No</u>	<u>Abstain</u>	<u>Absent</u>
Councilmember Alstede						✓
Councilmember Calabrese		✓	✓			
Councilmember Carluccio			✓			
Councilmember Cogger			✓			
Councilmember Kovach			✓			
Councilmember Letts			✓			
Councilmember Pasquarelli				✓		
Councilmember Peterson					✓	
Councilmember Schrier	✓		✓			
Councilmember Vetrano						✓
Councilmember Way			✓			
Councilmember Whitenack						✓
Councilmember Weingart			✓			



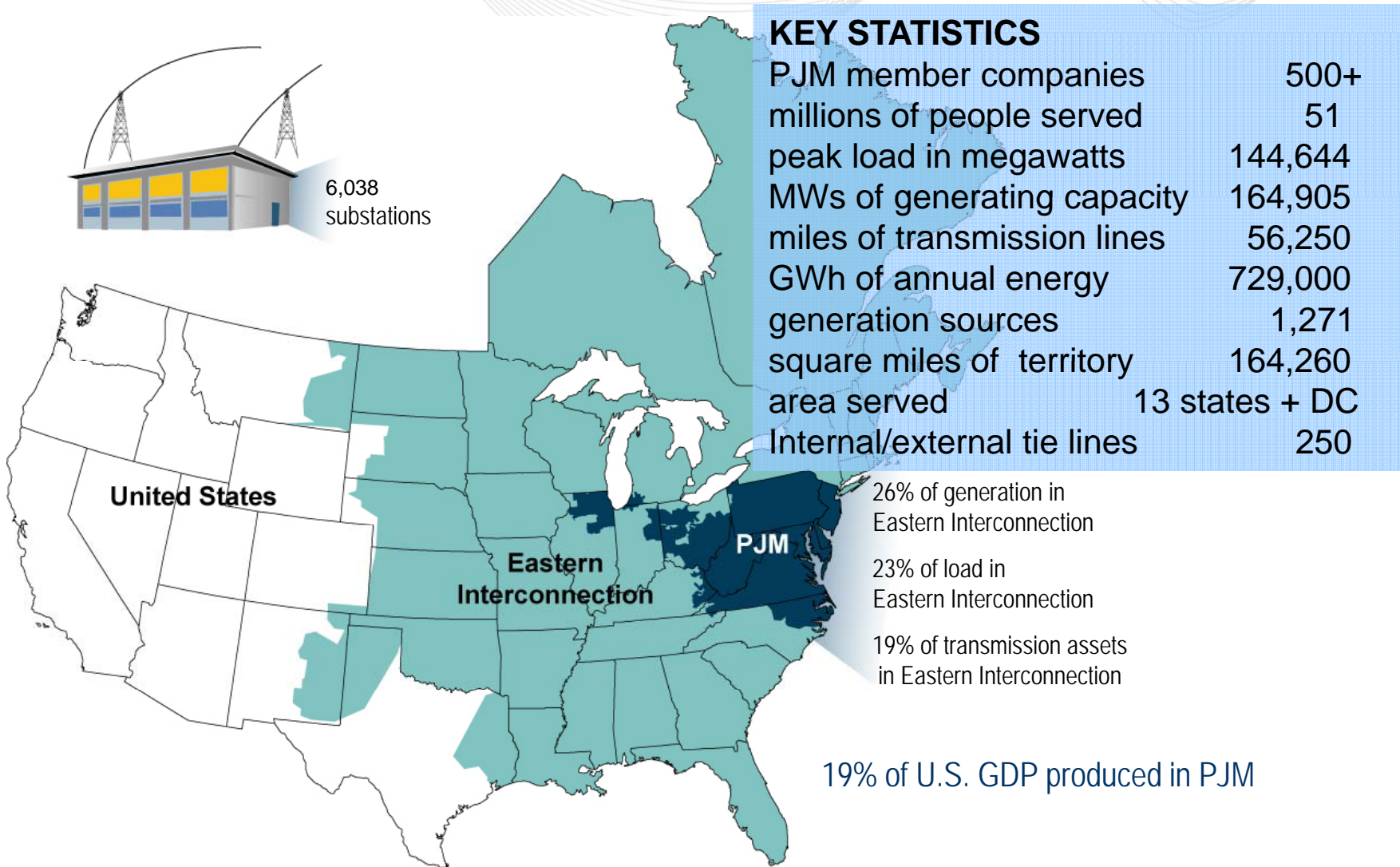
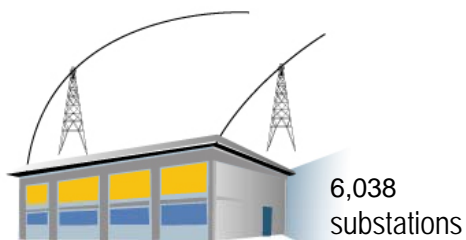
PJM

Regional Transmission Planning Process

Steven R. Herling
Vice President, Planning
PJM Interconnection
February 26, 2009



PJM as Part of the Eastern Interconnection



KEY STATISTICS

PJM member companies	500+
millions of people served	51
peak load in megawatts	144,644
MW of generating capacity	164,905
miles of transmission lines	56,250
GWh of annual energy	729,000
generation sources	1,271
square miles of territory	164,260
area served	13 states + DC
Internal/external tie lines	250

26% of generation in Eastern Interconnection

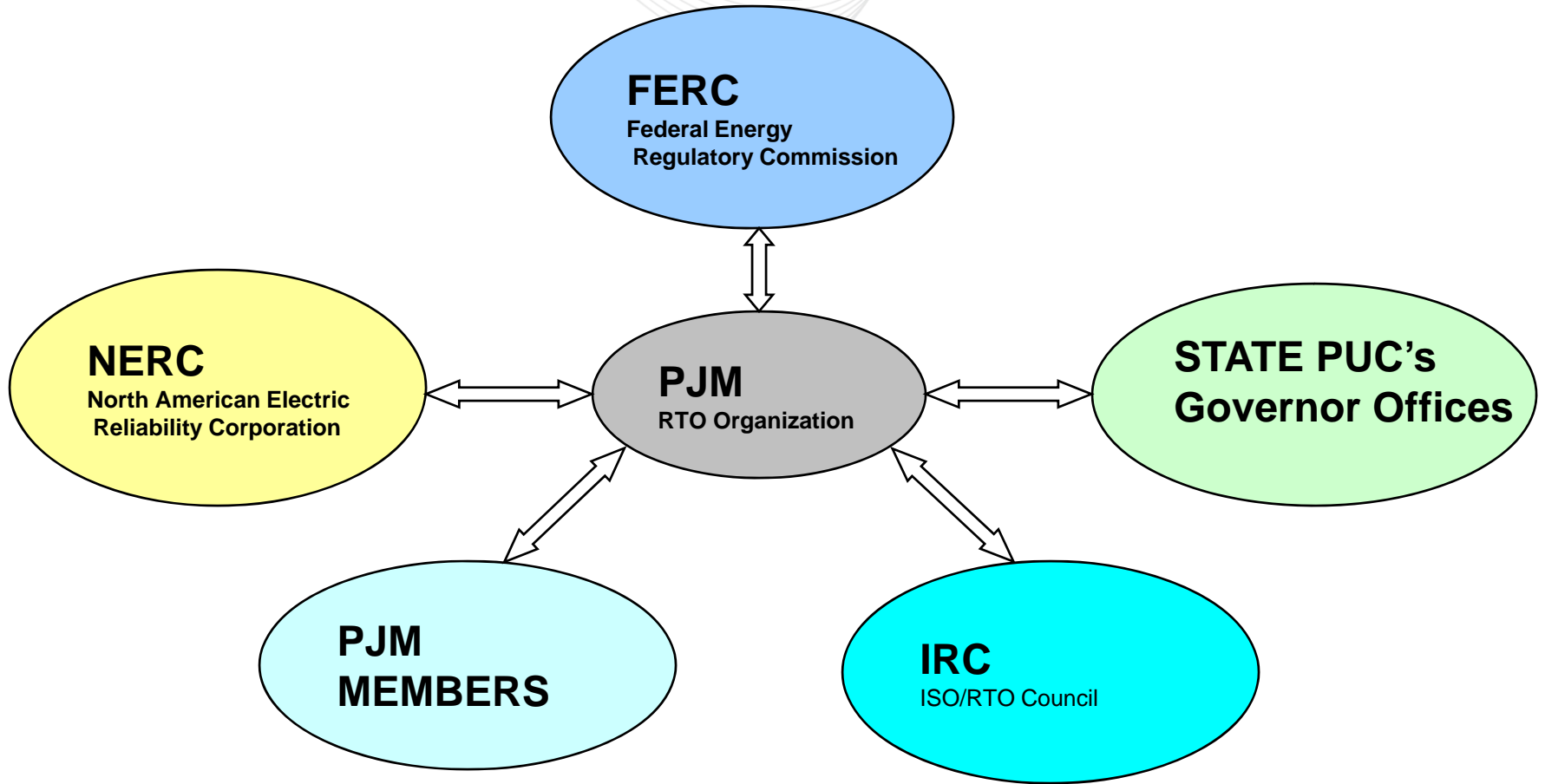
23% of load in Eastern Interconnection

19% of transmission assets in Eastern Interconnection

19% of U.S. GDP produced in PJM



PJM Key Relationships

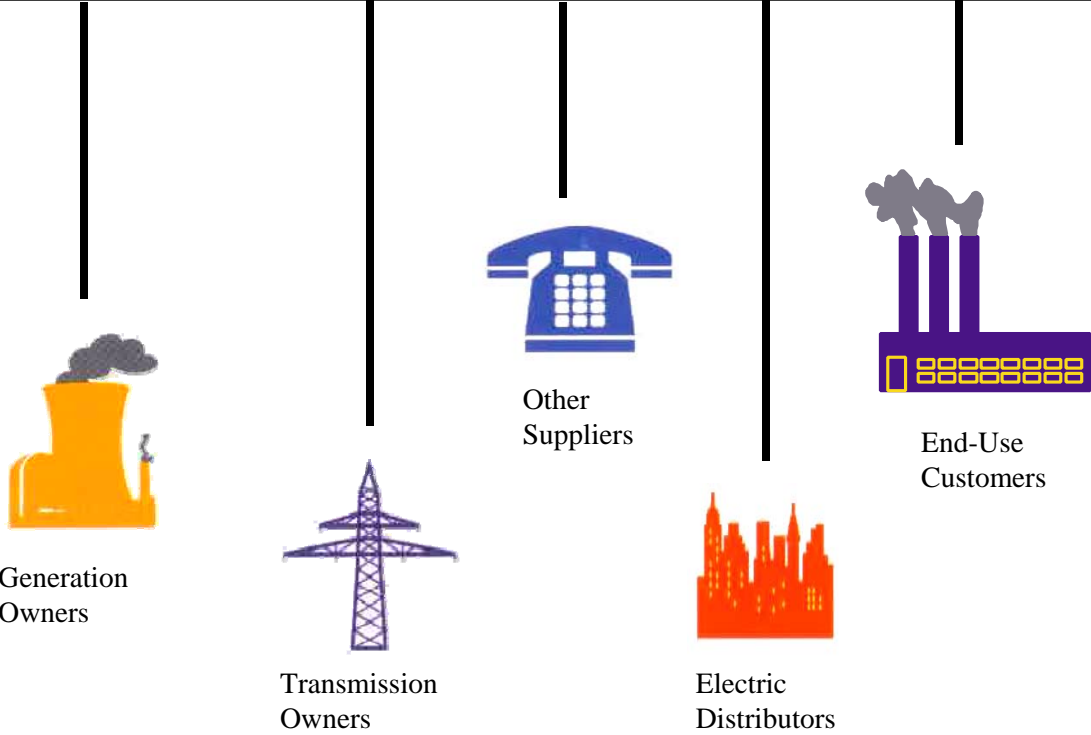




Two Tier Governance

INDEPENDENT BOARD

Members Committee





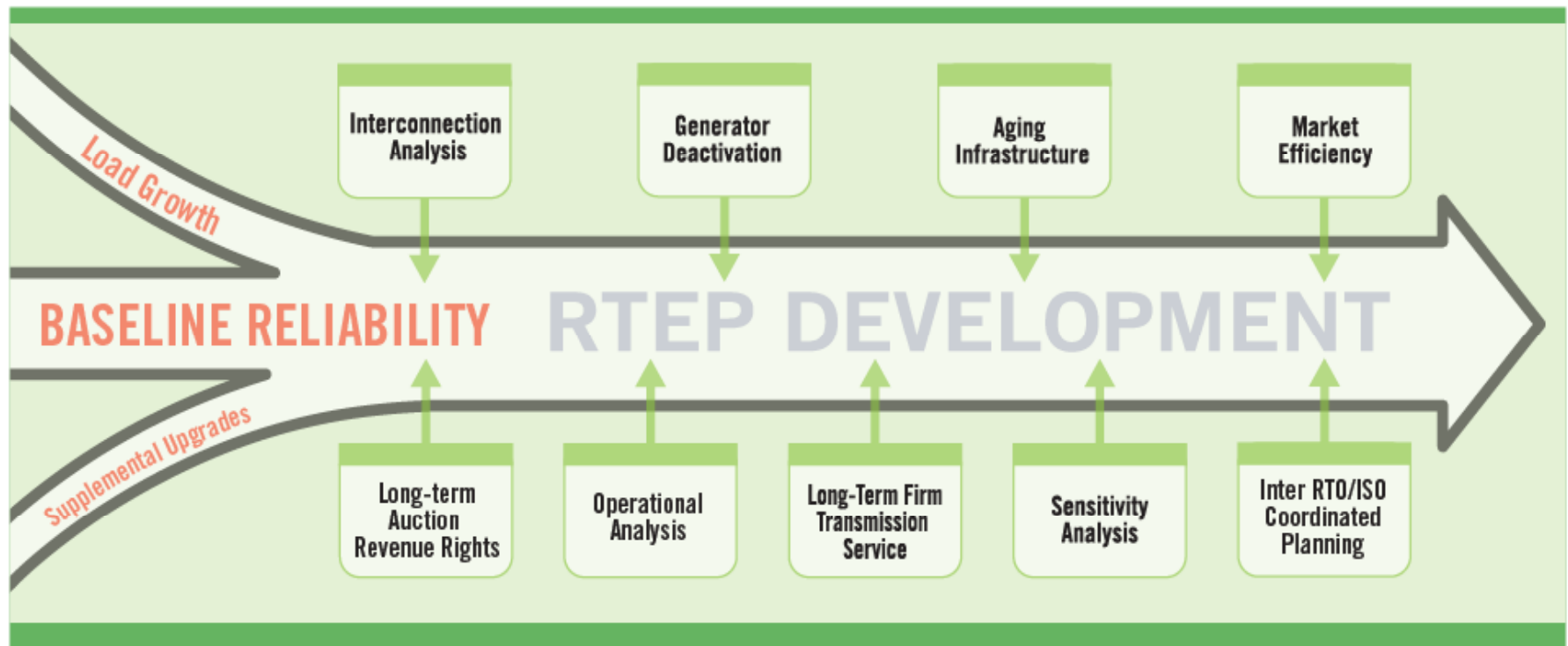
RTEPP Analytical Approach

- ❖ Planning Process Overview
- ❖ Compliance With Reliability Standards
 - North American Electric Reliability Council (NERC) Criteria – ERO
 - ReliabilityFirst Criteria (RFC), SERC – RROs
- ❖ Planning Assumptions
 - Load Forecasting
 - Generation Interconnections
- ❖ Load Deliverability Criteria
- ❖ Generator Deliverability Criteria



RTEP Process Characteristics

- ❖ Ongoing and cyclical
- ❖ Collaborative
- ❖ 15 year planning horizon
- ❖ NERC, RFC compliance
- ❖ Comprehensive and Holistic
- ❖ FERC-approved





NERC Planning Standards

- **R1.** The Planning Authority and Transmission Planner shall each demonstrate through a valid assessment that its portion of the interconnected transmission system is planned such that the Network can be operated to supply projected customer demands and projected Firm Transmission Services, at all demand levels over the range of forecast system demands, under the contingency conditions as defined in Table I. To be valid, the Planning Authority and Transmission Planner assessments shall:
 - **R1.1.** Be made annually.
 - **R1.2.** Be conducted for near-term (years one through five) and longer-term (years six through ten) planning horizons.
 - **R1.3.** Be supported by a current or past study and/or system simulation testing that addresses each of the following categories, showing system performance following Table 1.
 - **R1.3.2.** Cover critical system conditions and study years as deemed appropriate by the responsible entity.



- **R2.** When System simulations indicate an inability of the systems to respond as prescribed in Reliability Standard TPL-002-0_R1, the Planning Authority and Transmission Planner shall each:
 - **R2.1.** Provide a written summary of its plans to achieve the required system performance as described above throughout the planning horizon:
 - **R2.1.1.** Including a schedule for implementation.
 - **R2.1.2.** Including a discussion of expected required in-service dates of facilities.



NERC Planning Standards

Standard	Category	Contingencies
TPL-001	A	All Facilities in Service
TPL-002	B	Fault with Normal Clearing – Loss of all Facilities Associated with a Single Contingency
TPL-003	C1	Bus Section Faults
	C2	Breaker Failure
	C3	Fault with Normal Clearing Followed by Re-Dispatch Followed by a Second Fault with Normal Clearing (n-1-1 Contingency)
	C5	Multiple Circuit Tower Line
TPL-004	D	Extreme Events



Load Forecast Assumptions

- ❖ 50/50 peak load forecast
 - Based on “normal” summer weather
 - 50% probability that forecast will be exceeded due to hotter than normal weather
 - Does not represent emergency conditions
 - Demand response is not activated
- ❖ 90/10 peak load forecast
 - Based on “extreme” summer weather
 - 10% probability that forecast will be exceeded due to hotter than normal weather
 - Represents emergency conditions
 - Demand response is activated
- ❖ Load deliverability models 90/10 load in area under test and 50/50 load elsewhere
- ❖ Generator deliverability and all other criteria tests model 50/50 load

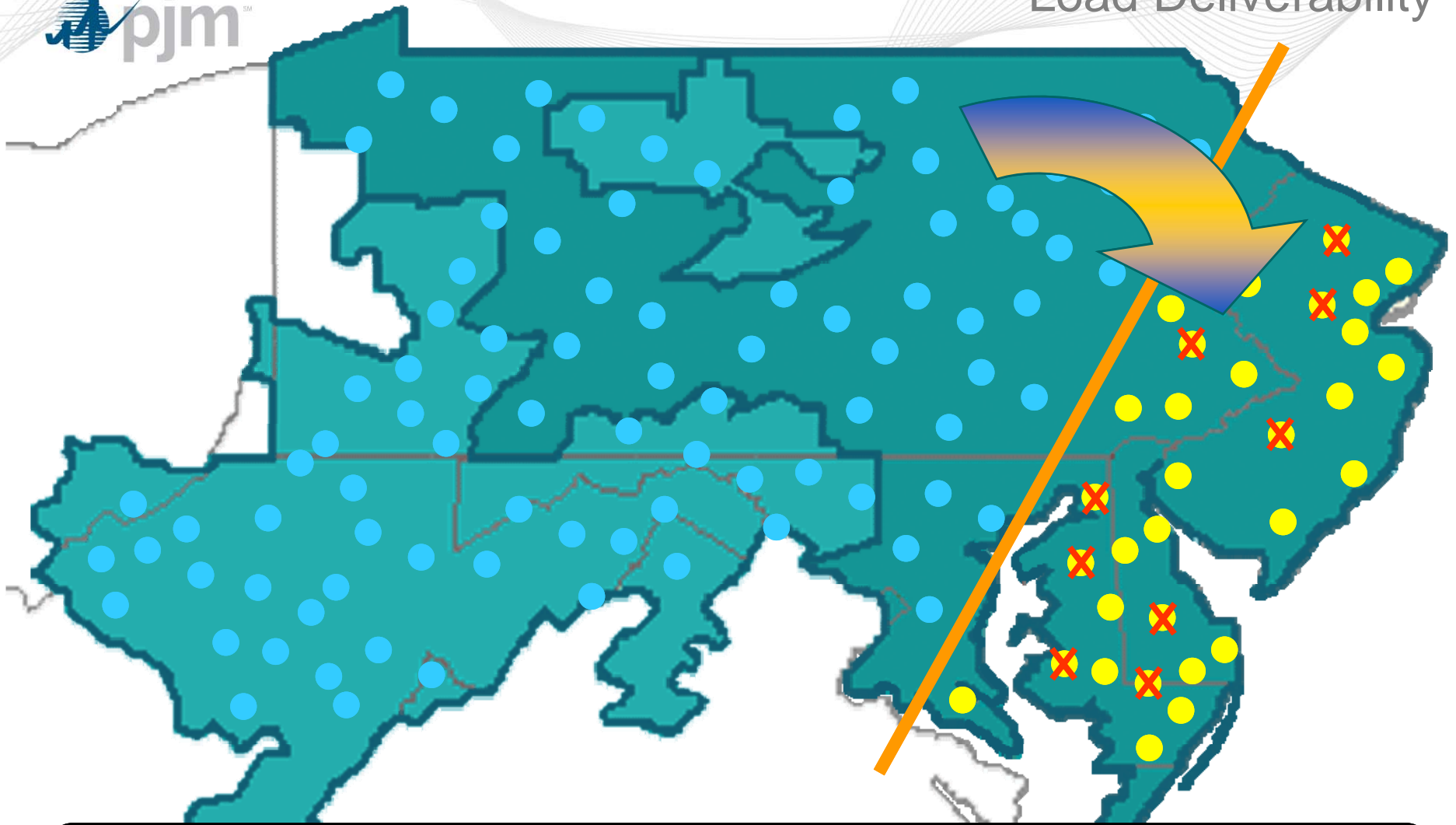


Generation Modeling Assumptions

- ❖ Generation Interconnection Process
 - Study Process
 - Feasibility Study
 - System Impact Study
 - Facilities Study
 - Construction Service Agreement / Interconnection Service Agreement
- ❖ Queue Volumes
 - Withdrawal rates
- ❖ All Interconnection Projects Included in RTEP Studies Upon Execution of Interconnection Service Agreement in Same Manner as In-service Projects
- ❖ Interconnection Projects Having Executed a Facilities Study Agreement are Included in RTEP Analyses to the Extent That Their Interconnection Rights Contribute to the Need For Transmission Upgrades



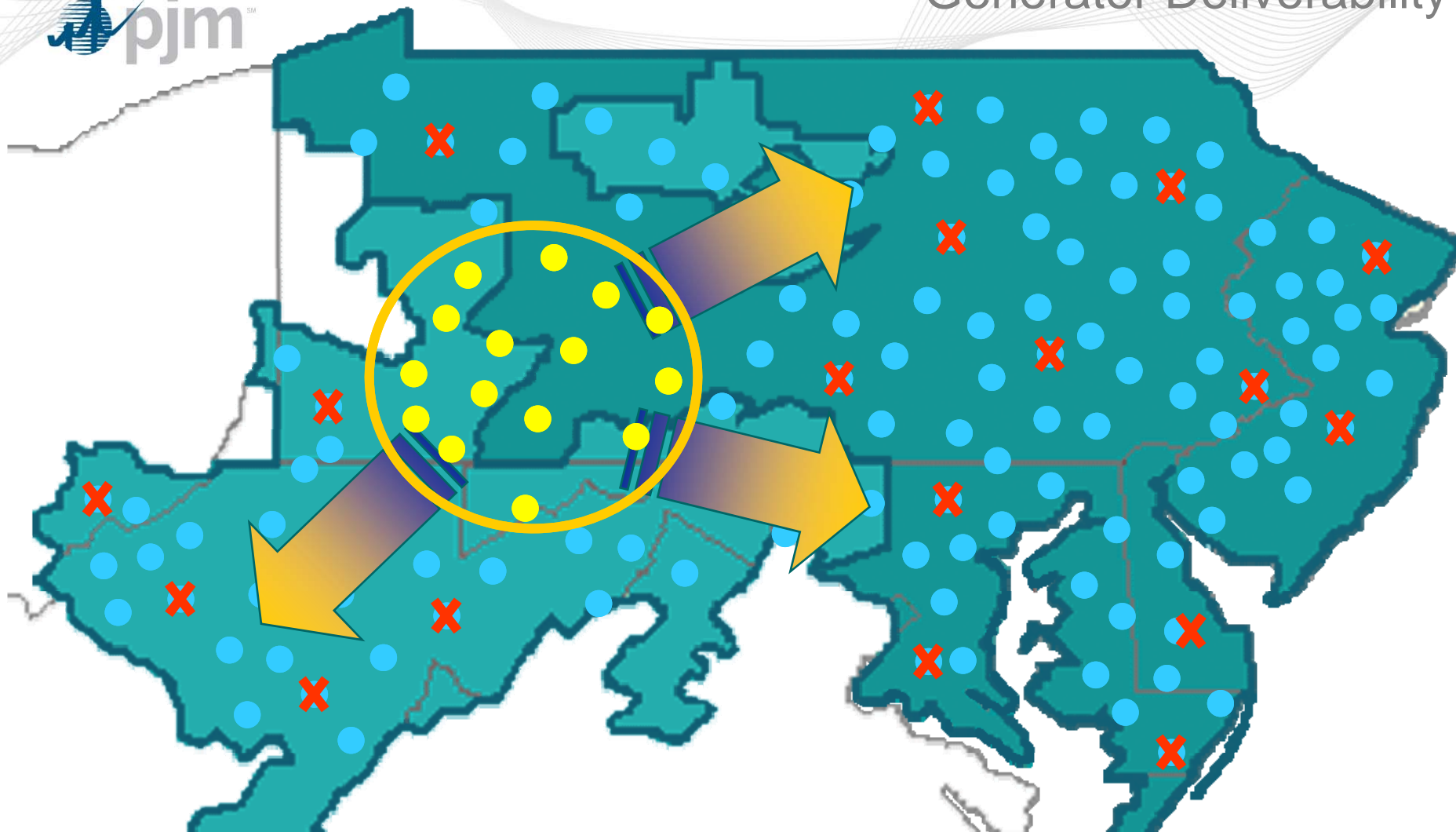
Load Deliverability



Transmission system's capability to deliver energy from aggregate of all capacity resources to an electrical area experiencing a capacity deficiency.



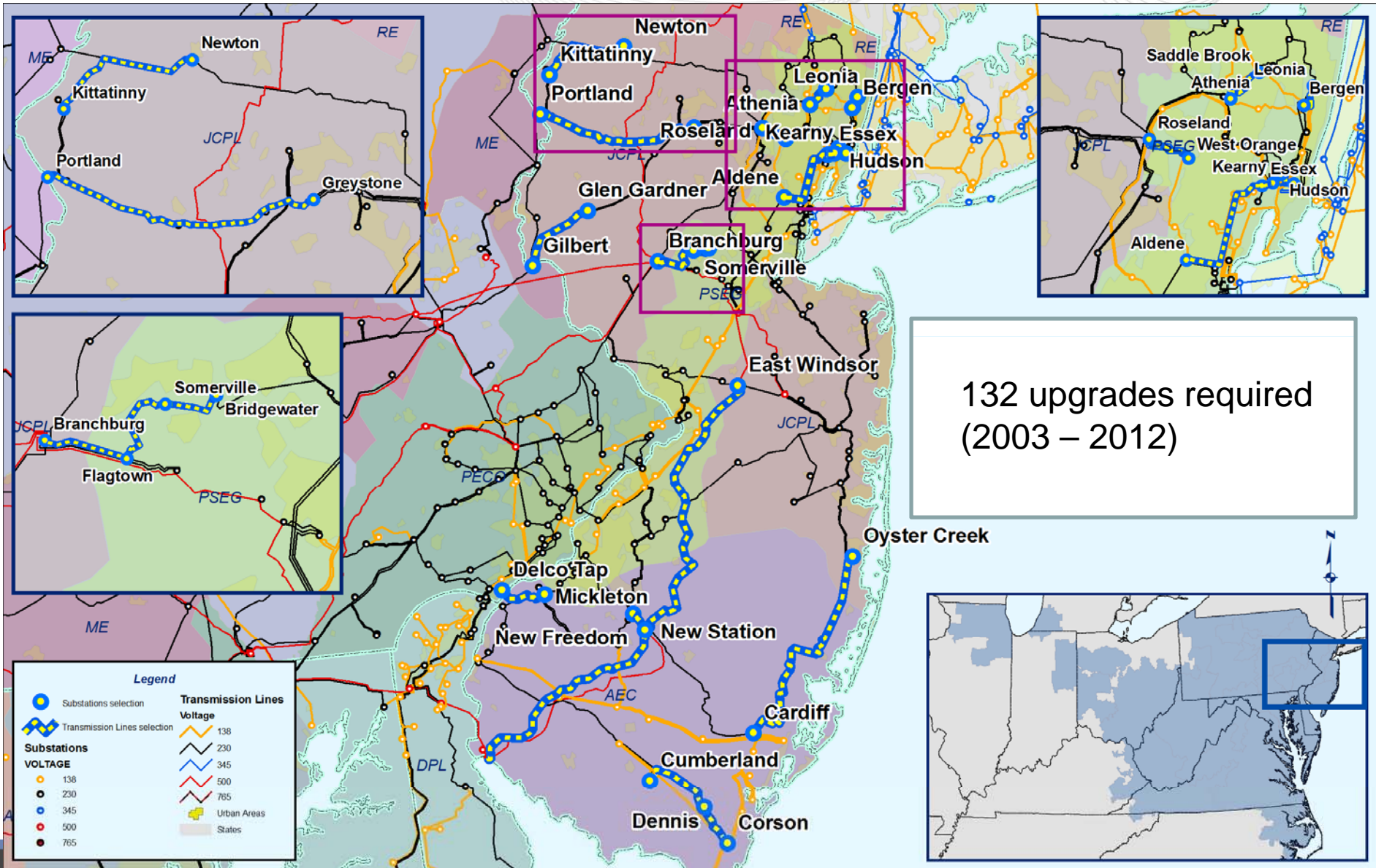
Generator Deliverability



Strength of the transmission system to ensure that the aggregate of generators in a given area can be reliably transferred to the rest of PJM.



New Jersey RTEP Upgrades

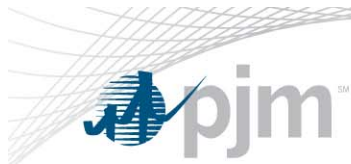




2012 Retool – Susquehanna to Roseland Project

Overload Reduction For Single Contingencies

Overloaded Facility			Without Susq- Roseld	With Susq- Roseld
Fr Name	To Name	kV		
BRIDGWTR	MIDDLESEX	230	2021	>2022
BUSHKILL	KITATINY	230	2013	>2022
MTN CRK	MO PARK	230	2017	>2022
PORTLAND	KITATINY	230	2019	>2022
GILBERT	MO-TOWN	230	2021	>2022
LK ILIFF	MONTVILE	230	2019	>2022
E WINDSR	SMITHBRG	230	2017	2022
MTN CRK	PORTLAND	230	2014	>2022
PORTLAND	GRYSTN Q	230	2020	>2022
BRANCHBG	READ-GTN	230	2012	>2022
WHIPPANY	ROSELAND	230	2014	>2022
READ-GTN	ROSELAND	230	2012	>2022



2012 Retool – Susquehanna to Roseland Project

Overload Reduction For Single Contingencies

Overloaded Facility			Without Susq- Roseld	With Susq- Roseld
Fr Name	To Name	kV		
G GARDNR	CHESTER	230	2019	>2022
HOSENSAK	ELROY	230	2019	>2022
NEWTON	LK ILIFF	230	2018	>2022
RICHMOND	CAMDEN7	230	2015	2018
MONTVILE	ROSELAND	230	2014	>2022
KITATINY	POHATCNG	230	2016	>2022
COXSCRNR	LUMBRTN	230	2021	>2022
KITATINY	NEWTON	230	2017	>2022
WANEETA3	RICHMOND	230	2017	2019
GRYSTN Q	WHIPPANY	230	2012	>2022
W WHRTN	GRYSTN J	230	2016	>2022



Questions?