

Utility Scale Solar on N.J. Farmland



State of New Jersey

STATE AGRICULTURE DEVELOPMENT COMMITTEE

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SUSAN E. PAYNE
Executive Director

February 4, 2021

Via Email

Aida Camacho-Welch, Secretary
New Jersey Board of Public Utilities
ATTN: BPU Docket Number: QX19060720
44 South Clinton Avenue, 9th Floor
PO Box 350
Trenton, NJ 08625-0350

Re: Proposed Amendment to N.J.A.C. 14:8-2.5
Proposal Number PRN 2020-112

Dear Ms. Camacho-Welch:

The State Agriculture Development Committee (SADC) appreciates the opportunity to comment on the above-referenced rule proposal.

The Right to Farm Act, N.J.S.A. 4:1C-1 et seq. ("RTFA"), was amended in 1998 to require New Jersey state agencies proposing a rule for adoption to issue an agriculture industry impact statement in the proposed rule setting forth "the nature and extent of the impact of the proposed rule on the agricultural industry". N.J.S.A. 4:1C-10.3(a). The SADC has the authority to review proposed rules to determine if they may have a significant adverse impact on the agricultural industry and, if so, the agency proposing the rules is required to consult with the SADC prior to adoption. N.J.A.C. 4:1C-10.3(c).

The SADC has reviewed the proposed amendment to N.J.A.C. 14:8-2.5 and notes that the Agriculture Industry Statement accompanying the proposed rule states, in part,

"To the extent that the proposed rulemaking facilitates the development of solar energy facilities on land currently agricultural in nature, the proposed rulemaking could have a detrimental impact on the agricultural industry by displacing farming with solar development. Potential

harms will likely be limited by existing or future land-use regulations that discourage or prohibit solar development on agricultural lands."

This statement suggests that a significant amount of agricultural land could be impacted but does not provide any estimate of the extent of such impact. Accordingly, the SADC finds that *the proposed rule may have a significant adverse impact on the agricultural industry of the State* and, therefore, requires consultation with the NJ Board of Public Utilities (NJBPUI) prior to rule adoption.

Due to its brevity, and for ease of reference, N.J.A.C. 4:1C-10.3 is copied here in its entirety:

4:1C-10.3 New rule adoption process

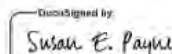
a. In proposing a rule for adoption, the agency involved shall issue an agriculture industry impact statement setting forth the nature and extent of the impact of the proposed rule on the agricultural industry that shall be included in the notice of a proposed rule as required by subsection (a) of section 4 of P.L. 1968, c. 410 (C.52:14B-4).

b. During the public comment period on the proposed rule, the State Agriculture Development Committee shall review the rule proposal to determine its impact on the agriculture industry of the State.

c. If the State Agriculture Development Committee determines that the proposed rule may have a significant adverse impact on the agricultural industry of the State and notifies the relevant agency of that determination during the public comment period on the proposed rule, the agency shall [emphasis added] consult with the State Agriculture Development Committee prior to the adoption of the rule. L. 1998, c. 48, s. 7.

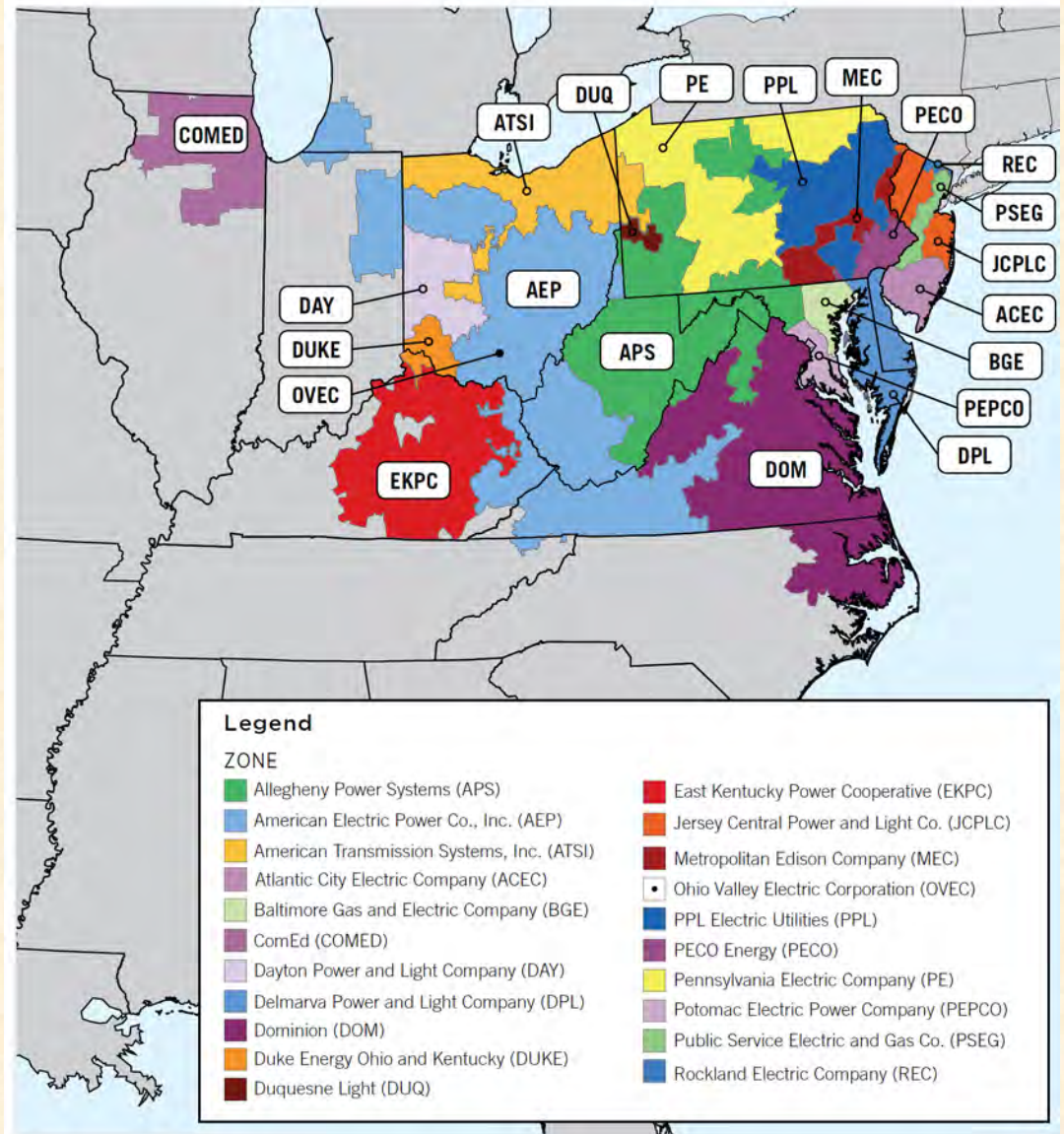
Thank you for your consideration of these comments. If you have any questions, please contact me at (609) 984-2504 or via email at susan.payne@ag.state.nj.us. We look forward to establishing a schedule for a collaborative exchange on the proposed rule amendment in the near future.

Sincerely,

Discontinued by:

Susan E. Payne, Executive Director

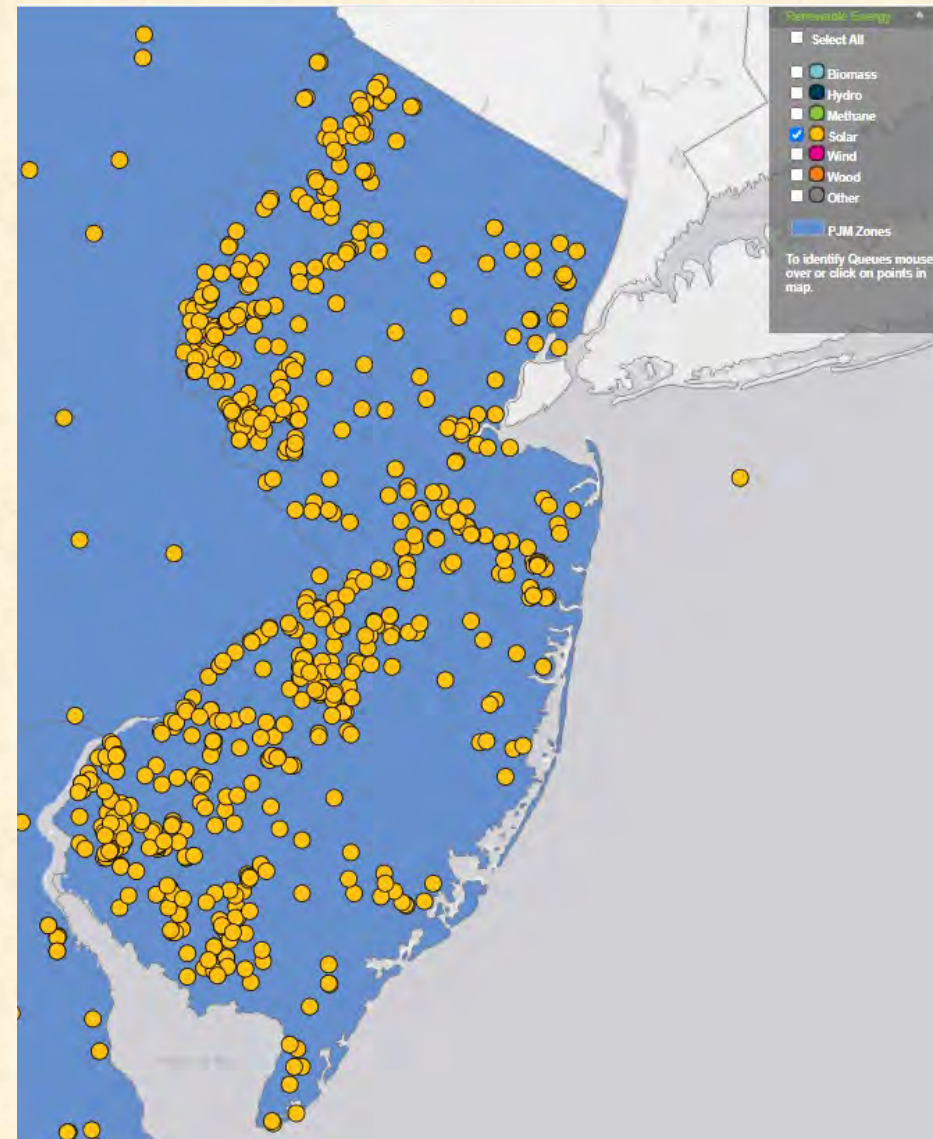
c: Douglas Fisher, Secretary, NJ Department of Agriculture
Joseph L. Fiordaliso, President, NJ BPU
Members, State Agriculture Development Committee
Brian D. Smith, Esq., SADC
Jason Stypinski, Esq., DAG

PJM Service Territory



PJM Solar Interconnection Queue – N.J.

- "Active" Status: 48 Projects (1265 MW)
- "Engineering and Procurement" Status: 11 Projects (40.8 MW)
- "In Service" Status: 122 Projects (826.2 MW)
- "Withdrawn" or "Suspended" Status: 482 Projects (4506 MW)



2019 New Jersey Energy Master Plan (EMP)

https://www.nj.gov/emp/docs/pdf/2020_NJBPU_EMP.pdf

- New Jersey should install 5.2 GW of solar by 2025, 12.2 GW by 2030, and 17.2 GW by 2035. Smoothed out over 15 years and considering that New Jersey already has roughly 3 GW of solar, this represents installing an average of roughly 950 MW annually from 2020 through 2035. Historically, New Jersey has installed an average of 152 MW of solar PV annually, and averaged over 320 MW over the last five years.

- NJ could most cost-effectively meet demand by building 17GW of in-state solar by 2035 and 32 GW of in-state solar by 2050. This means 1000MW each year 2021-2035 plus 3000 MW of existing resources to achieve 17GW by 2035.

- 2035 Goal: 17GW - 3GW (Existing) X 1000 = 14,000MW X 5acres/MW = 70,000 Acres

- 2050 Goal: 32 GW – 3GW (Existing) X 1000 = 29,000 MW X 5 acres/MW = 145,000 Acres

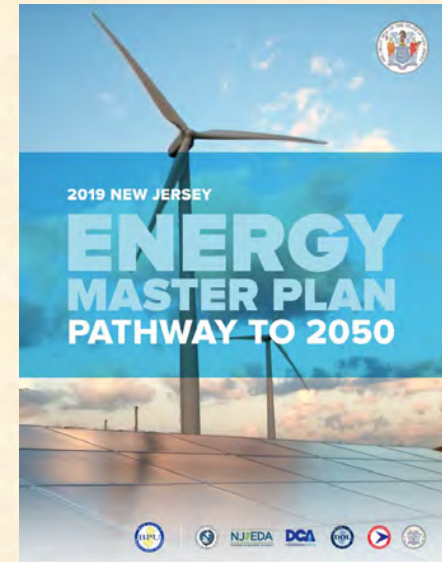


FIGURE 12.
In-State Electricity Capacity, Least Cost Scenario

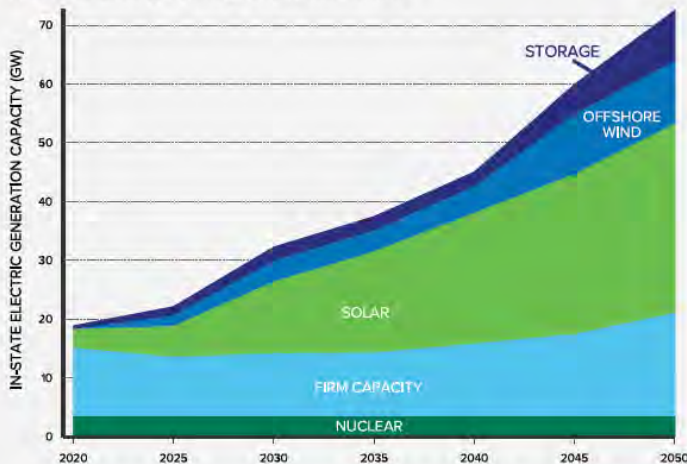


Table 3.3. In-State Installed Capacity Goals by Year (GW).⁵

Resource Type	2020	2025	2030	2035	2040	2045	2050
NJ Solar	3.5	5.2	12.2	17.2	22.2	27.2	32.2
Offshore Wind	0	1.1	3.5	7.5	8.8	10.1	10.7
Nuclear	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Fossil Gas	11.7	10.1	10.7	10.8	12.4	13.7	0
Biogas, Biofuels and Hydrogen	0	0	0	0	0	0.3	17.6
Storage	0.6	1.6	2.5	2.5	2.5	5.2	8.7
Other ⁶	0.97	0.25	0.26	0.22	0.19	0.16	0.15
Total	20.3	21.8	32.7	41.7	49.6	60.2	72.9

2020 NEW JERSEY
80X50 REPORT

2019 New Jersey Energy Master Plan

Goal 2.1.8: Coordinate permitting and siting processes for renewable energy development.



“In order to enhance smart siting of solar, the state should better define areas that are considered marginalized, such that they have constrained economic or social value. For example, there are areas of non-preserved farmland that may have poor soil conditions, or non-pristine open spaces that are underutilized, both of which could potentially serve as host sites for solar projects while not compromising the state’s commitment to preserve open space.”

“NJDEP and NJBPU will coordinate land use policy for solar siting with the New Jersey Department of Agriculture to identify sites that could be used to expand New Jersey’s commitment to renewable energy while still protecting the state’s farmland and open spaces.”

2019 New Jersey Energy Master Plan Goals

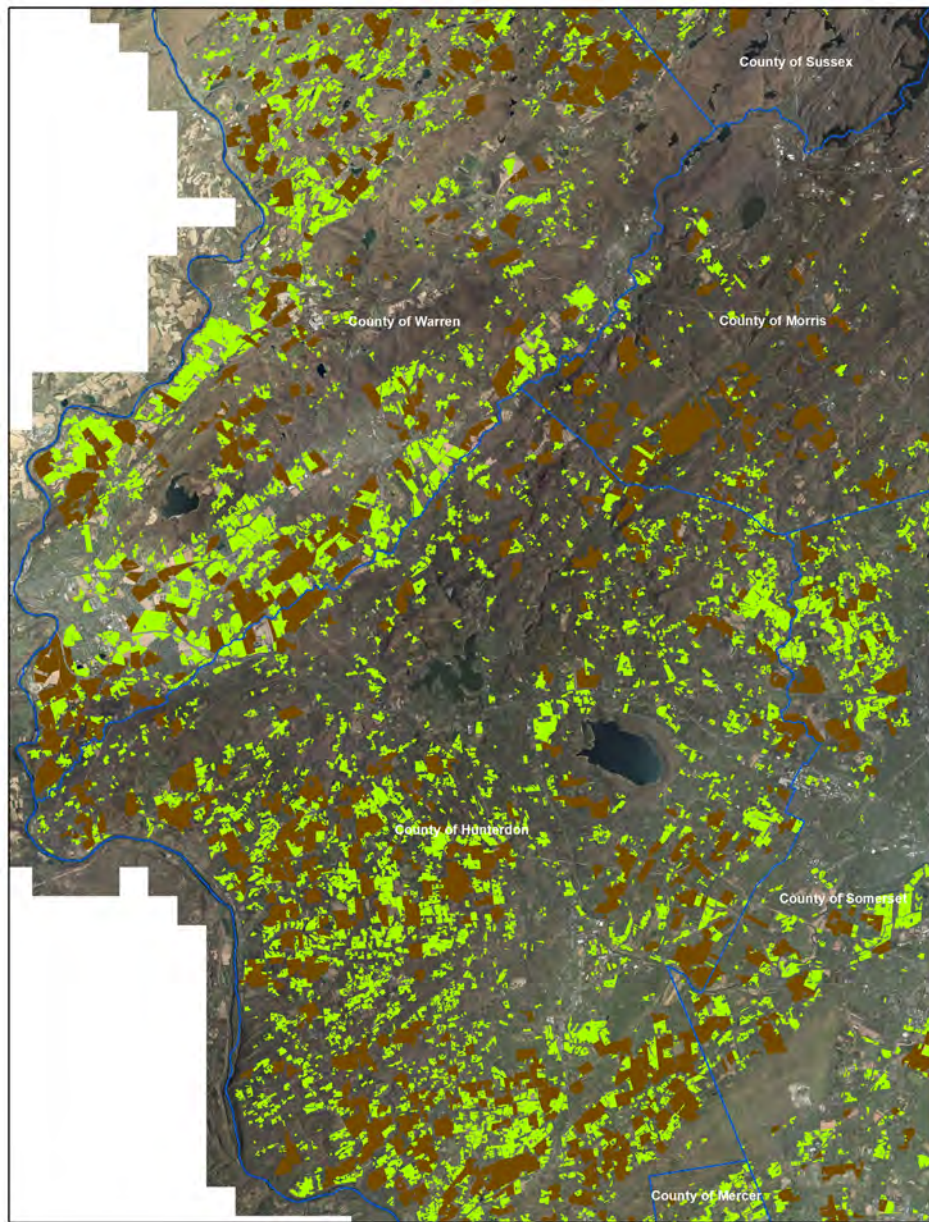
2035 Goal: $17\text{GW} - 3\text{GW (Existing)} \times 1000 = 14,000\text{MW} \times 5\text{acres/MW} = \underline{70,000 \text{ Acres}}$

2050 Goal: $32 \text{ GW} - 3\text{GW (Existing)} \times 1000 = 29,000 \text{ MW} \times 5 \text{ acres/MW} = \underline{145,000 \text{ Acres}}$

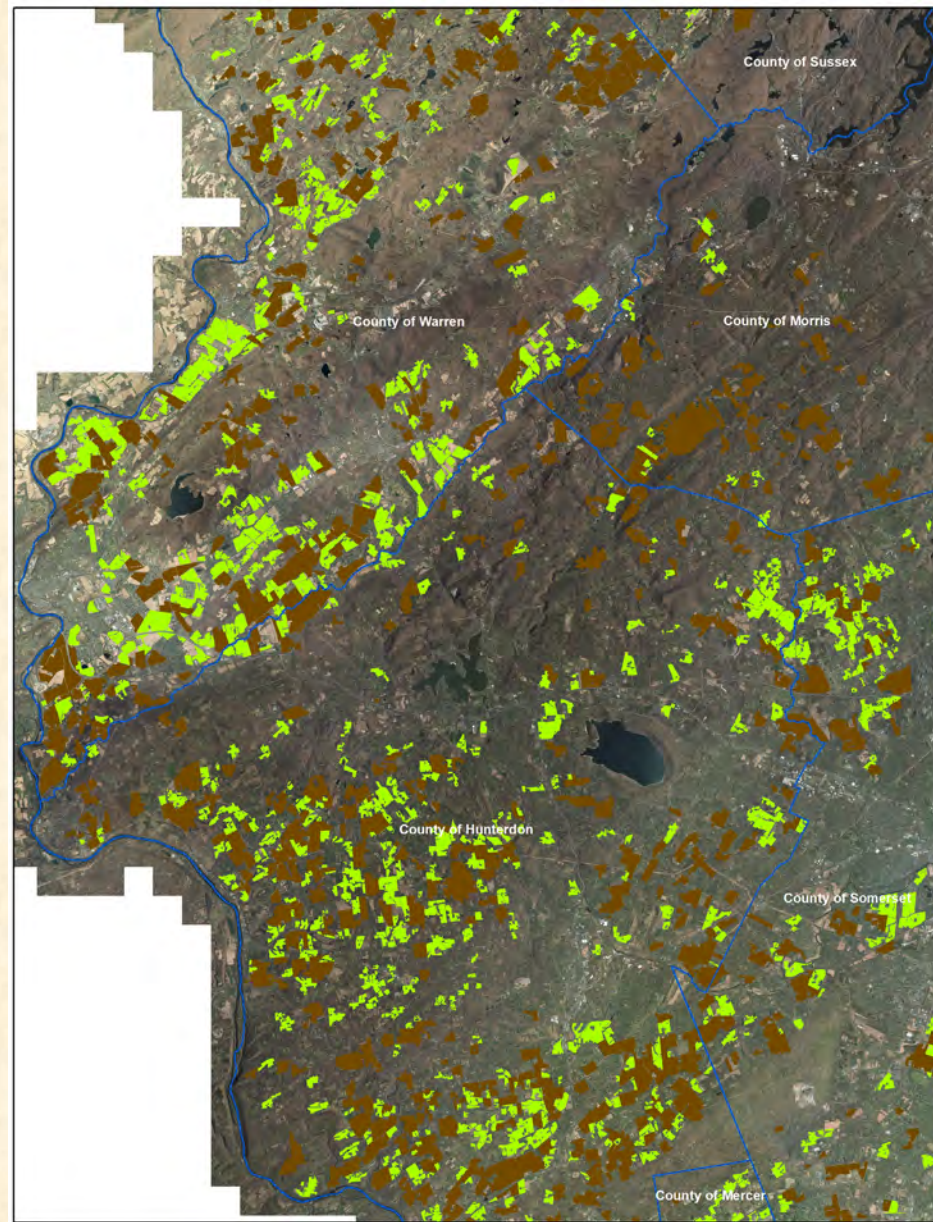
SADC Agricultural Impact Analysis

- There are 538,000 acres of unpreserved farm assessed parcels that are not 100% woodland.
 - Of this, **264,000 acres** on these parcels are in **upland, agricultural land use** (no modified ag wetlands)
 - These **264,000 acres** are comprised of:
 - **207,000 acres** are **within** the ADA
 - **57,000 acres** are **outside** of the ADA
 - These **264,000 acres** are comprised of:
 - **207,000 acres** are **Prime and Statewide Important soils**
 - Of which, **163,000 acres** are **WITHIN** the **ADA** (115,000 ac. prime and 48,000 ac. SWI), and **44,000 acres** are **OUTSIDE** of the **ADA**
 - **57,000 acres** are **NOT** Prime and SWI soils
 - Of which, **44,000 acres** are **WITHIN** the ADA, and **13,000 acres** are **OUTSIDE** of the ADA
- There are **101,000 acres** in upland agricultural land use that are either **NOT** in the ADA (57,000 ac.) **or** are in the ADA, but do not have Prime and Statewide Soils (44,000 ac.)
 - Note: this 101,000-acre total is reduced to **94,000 acres** if Highlands Preservation Area and Pinelands Forest and Preservation Area are excluded

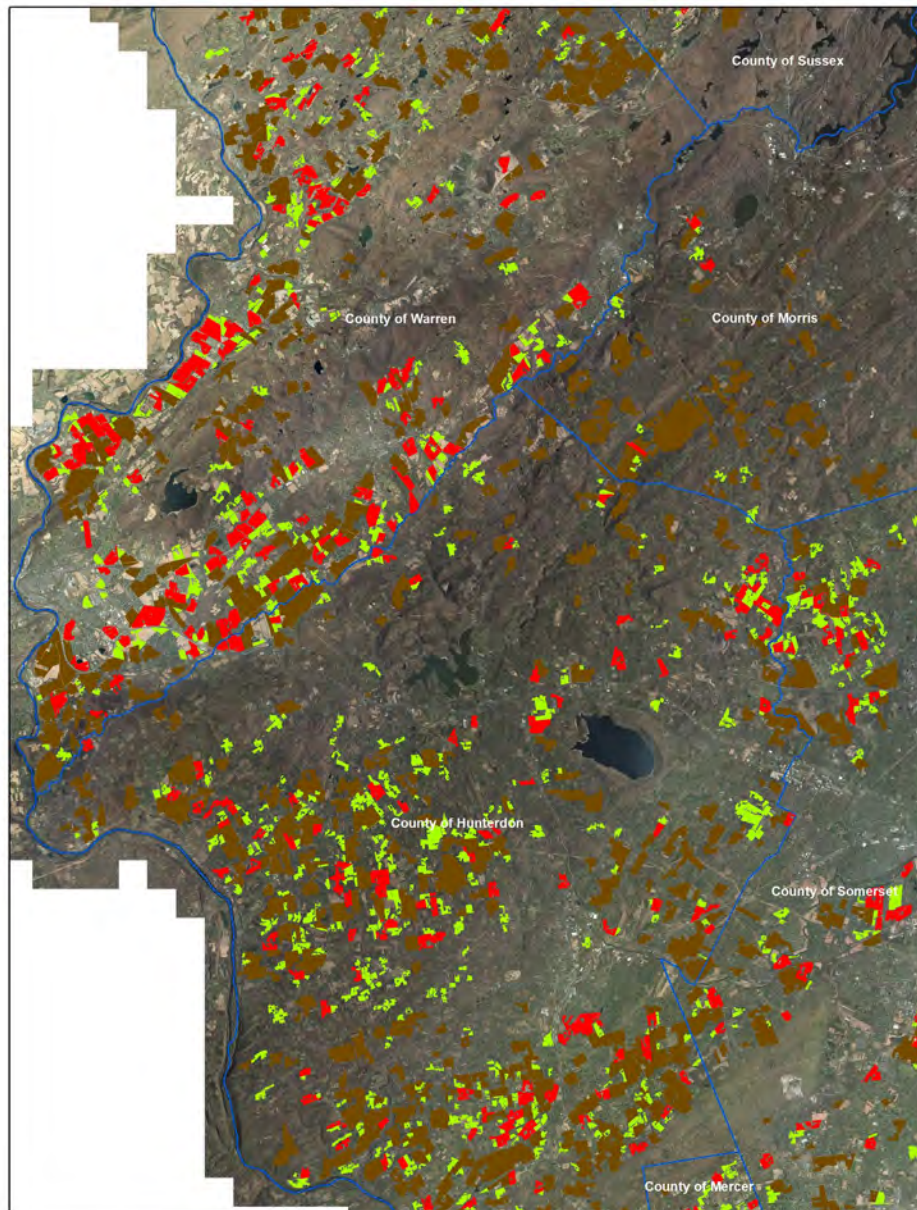
Remaining Unpreserved Agricultural
Land Use (2015 NJDEP LULC)



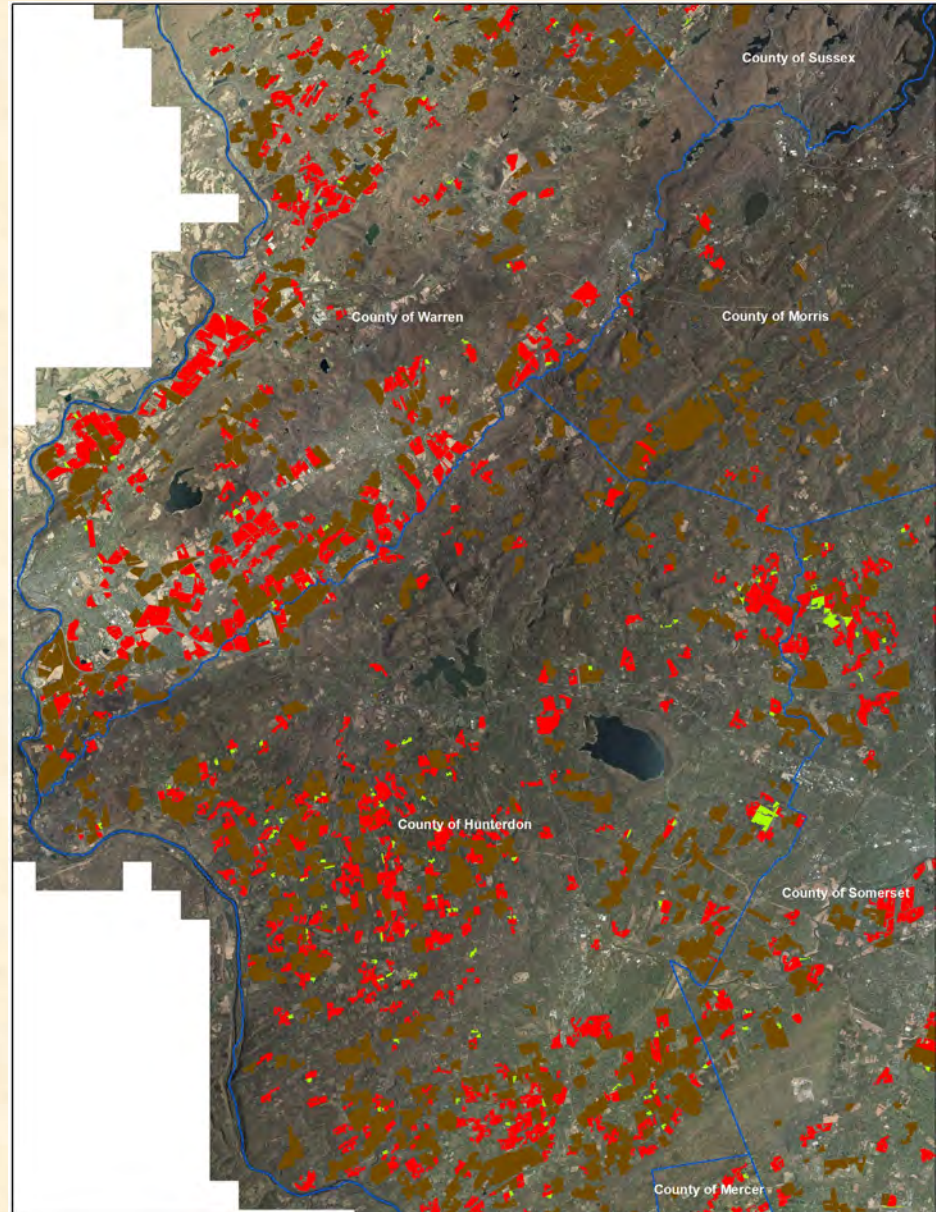
Remaining Unpreserved Agricultural
Land Use (2015 NJDEP LULC) > 50 Acres



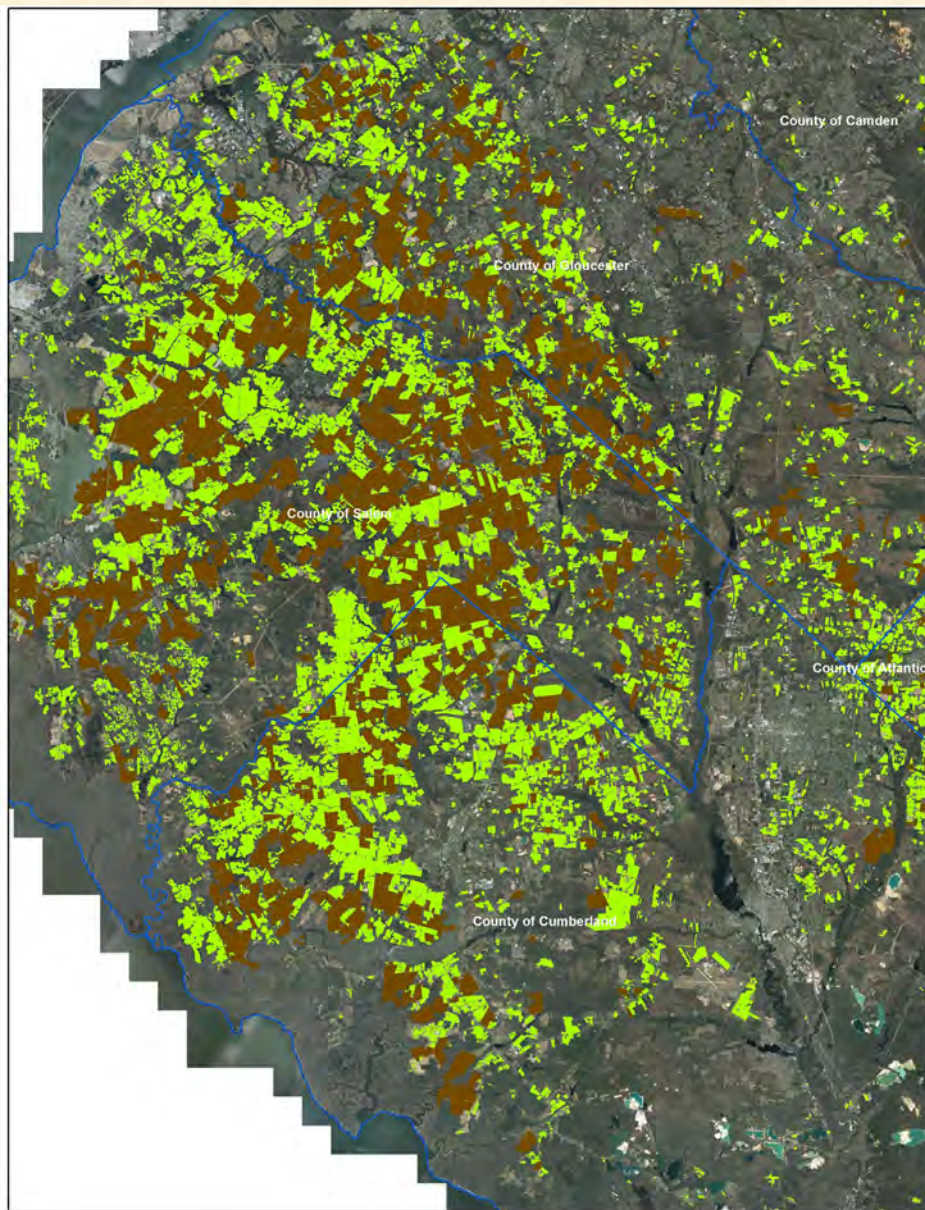
Remaining Unpreserved Agricultural Land
Use >50 Acres with
70,000 Acres Removed (2035 Solar Goal)



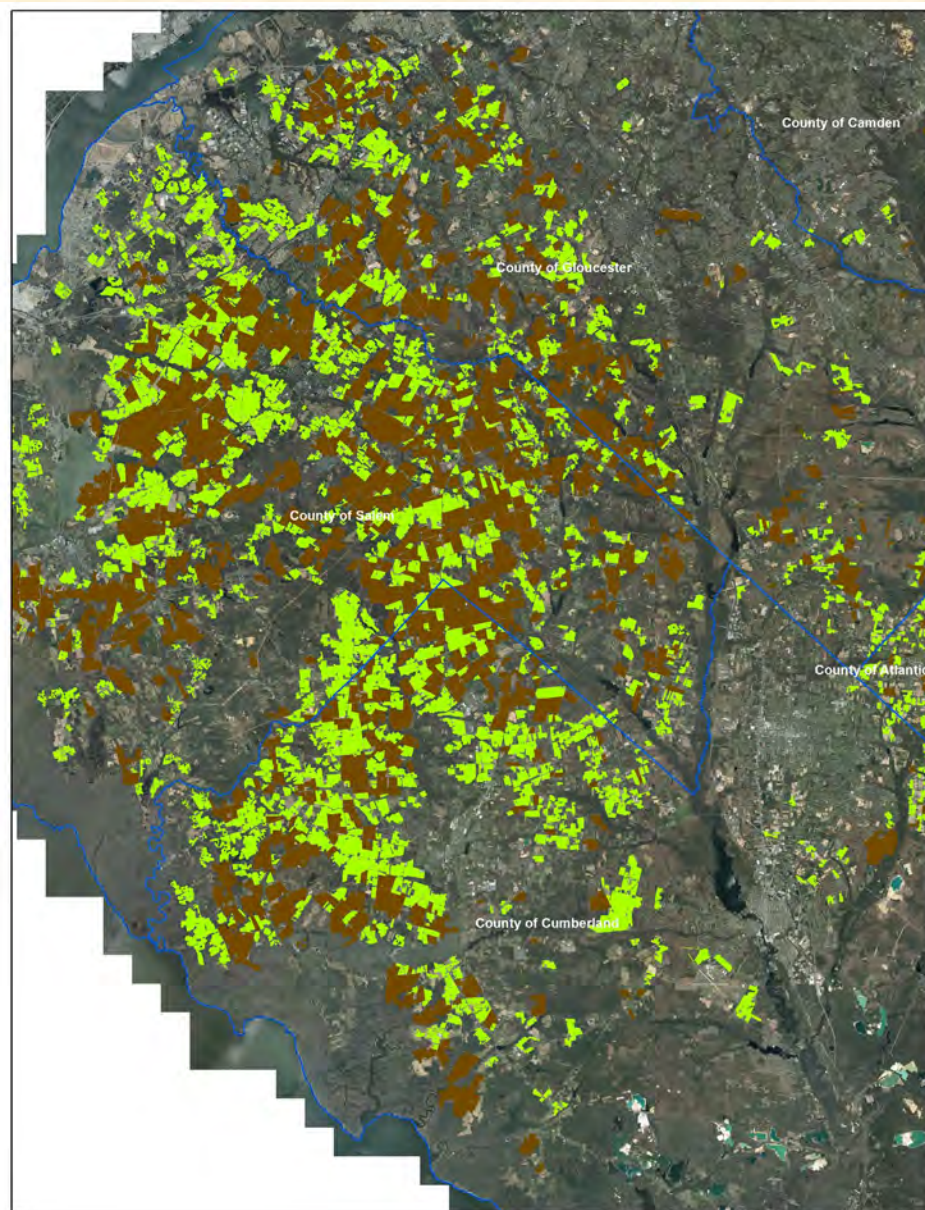
Remaining Unpreserved Agricultural Land
Use > 50 Acres with
145,000 Acres Removed (2050 Solar Goal)



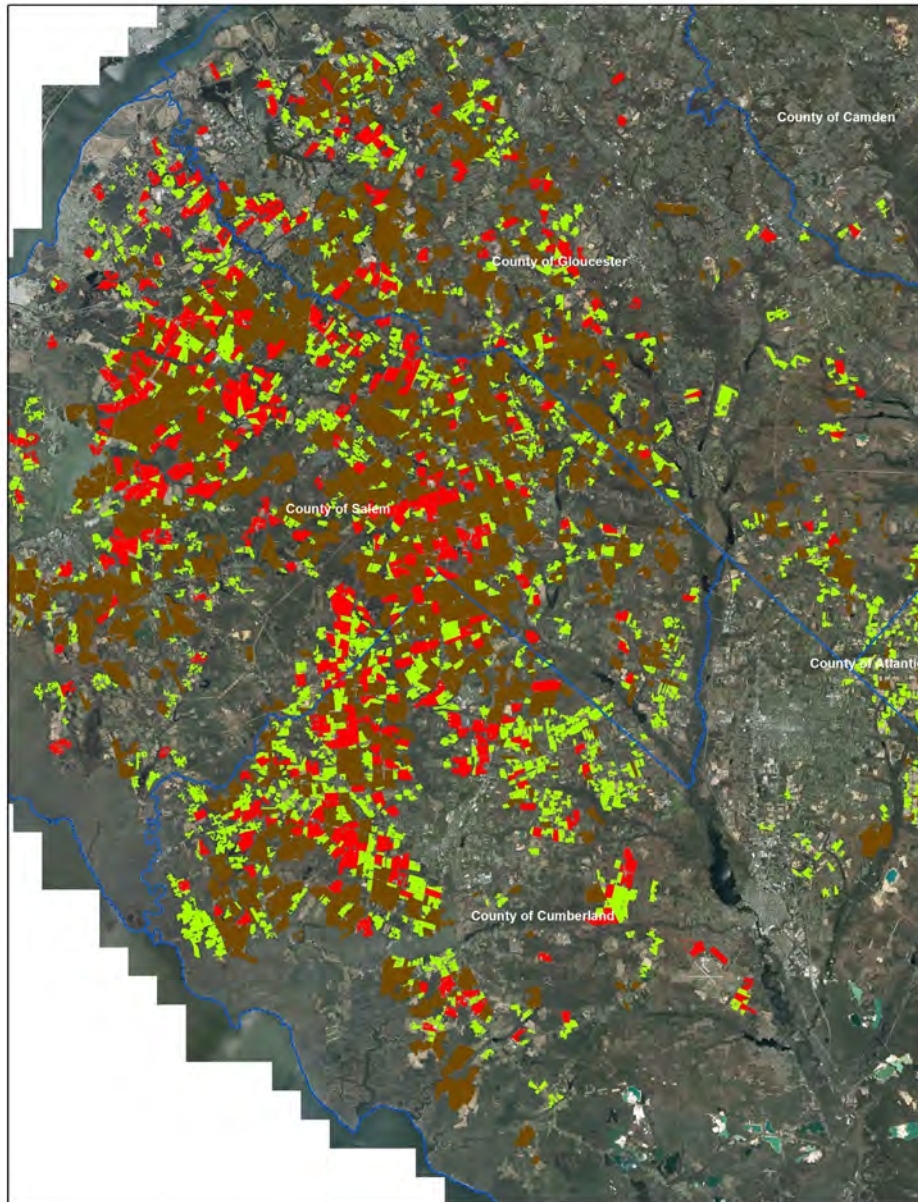
Remaining Unpreserved Agricultural
Land Use (2015 NJDEP LULC)



Remaining Unpreserved Agricultural
Land Use (2015 NJDEP LULC) > 50 Acres



Remaining Unpreserved Agricultural Land
Use >50 Acres with
70,000 Acres Removed (2035 Solar Goal)



Remaining Unpreserved Agricultural Land
Use > 50 Acres with
145,000 Acres Removed (2050 Solar Goal)

