



GUIDANCE FOR THE PERMITTING OF SOLAR ENERGY SYSTEMS ON NEW JERSEY LANDFILLS

New Jersey Department of Environmental Protection
Division of Solid and Hazardous Waste

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Guidance for the Permitting of Solar Energy Systems on Landfills in New Jersey

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A. Introduction

New Jersey's [2019 Energy Master Plan](#) outlines the main strategies necessary to reach the goals of 100% clean energy and 80% emissions reductions from 2006 levels by 2050. Among these strategies is the acceleration of deployment of renewable energy, including solar.

Properly closed landfills may be suitable locations for solar energy systems. As of February 2020, solar installations have been completed on approximately 20 landfills with another 10 projects under construction or applications under review. In addition to providing a source of renewable energy, the installation of solar energy projects on landfills can offset the costs of closure and post-closure care and provide long-term revenues for landfill owners.

This guidance provides information about the process for obtaining approval to install solar energy projects on closed sanitary landfills under New Jersey's Solid Waste Regulations, N.J.A.C. 7:26 et seq., and other Department programs. This guidance describes the approvals that are necessary from the DEP's Division of Solid & Hazardous Waste (DSHW) and provides a list of the permits or approvals from other programs in the Department and other agencies that may be required. It also describes some of the special issues that must be addressed when placing solar energy systems on sanitary landfills.

To find information about the location of landfills in New Jersey, visit the DSHW's Landfill Database website at: <http://www.nj.gov/dep/dshw/lrm/landfill.htm>.

B. Process Overview

The process for obtaining approval from the Department and constructing landfill solar projects will generally follow this path, depending on site-specific situations:

1. Permit Readiness Checklist: The Permit Readiness Checklist and initial GeoWeb site suitability review are provided by the Department's Office of Permit Coordination and Environmental Review (OPCER). The applicant completes the Readiness Checklist. See section C below.
2. Pre-application meeting: A pre-application meeting provides an opportunity early in the planning process for the applicant to meet with Department representatives, discuss the project and proposed schedule, and determine what will be required to obtain the appropriate permit approvals for the project. See section C below. For projects within the New Jersey Pinelands Area, inclusion of Pinelands staff at the pre-application meeting is advisable.
3. Landfill Assessment: If the landfill has not been properly closed, the applicant will have to perform an assessment of the landfill and its surroundings to determine the environmental controls, maintenance, and monitoring necessary for closure and post-closure care. If a physical investigation of the landfill is needed to complete the assessment, e.g. soil borings, test pits, well installation, the applicant must obtain a Minor Disruption Approval pursuant to N.J.A.C. 7:26-2A.8(j). See section D below.

4. Approval for Construction Under New Jersey's Solid Waste Rules

Generally, applications for construction of solar energy systems on landfills under New Jersey's Solid Waste Rules will be processed by the Bureau of Solid Waste Permitting in the DSHW. Under certain circumstances, if the landfill is also required to comply with the Department's Site Remediation Rules, N.J.A.C. 7:26C and E, applications for Solid Waste approvals may be processed by the Department's Office of Brownfields Reuse in the Site Remediation Program. Depending of the specific regulatory circumstances of the landfill, approval of the project may take a variety of forms:

- a. **Landfill Closure and Post-Closure Plan:** If the landfill has not been verified as properly closed, the owner must prepare and submit for approval a Closure and Post-Closure Plan in accordance with N.J.A.C. 7:26-2A.9. A proposal to install the solar energy system may be included in the plan initially, or the owner may implement the approved closure plan and apply for modification of the plan for the solar energy project at a later date. See section E below for more information.
 - b. **Closure and Post-Closure Plan Modification:** If a Closure and Post-Closure Plan has already been approved and closure implemented to the satisfaction of the Department, then the owner will be required to submit an application for a modification of the Plan that addresses installation of the solar energy system and any changes or modifications to any previously installed environmental control systems under the original Closure and Post-Closure Plan Approval. (N.J.A.C. 7:26-2A.9(d)6)
 - c. **Sanitary Landfill Major Disruption Approval:** Under certain limited circumstances, the Department may approve the installation of a solar energy system on a properly closed landfill through a Sanitary Landfill Major Disruption Approval in accordance with N.J.A.C. 7:26-2A.8(j). Such circumstances include projects located at landfills that have completed their post-closure care period or landfills that had been previously properly closed under the EPA's Superfund Program where no Closure and Post-Closure Plan Approval was previously issued.
 - d. **Solid Waste Facility Permit Modification:** The DSHW may approve the installation of a solar energy system on a properly closed portion of an operating landfill by modifying the landfill's Solid Waste Facility Permit.
5. **Construction:** After obtaining all required permits/approvals, the applicant may start construction of the proposed solar project. In accordance with N.J.A.C. 7:26-2A.9(c)4, a New Jersey licensed professional engineer (NJPE) must oversee the construction activities at the landfill.
 6. **Post-construction Submissions:** After completion of the project, the owner must submit an as-built report and certification, including engineering drawings, signed and sealed by a NJPE to the DSHW.

C. Permit Coordination

A solar landfill project may require a number of Department permits or approvals. For the applicant's convenience, the OPCER offers a "one-stop" coordination process to assist the applicant. This office was established to improve service to permit applicants through better communication, coordination, and identification of problematic issues early in the permitting process. The OPCER will work with the applicant to help identify any site impediments or fatal flaws via a GeoWeb review as well as any DEP permits and approvals necessary to complete the project. The OPCER will establish a permitting team of representatives from applicable Department programs that may be involved in permitting or approving the solar project and coordinate a pre-application meeting between those DEP programs and the applicant. This process assists the applicant in determining if a development plan is advanced enough to be ready to submit permit applications, establishing contact with a full Departmental permitting team, and maintaining consistent contact throughout the permitting process.

To initiate the permit coordination process, an applicant must electronically submit a Permit Readiness Checklist to the OPCER prior to a pre-application meeting to ensure that all appropriate programs are present. The permit readiness checklist is located at the website: <https://www.nj.gov/dep/pcer/>

If you have any questions concerning the permit coordination process, please contact OPCER at (609) 292-3600.

All permit/approval applications should be submitted directly to each program in the Department, or to agencies outside the Department as appropriate, after discussion and coordination through meetings with the OPCER.

D. Landfill Assessment

If the landfill has not been verified as properly closed, the owner of the site or other applicant must perform an assessment of the landfill and its surroundings. The purpose of the assessment is to determine the types and extent of closure requirements needed for the landfill. The assessment should use available records along with a physical investigation of the site to determine the current condition and potential impact of the landfill. The assessment should address, but not be limited to, the following:

- topography, geology, and hydrology of the area,
- surrounding land use,
- identification of nearby human and ecological receptors and environmentally sensitive areas,
- site access routes,
- existing and future use of the site,
- current and prior owners and operators of the landfill,
- time period the landfill was used for disposal,
- characterization of the types of waste disposed,
- vertical and horizontal extent of waste,

- existing environmental controls and their condition and effectiveness,
- chemical characteristics of all environmental media, including soil, leachate, groundwater and surface water, and
- landfill gas generation rates and migration data.

If a physical investigation of the site e.g., soil boring/well drilling/decommissioning/test pits, is necessary, then the applicant shall obtain a Minor Disruption Approval pursuant to N.J.A.C. 7:26-2A.8(j) from the Department. The application to obtain a Minor Disruption Approval must be prepared and submitted pursuant to the requirements of Section 9 of the Department's Technical Manual for Sanitary Landfill Permits and Approvals which can be found at <https://www.nj.gov/dep/dshw/hwtf/permits/sanlanpa.pdf>.

E. Landfill Closure and Post-Closure Care

A sanitary landfill must be properly closed in accordance with the requirements of N.J.A.C. 7:26-2A.9 prior to the installation of a solar energy system or other redevelopment. In most cases, this includes the preparation and Department-approval of a Closure and Post-Closure Plan, in accordance with N.J.A.C. 7:26-2A.9(e). Specific guidance on each provision of the Closure and Post-Closure Plan is included in the Department's Technical Manual for Sanitary Landfill Permits and Approvals. This technical manual is available at <https://www.nj.gov/dep/dshw/hwtf/permits/sanlanpa.pdf>.

Listed below are brief descriptions of the elements required in a Closure and Post-Closure Plan. The plan must include a narrative describing the design of each closure element and a justification/explanation how the design complies with the regulation. The plan must also include NJPE signed and sealed engineering drawings of the designed closure elements. Note that the Department may require additional closure and post-closure measures or waive one or more of the requirements based upon the Department's evaluation of specific health and/or environmental circumstances:

1. Solid Waste Facility Permit Application Form – The form is available at <http://www.nj.gov/dep/dshw/resource/forms.htm>. It should be completed and signed by the owner, agent and professional engineer.
2. Municipal Site Plan Approval - A copy of the application and the preliminary or final site plan approval issued by the municipality for the project pursuant to the Municipal Land Use Law. This requirement applies to non-public entities that undertake closure of a legacy landfill or any landfill owner or operator that is proposing to accept any material on a landfill that is already properly closed. See N.J.A.C. 7:26-2A.9(e)2.
3. Landfill Assessment - An assessment of the landfill and its surroundings to determine the environmental controls, maintenance, and monitoring necessary for closure and post-closure care as described earlier in this document. See N.J.A.C. 7:26-2A.9(e)3.
4. Soil Erosion and Sediment Control Plan (certified) - A SESC plan approved by the regional soil conservation district or a copy of the SESC plan application must be included in the closure plan.

5. Final Capping/Cover, Final Cover Vegetation, and Final Cover Maintenance –

Final Cover - The final cover system must completely isolate the landfilled waste from the surrounding environment. The system must be designed to minimize long term infiltration or percolation of liquid into the landfill throughout the closure and post-closure care period. The final cover design is required to meet the standards of N.J.A.C. 7:26-2A.7(i). However, in some cases where impacts to human health and the environment allow, the DSHW may approve final cover consisting of 2 feet of soil [18 inches of common soil overlain by a six-inch minimum erosion layer (topsoil)].

The final cover system must accommodate settlement throughout the closure and post-closure care period. An analysis of the long-term stability of the final slopes must be addressed pursuant to N.J.A.C. 7:26-2A.5(a)6. (N.J.A.C. 2A.7(i)4).

Final Cover Vegetation – Vegetation should be selected in accordance with the Standards for Soil Erosion and Sediment Control in New Jersey.

Final Cover Maintenance – During the post-closure care period, the final cover must be inspected on a regular basis. Vegetation must be mowed and fertilized, limed and reseeded as needed to prevent erosion. Erosion, settlement, and damage to the final cover/capping system must be repaired.

6. Maintenance of Side Slopes - addressed in a similar manner to item 5 above.

7. Stormwater Run-on/Run-off Control Design, Construction and Maintenance

According to Solid Waste Regulations, the surface drainage should be designed to protect the sanitary landfill from run-on/run-off at a minimum peak discharge of a 24-hour, 25-year storm. The design requirements for surface drainage must be in accordance with N.J.A.C. 7:26-2A.7(g). It should be noted that other Programs in the Department may have more stringent requirements on stormwater management (see below for more information on stormwater requirements.)

Run-on/run-off controls, e.g. berms, dikes, downchutes, swales, and basins, must be inspected regularly during the post-closure care period. The structures must be maintained with adequate capacity, kept free of obstructions, and repaired as needed.

8. Groundwater Wells, Groundwater Monitoring and Maintenance

A groundwater monitoring system must be designed and constructed in accordance with the New Jersey Pollutant Discharge Elimination System (NJPDES) regulations at N.J.A.C. 7:14A-6. Landfills that accepted waste for disposal on or after January 1, 1982, must have a NJPDES Permit and monitor according to NJPDES regulations at N.J.A.C.7:14A.

Landfills without NJPDES Permits may be required to perform groundwater monitoring in accordance with the requirements of the Closure and Post-Closure Plan approval depending on the results of the landfill assessment.

Wells will have to be periodically inspected and replaced or redeveloped as needed.

9. Landfill Gas Venting and Evacuation System Design, Construction and Maintenance and Landfill Gas Monitoring

If necessary, a landfill venting system must be developed to prevent gas build up and migration laterally from the site to adjacent receptors such as residences or other structures. Gas venting systems must be designed and constructed in accordance with N.J.A.C. 7:26-2A.7(f). If installed, regular inspection and maintenance are required during the post-closure care period.

Regardless of whether a gas venting system is required, regular subsurface monitoring for migration of landfill gas will likely be required during the post-closure care period in accordance with N.J.A.C. 7:26-2A.8(h)9.

10. Leachate Collection/Control System, and Operation and Maintenance of the Leachate Collection System

If necessary, a leachate collection system must be designed and constructed in accordance with N.J.A.C. 7:26-2A.7(d). Details of all aspects of the operation and maintenance of the leachate collection system must be provided.

11. Facility Access Control and Maintenance of Access Control - Facility access controls, e.g. fencing and gates, must be designed and constructed in accordance with N.J.A.C. 7:26-2A.8(b)25. Access controls must be regularly inspected and repaired during the post-closure care period.

12. Conformance of the Site to the Surrounding Area – Provisions of a program to make the closed landfill aesthetically compatible with the surrounding area and maintenance of these provisions during the post-closure care period is required.

13. Hydrogen Sulfide Monitoring – A program for monitoring hydrogen sulfide must be included if specifically required by the DSHW in accordance with N.J.A.C. 7:26-2A.7(h)10. Such a system is only required by the DSHW if the landfill has a history of odor complaints related to suspected hydrogen sulfide emissions. The Department's Division of Air Quality may have additional requirements regarding hydrogen sulfide monitoring at landfills.

14. Material Acceptance Protocol – A protocol setting forth the types, quantities, uses, and specifications of material proposed for acceptance subsequent to termination of solid waste disposal operations at the landfill and the procedures to be implemented by the

owner/operator to accept and manage such material must be provided. See N.J.A.C. 7:26-2A.9(e)4xx.

15. Inspections – The plan must provide for periodic inspections of the facility during the post-closure period. Details of items required to be inspected, inspection form(s), and an inspection schedule should be included.
16. Schedule – A schedule for implementation of closure and post-closure is required.
17. Closure and Post-Closure Financial Plan

For landfills that accepted solid waste for disposal on or after January 1, 1982, a Financial Plan prepared in accordance with N.J.A.C. 7:26-2A.9(f) shall be included. The Financial Plan must set forth the costs and expenses and establish the means for meeting those costs and expenses associated with full implementation of the approved Closure and Post-Closure Plan.

For any legacy landfill or closed sanitary landfill facility that accepts recyclable material, contaminated soil, wastewater treatment residual material, or construction debris, a Financial Plan prepared in accordance with N.J.A.C. 7:26-2A.9(h) shall be included. This Financial Plan includes requirements for financial assurance for closure and post-closure care expenses and liability insurance.

A “legacy landfill” is a sanitary landfill that ceased operations prior to January 1, 1982, and received for disposal solid waste or waste material that was accepted for disposal prior to October 21, 1976, and that is included within the definition of hazardous waste adopted by the Federal government pursuant to the Resource Conservation and Recovery Act, 42 U.S.C. §§ 6921 et seq.

18. Plan Certification - A NJPE must prepare, sign and seal the closure and post-closure plan per N.J.A.C. 7:26-2A.9(e)1.

F. Specific Issues Regarding Solar Energy Systems

Many issues may influence the integrity of the landfill and its properties when installing solar systems on a landfill site. Therefore, it is important to understand what properties of the landfill need to be addressed and understood before commencing with a solar system project located on a landfill.

1. Settlement – Landfills naturally settle over time due to physical, chemical, and biological changes taking place in the waste mass. Differential settlement can cause damage to the landfill cap and ponding which can increase infiltration of water into the landfill. This would increase leachate generation and potentially cause leachate seeps and/or negatively impact groundwater quality. The weight of the solar installations and construction equipment could have an impact on landfill settlement. Also, settlement can damage the solar installations or adversely impact their efficiency. Therefore, the design of the capping/cover system,

selection of the type of solar systems and its support system, and construction practices must consider measures to minimize settlement.

2. Side Slope Stability – Like settlement, side slope stability must be considered when selecting the type of solar installation, the design of the cover system and solar foundations that will be used in such locations. Snow, wind and ice loading should also be considered when designing solar installations on side slopes.
3. Stormwater/Run-off – Installation of solar systems on a landfill will change the way stormwater behaves and will likely increase the potential for erosion and increase the amount of runoff that will have to be managed to prevent flooding. Therefore, the design of the solar installations must consider measures to minimize erosion, and stormwater management structures must be designed for the expected higher flow.
4. Landfill Cover - For landfills with existing caps/cover systems, installation may impact the landfill cap and expose waste during construction. This can occur during clearing and grading, construction of solar system support systems and utility installation. The integrity of the cap must not be damaged during construction. The DSHW strongly recommends the use of ballasted racking systems and running conduit for electrical lines above the surface of the landfill. All construction activities must be conducted in compliance with the requirements for landfill disruptions found at N.J.A.C. 7:26-2A.8(j).
5. Routine Cap Maintenance - Simply due to their presence on the landfill, solar system installations will affect the way post-closure maintenance of closure systems are normally performed. The Closure and Post-Closure Plan must address how the system’s design and maintenance programs allow for vegetation management, erosion inspections and cover maintenance, inspection and maintenance of the gas and leachate collection systems, gas migration and surface monitoring, etc.

The Department will consider the use of new and/or innovative technologies for solar energy production that have been approved by a NJPE. The NJPE must sign and seal the Closure and Post-Closure Plan application as meeting the Department’s landfill closure regulatory requirements and providing for post-closure care remedies in the event of failure of any aspect of the solar facility as it relates to fulfilling the landfill closure requirements.

G. Other Permits/Approvals/Requirements

Other Divisions within the Department or agencies outside of the Department may require permits or approvals for solar projects on landfills. Some of the more common permits that may be required are listed below. Please note that this is not a complete list of the Department’s permits and approvals that may be necessary for specific projects with unique circumstances. Contact information is provided to obtain further information on the specific requirements of these permits or approvals.

1. Land Use Permits(Flood Hazard Area, Freshwater Wetlands, Coastal Wetlands, CAFRA, Waterfront Development, Highlands Preservation Area, and Tidelands permits/approvals):

For questions regarding specific permit requirements, please contact the Division of Land Use Regulation by visiting its internet website at <http://www.nj.gov/dep/landuse/> or by telephone at (609) 777-0454.

2. Air Permits: Required for landfill gas venting systems, such as an Air Pollution Control Permit and Certificate, pursuant to N.J.A.C. 7:27-8.2(c)17. For questions regarding these permit requirements, please contact the Bureau of Stationary Sources by visiting its internet website at <http://www.nj.gov/dep/aqpp/> or by phone at (609)-292-0834.

3. Well Drilling Permits: Required for drilling, constructing, redeveloping, replacing and decommissioning wells (including but not limited to gas vent extraction wells), some soil borings, cathodic protection wells, dewatering well points, etc. placed within or outside of the landfilled area. For questions regarding these permit requirements, please contact the Division of Water Supply and Geoscience by visiting its internet website at <http://www.nj.gov/dep/watersupply/> or by phone at 609-984-6831.

3. New Jersey Pollutant Discharge Elimination System Permits (NJPDES):

Groundwater discharges: For questions regarding the permit requirements for landfills that are no longer operating, please contact the DSHW's Bureau of Solid Waste Permitting at 609-292-9880.

Surface water discharges: Approval may be necessary if a new or increased discharge to surface water will occur due to this project. Please contact the Bureau of Surface Water Permitting at (609) 292-4860.

4. New Jersey Highlands Council: Approval is required for sites located in either the Highlands Preservation or Planning Area. For questions, please contact the Highlands Council Executive Director at New Jersey Highlands Council, 100 North Road (Route 513), Chester, N.J. 07930-2322, telephone: (908) 879-6737 and <http://www.highlands.state.nj.us/>.

Additional information on the Highlands Water Protection and Planning Act rules is available at <http://www.nj.gov/dep/highlands/>.

5. New Jersey Pinelands Commission: Approval is required for sites located in the New Jersey Pinelands Area. For questions regarding permit requirements, please contact the NJPC by visiting its internet website at www.NJ.gov/pinelands or by phone at (609) 894-7300.
6. Green Acres: For questions concerning any permit requirements, please contact the Green Acres Program by visiting its internet website at <https://www.nj.gov/dep/greenacres/> or by phone at (609) 984-0500.
7. Fish & Wildlife: For questions regarding any permit requirements, please contact the Division of Fish & Game by visiting its internet website at <http://www.nj.gov/dep/fgw/contact.htm> or by phone at (609) 292-2965.

8. Stormwater Requirements for Placement of Solar Projects on Landfills: Two different requirements are described below: the Construction Activity Stormwater General Permit (5G3) and the design and performance standard for runoff quantity.

Construction Activity Stormwater General Permit (5G3) - Construction activities that propose to disturb an acre or more of land must apply for a Construction Activity Stormwater General Permit (known as “5G3”). This permit can be accessed through the Bureau of Nonpoint Pollution Control’s Stormwater Construction E-Permitting System available at the website: <http://www.nj.gov/dep/online>. Guidance on filling out the permit is available at <http://www.state.nj.us/dep/dwq/5g3.htm> or by phone at 609-633-7021. The Bureau website can be found at http://www.state.nj.us/dep/dwq/bnpc_home.htm.

Stormwater Runoff Quantity and Control Requirements - The Department’s requirements for the minimum design and performance standards necessary to control the stormwater runoff quantity due to the impacts of solar project placement on landfills can be found at N.J.A.C. 7:8 et seq. The Bureau of Non-Point Pollution Control is available at the websites listed above.

H. Division of Solid & Hazardous Waste Contact Information

For further information, please contact the Bureau of Solid Waste Permitting at (609) 292-9880. Additional information about the requirements for disruption, closure/post-closure plan and closure plan modifications approvals, is available in the BSWP’s Technical Manual for Sanitary Landfill Permits and Approvals. This manual is available at: <http://www.nj.gov/dep/dshw/resource/techman.htm>.

Correspondence should be addressed to:

Chief, Bureau of Solid Waste Permitting
New Jersey Department of Environmental Protection
Division of Solid & Hazardous Waste
Mail Code 401-02C
401 East State Street P.O. Box 420
Trenton, New Jersey 08625

I. Office of Brownfields Reuse Contact Information

For further information, please contact the OBR at (609) 984-2001. Correspondence should be addressed to:

Section Chief, Office of Brownfield Reuse
New Jersey Department of Environmental Protection
Site Remediation Program
Mail Code 401-06A
401 East State Street P.O. Box 420
Trenton, New Jersey 08625

J. Resources for Additional Information

New Jersey Department of Environmental Protection Solar Siting Analysis Update December 2017 <https://www.nj.gov/dep/aqes/solar-siting.html>

“Solar Power Installations on Closed Landfills: Technical and Regulatory Considerations,” September 2009. Prepared by: Gabriel Sampson, National Network of Environmental Management Studies Fellow, Bren School of Environmental Science and Management, University of California, Santa Barbara for the U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response, Office of Superfund Remediation and Technology Innovation, Washington, D.C.

www.epa.gov

www.clu-in.org

<http://www.clu-in.org/download/studentpapers/Solar-Power-Installations-on-Closed-Landfills-Sampson.pdf>

New Jersey Department of Agriculture State Soil Conservation Committee (SSCC) - <http://www.state.nj.us/agriculture/divisions/anr/nrc/soil.html>

USDA Natural Resources Conservation Service (NRCS) - <http://directives.sc.egov.usda.gov/>

USFWS N.J. Field Office - <http://www.fws.gov/northeast/njfieldoffice/>

New Jersey Department of Environmental Protection Air Quality Permitting Program - <http://www.nj.gov/dep/aqpp/>

New Jersey Department of Environmental Protection Brownfields - <http://www.nj.gov/dep/srp/brownfields/>

New Jersey Department of Environmental Protection Endangered and Threatened Species - <http://www.nj.gov/dep/fgw/tandespp.htm>

New Jersey Department of Environmental Protection Land Use Program - <http://www.nj.gov/dep/landuse/>

New Jersey Department of Environmental Protection Division of Solid and Hazardous Waste - <http://www.nj.gov/dep/dshw/>

New Jersey Department of Environmental Protection Stormwater and Nonpoint Source Pollution - <http://www.nj.gov/dep/stormwater/>

New Jersey Department of Environmental Protection Division of Water Supply and Geoscience – <http://www.nj.gov/dep/watersupply>

New Jersey Department of Environmental Protection Division of Water Quality - <http://www.nj.gov/dep/dwq/>

Division of Water Quality's NJPDES Discharge to Surface Water Program – <http://www.nj.gov/dep/dwq/swp.htm>

New Jersey Highlands Council - <http://www.highlands.state.nj.us/>
Guidance for the Highlands Water Protection and Planning Act – <http://www.nj.gov/dep/highlands/>

New Jersey Pinelands Commission - <http://www.nj.gov/pinelands/>