

Office of Natural Resource Restoration Frequently Asked Questions (FAQ)

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The Questions

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The Answers

Why is there a New Jersey Department of Environmental Protection (NJDEP) Office of Natural Resource Restoration (ONNR) and what is the goal of the program?

The State holds the natural resources of New Jersey in trust for the benefit of its citizens.¹ It is a fundamental concept that natural resources and natural resource services provide not only the cornerstone of all life, but also determine the quality of that life, for humans and all other species. Discharges of hazardous substances and other pollutants may result in injuries to these natural resources and natural resource services, thereby impairing the important ecological and economic functions they provide. The Office of Natural Resource Restoration was created to address natural resource injuries.

The Department's goal in implementing the State's natural resource restoration program is to redress the injuries resulting from hazardous discharges to natural resources and the ecological and economic services they provide, through the restoration of those natural resources and the compensation of the economic and ecological losses for the citizens of NJ.

NOTES: 1. **N.J.S.A.** 58:10-23.11a.

What is the Department's legal authority and role in overseeing the investigation and restoration of injured natural resources?

The Department's legal authority for the investigation and restoration of injured natural resources is three-fold.

First, multiple New Jersey statutes establish the Department's authority. The most important New Jersey statutes which provide the Department with the authority to require the investigation and restoration of injured natural resources include the Department's enabling act², the Water Pollution Control Act³, the Spill Compensation and Control Act⁴, the Industrial Site Recovery Act⁵, and the Brownfield and Contaminated Site Remediation Act⁶. More specifically, the definition of "remedial action" under the Brownfield and Contaminated Site Remediation Act, and the definition of "clean up and removal costs" under the Spill Compensation and Control Act, are "sufficiently broad to encompass the [Department's] power to assess damages caused to natural resources and to require remediation."⁷ In addition, the Industrial Site Recovery Act also "supports the [Department's] inclusion of the natural resource damage issue in the remediation process."⁸ Finally, "the investigation and restoration of injured natural resources is incorporated into the Brownfield [and Contaminated Site Remediation] Act."⁹

Second, the common law provides the Department with additional authority to require investigation and restoration of injured natural resources. The public trust doctrine is an example of the State's common law authority which develops through individual court cases.¹⁰ Under this long-held doctrine, the State is responsible, as the trustee of the state's natural

resources, to manage these natural resources for the benefit of the present and future citizens of New Jersey. The State also has a fiduciary obligation to seek restitution when any of the State's natural resources are injured or otherwise impaired as a result of a discharge. ¹¹ This restitution is generally in the form of restoring the injured natural resources and natural resource services.

Finally, several Federal statutes provide the Department with additional authority to require the investigation and restoration of injured natural resources. These federal statutes include the Comprehensive Environmental Response, Compensation and Liability Act ¹², the Clean Water Act ¹³, and the Oil Pollution Act ¹⁴.

NOTES:

2. **N.J.S.A.** 13:1D-9.
3. **N.J.S.A.** 58:10A-1 *et seq.*
4. **N.J.S.A.** 58:10-23.11a *et seq.*
5. **N.J.S.A.** 13:1K-6 *et seq.*
6. **N.J.S.A.** 58:10B-1 *et seq.*
7. *New Jersey Site Remediation Industry Network v. New Jersey Department of Environmental Protection*, Docket No. A-5272-97T3 slip op. at 21 (App. Div., April 17, 2000) (per curiam) cert. denied 165 **N.J.** 528 (2000).
8. *New Jersey Site Remediation Industry Network v. New Jersey Department of Environmental Protection*, Docket No. A-5272-97T3 slip op. at 21 (App. Div., April 17, 2000) (per curiam) cert. denied 165 **N.J.** 528 (2000).
9. *New Jersey Site Remediation Industry Network v. New Jersey Department of Environmental Protection*, Docket No. A-5272-97T3 slip op. at 29 (App. Div., April 17, 2000) (per curiam) cert. denied 165 **N.J.** 528 (2000).
10. See, for example, *Arnold v. Mundy*, 6 **N.J.L.** 1 (1821).
11. See, *State v. Jersey Cent. Power & Light Co.*, 125 **N.J. Super.** 97 (1973), *aff'd.*, 133 **N.J. Super.** 375 (App. Div. 1975), *rev'd. on other grounds*, 68 **N.J.** 161 (1976).
12. 42 **U.S.C.** 9601 *et seq.*
13. 33 **U.S.C.** 1301 *et seq.*
14. 33 **U.S.C.** 2701 *et seq.*

What regulations pertain to the investigation of injured natural resources?

The [Technical Requirements for Site Remediation, N.J.A.C. 7:26E](#), provide regulatory guidance on the investigation of injured natural resources.

What steps are necessary to characterize natural resource injuries?

The process to characterize natural resource injuries is incorporated in the Department's existing remedial investigation activities required for remediation which utilize the [Technical Requirements for Site Remediation](#). The characterization is completed during the remedial investigation, which is overseen by the Site Remediation Program.

Characterization of natural resource injuries falls into two categories: **ecological injury** and **ground water injury**. Both categories need to be evaluated for natural resource injuries and are part of the remedial investigation. (N.J.A.C. 7:26E - 4)

Ecological Injury

As per the Technical Requirements for Site Remediation ¹⁵, the characterization of ecological natural resource injuries is a two-step process -- a **baseline ecological evaluation** and an **ecological risk assessment** -- described in more detail in the following paragraphs:

a. What is a baseline ecological evaluation?

A critical part of every site investigation is the baseline ecological evaluation required in N.J.A.C. 7:26E-3.11.¹⁶ The Technical Requirements for Site Remediation require each person conducting the remediation of a contaminated site or area of concern to conduct a baseline ecological evaluation as part of the process to ensure that the resulting remedy is protective of the environment. The Department uses the information that the person is already required to collect in the baseline ecological evaluation as the first step in determining whether or not natural resource injuries potentially exist as a result of a discharge at a site. In the baseline ecological evaluation, the person responsible for conducting the remediation must determine whether or not any natural resources may have been injured by a discharge. A determination is based upon the following criteria:

- the presence of a contaminant of ecological concern that exists at the site;
- the presence of an environmentally sensitive natural resource at or near the site; and
- a pathway that would link the contaminant of ecological concern with the environmentally sensitive natural resource.

b. What are contaminants of ecological concern?

[Contaminants of ecological concern](#) include those contaminants that exhibit the ability to biomagnify or bioaccumulate, as well as contaminants with concentrations that exceed the applicable standards or guidelines recommended by the Department, the National Oceanic and Atmospheric Administration, the U.S. Environmental Protection Agency or other Federal natural resource agencies. The Department has outlined some of the references that may be used in the identification of the contaminants of ecological concern for specific environmental media at N.J.A.C. 7:26E-3.11(a)1.

c. What are environmentally sensitive natural resources?

Environmentally sensitive natural resources means all areas defined at N.J.A.C. 7:1E-1.8(a), ground water, and areas and/or resources that are protected or managed pursuant to the Pinelands Protection Act, N.J.S.A. 13:18A-1 et seq. and the Pinelands Comprehensive Management Plan, N.J.A.C. 7:50.

d. What is a contamination pathway?

A contamination pathway is the link between the contaminant of ecological concern in the environment and an environmentally sensitive natural resource. It is through this pathway that the contamination from a discharge could move from the point of discharge to the environmentally sensitive natural resource. An example of a contamination pathway is ground water, which can serve as a mechanism for hazardous substances to move from the point of a discharge on the land surface to surface water.

e. What happens if all three of these criteria are met?

If it is determined through the baseline ecological evaluation that there is a contaminant of ecological concern present, that there is an environmentally sensitive natural resource at or near the site, **and** that there is a pathway from the contamination to the environmentally sensitive natural resource, then that person must conduct an ecological risk assessment pursuant to the Technical Requirements for Site Remediation.¹⁷

f. What is an ecological risk assessment?

An ecological risk assessment is a process through which the person responsible for conducting the remediation evaluates the likelihood that adverse ecological effects to natural resources have occurred, are occurring or may occur, as a result of a discharge.

These adverse ecological effects are the result of any physical, chemical, or biological mechanism that can induce an adverse ecological response. Adverse ecological responses can range from sublethal chronic effects in an individual organism to a loss of ecosystem function.¹⁸ Similar to the baseline ecological evaluations discussed above, ecological risk assessments are described in the Technical Requirements for Site Remediation.¹⁹ In addition to using the ecological risk assessments to ensure that the remedy is protective of the environment, the Department uses the ecological risk assessment to identify and characterize the injuries to natural resources and natural resource services. Often, the results of the ecological risk assessment can be used to provide the scope of the restoration necessary to compensate for the injury. In cases where the environmental risk assessment does not provide sufficient information to develop appropriate restoration, the Department will work with the person conducting the remediation to collect necessary additional data to do so.

Ground Water Injury

Ground water injury is characterized in the remedial investigation through the delineation of the horizontal and vertical extent of the ground water contamination.

NOTES:

15. **N.J.A.C.** 7:26E-1 *et seq*
16. Except that a baseline ecological evaluation is not required at any area of concern that consists of an underground storage tank storing heating oil for on-site consumption in a one to four family residential building. See, **N.J.S.A.** 58:10B-12a.
17. **N.J.A.C.** 7:26E-4.7.
18. U.S. EPA, "Ecological Risk Assessment Guidance for Superfund." September 1994.
19. **N.J.A.C.** 7:26E-4.7

How does the Department manage the oversight of the various phases of natural resource injury characterization and restoration?

The Department's [Site Remediation Program](#) oversees the identification and characterization of injured natural resources as part of the site investigation and remedial investigation of a contaminated site.

Upon completion of the remedial investigation, the Site Remediation Program will consult with the Office of Natural Resource Restoration if the investigation reveals ground water contamination or the presence of ecological risk. The Office of Natural Resource Restoration will oversee the characterization of the injury and the selection of the appropriate restoration. Whenever injured natural resources are restored concurrent

with other remedial actions, the Office of Natural Resource Restoration is involved. The Office of Natural Resource Restoration has the lead for all natural resource restoration that is implemented independent of the other remedial actions for the site.

Do the Technical Requirements for Site Remediation require that an evaluation of natural resource injuries be completed on all cases prior to the issuance of a no further action letter?

Yes, the [Technical Requirements for Site Remediation](#) requires that an evaluation of natural resource injuries, precede the Site Remediation Program's issuance of a [no further action letter](#) except as provided below:

- a. a baseline ecological evaluation is not required at any area of concern that consists of an underground storage tank storing heating oil for on-site consumption in a one to four family residential building. See, N.J.S.A. 58:10B-12a.
- b. Soil areas of concern where a baseline ecological evaluation and an ecological risk assessment (if necessary) are completed and indicate no ecological injury will be issued no further action letters. (For soil areas of concern that indicate there is potential for ecological injury, or if the ecological investigation is not completed, the Department will issue a no further action with a reservation of rights to pursue natural resource injury).

How is the information from the remedial investigation used to assess natural resource injury and determine the scope of the restoration?

The scope of the restoration is based on the information that is gathered during the assessment stage. Natural Resource injuries are assessed for both ground water and ecological resources as follows:

a) groundwater

Injury to groundwater resources is solely the responsibility of the State. The Department uses the [ground water injury calculation](#) developed and applied by the Office of Natural Resource Restoration. This formula incorporates plume size, duration of injury, groundwater recharge rates and water rates in order to derive a monetary value (damages) for injuries to ground water resources of the State. The resulting surrogate value is then used to determine the appropriate scale of the restoration project.

b)ecological resources

For natural resource injuries other than to groundwater, such as wetlands, wildlife, surface water and human use injuries (as in the closure of a waterway to fishing or beach access), the process involves collecting, compiling and analyzing information, statistics, or data to make a determination of the extent of the injuries to natural resources resulting from discharges of oil, releases of hazardous substances, or physical injury due to remedial activities.

The Department considers applying methods accepted by Federal and State trustees on a case by case basis. The Office of Natural Resource Restoration works with Federal Trustees to determine the extent of the injury and the appropriate restoration to compensate for the injury.

Where does the money (damages) go that the State collects for natural resource injuries?

Money collected for natural resource injuries is known as Natural Resource Damages (NRD). These monies are appropriated to case specific or watershed management area accounts in the [Hazardous Discharge Site Remediation Fund \(HDSRF\)](#) and are used to perform restoration projects. The HDSRF, which is administered by the Department, is maintained separately from the State's General Treasury Fund.

What are some ways that natural resources may be restored?

There are various means in which a person responsible for conducting the remediation may compensate the citizens of New Jersey for natural resource injuries. Depending on the injury, the Office of Natural Resource Restoration encourages responsible parties to restore the resources and services that are lost. For all claims, the Department's preference is for performance of restoration work and resource protection in lieu of payment of money (damages), provided that reasonable allowance is made for monitoring and oversight to ensure accountability and effectiveness of restoration. For example, if as part of a remedial activity, wetlands are injured, the person responsible for conducting the remediation may propose to create wetlands/habitat in the appropriate ratios to compensate for the functions and services lost.

Other restoration may include acquisition of land for aquifer recharge, reforestation and/or removal of impervious surfaces to improve infiltration and water retention, non-point source pollution abatement projects, enhanced public access, and information and interpretive projects to compensate for lost public use and natural resource services. Restoration projects must have a nexus to the injured resource and should be in the same watershed or subwatershed to the extent practicable.

When do the Federal Natural Resource Trustees become involved in coordinating the necessary assessment and restoration of natural resource damages?

The Office of Natural Resource Restoration, as the State's [natural resource trustee](#) representative for the Commissioner of NJDEP, is a co-trustee with designated Federal Natural Resource Trustee agencies under Federal law. The trustee agencies that the Office of Natural Resource Restoration most frequently interacts with are the U.S. Fish and Wildlife Service and the National Oceanic and Atmospheric Administration. When natural resources under their authority are also impacted, the Trustees can participate in assisting with the identification of natural resources injured, determining the extent of the injuries, recovering compensatory restoration and damages from those responsible, and carrying out natural resource restoration activities.

Does the Department pursue natural resource damages against homeowners?

No, the Department does not pursue homeowners, at their place of residence, for restoration of natural resources injured by hazardous discharges. The Department may, however, pursue other persons responsible for the hazardous substances that were discharged at a residential site, including, without limitation, suppliers of the hazardous substances, such as fuel oil and heating oil, that are discharged at a residence, and persons that transported the hazardous substance to that residence.

[End of the ONRR FAQ]