

New Jersey Highlands  
Water Protection and Planning Council

# ANNUAL REPORT 2024



Morris Canal Greenway, Waterloo Village, Byram Township, Sussex County





# Table of Contents

## Introduction

Executive Director Certification.....	i
A Message from the Chairman and Executive Director.....	ii
Protecting the New Jersey Highlands .....	iii
Highlands Water Use Map.....	iv
Highlands Water Protection and Planning Council 2024 .....	v
Council Member Updates.....	v
Statement of Activities and Financial Report .....	vi
The New Jersey Highlands Region Map .....	vii



2024 Snapshots.....	1
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## Feature Stories

Funding Municipal Priorities.....	3
Increasing Implementation of the RMP.....	5
RMP Amendments Adopted in 2024 .....	7
Highlands Council Marks Two Decades of Protection .....	8
GIS: The Backbone of Highlands Protections.....	11
Protecting Highlands Resources while Meeting Affordable Housing Obligations.....	15
Sustainable Agriculture Grant Updates .....	17
Creating a Highlands Brand .....	19
Chester Borough Weather Station Fills Gap in Data Desert .....	20
Confronting Climate Change .....	21
Monitoring Water Quality in the Raritan Watershed.....	23
Land Preservation Updates .....	24

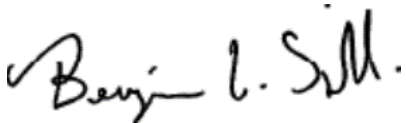


## Highlands Development Credit Bank Annual Report

Highlands Development Credit Purchase Program Summary.....	25
Highlands Development Credit Registry.....	26

## Executive Director Certification

As required by State Executive Order #37, all State authorities are required to certify that during the preceding year, the authority has, to the best of its knowledge, followed all of the authority's standards, procedures, and internal controls. I hereby certify to the best of my knowledge that, during the 2024 calendar year, all of the Council's standards, procedures, and internal controls were followed.



Benjamin L. Spinelli, Esq.

*Executive Director*

New Jersey Highlands Water Protection and Planning Council

*Please note that Highlands Council financial reporting follows a Fiscal Year that begins July 1 and ends June 30, while this 2024 Annual Report summarizes activities for the calendar year. For this reason, the Statement of Activities and Financial Report found on page vi, includes portions of both Fiscal Year 2024 and Fiscal Year 2025.*

*Complete Highlands Council Financial Reports are available on the Highlands Council website.  
[www.nj.gov/njhighlands](http://www.nj.gov/njhighlands)*



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 Chester, New Jersey 07930-2322  
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**PHILIP D. MURPHY**  
*Governor*

**TAHESHA L. WAY**  
*Lt. Governor*

**CARL J. RICHKO**  
*Chairman*

**BENJAMIN L. SPINELLI, ESQ.**  
*Executive Director*

## **A Message from the Chairman and Executive Director**

When the Highlands Act was adopted in 2004, it was visionary legislation. We need only look to the example set when, around the turn of the 20th century, New York state had the foresight to set aside approximately 2,000 square miles in the Catskill-Delaware watershed to protect drinking water.

Today, those lands provide about 1 billion gallons of water per day to residents of New York City, and the city invests an average of \$108 million per year to manage those public and privately held lands. It is an illustration of the importance of the Highlands Act and the commitment it takes to be successful. The Highlands region exports about 840 million gallons of water per day to residents throughout New Jersey. Clearly, protection of the Highlands region and its resources was an investment in the future of New Jersey.

In the 20 years since its passage, the Highlands Council has worked with its state agency partners and the municipalities of the region to ensure the water supply for approximately 7 million people is properly safeguarded, the agricultural resources and the agricultural economy continue to thrive, and the unique ecosystems of the Highlands are adequately protected. That mission will continue to be relevant far into the future. While the threats to the Highlands today are somewhat different than they were at the time of the Act's inception, the urgency to meet these threats remains.

During 2024, the Highlands Council and its staff was committed to fulfilling the mandates of the Highlands Act and the sound principles set forth in the Highlands Regional Master Plan (RMP). The Land Use Capability Zones that underly the RMP were reexamined to ensure accuracy using the latest available Land Use/Land Cover data from the NJ Department of Environmental Protection (NJDEP). Affordable Housing policy was addressed in response to new legislation that recognized the need to incorporate the dictates of the Highlands Act into housing plans for Highlands municipalities. The Council has been actively engaged in working with over a dozen Planning Area towns on Highlands RMP conformance. Significant advances were made in creating a brand and marketing plan for the Highlands to strengthen economic sustainability in the region. The Council made a substantial investment in the future of Highlands agriculture with a series of sustainable agricultural grants. Finally, progress continued on creating a new Open Space & Recreation Plan for the region.

These are just some of the highlights from the Council's many achievements in the past year. The report that follows illustrates just some of the work we're actively engaged in to ensure this future. Here at the Highlands Council, we are working hard every day to ensure that both the region and the State of New Jersey have a sustainable and prosperous future.

Carl J. Richko, Chairman  
 Highlands Water Protection and Planning Council

Benjamin L. Spinelli, Esq., Executive Director  
 Highlands Water Protection and Planning Council

# Protecting the New Jersey Highlands

The New Jersey Highlands region stretches from the banks of the Delaware River in Warren and Hunterdon counties to the New York State border along northern Sussex, Passaic, and Bergen counties. The Highlands region covers approximately 1,300 square miles and includes 88 municipalities and portions of seven counties (Bergen, Hunterdon, Morris, Passaic, Somerset, Sussex, and Warren).

Although the region covers less than 15% of the state's land area, **70% of the state's residents get some or all of their drinking water from the Highlands, including 8 out of every 10 people living in a designated Overburdened Community.** For this reason, the New Jersey Highlands region requires special protection. Recognizing the significant natural, cultural, and agricultural value of the region, the State Legislature of New Jersey passed the New Jersey Highlands Water Protection and Planning Act (Highlands Act) in 2004 to protect both the natural resources and the economic vitality of communities within the region.

This protection is achieved through a combination of regional planning and regulatory provisions administered jointly through implementation of the Highlands Regional Master Plan (RMP) and the New Jersey Department of Environmental Protection (NJDEP) Highlands Rules.

The Highlands Act established the New Jersey Highlands Water Protection and Planning Council (Highlands Council) as a regional planning agency and charged it with the creation and adoption of a regional master plan to protect and enhance the natural resources within the New Jersey Highlands. The RMP was adopted by the Highlands Council in 2008.

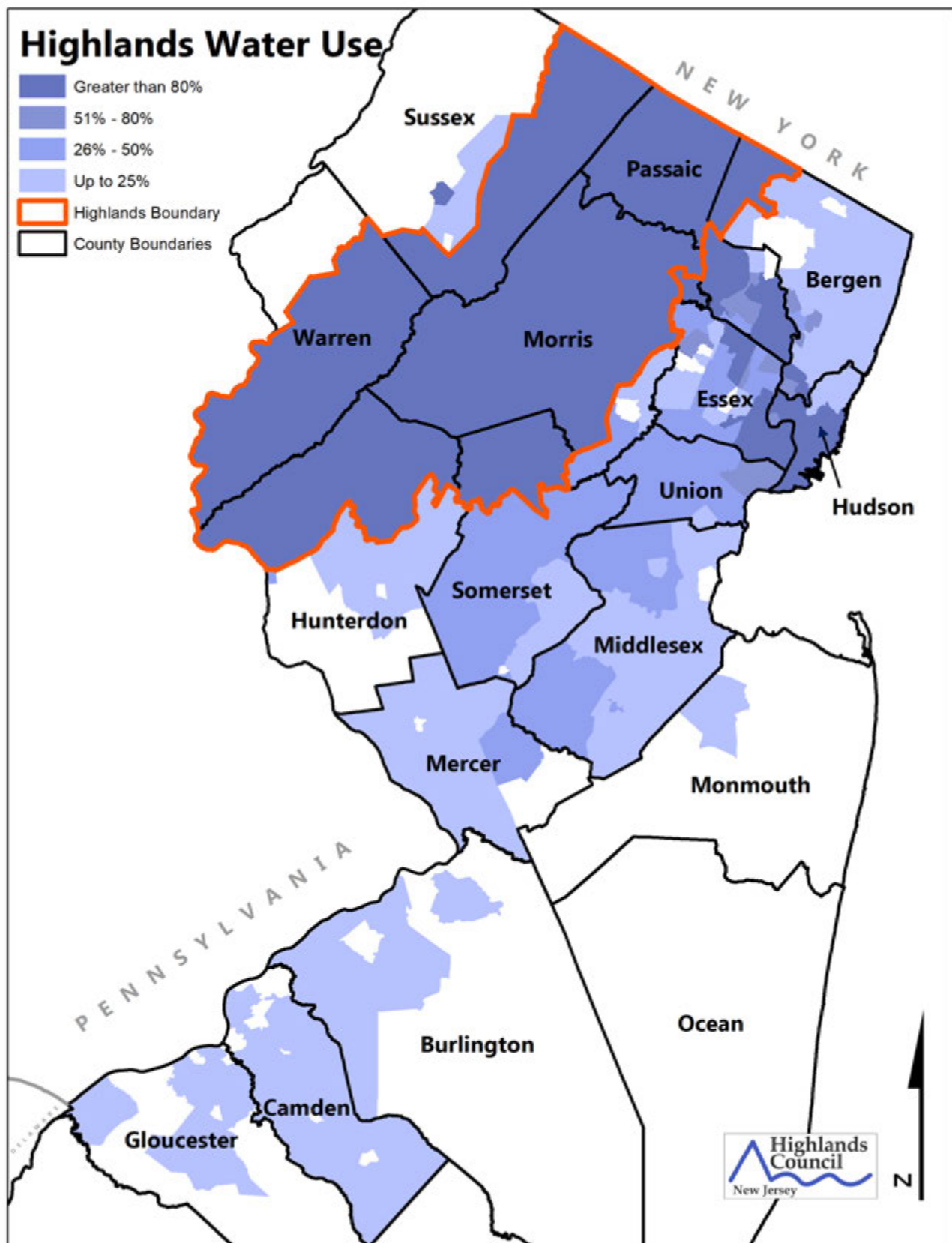
The Highlands Council works in partnership with municipalities and counties in the region to encourage a comprehensive regional planning approach to implementation of the Highlands Act. The RMP provides a framework for this implementation at the local level. Programs outlined in the RMP include the management of Natural Resources; Water Resources and Utilities; Agricultural Resources; Historic, Cultural, Archaeological and Scenic Resources; Transportation; Sustainable Economic Development; and Air Quality.

The RMP also outlines a program to guide municipalities and counties in the region through its implementation. Conformance with the RMP is required by the Highlands Act throughout the Preservation Area and is voluntary in the Planning Area. This process involves the revision of local planning and regulatory documents to integrate the land use provisions and resource management protections of the Highlands Act, so that those documents align with the goals, policies, and objectives of the RMP. Noncompetitive, no-match-required grant funding is available to support this work.

The Highlands Council does not issue permits, but is statutorily required to review certain proposed projects throughout the Highlands region for consistency with the Highlands Act and the RMP.



New Jersey is part of the four-state federal Highlands region. The federal Highlands region stretches from Southeastern Pennsylvania through parts of New Jersey, New York and into Connecticut. Recognizing the significance and value of the resources within this region, the United States Congress enacted the Highlands Conservation Act (HCA) in 2004. The HCA authorizes funding to protect lands with the highest conservation value in the four-state region.



The Highlands region is a primary source of drinking water for New Jersey. More than 70% of New Jersey residents get some or all of their drinking water from the Highlands region, including 8 out of every 10 people living in a designated Overburdened Community. The Highlands Council works with municipal and county governments, our sister state government agencies, and other entities to implement the provisions of the 2004 Highlands Water Protection and Planning Act and the Highlands Regional Master Plan.



# Highlands Water Protection and Planning Council 2024

The Highlands Council is a 15-member appointed body tasked with implementation of the Highlands Act. The Council is advised in its actions by a staff of planning, science, geographic information system (GIS), and administrative professionals, based in Chester, NJ. There are currently five vacancies on the Council.

**Carl J. Richko, Chairman**

West Milford, Passaic County  
Former Mayor, West Milford Township

**Kurt Alstede, Vice Chairman**

Chester Township, Morris County  
Founder, Alstede Farms  
Former Councilman, Chester Township

**Daniel T. Bush**

Holland Township, Hunterdon County  
Mayor, Holland Township

**Timothy P. Dougherty**

Morristown, Morris County  
Mayor, Town of Morristown

**Michael R. Dressler**

Cresskill, Bergen County  
Bergen County Surrogate

**Michael Francis**

Hopatcong Borough, Sussex County  
Former Mayor, Hopatcong Borough

**Bruce James**

Clifton, Passaic County  
Commissioner, Passaic County

**Dr. Daniel J. Van Abs**

Princeton, Mercer County  
Former Professor of Professional Practice for  
Water, Society & Environment at Rutgers  
University, School of Environmental and  
Biological Sciences

**James A. Visioli**

Dover, Morris County  
Former Alderman, Town of Dover

**Richard Vohden**

Andover Township, Sussex County  
Former Freeholder, Sussex County

## Council Member Changes in 2024

### Mayor Dan Bush of Holland Township Joins Highlands Council

Mayor Daniel T. Bush of Holland Township, Hunterdon County was sworn in as a member of the Highlands Council at its February public meeting. A lifelong Hunterdon County resident, long-time municipal official in Holland Township, and the Director of Public Works for Hunterdon County, Dan brings valuable experience and insight to the Council.



### Dr. Michael Sebetich Concludes 13 Years of Service

At the December Highlands Council meeting, Dr. Michael Sebetich was presented with a plaque commemorating his 13 years of service on the Highlands Council. A retired professor with expertise in lake and stream ecology, Dr. Sebetich provided an informed perspective to the work of the Council during his tenure. An avid outdoorsman, Dr. Sebetich noted in his remarks at his last meeting, "I will miss being a part of the process, but leaving the Council gives me one more day a month to go fly fishing."





# Statement of Activities and Financial Report

*period ending December 31, 2024*

## General Operating Budget FY24 - July 1, 2023 through June 30, 2024

### Revenues

State of New Jersey Appropriation FY24	\$ 2,429,000.00
Balance from FY23	\$ 554,092.46
Miscellaneous Revenues & Reimbursements	\$ 11,554.76
<b>TOTAL</b>	<b>\$ 2,994,647.22</b>

### Expenditures

Salaries	\$ 2,258,035.47
Materials and Supplies	\$ 27,510.39
Other Operating Expenses	\$ 86,792.23
Rent, Maintenance, and Repairs	\$ 254,830.91
Equipment, Additions, and Improvements	\$ 134,138.36
Balance through June 30, 2024	\$ 233,339.86
<b>TOTAL</b>	<b>\$ 2,994,647.22</b>

## General Operating Budget for Portion of FY25 - July 1, 2024 through December 31, 2024

### Revenues

State of New Jersey Appropriation FY25	\$ 3,066,000.00
Balance from FY24	\$ 233,340.00
Miscellaneous Revenues & Reimbursements	\$ 5,000.00
<b>TOTAL</b>	<b>\$ 3,304,340.00</b>

### Expenditures

Salaries	\$ 1,188,093.68
Materials and Supplies	\$ 12,672.68
Other Operating Expenses	\$ 50,538.95
Rent, Maintenance, and Repairs	\$ 123,520.06
Equipment, Additions, and Improvements	\$ 47,950.96
Balance through June 30, 2024	\$ 1,881,563.67
<b>TOTAL</b>	<b>\$ 3,304,340.00</b>

## Regional Master Plan Budget for Portion of FY25 - July 1, 2024 through December 31, 2024

### Revenues

Balance from FY24	\$ 3,399,120.95
USFWS Grant	\$ 172,000.00
Miscellaneous Revenues & Reimbursements	\$ 500.00
<b>TOTAL</b>	<b>\$ 3,571,620.95</b>

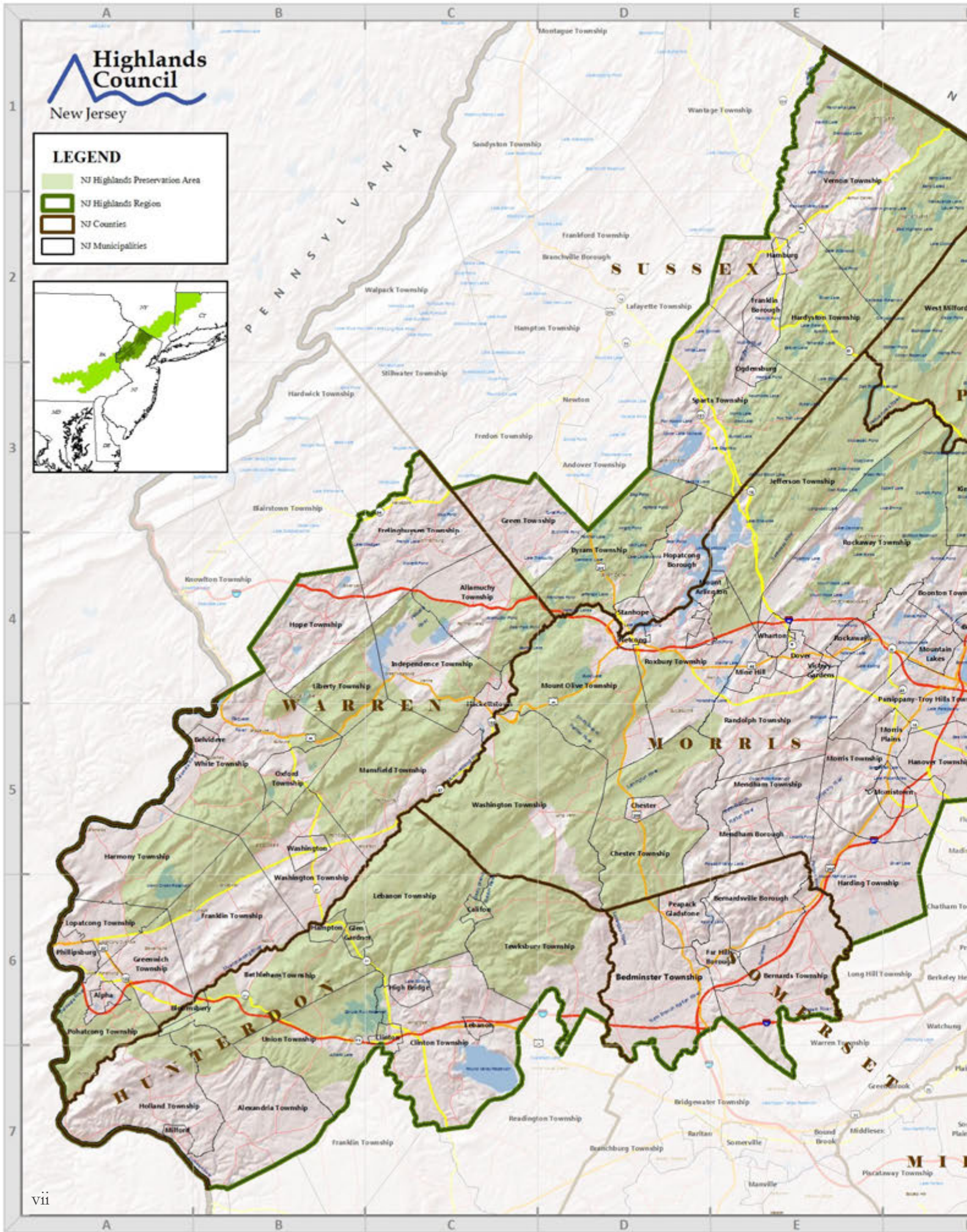
### Expenditures

Contracts Paid to Date	\$ 684,434.80
Balance on Approved Contracts	\$ 1,435,735.36
Balance through June 30, 2025	\$ 1,451,450.79
<b>TOTAL</b>	<b>\$ 3,571,620.95</b>



**LEGEND**

- NJ Highlands Preservation Area
- NJ Highlands Region
- NJ Counties
- NJ Municipalities





## Highlands Municipalities

Alexandria Township, 7B  
 Allamuchy Township, 4C  
 Alpha Borough, 6A  
 Bedminster Township, 6D  
 Belvidere, 5A  
 Bernards Township, 6E  
 Bernardsville Borough, 6E  
 Bethlehem Township, 6B  
 Bloomingdale Borough, 3G  
 Bloomsbury Borough, 6A  
 Boonton, 4F  
 Boonton Township, 4F  
 Butler Borough, 3F  
 Byram Township, 4D  
 Califon Borough, 6C  
 Chester Borough, 5D  
 Chester Township, 5D  
 Clinton, 6C  
 Clinton Township, 7C  
 Denville Township, 4E  
 Dover, 4E  
 Far Hills Borough, 6E  
 Franklin Borough, 2E  
 Franklin Township, 6B  
 Frelinghuysen Township, 4C  
 Glen Gardner Borough, 6B  
 Green Township, 3C  
 Greenwich Township, 6A  
 Hackettstown, 5C  
 Hamburg Borough, 2E  
 Hampton Borough, 6B  
 Hanover Township, 5F  
 Harding Township, 6E  
 Hardyston Township, 2E  
 Harmony Township, 5A  
 High Bridge Borough, 6C  
 Holland Township, 7A  
 Hopatcong Borough, 4D  
 Hope Township, 4B  
 Independence Township, 4C  
 Jefferson Township, 3E  
 Kinnelon Borough, 3F  
 Lebanon Borough, 6C  
 Lebanon Township, 6C  
 Liberty Township, 4B  
 Lopatcong Township, 6A  
 Mahwah Township, 2H  
 Mansfield Township, 5C  
 Mendham Borough, 5E  
 Mendham Township, 5E  
 Milford Borough, 7A  
 Mine Hill Township, 4E  
 Montville Township, 4F  
 Morris Plains Borough, 5F  
 Morris Township, 5E  
 Morristown, 5F  
 Mount Arlington Borough, 4E  
 Mount Olive Township, 4D  
 Mountain Lakes Borough, 4F  
 Netcong Borough, 4D  
 Oakland Borough, 3G  
 Ogdensburg Borough, 3E  
 Oxford Township, 5B  
 Parsippany-Troy Hills Township, 4F  
 Peapack-Gladstone Borough, 6D  
 Pequannock Township, 4G  
 Phillipsburg, 6A  
 Pohatcong Township, 6A  
 Pompton Lakes Borough, 3G  
 Randolph Township, 5E  
 Ringwood Borough, 2G  
 Riverdale Borough, 3G  
 Rockaway Borough, 4E  
 Rockaway Township, 4E  
 Roxbury Township, 4D  
 Sparta Township, 3E  
 Stanhope Borough, 4D  
 Tewksbury Township, 6C  
 Union Township, 7B  
 Vernon Township, 1E  
 Victory Gardens Borough, 4E  
 Wanaque Borough, 3G  
 Washington Borough, 5B  
 Washington Township (Warren), 5B  
 Washington Township (Morris), 5C  
 West Milford Township, 2F  
 Wharton Borough, 4E  
 White Township, 5B

0 1.5 3 6 9 12 Miles





# 2024 snapshots



**It's puzzling why more people don't know about the New Jersey Highlands.** But these young Highlands Heroes know all about why the Highlands region is so important to New Jersey's drinking water after spending some time with Highlands staff on 'Take Your Child to Work day' in April. Piecing together this giant floor puzzle, created with the help of the Highlands GIS team, was just one of the day's activities.



**Hey buddy!** Casey Ezyske of the Highlands Council Science team shows off a crayfish – indicative of water quality – found during stream monitoring with Raritan Headwaters Association (RHA). Highlands Council staff joined forces with other RHA volunteers to assess stream conditions and collect water samples from the South Branch of the Raritan River at multiple sites in the Highlands. See story page 23.



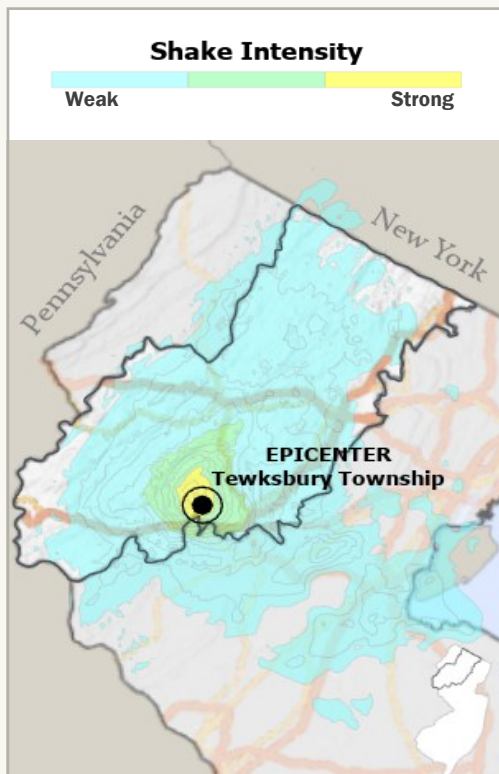
Executive Director Ben Spinelli offers remarks at the **Highlands Act 20th Anniversary** celebration in September. See story page 8.





In June, the Highlands Council hosted a meeting led by the **New Jersey Office of Food Security** designed to assemble organizations working to address food security in the region. The goal is to find ways to profitably connect the Highlands agricultural industry with the food security market.

**Rarities.** Although not directly related to the work of the Highlands Council, 2024 saw some notable natural phenomena in the area. On April 5, a 4.8 magnitude earthquake hit New Jersey emanating from an epicenter



in Tewksbury Township, Hunterdon County along the southern border of the New Jersey Highlands. Later in the year the Aurora Borealis, or Northern Lights, made a rare appearance in the Highlands region. (photo below)



# By the Numbers

**\$1 million**  
**in reimbursements**

to Highlands municipalities and counties for RMP implementation projects.

**\$3 million**  
**in grant awards** to Highlands municipalities and counties for RMP implementation projects.

**\$306,000+**  
paid to Highlands towns to support **MS4 permit compliance.**

**\$625,000**  
**awarded** to Highlands towns to support **affordable housing planning** in the Highlands.

# Funding Municipal Priorities

Every year municipalities and counties throughout the Highlands region, just like local governments everywhere, examine priorities, set goals, and put together budgets to meet those goals. For those working with the Highlands Council, many of the tasks ordinarily funded by municipal and county planning budgets can instead be paid for by the Highlands Council because those tasks also help implement the Highlands Act and Regional Master Plan (RMP). Funding for these types of grants comes from the Highlands Protection Fund, which was created as part of the Highlands Act and is sustained by an allocation from the realty transfer fee.

This plan conformance grant process begins with discussions between a municipality or

county and Highlands Council staff to review needs and goals. A specific request is then made and presented to the full Highlands Council for approval by resolution. Once approved, a detailed scope of work is developed, reviewed and approved by Highlands Council staff. A grant agreement is then formalized and work begins. Final project deliverables must be reviewed and approved by Highlands Council technical staff before invoices can be submitted for reimbursement.

Since this grant program was established, the Highlands Council has provided 78 municipalities and six counties with reimbursements totaling \$10.5 million for activities that help advance the goals of the Highlands Act and RMP. 💧

## 2024 Reimbursements

In 2024, the Highlands Council provided more than \$1 million to 23 municipalities and 2 counties in the region for completion of projects that help implement the RMP. Below is a summary of 2024 reimbursements by project type.

Project Type	Total Reimbursements
Stormwater Management/MS4 Compliance	\$ 306,395.55
Economic Sustainability Planning	\$ 205,602.73
Lake and Stream Management	\$ 142,281.65
Master Plan and Zoning	\$ 132,252.54
Open Space, Recreation and Trails Planning	\$ 102,142.50
Housing Element and Fair Share Plan	\$ 97,279.12
Plan Conformance Assessments	\$ 44,311.25
Redevelopment Planning	\$ 31,062.50
Wastewater Management Planning	\$ 7,586.75
<b>TOTAL</b>	<b>\$ 1,068,914.59</b>

*NOTE: Table summarizes reimbursements that took place in 2024; project work may have been completed in prior years, and reimbursements could be for partial or draft project deliverables.*



## 2024 Awards

In 2024, the Highlands Council approved more than \$3 million in grants for Highlands municipalities and counties. Below is a summary of 2024 awards by project type.

Project Type	Total Awards
Stormwater Management/MS4 Compliance	\$ 1,566,450.00
Municipal Build-out Analysis and Housing Element and Fair Share Plans	\$ 625,000.00
Lake Management	\$ 245,500.00
Watershed Management	\$ 230,269.00
Plan Conformance Assessments and Petition Preparation	\$ 153,500.00
Economic Sustainability Planning	\$ 100,000.00
Climate Hazard Vulnerability Assessment	\$ 50,000.00
Master Plan and Zoning	\$ 15,000.00
Redevelopment	\$ 10,000.00
Wastewater Management	\$ 10,000.00
<b>TOTAL</b>	<b>\$ 3,005,719.00</b>

*NOTE: Table summarizes awards made in 2024; grants are reimbursement based and require Highlands Council staff review and approval of project scopes and deliverables.*

## Municipalities and Counties that were reimbursed or awarded funding from the Highlands Council in 2024

Alexandria Township	Allamuchy Township	Bedminster Township
Bernards Township	Bethlehem Township	Bloomsbury Borough
Boonton Town	Boonton Township	Byram Township
Clinton Town	Clinton Township	Denville Township
Franklin Township	Glen Gardner Borough	Greenwich Township
Harmony Township	High Bridge Borough	Holland Township
Hope Township	Hunterdon County	Jefferson Township
Liberty Township	Mahwah Township	Mendham Township
Montville Township	Morris County	Mount Olive Township
Mountain Lakes Borough	Mount Arlington Borough	Netcong Borough
Oxford Township	Peapack and Gladstone Borough	Pohatcong Township
Ringwood Borough	Roxbury Township	Tewksbury Township
Union Township	Vernon Township	Washington Borough
Washington Township, Warren	West Milford Township	Wharton Borough

# Increasing Implementation of the RMP

## Three municipalities move closer to conformance

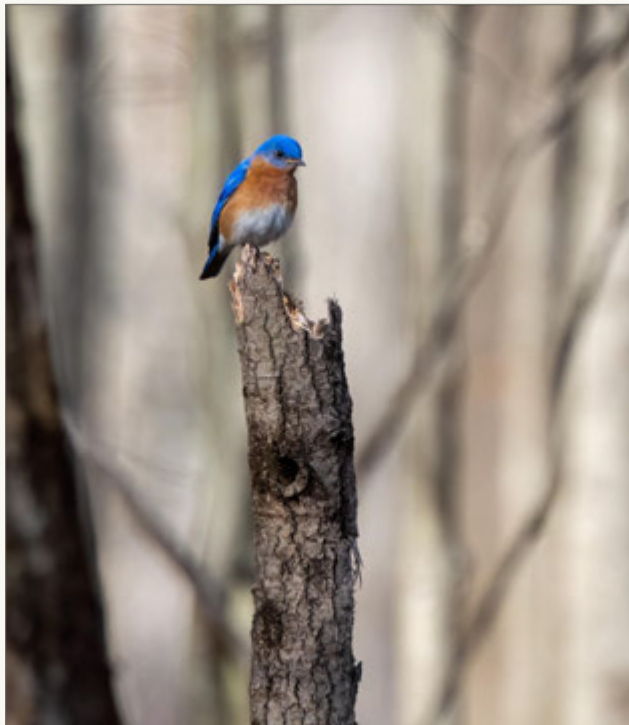
Municipal and county governments play a critical role in implementation of the Highlands Act through “plan conformance.” This process involves the revision of local planning and regulatory documents to integrate the land use provisions and resource management protections of the Highlands Act, so that those documents align with the goals, policies, and objectives of the RMP. Grant funding is available to support this work.

In broad brush strokes, the steps to conformance include: 1) Municipal or county self-assessment; 2) Petition preparation, review, and approval; and 3) Local implementation/adoption. When certain ordinances are adopted during the implementation phase, municipalities are considered to be fully conforming with the RMP. The Highlands Council provides no-match-required grant funding to support planning, engineering, and design costs incurred along every phase of this process.

In 2024 the Highlands Council approved three petitions for plan conformance. With approved petitions these municipalities move into the local implementation phase, and are now eligible for additional grant funding to support a variety of municipal tasks as described in each profile. 💧

### Harding Township, Morris County

Harding Township is a rural community located in the southeastern part of Morris County. The township holds several distinctions including being home to the Great Swamp National



**Eastern Bluebird** spotted in the Great Swamp National Wildlife Refuge in Harding Township, Morris County.

Wildlife Refuge, the Jockey Hollow section of the Morristown National Historical Park, and the headwaters of the Passaic River, which is a source of drinking water for more than 1 million people. The municipality is located entirely within the Planning Area of the Highlands region. Harding’s petition for conformance with the RMP was approved at the July Highlands Council meeting with specific plans for the municipality to address a municipal master plan reexamination; updates to the Township’s land use ordinance to reflect the RMP; an environmental resource inventory; stormwater management planning (MS4 permit compliance); and affordable housing. 💧

## Mountain Lakes Borough, Morris County

As its name implies, the historic Borough of Mountain Lakes is primarily a residential lake community boasting a total of nine lakes within the boundaries of the municipality. The Borough is also known for its historic “Hapgood” homes and the two-mile long Boulevard walking path and is conveniently located on New Jersey Transit's Montclair–Boonton Line with service to New York Penn Station. Listed on the national and state registers of historic places, Mountain Lakes is located entirely within the Planning Area of the Highlands region. The Borough’s petition for conformance with the RMP was approved at the December Highlands Council meeting. As part of the conformance process the municipality intends to complete a municipal master plan reexamination; adopt a land use ordinance that incorporates components of the RMP; complete an environmental resource inventory; and develop an affordable housing plan. 💧



**Mountain Lake** Mountain Lakes Borough, Morris County

## Bernardsville Borough Somerset County

A suburban-rural residential community located in northern Somerset County, Bernardsville Borough is home to the Scherman Hoffman Wildlife Sanctuary, a large portion of the Morristown National Historical Park, and, like Harding Township, the headwaters of the Passaic River. With a mixed-use downtown center, and a station on New Jersey Transit's Gladstone Branch line, Bernardsville is located entirely within the Planning Area of the Highlands region. The Borough’s petition for conformance with the RMP was approved at the December Highlands Council meeting with plans to complete a master plan reexamination; adopt a land use ordinance that incorporates components of the RMP; complete a Highlands Center feasibility study; and complete stormwater management planning tasks. 💧



**Cross Estate Gardens Water Tower**  
Bernardsville Borough, Somerset County



# RMP Amendments Adopted in 2024

The Highlands RMP is the principal document that shapes the work of the Highlands Council. Changes to it are not made lightly. The RMP Amendment Procedures adopted by the Council in 2018 require a comprehensive public input process involving six public hearings around the region and in Trenton, simultaneous with a 60-day public comment period. In 2024 three addenda were adopted by Council as amendments to the RMP. Addenda 2024-1 and 2024-2 were adopted by the Highlands Council in April. Addendum 2024-3 was adopted in July. 💧

## **Addendum 2024-1: Policy Standards for Warehousing in the New Jersey Highlands Region (adopted April)**

The Warehousing Standards were created in response to the proliferation of large warehouse projects, both built and proposed, throughout the Highlands region. Just as with all development in the Highlands, the need to protect the region's resources and avoid the adverse impacts that come with large-scale land use changes must inform the location, number, and design of warehouses. The continued threats to the region posed by inappropriately located and inappropriately designed warehouse developments led to a staff recommendation to adopt the standards as part of the RMP.

The adopted policy provides guidance for Highlands municipalities regarding siting and standards for warehouse facilities in the Highlands region. In addition, this policy supplements statewide policy guidance on this issue by providing information specific to the Highlands region.

## **Addendum 2024-2: Highlands Land Use Capability Zone (LUCZ) Map Technical Report Update (adopted April)**

The LUCZ informs much of the Council's work and is the primary guidance tool for implementation of the RMP. Most of the underlying data that supports the Highlands LUCZ has been updated and new data sets have become available since the original map was developed in 2008. Among other changes, the revised LUCZ incorporates the adoption of inland flood hazard rules, the update of mapping of anticipated flood hazard areas in the region, and new land use/land cover data from the NJDEP. The adopted amendment provides an update to the Highlands LUCZ map and its associated technical report that describes in detail the methodology for creating the LUCZ. See GIS feature page 11.

## **Addendum 2024-3: Highlands Affordable Housing Amendment (adopted July)**

Provides guidance to inform the appropriate location for affordable housing in the Highlands region. The requirement to provide affordable housing is not an excuse to ignore good planning. The Highlands Council was successful at ensuring that the protections of the Highlands Act and RMP would be factors in calculating affordable housing in the region. This amendment outlines specific changes that will be made to the RMP to reflect the new Affordable Housing Law (P.L.2024, c.2.) and provides clarifications about what the changes in the new law mean for Highlands municipalities. See Affordable Housing feature pages 15.

# Highlands Council Marks Two Decades of Protection

Passage of the New Jersey Highlands Water Protection and Planning Act (Highlands Act) in 2004 was a significant milestone in a state already known for sound long-term planning. With the region under threat of increasingly rapid sprawl development into some of the state's most important watershed lands, legislative protection of the Highlands was clearly required and received bi-partisan support.

In September 2024, the Highlands Council commemorated the 20th anniversary of the passage of the Highlands Act by hosting an event at the Frelinghuysen Arboretum in Morris Township. Following a welcome by Highlands Council Chairman Carl Richko, Executive Director Ben Spinelli introduced a panel discussion featuring the Council's first chairman, John Weingart, the two primary sponsors of the Act, Senators Bob Smith and John McKeon, and the former executive director of the New Jersey Conservation Foundation, Michele Byers.

The result was a fascinating discussion about the politics and policy concerns that influenced the drafting of the Act and the compromises that had to be

made to ensure its passage. It was also clear that the effort to protect the region's resources was visionary in nature and required a great deal of forward thinking to become reality. The lively discussion touched on the political climate and the struggles in 2004 to bring the act to fruition, implementation of the Act over the past 20 years, and what the future might hold for the Highlands region. A recording of the discussion is available on the Highlands Council website.

*story continues on next page*



**Welcome.** Highlands Council Chairman Carl Richko shares remarks with participants to open the Highlands Act 20th Anniversary Summit on Friday, September 6, 2024.

Following the plenary, guests could choose from several sessions and activities.

- Marc Saluk, Director of Economic Development and Tourism of Hunterdon County, along with Hunterdon County Commissioner John Lanza, and Mayor Paul Muir of Bethlehem Township hosted a session spotlighting **Highlands Act implementation success stories** in Hunterdon County.
- Frank Pinto, president of Pinto Consulting LLC, led a session focusing on **the agricultural industry in the Highlands**.
- Guests could also visit a showcase featuring exhibits on **The Highlands Trail** (hosted by the NY-NJ Trail Conference), **20 Years of Mapping the Highlands** (hosted by Highlands Council GIS staff), and **Protecting Lake Hopatcong**, (hosted by Highlands Council science staff, Princeton Hydro LLC, the Lake Hopatcong Commission, and Lake Hopatcong Foundation.)

- For those interested in enjoying the nice weather, Highlands Council science staff offered guided nature walks to explore the variety of plant species found throughout the beautiful grounds of the Arboretum.

After lunch, Highlands Council Executive Director Ben Spinelli shared his thoughts on the *State of the Highlands*, and Will Ketchum, president of NorthStar Place Branding and Marketing, updated attendees on the status of the initiative by the Highlands Council to create a cohesive identity for the region to protect and enhance its many assets.

Among the more than 100 attendees were current and former council members and staff, county and municipal representatives, non-governmental environmental group representatives, and several key players instrumental in the adoption of the Act. It was a unique opportunity for those who have worked on the issues facing the Highlands for the past 20 years or more to visit, reminisce, and discuss strategies for ensuring ongoing protection of this important region. 💧



**Reflections on the Highlands Water Protection and Planning Act.** No discussion of the early days of the Highlands Act would be complete without two of the key architects of the legislation, Senator Bob Smith (far left, via video) and Senator John F. McKeon (far right), the first Highlands Council Chairman, John Weingart (second from left), and former executive director of the New Jersey Conservation Foundation, Michelle Byers.





**(Above) The Frelinghuysen Arboretum** in Morris Township provided a beautiful backdrop to the Highlands 20th Anniversary Summit. The Haggerty Educational Center, pictured above, was the central location for the day's events, with a "showcase" of exhibits located in the historic Frelinghuysen Mansion.

**(Below, left) Highlands Showcase.** On display in the Frelinghuysen Mansion were three exhibits for attendees to visit. Themes included *Protecting Lake Hopatcong*, *Discovering the Highlands Trail*, and *Mapping the Highlands Region*.

**(Below, Right) The Highlands Today.** Executive Director Ben Spinelli provided a "State of the Highlands" update in the afternoon.



**“It is in the public interest of all the citizens of New Jersey to protect the New Jersey Highlands intact, in trust, forever for the pleasure, enjoyment and use of future generations.”**

**The 2004 New Jersey Highlands Water Protection and Planning Act**

## The Backbone of Highlands Protections

Mapping has helped people know and understand the Highlands region since as early as the 1800s. In that century, Topographer and Engineer C.C. Vermeule led a project that resulted in the first topographical survey of New Jersey. Completed in 1888, the “Vermeule Maps” are an essential reference point in understanding how the entire state, including the Highlands, has grown and changed over the years.

Fast-forward about 100 years and starting in the 1980s Geographic Information Systems (GIS) became an essential tool for understanding development trends and their impact on natural resources and communities across the state. Spatial data analysis driven maps created in this

time were central components of the studies that led to the legislative protections of the four-state federal Highlands region, inclusive of the New Jersey Highlands region.

After passage of the Highlands Act in 2004, the Highlands Council relied extensively upon paper maps created by its GIS department. In the intervening years, GIS mapping has continued to provide the foundation for just about everything the Highlands Council does. From the detailed resource mapping that helps implement the protections of the Highlands Act during municipal and county master plan creation, to reviewing proposed development projects, to helping members of the public better understand the region, GIS is foundational to effective protection of the Highlands.

As the GIS field has grown and expanded over the 20 years since the Highlands Act was passed, so too have the capabilities of the Highlands Council GIS team. The scope of Highlands GIS responsibilities now includes maintaining digitally available data and multiple interactive map applications for public use; conducting advanced data processing to support a wide variety of Council needs and projects; and creating paper maps that are crucial for providing context and understanding.

In 2024, the Highlands Council GIS team continued to advance their capacity to provide the Council with data to answer questions about how best to protect the region, its resources and its economic viability for decades to come. 💧



1888 Vermeule Map of the Central New Jersey Highlands



# Land Use Capability Zone (LUCZ) Map Update and RMP Amendment

The LUCZ map was created in 2008 in support of the Highlands RMP. The purpose of the LUCZ map is to identify appropriate overlay zones throughout the region that reflect the resource protections required by the Highlands Act. The map divides the New Jersey Highlands region into three primary zones and four sub-zones that indicate the development capacity and environmental sensitivity of each region.

## Primary Zones

- Protection
- Conservation
- Existing Community

## Sub Zones

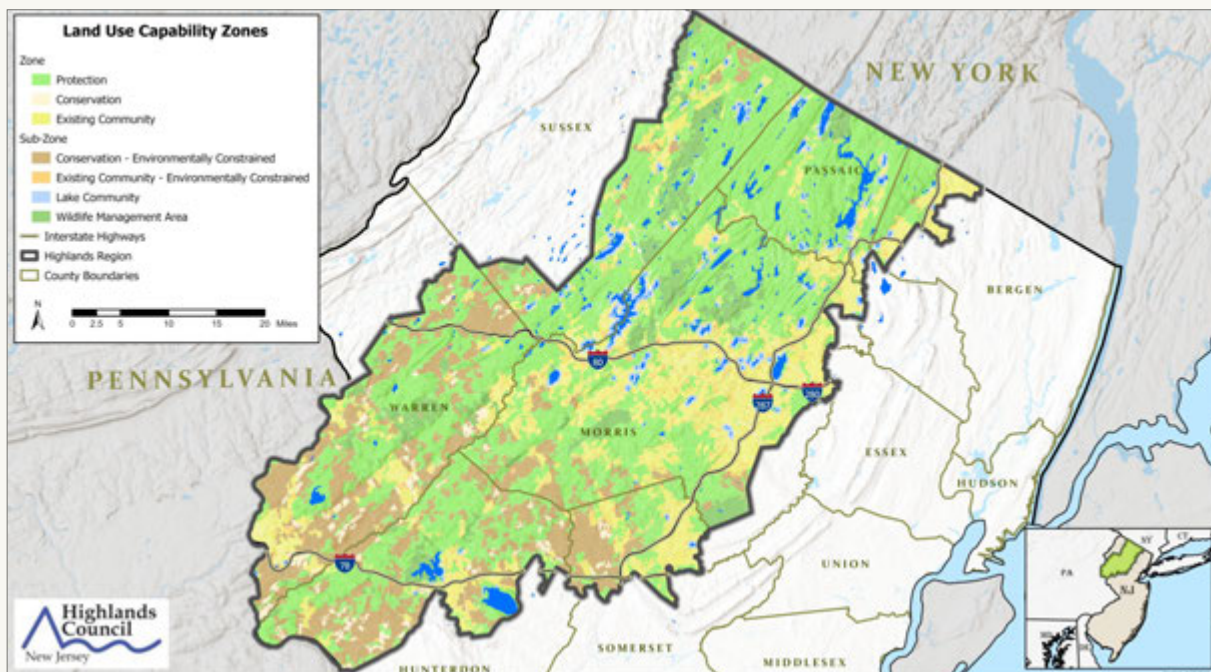
- Wildlife Management
- Conservation – Environmentally Constrained
- Existing Community – Environmentally Constrained
- Lake Community

In most cases, the LUCZ map will not differ dramatically from existing municipal zoning.

In January of 2024, the Highlands Council GIS team completed a multi-year effort to update the

data layers that form the foundation of LUCZ map. The new LUCZ map incorporates NJDEP's most recent Land Use Land Cover (LULC) dataset, finalized in December 2023, along with the latest scientific data available from several other datasets. As part of this project, the Highlands GIS team also updated much of the underlying mechanics of how the LUCZ is created, reflecting an improved ability to more quickly and accurately update data based on on-the-ground conditions. Part of this effort involved updating underlying datasets that feed into the LUCZ and these datasets were incorporated into the Highlands Interactive Map and the Interactive ERI making them available to members of the public.

In April, the Highlands Council adopted the updated LUCZ map and associated Technical Report as an amendment to the RMP. Per Highlands Council Amendment procedures, the adoption was preceded by a 60-day public comment period and six public hearings. 💧



Highlands Land Use Capability Zone Map 2024 update.



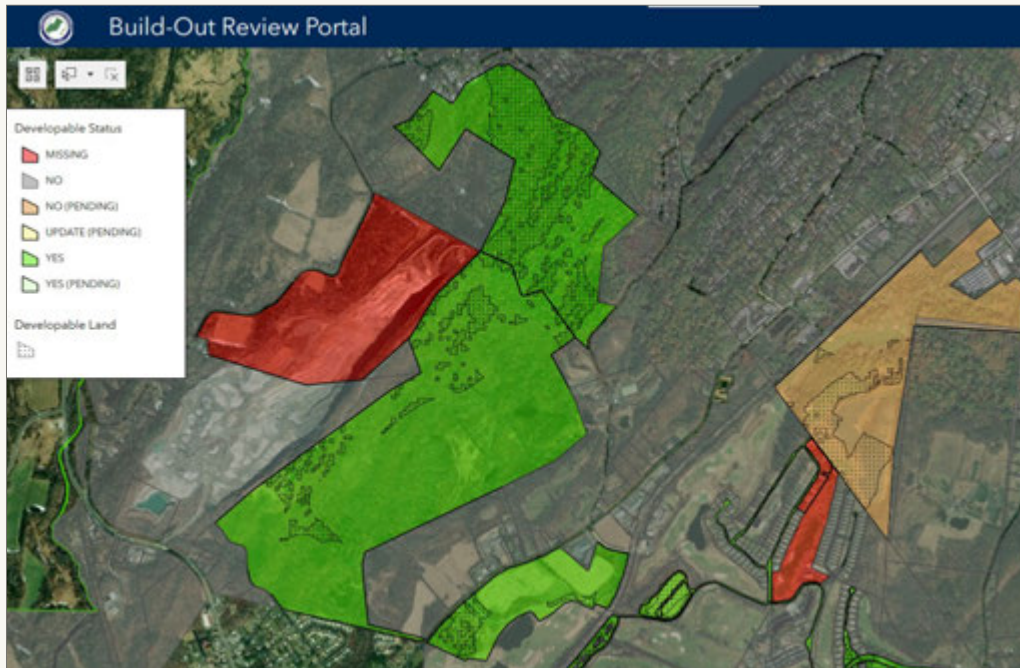
# Highlands Municipal Build-Out Review Portal

Shortly after the release of affordable housing obligation estimates from the Department of Community Affairs in October, the Highlands Council released the Highlands Municipal Build-Out Review Portal. Developed by the Highlands GIS team exclusively for conforming municipalities in the Highlands, this online tool allows municipalities to better visualize and understand the nature and extent

of developable lands in the context of protected Highlands resources. From that, users can extrapolate a more accurate affordable housing obligation estimate that reflects the requirements of the Highlands Act.

Access to the Portal requires a login and password, which was provided to conforming municipalities in advance of a training session held in November.

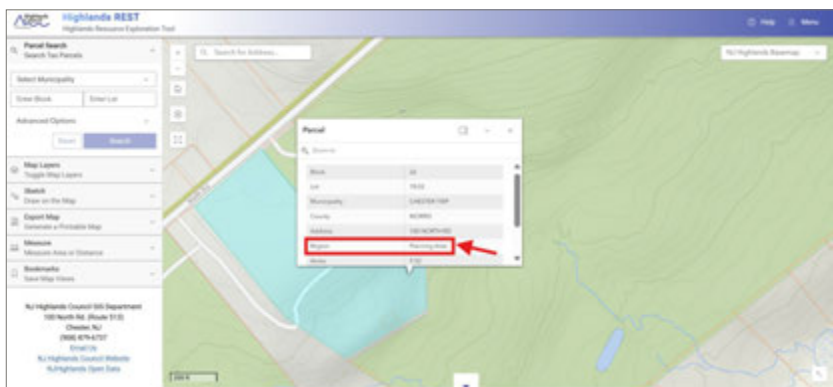
While non-conforming municipalities may request log-in credentials, per the parameters of the affordable housing legislation, only conforming municipalities are eligible to consider Highlands resources in determining development potential of individual parcels. 💧



The Highlands municipal Build-out Portal allows conforming Highlands municipalities to assess development potential in the context of Highlands resources using Highlands Council GIS data.

## Preservation Area or Planning Area Quick Lookup

An enhancement to the Highlands Council's Interactive Map released in April makes it easier to quickly identify whether a particular property is located within the Highlands Preservation Area or Planning Area. Once a parcel has been located on the map, clicking on the lot opens a small pop-up window that now includes a field indicating whether the property is located in the Planning or Preservation Area of the Highlands region. 💧



The term “geographic information system” was coined by Dr. Roger Tomlinson (considered the "Father of GIS") in the early 1960s. Put simply, GIS is a computer system that allows users to map and analyze data. The result is an incredibly sophisticated set of tools that allows for data-driven decision making.

Data sets connected to specific geographical areas can be combined, sorted, and organized in myriad ways to create visual representations that enable exploration, analysis, and greater understanding of the world around us. Every time a mapping application is used to get directions, find a restaurant, or navigate a hiking trail, GIS is being used.

The 1960s through the 1980s was a time of broad GIS development, giving rise to several GIS businesses. In the 1990s and early 2000s, GIS technology began to evolve making it more accessible to a wider range of professionals beyond the developer, engineering and collegiate/university communities. Since the early 2000s, GIS has increasingly become a crucial piece of the decision-making process in many different fields. It is taught in grade schools and used by nonprofits, multi-national corporations, and at all levels of government.

Today, GIS is a mainstream part of daily life through various mapping and smartphone applications. Data, ranging from local and simple to large and complex, collected via satellite imagery, handheld GPS receivers or digitized paper maps, are freely available for vast reaches of the world. Processing capabilities and storage capabilities have exploded. GIS is still expanding with every year bringing new capacities, functions and applications.

# What is GIS?

**(It's so much more  
than just maps.)**

The sheer amount of geographic data that is currently available allows for complicated analysis taking location into account. It is much more than merely allowing users to map the world around them. It enables people to find patterns and relationships that can be leveraged to drive decision making. The possibilities are endless. 💧

# Protecting Highlands Resources while Meeting Affordable Housing Obligations

In March 2024, Governor Murphy signed into law revisions to the Fair Housing Act (P.L. 2024, c.2.) that include specific references to the Highlands Act and the Highlands RMP effectively saying that the RMP and municipal conformance status must be considered when determining municipal affordable housing obligations.

This important provision seeks to balance the very real need for an increase in affordable housing in New Jersey and the necessity of protecting the vital resources that exist in the Highlands. The ultimate result was that affordable housing obligations for conforming Highlands municipalities were calculated differently from both non-conforming Highlands municipalities and municipalities in the rest of the state, taking into consideration the Highlands Land Use Capability Zone

(LUCZ) map, which provides the foundation for much of the Council's work to implement the Highlands Act.

The most significant element of recognition of the Highlands in the new Affordable Housing legislation was the acknowledgement that municipalities in the Highlands region need to be treated differently than non-Highlands towns. The Highlands is a limited growth region that has a finite capacity to accept new growth and still provide vital resources for the remainder of the state. Calculation of the number of new units, the location of new developments, and the method by which new affordable units will be created all must be addressed differently in the Highlands than in the rest of the state.

Recognizing that Round 4 affordable housing obligations were imminent and would present a





challenge for Highlands municipalities, the Highlands Council began preparing in early 2023 to provide support for the region's municipalities. In recognition of the aggressive timelines municipalities were required to follow, the Highlands Council moved quickly to help Highlands municipalities navigate the complex issues around meeting multiple, and sometimes seemingly incompatible, planning goals. Below is a summary of actions taken by the Highlands Council in 2024 to support municipalities in addressing affordable housing.

## Moving forward

As of the publication of this report, 69 of the 88 municipalities in the Highlands met the January 31, 2025 deadline for responding to the Department of Community Affairs estimates of municipal obligations. Of those, 59 filed to modify their estimates, including 11 fully conforming towns. Nineteen municipalities in the region have requested grant funding to support development of Fair Share Housing Plans, which must be adopted by June 30. All but one have been approved for funding and the last will be shortly. 💧

## Actions taken by the Highlands Council in 2024 to help Highlands municipalities address affordable housing requirements

Date	Action
April	<b>RMP Amendment released</b> for public comment. Amending the RMP to reflect the recent revisions to the Fair Housing Act is an important first step in affirming how Highlands municipalities will assess their affordable housing obligations differently than the rest of the state because of the important role they play in protecting the state's water supply.
July	<b>RMP Amendment adopted.</b> By adoption, this amendment incorporates the provisions of the 2024 Affordable Housing legislation in the RMP in the context of the resource protections required in the Highlands region.
October	<b>Affordable Housing Implementation Guidelines released.</b> This guidance document explains how conforming municipalities should draft their new Affordable Housing Plans, by providing techniques and mechanisms for producing affordable housing that is compliant with the Highlands RMP.
	<b>\$600,000 approved in grant funding</b> to support municipal build-out analyses and development of Fair Share Housing Plans
	<b>Build-out Update Review Portal launched.</b> A GIS-based tool was developed that allows fully conforming Highlands municipalities to determine the number of developable lots remaining in their town in the context of Highlands resources and from that, extrapolate their affordable housing obligation. <i>(See story page 13.)</i>
November	<b>Build-out Update Review Portal training.</b> Access to the Portal requires a login and password, which was provided to conforming municipalities. While non-conforming municipalities may request log-in credentials, per the parameters of the affordable housing legislation only conforming municipalities are eligible to consider Highlands resources in determining development potential of individual parcels.

# Sustainable Agriculture Grant Updates

The New Jersey Highlands region is known for producing some of the best agricultural products in the state. With no shortage of family and small business farms, agriculture is a vital part of the region's character and economy. Ensuring that farmers in the region can continue to thrive in a changing world is an important goal for the Highlands Council. The Council is making an investment in the future of agriculture because it is an essential element of the long-term sustainability of the Highlands.

In 2023, the Highlands Council launched a Sustainable Agricultural grant program seeking innovative projects that would elevate agricultural practices, be innovative in nature, replicable, and aligned with the goals, policies, and objectives of the RMP. Five projects were approved for the first of potentially three years of funding and a sixth was approved for one year. All projects continue moving forward in 2024, with three making sufficient progress to be approved for year-two funding. Updates on all projects follow.

The **Ramapo Nation** seeks to restore Native American crops and agricultural practices on property leased by the Turtle Clan in Whittingham Wildlife Management Area (WMA), returning the land to its original Native American use. Regenerative farming in a WMA requires an innovative approach to grain and vegetable production through the strategic planting necessary to eliminate the need for wildlife fencing while continuing to provide critical habitat for endangered species.

**North Jersey RC&D** has been working to expand their River Friendly farm program in the Highlands by recruiting new farmers into the program and providing technical assistance and training to farmers. Through the River Friendly Farm program, RC&D seeks to protect the waterways of North Jersey by preventing the overuse of fertilizers and pesticides while enhancing the flow of stormwater into streams and rivers.

Oxford Township in Warren County received funding to support planning efforts for the **Northwest Food Processing and Innovation Center**. In 2024 this project made significant progress with the launch of a website ([njprocessing.org](http://njprocessing.org)) and creation of a partnership with Warren County Community College to provide educational and work opportunities to students. Funding was also used to support a grant application to the United States Department of Agriculture (USDA) for implementation funding. Although the USDA application was unsuccessful, the project continues moving forward and remaining Highlands Council funding is being used to support acquisition of a lease agreement with Warren County for a site to create the Center, additional grant applications, and site design.

## Projects Funded for Year Two

The **Foodshed Alliance** proposed a project to increase production of organic grains in the Highlands region. Specifically, the Alliance wanted to introduce value-added grain crops to at least 20 farms in the Highlands over the three-year grant period. In year one, the Alliance launched the

Heritage Grains project, which provides a robust suite of educational resources, networking and events for farmers interested in learning more about small grain production and regenerative agriculture practices. The Alliance is now actively engaged with several farms including GrowingDirt, Dandy Lion Acres, and Four Fields Farm all in Great Meadows (Independence Township). In year two the Foodshed Alliance will continue to recruit additional growers.

The **Northeast Organic Farmers Association (NOFA)** planned to leverage Highlands Council grant funding to demonstrate how organic farming can be profitable in the Highlands region. NOFA made



Attendees at NOFA workshop.

tremendous progress in “Operation Diversification”

in year one through restorative farming on Provenance Farm with the use of rotational grazing and composting. Year two of the project will expand operations to additional sites including Comeback Farm in Asbury (Bethlehem Township) and Maranatha Farm in Peapack & Gladstone Borough. These two farms represent different conditions to demonstrate regenerative farming practices through silvopasture, terracing, contour farming, and other stewardship practices.



Foodshed Alliance Grains Project  
Grains Field Day Flyer

**City Green** wanted to increase access to local, healthy food grown using sustainable farming practices. In year one, City Green significantly expanded regenerative practices at its farming operation on South Branch Preserve in Mount Olive. Enhancements include the use of hedgerows to attract beneficial insects, and the construction of a high tunnel structure to extend the growing season at the Preserve. As a result, City Green experienced record harvests in the third quarter of 2024. This enabled the distribution of fresh produce through their 10 Mobile Veggie community farm stands, senior center farms stands, and other community locations that allow customers to use federal food benefits like SNAP and WIC to purchase fresh produce. City Green was also able to support local emergency food systems such as LocalShare, which distributes gleaned produce to food pantries in Morris County. Year two will see the expansion of existing capacity through revitalization of irrigation systems and enhancements of processing capabilities. 💧



Crops growing at City Green farm on South Branch Preserve in Mount Olive.



# Creating a Highlands Brand

When someone mentions the Pinelands or the Meadowlands, most people have a general idea what that means. That doesn't happen with the Highlands. Yet.

In the 20 years since the Highlands Act was passed, understanding of the importance of the region has certainly grown, but not to the extent necessary for the Council to fulfill some of its core objectives, especially related to economic sustainability. One of the key recommendations to come out of the 2022 Highlands Region Economic Sustainability Plan was the need to develop a Highlands brand that could be used to support region-wide growth across a variety of industries.

Building on the idea that people tend to protect what they value, establishing a Highlands brand

will showcase the variety of assets available in the region and help people understand why it's important to protect and enhance those assets. Perhaps most importantly, a Highlands brand will help the seven counties and 88 municipalities of the Highlands leverage their special status in ways that will benefit their residents and business owners.

In March 2024, the Highlands Council awarded a contract to national place branding and marketing firm North Star to develop a unique brand and associated marketing plan for the Highlands. The project kicked off in May, led by the North Star team in collaboration with the Highlands Economic Sustainability County Coalition, a committee with representation from economic development experts from across the region.



**Highlands Vistas.** The view from Wyanokie High Point in Wanaque Borough, one of many sites visited during the research phase of the project.

A project website was set up at [www.authenticnjhighlands.com](http://www.authenticnjhighlands.com) to provide information about the project and capture individual insights and interests. In July, the project team toured the Highlands region meeting with business owners and other stakeholders to get a better understanding of the region's diverse assets and challenges.

One-on-one interviews, focus groups and surveys both inside and outside the region further informed the research and analysis phase of the project.

In early 2025 the project entered the creative development phase with final deliverables and actions plans anticipated before the end of the summer. 💧

## Chester Borough Weather Station Fills Gap in Data Desert

For years, the western half of Morris County has been a weather data desert, but that gap has been filled thanks to a collaboration between the Highlands Council, the Office of the New Jersey State Climatologist at Rutgers, and Chester Borough.

In late March 2024, the first weather station in Chester was installed near the borough's Department of Public Works. Equipment for the station was funded by the Highlands Council.

The Chester site is part of a network of 68 weather stations across New Jersey that relay data to the National Weather Service. The advanced station measures eight meteorological variables, including temperature, humidity, precipitation, and wind speed, broadcasting updates every five minutes to a statewide network managed by Rutgers University.

As monitoring climate conditions becomes increasingly important, augmenting available data for the region is a priority for the Highlands Council. 💧



**The newly installed Chester Borough Weather Station.**

# Confronting Climate Change

In 2023, the Highlands region experienced some of the most visible signs of climate change to-date, with massive flooding that tore open roadways and severely damaged homes and other infrastructure. Indicative of the extremes that climate change brings, 2024 was marked by severe drought.

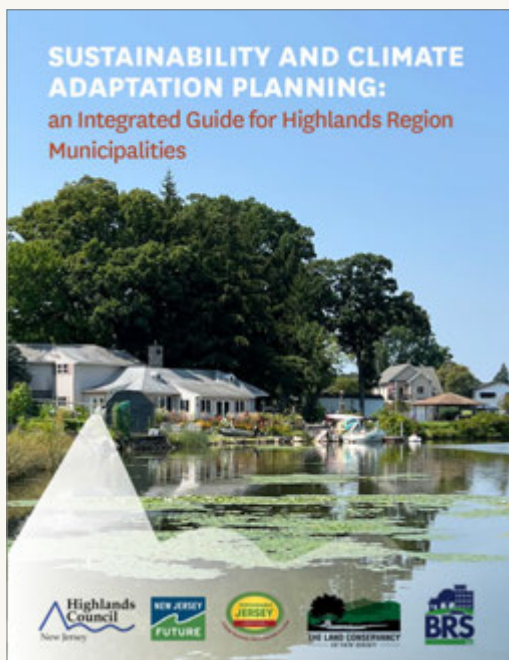
In fact, **October 2024 was the first month with no recorded measurable precipitation since record-keeping was started in the late 19th century.** None of the five weather stations in the Highlands region that are a part of the state-wide network with automated rain gauges reported any precipitation. Despite the

lack of rain, the Highlands continued to export over  $\frac{3}{4}$  billion gallons of water per day to the more populated

areas of the state, while still supporting the 850,000 people who call the region their home. Drought conditions continue into 2025.

New Jersey has taken a proactive approach to these changes, with the creation of the Interagency Council on Climate Resilience and the statewide Climate Change Resilience Strategy. As a member agency, the Highlands Council provides a critical perspective and expertise on managing inland impacts of climate change. While much of the attention regarding the effects of climate change has been focused on New Jersey's coastal areas, the implications of a changing climate in the Highlands and the importance of the region in helping New Jersey navigate these challenges is substantial.

The Highlands not only serves as a primary source of drinking water, but it's also home to a robust agricultural industry capable of significant



## Helping Highlands Municipalities Meet State Climate Guidance Requirements

In 2024, the Highlands Council released guidance that assists municipalities in meeting state climate change requirements in the context of the significance of the region. *Sustainability and Climate Adaptation Planning: an Integrated Guide for Highlands Region Municipalities* helps municipalities in the Highlands region incorporate the provision of the Highlands RMP into their climate change planning, while meeting state requirements.



Visit the Highlands Climate Guidance webpage.



food production in proximity to the state's largest population centers. The Highlands also contains vast forest land that helps mitigate extreme heat and flooding events. The resources of the Highlands region are perhaps some of the best assets the state has for addressing the effects of climate change that we are seeing today and that will likely only multiply. 💧

**Just one example of drought conditions in 2024.** The water in Spruce Run Reservoir in Clinton dropped by 25 feet between June and October 2024 and was at about 1/3 of its full capacity by the end of October. The photos below show deteriorating conditions over the space of just three weeks that month. As of the release of this report, all of New Jersey is still in a declared water supply warning.



# Monitoring Water Quality in the Raritan Watershed

In June, Highlands Council staff collaborated with Raritan Headwaters Association (RHA) and their volunteers to participate in their annual efforts to monitor water quality throughout the Raritan River watershed. Although several Highlands Council staff members have previously volunteered with RHA, this was the first coordinated collaboration specifically focused on gathering data for portions of the watershed in the Highlands region.

The Highlands Council team participated in four sampling events monitoring a total of eight sites: two sites in Tewksbury Township, two in Mount Olive Township, one in Lebanon Township, one in Clinton Town, one in Clinton Township, and one in Washington Township, Morris County.

Following standard RHA protocols, monitoring involved visual stream assessments including evaluating stream bank stability, erosion, sedimentation, and streamflow characteristics. The science staff team also collected macroinvertebrates for laboratory analysis.

On an annual basis, RHA uses the collected data to assess the overall quality of the watershed and identify areas for protection or restoration. 💧



**(Above)** Highlands Council staff and other RHA volunteers assess stream conditions and examine collection nets.

**(Below)** (l to r) Crane fly, salamander, and dragonfly nymph are all indicators of good water quality.





# Land Preservation Updates

## Open Space and Recreation Plan

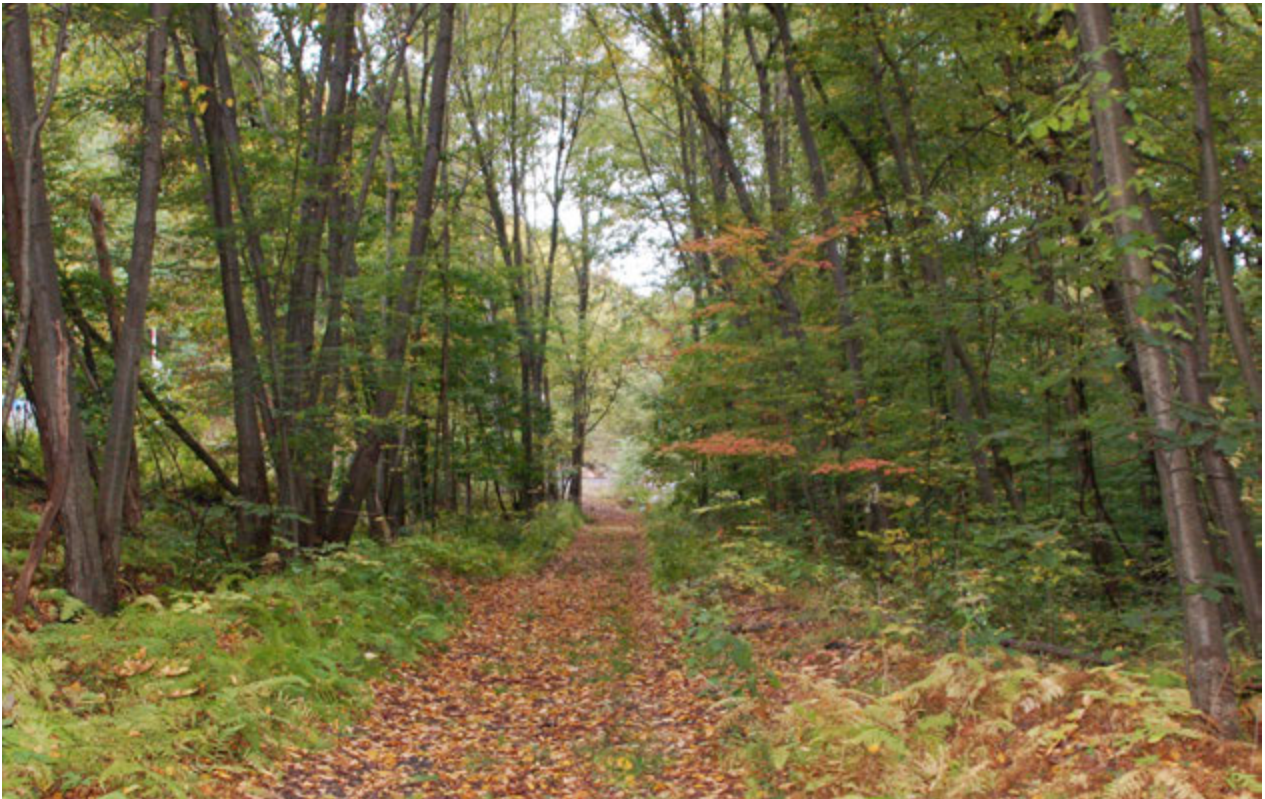
In February, the Highland Council awarded a contract to the team of The Trust for Public Land (TPL) and TwentyTwenty Public Affairs to develop an Open Space and Recreation Plan (OSRP) for the Highlands Region.

The objective of the project is to identify specific properties, establish priorities for preservation, and align potential funding sources to accomplish the conservation and recreation goals of the Highlands region.

The project kicked off in July with outreach to key stakeholders from municipal and county governments, and open space and recreation user groups. Through surveys and interviews the project team is getting a better sense of demands and trends, which will help inform where gaps exist and how best to close them. The project is expected to be completed at the beginning of 2026.

## Preservation of 37 Acres in Mount Olive Township in Progress

The Highlands Council received a grant through the federal Highlands Conservation Act (HCA) in January 2024 that will be used to support the acquisition of the Carson and Roberts tract, which comprises two parcels totaling 37.56 acres in Mount Olive Township. The Highlands Council is working closely with The Land Conservancy of New Jersey (TLCNJ) to preserve this property. The property has high resource values as it contains a tributary to the Musconetcong River and is adjacent to existing preserved lands. 💧



Towpath on Carson and Roberts property, Mount Olive Township. *Photo courtesy of The Land Conservancy of New Jersey*



# HIGHLANDS DEVELOPMENT CREDIT BANK ANNUAL REPORT

The Highlands Act charged the Highlands Council with developing a Transfer of Development Rights (TDR) program as a tool for advancing the regional planning goals of the Act (P.L. 2004, c. 120 C.13:20-13). The Council adopted a TDR Program as part of the RMP and established the Highlands Development Credit Bank (HDC Bank) in 2008. The HDC Bank is supported in its work by Highlands Council staff.

In a TDR program, eligible landowners in Sending Zones may apply for and receive credit allocations reflective of lost development potential. Landowners can then sell the credits to developers who can use them to build in an established Receiving Zone at a density greater than otherwise permitted in the underlying zoning. In the Highlands TDR program, Receiving Zones are voluntary and can be established anywhere in the state. Until voluntary Receiving Zones are established, the HDC Bank is serving as the sole purchaser of these HDCs. Through the end of 2023, the Highlands Council had allocated 4,332.50 Highlands Development Credits (HDCs).

## Highlands Development Credit Purchase Program Summary

The HDC purchase program is designed to address the landowner equity goals of the Highlands Act and RMP by compensating landowners for lost development potential through TDR transactions in which property owners retain the land but place a deed restriction on their property limiting future development. In the HDC purchase program, valuations are based on the development potential of the property prior to the passage of the Highlands Act, along with a comprehensive analysis of the natural resources present on the property. The number of credits is determined and an offer is made using an established per-credit price. This program is administered under the provisions of N.J.A.C. 7:70.

There were no transactions in the HDC Purchase Program in 2024. As of December 31, 2024, the HDC Bank had certified 1,814 credits, permanently protecting more than 2,500 acres. In addition, through the purchase of 1,732 of those credits, the Bank has provided over \$27 million to property owners in the Highlands region. See HDC Registry on the following pages for all HDC recorded easements.

## HDC Site Inspections

In 2024, Highlands Council staff visited 38 HDC properties to conduct inspections for compliance with terms of the easements placed on them. All sites were found to be appropriately within the parameters of the easement provisions. 💧

# Highlands Development Credit Registry

As of December 31, 2024

Holder/Owner of HDC Credits	Municipality	County	Block(s)	Lot(s)	HDC Easement Recorded	No. of HDCs	Consideration	Acres
HDC Bank	Bethlehem Township	Hunterdon	9	6	7/22/2010	4	\$ 64,000.00	15.45
HDC Bank	Washington Township	Morris	37	4 & 9	8/25/2010	83	\$ 1,328,000.00	93.19
HDC Bank	Mount Olive	Morris	8301	13	4/27/2011	23.25	\$ 372,000.00	2.31
HDC Bank	Oxford	Warren	24	4 & 20	5/3/2011	23	\$ 368,000.00	44.13
HDC Bank	White	Warren	16	45		1	\$ 16,000.00	18.29
HDC Bank	West Milford	Passaic	6902	23	12/13/2011	30.25	\$ 484,000.00	6.95
HDC Bank	Independence	Warren	23	3	12/29/2011	24.75	\$ 396,000.00	41.54
HDC Bank	West Milford	Passaic	8002	4	1/5/2012	122.5	\$ 1,960,000.00	26.23
HDC Bank	Washington Township	Warren	40	33.01	2/24/2012	8	\$ 128,000.00	39.16
HDC Bank	Franklin Township	Warren	15	11.03	2/24/2012	42	\$ 672,000.00	9.69
HDC Bank	Liberty Township	Warren	21.01	20.01	7/9/2012	3	\$ 48,000.00	10.54
HDC Bank	Rockaway Township	Morris	40801	85.01	11/29/2012	27.75	\$ 444,000.00	24.73
HDC Bank	Vernon	Sussex	153	5	3/11/2013	1.75	\$ 28,000.00	17.59
HDC Bank	Washington Township	Warren	40	109	4/16/2013	2	\$ 32,000.00	4.59
HDC Bank	Bethlehem Township	Hunterdon	8	11 & 12.01	5/24/2013	20.5	\$ 328,000.00	75.2
HDC Bank	Ringwood Borough	Passaic	877	16	7/19/2013	26.25	\$ 420,000.00	42.36
HDC Bank	Sparta	Sussex	17001 (formerly 19)	25 (formerly 110)	9/30/2013	63.75	\$ 1,020,000.00	110.69
HDC Bank	White	Warren	16	24, 24.15	9/26/2013	4.5	\$ 72,000.00	14.5
HDC Bank	Sparta	Sussex	35002 (formerly 6.25)	10, 11 (formerly 70.01, 70.02)	12/19/2014	7	\$ 112,000.00	6
HDC Bank	Union Township	Hunterdon	15	1	1/15/2015	1.75	\$ 28,000.00	26.27
HDC Bank	Union Township	Hunterdon	15	1	1/15/2015	1.75	\$ 28,000.00	-
HDC Bank	Union Township	Hunterdon	15	1	1/15/2015	1.75	\$ 28,000.00	-
HDC Bank	Union Township	Hunterdon	25	21	8/12/2016	11	\$ 176,000.00	43.21
HDC Bank	Clinton Township	Hunterdon	68	6	11/1/2016	86.25	\$ 1,380,000.00	9.9
HDC Bank	Oxford Township	Warren	2	12	8/1/2017	12	\$ 192,000.00	20.55
HDC Bank	Oxford Township	Warren	2	14	8/1/2017	20.5	\$ 328,000.00	34.52
HDC Bank	Oxford Township	Warren	2	18.03	8/1/2017	23.75	\$ 380,000.00	48.89
HDC Bank	Washington Township	Warren	4	4	8/1/2017	1.75	\$ 28,000.00	13.83
HDC Bank	Washington Township	Morris	20	52	8/1/2017	3.5	\$ 56,000.00	10.89
HDC Bank	Vernon	Sussex	611 (formerly 240)	3 (formerly 4)	8/8/2017	24.75	\$ 396,000.00	118.4
HDC Bank	Jefferson	Morris	387	8	8/31/2017	5.75	\$ 92,000.00	10.27
HDC Bank	Mount Olive	Morris	5300	16	10/17/2017	29.75	\$ 476,000.00	10.46
HDC Bank	West Milford	Passaic	11106	13, 17	11/20/2017	2.5	\$ 40,000.00	1.35
HDC Bank	Ringwood Borough	Passaic	508	2	12/21/2017	88.75	\$ 1,420,000.00	38.37
HDC Bank	Ringwood Borough	Passaic	508	2.29	12/21/2017	74	\$ 1,184,000.00	19.36
HDC Bank	Rockaway Township	Morris	40701; 40703	21; 8, 9	11/21/2017	5.5	\$ 88,000.00	18.1
HDC Bank	White	Warren	68	59	11/29/2017	8	\$ 128,000.00	19.34
HDC Bank	Jefferson	Morris	555	4	12/26/2017	147.75	\$ 2,364,000.00	162.79

*Continued on next page*

# Highlands Development Credit Registry

As of December 31, 2024

(continued)

Holder/Owner of HDC Credits	Municipality	County	Block(s)	Lot(s)	HDC Easement Recorded	No. of HDCs	Consideration	Acres
HDC Bank	Sparta	Sussex	34004 (formerly 4)	6 (formerly 45.01)	12/21/2017	18.75	\$ 300,000.00	16.84
HDC Bank	Hopatcong	Sussex	40005	18	12/8/2017	5.5	\$ 88,000.00	27.4
HDC Bank	Bethlehem Township	Hunterdon	33	12	1/16/2018	18	\$ 288,000.00	51.59
HDC Bank	West Milford	Passaic	6803	4	2/16/2018	30.25	\$ 484,000.00	16.11
HDC Bank	Harmony Township	Warren	24	10.07	2/26/2018	2.25	\$ 36,000.00	1.79
HDC Bank	White	Warren	13	21	3/19/2018	14	\$ 224,000.00	30.74
HDC Bank	Bethlehem Township	Hunterdon	18	2	5/15/2018	20	\$ 320,000.00	2.23
HDC Bank	Lebanon Township	Hunterdon	37	25	6/15/2018	4	\$ 64,000.00	29.65
HDC Bank	Roxbury Township	Morris	9203	1	6/29/2018	42.25	\$ 676,000.00	10.26
HDC Bank	Liberty Township	Warren	10	4	7/13/2018	51.75	\$ 828,000.00	90.9
HDC Bank	Liberty Township	Warren	11	43	7/13/2018	1.5	\$ 24,000.00	4.7
HDC Bank	Liberty Township	Warren	11	44	7/13/2018	4.25	\$ 68,000.00	7.14
HDC Bank	Lebanon Township	Hunterdon	65	2	7/2/2018	2.25	\$ 36,000.00	6.33
HDC Bank	Bedminster Township	Somerset	2	8.02	8/10/2018	18.25	\$ 292,000.00	39.46
HDC Bank	Harmony Township	Warren	24	10.06	8/20/2018	2.25	\$ 36,000.00	2.31
Contact HDC Bank	Lopatcong Township	Warren	90	13, 16.01	8/20/2018	26.25	*	60.35
HDC Bank	Harmony Township	Warren	24	10.05	9/18/2018	2.25	\$ 36,000.00	2.47
HDC Bank	West Milford	Passaic	13301	12	9/28/2018	7.25	\$ 116,000.00	11.54
HDC Bank	Bloomington	Passaic	3005	5	9/28/2018	10	\$ 160,000.00	24.87
HDC Bank	Alexandria	Hunterdon	4	12	1/8/2019	49.25	\$ 788,000.00	92.9
HDC Bank	Lebanon Township	Hunterdon	56	13.02	4/29/2019	16.75	\$ 268,000.00	72.19
HDC Bank	Lebanon Township	Hunterdon	56	10	5/28/2019	31.50	\$ 504,000.00	112.84
HDC Bank	Pohatcong Township	Warren	110; 117	9; 13	6/10/2019	6.75	\$ 108,000.00	53.14
HDC Bank	Tewksbury	Hunterdon	15	23	7/15/2019	44.25	\$ 708,000.00	46.69
HDC Bank	Tewksbury	Hunterdon	14	9.02	9/12/2019	44.25	\$ 708,000.00	45.94
HDC Bank	Tewksbury	Hunterdon	16	13	10/16/2019	24.50	\$ 392,000.00	11.52
HDC Bank	Tewksbury	Hunterdon	19	13.07	10/16/2019	23.00	\$ 368,000.00	42.55
HDC Bank	Tewksbury	Hunterdon	13	8, 10	11/20/2019	44.25	\$ 708,000.00	70.05
HDC Bank	Mount Olive	Morris	5300	38	11/20/2019	25.75	\$ 412,000.00	53.14
Contact HDC Bank	Tewksbury	Hunterdon	15	8.02	12/5/2019	26.25	*	16.65
HDC Bank	Independence	Warren	1	67	1/17/2020	30.25	\$ 484,000.00	26.76
HDC Bank	Mansfield	Warren	1001.01	20, 21, 22	1/24/2020	35.75	\$ 572,000.00	109
HDC Bank	Mount Olive	Morris	800	15	5/27/2020	31.75	\$ 508,000.00	88.16
HDC Bank	Mount Olive	Morris	800	16	5/27/2020	4.00	\$ 64,000.00	15.29
Contact HDC Bank	White Township	Warren	14	17	6/30/2020	25.75	*	62.00
						<b>1,814</b>	<b>\$ 27,772,000</b>	<b>2,565.14</b>

\* Property owners in the HDC Purchase Program may choose to record a deed of easement (DOE) on their property, while retaining ownership of the HDCs. In these cases, the HDC Bank has not purchased the credits. The property owner may choose to sell the credits any time in the future, but the property and the resources contained within it remain permanently protected through the DOE.







## State of New Jersey

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