



New Jersey Highlands
Water Protection and Planning Council

ANNUAL REPORT 2023

Abram S. Hewitt State Forest, Bearfort Ridge Trail, West Milford, Passaic County

All photos by Highlands Council staff except where noted.

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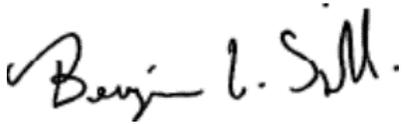


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Executive Director Certification

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 2023 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 2023 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 2023 and Fiscal Year 2024.

Complete Highlands Council Financial Reports are available on the Highlands Council website at: www.nj.gov/njhighlands/news/audit_reports.html.



State of New Jersey

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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

2024 marks 20 years since the New Jersey Highlands Water Protection and Planning Act was passed. The first meeting of the Highlands Council was December 16, 2004. As we begin 2024 it's difficult to reflect on all that was accomplished in 2023 without seeing some parallels with the challenges the Highlands was facing 20 years ago.

In the years leading up to the passage of the Highlands Act in New Jersey, analysis of development trends and the resources of the region revealed two core facts: 1) the New Jersey Highlands was an essential source of drinking water for more than half of the state, and 2) the safety of that resource was in jeopardy. This is a gross oversimplification of a complex problem, but that's the crux of it. The primary threat at the time was coming from residential development, which had the potential to compromise not only water quality, but also agricultural, historic, and cultural resources. And the need to protect these resources in no way negated the need to protect local and regional economies. In fact, the directive in the Act is to "protect **and** enhance" (emphasis added) all Highlands resources. The mission was to not only ensure the Highlands continued to be a great place, but to make it even better.

Twenty years later through the Highlands Act, the Highlands Regional Master Plan (RMP), and the New Jersey Department of Environmental Protection (NJDEP) Highlands Rules, a great deal has been done to minimize the threat and enhance protection of the region's resources. However, new challenges have emerged in the form of climate change, pressure from inappropriate industrial development, and new rounds of affordable housing that, until very recently, have lacked appropriate consideration of the RMP in determining municipal obligations for the region.

Despite these threats, it is imperative that the region remain a reliable source of adequate clean drinking water, a home for local agriculture that helps to define the "Garden State," and a strong base of vibrant communities where New Jersey residents can and want to live, work and play.

The Highlands Council and its staff have been committed to fulfilling the mandates of the Highlands Act and the sound principles set forth in the RMP. 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.** 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.

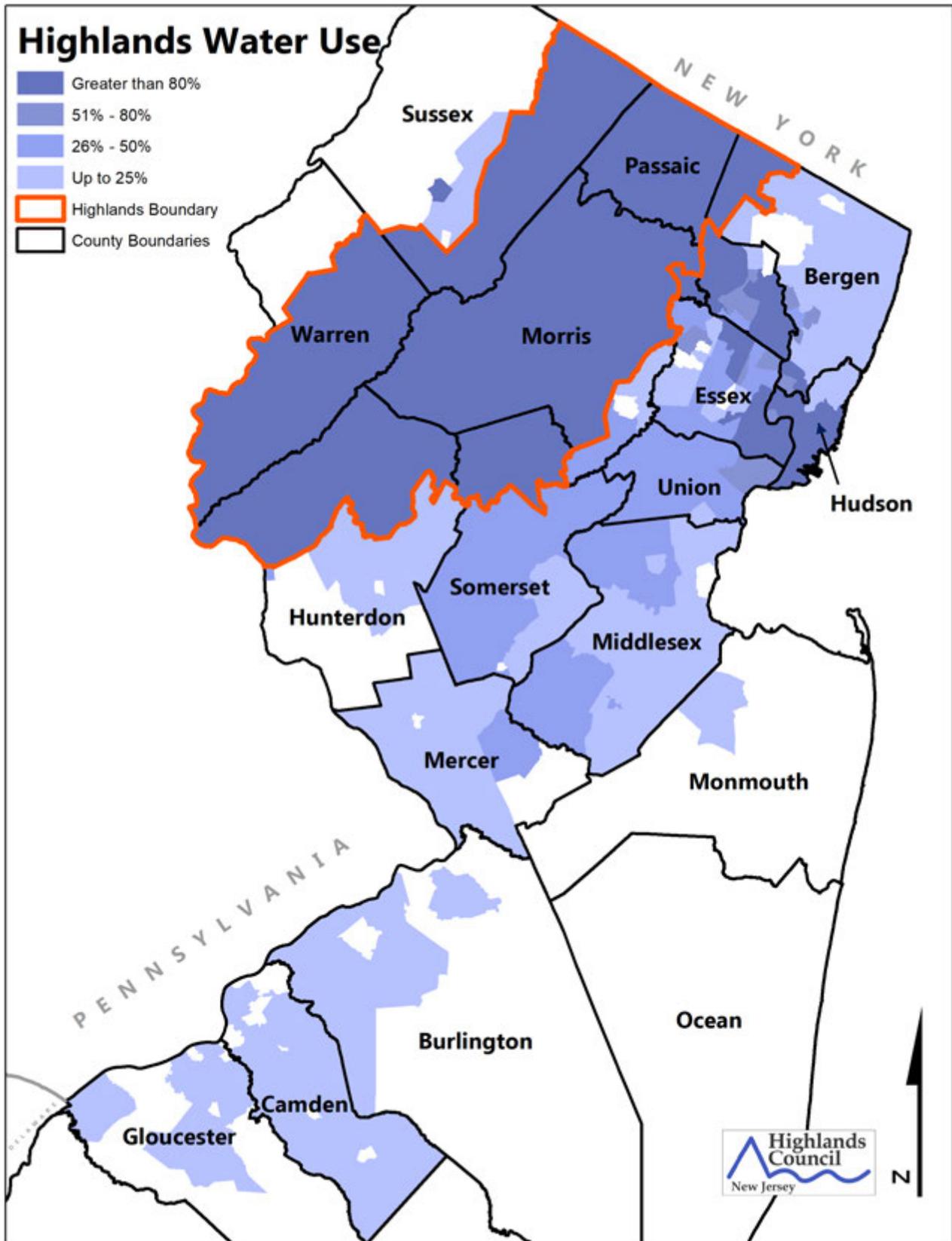
The Highlands Council works in partnership with municipalities and counties in the region to encourage a comprehensive regional planning approach to implementation of the Highlands Act. The RMP provides a framework for this implementation at the local level. Programs outlined in the RMP include the management 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. Non competitive, 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.



While the region’s forests and open spaces retain and filter large quantities of water, sprawl development has impacted communities and impaired nature’s ability to do that job. Because families, farms and businesses all depend on a steady supply of clean water, and water resources do not follow municipal boundaries, a regional approach is required to protect and conserve the vital natural resources of the Highlands.

Highlands Water Protection and Planning Council 2023/2024

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 four 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
Mayor, Hopatcong Borough

Bruce James
Clifton, Passaic County
Commissioner, Passaic County

Dr. Michael Sebetich
Hawthorne, Passaic County
Retired Professor of Biology,
William Paterson University

Dr. Daniel J. Van Abs
Princeton, Mercer County
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 Holtaway Retires

After serving as a dedicated member of the New Jersey Highlands Water Protection and Planning Council for more than a decade, Robert Holtaway stepped down from his seat on the Council at the conclusion of the December 14 meeting. Highlands Council Chairman Carl Richko presented Holtaway with a plaque commemorating his service and the Council passed a resolution memorializing the occasion.

Highlands Council Chairman Carl J. Richko (right) presents a plaque to retiring Council Member Robert F. Holtaway in recognition of his 14 years of service on the Highlands Council.



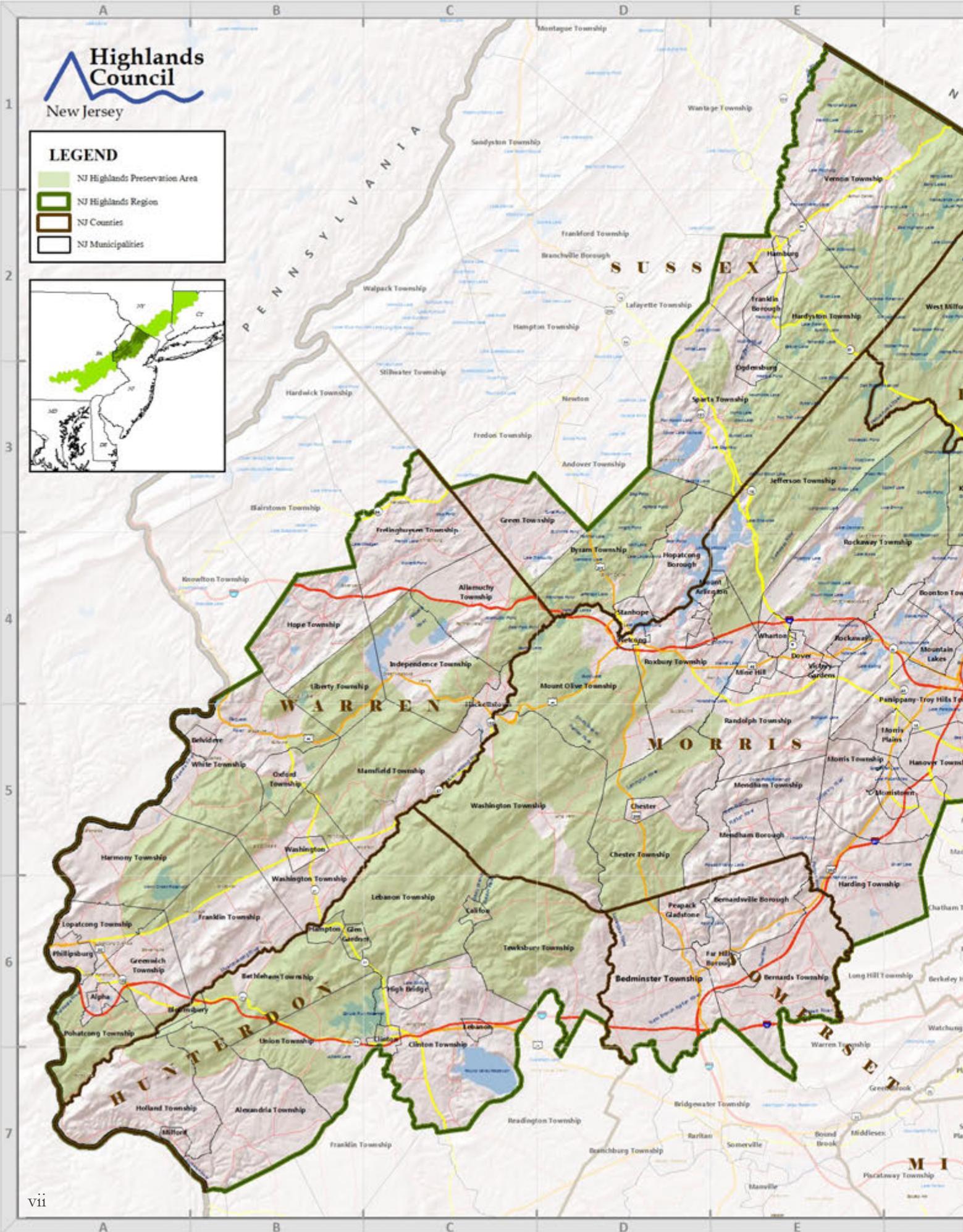
Statement of Activities and Financial Report

period ending December 31, 2023

General Operating Budget FY23 - July 1, 2022 through June 30, 2023	
Revenues	
State of New Jersey Appropriation FY23	\$ 2,429,000.00
Balance from FY22	\$ 592,518.97
Miscellaneous Revenues & Reimbursements	\$ <u>7,128.53</u>
TOTAL	\$ 3,028,647.50
Expenditures	
Salaries	\$ 1,995,508.87
Materials and Supplies	\$ 25,581.56
Other Operating Expenses	\$ 84,388.16
Rent, Maintenance and Repairs	\$ 253,319.77
Equipment, Additions, and Improvements	\$ 115,756.68
Balance through June 30, 2023	\$ <u>554,092.46</u>
TOTAL	\$ 3,028,647.50
General Operating Budget for Portion of FY24 - July 1, 2023 through December 31, 2023	
Revenues	
State of New Jersey Appropriation FY24	\$ 2,429,000.00
Balance from FY23	\$ 554,092.00
Miscellaneous Revenues & Reimbursements	\$ <u>5,000.00</u>
TOTAL	\$ 2,988,092.00
Expenditures	
Salaries	\$ 1,013,034.70
Materials and Supplies	\$ 12,523.40
Other Operating Expenses	\$ 62,712.64
Rent, Maintenance and Repairs	\$ 118,918.72
Equipment, Additions, and Improvements	\$ 27,858.65
Balance through June 30, 2024	\$ <u>1,753,043.89</u>
TOTAL	\$ 2,988,092.00
Regional Master Plan Budget for Portion of FY24 - July 1, 2023 through December 31, 2023	
Revenues	
Balance from FY23	\$ 2,229,025.37
Miscellaneous Revenues & Reimbursements	\$ <u>500.00</u>
TOTAL	\$ 2,229,525.37
Expenditures	
Contracts Paid to Date	\$ 187,981.05
Balance on Approved Contracts	\$ 1,446,573.34
Balance through June 30, 2024	\$ <u>594,970.98</u>
TOTAL	\$ 2,229,525.37

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
- Bloomington 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



2023 snapshot

Highlands Region Quick Guide
Navigating the 2023 MS4 Permit Changes

The new municipal separate storm sewer system (MS4) permit became effective on January 1, 2023 and introduced a number of significant changes for municipalities. Most notably, municipalities formerly classified as Tier B must now meet the same requirements as Tier A municipalities. Because meeting these requirements advances the goals and purposes of the Highlands Act and Regional Water Plan (RWP), grant funding can be made available to any Highlands municipality for MS4 permit compliance work.

Step 1 :: Secure NJDEP funding

If you have not already, apply for the NJDEP funding:

- Single-coverage MS4 permit application
- **DEADLINE EXTENDED TO March 31, 2024.**
- Funding can be used for other permit-related costs once specified deadlines are submitted.

Form # 8 - \$75,000

- MS4 application and submit the Application
- MS4 grant completion of Stormwater Pollution Assessment Plan (SPAP) due 6/30/24

Form # 6 - \$25,000

- MS4 application submit the application
- MS4 grant completion of MS4 Implementation Planning Plan 6/30/24

Step 2 :: Develop a timeline

Develop a timeline for the remaining components including estimated costs and funding sources. The Highlands Council can help with this step and can fund many of the costs.

Item	Estimated Cost	Funding Source
MS4 permit application	\$10,000	NJDEP
MS4 grant completion of Stormwater Pollution Assessment Plan (SPAP)	\$15,000	NJDEP
MS4 grant completion of MS4 Implementation Planning Plan	\$10,000	NJDEP
MS4 permit compliance work	\$20,000	Highlands Council
MS4 permit compliance work	\$20,000	Local/Other

Step 3 :: Access Highlands Council funding and expertise

The Highlands Council can be a valuable partner in helping meet MS4 permit requirements. Staff teams will work with your municipal team to help identify areas that the Highlands Council can fund and assist with the development of an implementation timeline. Eligible activities include planning, design and engineering costs.

Highlands Council Grants

- Non-competitive
- No match required
- No extension of program
- No application deadline
- Merit-based award
- Requires an approval award
- Funding availability of funding from Healthy

www.hcgc.org/highlands | 800.878.6707 | highlands@highlands.org | highlandscouncil.org

MS4 Permit Changes. The Highlands Council provided guidance and grant funding to help municipalities manage significant changes to the MS4 Permit that took effect in January 2023. See story page 15.

Forest Management in the Highlands. Highlands Council science staff completed extensive outreach and research into best practices for management of forests, specifically for watershed value. The results of this work have been shared with the NJDEP for consideration in any future updates to statewide guidance. See story page 19.



Celebrity Sighting. U.S. Forest Service spokes-animal Smokey Bear visited the Highlands Council Expo Booth at the 108th annual New Jersey State League of Municipalities conference in November. (left to right) Executive Director Ben Spinelli, Smokey, Highlands Council Environmental Scientist Sarah Friend, and GIS Manager Jocelyn van den Akker.



Sustainable Agriculture in the Highlands. The Highlands Council launched and announced the first round of awards in a new Sustainable Agriculture grant program. See story page 12.



Harmful algal bloom (HAB) data collection. Highlands Council staff participated in the Montclair State University Traveling HAB Lab project. See story page 24.

By The Numbers

\$950,000
in reimbursements
to Highlands municipalities
and counties for RMP
implementation projects.

\$1.6 million
in grant awards to
Highlands municipalities and
counties for RMP
implementation projects.

\$750,000
invested in Watershed
Protection Plans that will
protect **34 watersheds** in
parts of 25 Highlands towns.

\$600,000
invested in
sustainable
agriculture in the
Highlands.



**Follow the
Highlands Council!**

The Highlands Council now publishes news, notices, and fun facts on our Facebook and Instagram pages. Follow the Highlands Council on both platforms to keep informed and engaged!
@njhighlandscouncil



What's so **great** about

So glad you asked! Those who live in the region know well. Take in the vistas from Wyanokie High Point in Norvin Green State Forest or if you're not feeling that ambitious, take a walk or a bike ride on the Columbia Trail that spans Morris and Hunterdon counties. If outdoor adventure isn't on the agenda, hit one of the great small towns of the Highlands. Spend a little time strolling the streets of downtown Chester or Clinton and popping into shops. Or visit one of the many farms that dot the landscape just about everywhere in the region and offer not only abundant and delicious fresh local produce, but also family fun from corn and sunflower mazes to haunted hayrides. Need a job? Small businesses and corporate centers abound in the area. And Morristown and Dover offer city life vibes without the hassle of the city if that's more your style.

The Highlands is a diverse landscape with both rural and densely developed areas. The watersheds located within its borders supply nearly 70% of New Jerseyans with clean drinking water.

As the 20th anniversary of the Highlands Act approaches in August 2024, it's important to remember why this area requires special planning and care. The overarching goal of the Highlands Act and the RMP is protection of the region's natural resources particularly water. However, the Act and RMP also emphasize the importance of economic health to the region's long-term viability. In recognition of the importance of maintaining a healthy economy, the Highlands Council released an Economic Sustainability Plan for the Highlands in 2021. The Plan identified goals and action items to strengthen the Highlands economic future. Among the recommended actions was development of a "Highlands Region brand for business development and tourism that celebrates the breadth of assets and geographies in the area."

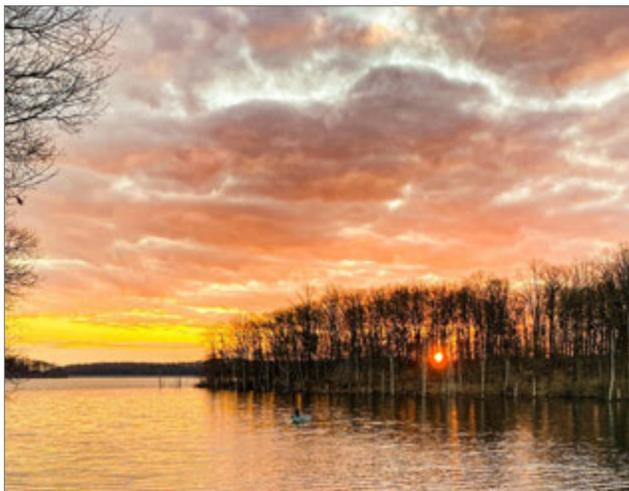
In late November 2023, the Highlands Council released an RFP to Develop a Branding and Marketing Plan for the New Jersey Highlands Region. The RFP specified three broad tasks: 1) Brand Identification; 2) Marketing Materials; and 3) Implementation Action Plan.



the New Jersey Highlands?

The RFP specifically sought marketing teams with expertise in tourism branding and marketing for the purpose of positioning the Highlands Region to increase tourism, support agriculture, bolster local businesses, and improve economic sustainability. The project involves the development of a unique brand, a marketing campaign, and an implementation action plan. The RFP specified that the branding and marketing campaign should encapsulate the unique environment of the Highlands Region and the various types of tourism and recreation it has to offer visitors from all areas.

Eight responses to the RFP were received and in early 2024 four teams were invited to interview with staff. The project is expected to launch in the first half of 2024 and be completed within 12 months. ♦



Opposite page: Clinton Township, Hunterdon County. Above: Merrill Creek Reservoir, Harmony Township, Warren County. Top right: Main street High Bridge Borough, Hunterdon County. Right: Shongum Lake, Randolph Township, Morris County.

Alpha Borough Expands Highlands Center

Alpha Borough is one of the smallest municipalities in the Highlands region by area, but don't confuse size with vision. After first establishing a Highlands Center in 2011 with the goal of enhancing a walkable residential area and addressing brownfields sites, Alpha reached out to the Highlands Council about two years ago to discuss the possibility of expanding its Center to incorporate insights gained during the planning process. The petition for the expansion was approved by the Highlands Council in April 2023.

A rural community in southwest Warren County, Alpha covers less than 2 square miles with a population of just over 2,000 residents. The municipality was founded largely on the industrial potential of the rich limestone deposits that were used in the manufacture of cement. Today the town includes a mix of residential areas, farms, a small downtown, and an industrial area. Interstate 78 cuts through the southwest and southeast corners of the borough.

A Highlands Center is an area where development and redevelopment are carefully planned to encourage sustainable economic growth while maintaining protection of critical natural, historic and cultural resources. The planning process for a Highlands Center is community-driven and designed to create a sense of place that reflects municipal goals.

The previously approved Highlands Center designation encompassed the eastern portion of the borough north of I-78. In the process of planning for the Center, the borough did a significant amount of outreach to learn more about community interests and needs. The expansion of the center adds areas to the west



and southeast of I-78 to include portions of Alpha's business district and its industrial centers. The resulting Highlands Center Designation Plan emphasizes the need for placemaking, improved recreation and community areas, and enhanced transportation options.

To ensure Alpha's strategically planned growth remains consistent with the RMP and protective of Highlands resources, approval of the petition for expansion comes with several conditions that were crafted with the borough since some industrial development is already being considered in a portion of the center.

Notably, the petition approval requires adherence to the "Policy Standards for Warehousing in the New Jersey Highlands," along with significant mitigation provisions for any loss of agricultural lands resulting from development. Condition 12 in the Highlands Council Consistency Review and Recommendations Report specifies that any loss of agricultural lands will be offset through the purchase of Highlands Development Credits (HDCs) or preservation of comparable farmland. This condition requires a formal agreement between the borough, the Highlands

Council, and any owner/developer memorializing the mitigation, and represents the first time the Highlands Council is formally assigning a value to the potential loss of agricultural resources. Alpha Borough has been an outstanding partner in this process and clearly understands that value.

By the end of 2023, such an arrangement is already in place through a developer’s agreement that has established an escrow account with the borough with funds to be used for farmland preservation projects in the borough, as mitigation for any farmland that is lost due to development. 📍

2023 Planning Grant Financial Summary

Implementation of the Highlands Water Protection and Planning Act is guided by the Highlands RMP and relies on the leadership of municipal and county governments that are eligible for grant funding from the Highland Council for planning, design and engineering costs related to that implementation. The Highlands Plan Conformance grant program is non-competitive and requires no matching funds. Municipalities and counties work in collaboration with Highlands Council staff to identify and prioritize projects that help implement the Highlands Act and the RMP at the local level. The Highlands Act requires the Highlands Council to provide this funding and established the Highlands Protection Fund to support this work.

2023 Planning Grant Reimbursements. Since this grant program was established in 2008, the Highlands Council has provided 75 municipalities and 6 counties with reimbursements totaling \$9.2 million for activities that help advance the goals of the Highlands Act and RMP.

In 2023, the Highlands Council provided a total of \$951,826.21 in reimbursements to 16 municipalities and 2 counties for implementation tasks. Below is a summary of some representative grant reimbursements from 2023.

2023 Highlands Council Grant Reimbursements*		
Plan/Activity	Total Reimbursement	Number of Grantees
Water Use and Conservation Management Plan	\$13,814	1
Lake and Watershed Management Plan	\$94,091	1
Sustainable Economic Development	\$206,698	5
Stormwater Management Plans	\$16,558	2
Wastewater Management Plans	\$35,867	2
Land Use Inventory and Ordinance	\$3,353	1
Initial Assessment Report	\$8,214	1
Reexamination Report	\$6,900	1
Fair Share Plan	\$10,000	1

**This table represents only a portion of total reimbursements made in calendar year 2023.*

2023 Planning Grant Awards. In 2023 the Highlands Council Awarded 27 grants to 18 towns and 2 counties, totaling \$1,606,300. All Highlands Council grants are reimbursement-based and require Highlands Council staff approval of a scope of work to begin projects, and final deliverables to be eligible for reimbursement.

Town of Belvidere, Warren County – Initial Assessment Grant

Not to exceed \$15,000

Belvidere will complete an Initial Assessment study to help the town better understand what is involved in aligning local planning and regulatory documents with the RMP. Belvidere is located entirely within the Planning Area of the Highlands Region where conforming with the Highlands RMP is completely voluntary.

Butler Borough, Morris County – Initial Assessment Grant

Not to exceed \$15,000

The purpose of an Initial Assessment Grant is to help a municipality better understand what is involved in aligning local planning and regulatory documents with the Highlands Regional master plan. Butler Borough is located entirely within the Planning Area of the Highlands Region where conforming with the Highlands RMP is completely voluntary.

Byram Township, Sussex County - Stormwater Management Planning

Not to exceed \$60,000

Byram Township will leverage Highlands Council funding to supplement NJDEP funding to comply with enhanced Municipal Separate Stormwater Sewer Systems (MS4) permit requirements.

Chester Borough, Morris County – Water Use and Conservation Management Plan (WUCMP)

Not to exceed \$60,000

Chester Borough will develop a WUCMP that will set priorities for the use of available water and will establish methods to reduce and, where feasible, eliminate deficits where they exist.

Town of Clinton, Hunterdon County – Traffic Study (Phase 1)

Not to exceed \$75,000

The Town of Clinton will complete a traffic study to assess the nature and capacity of their roads. Funding approved is for Phase 1, which will include an initial assessment of current conditions. Data collected may be used in subsequent phases to develop a means and methods plan to address any issues discovered.

Green Township, Sussex County – Master Plan Update, Climate Change

Not to exceed \$40,000

Green Township will update its Master Plan Land Use Element to include a climate change hazard vulnerability assessment referencing Highlands Council and NJDEP guidance and resources.

Holland Township, Hunterdon County – Open Space & Recreation Plan

Not to exceed \$40,000

Holland Township will complete an update to its Open Space and Recreation Plan, which was last updated in 2007. The township's 2020 Master Plan Reexamination Report recommended this update to ensure Holland remained eligible for funding from the NJDEP Green Acres program among other priorities.

Hunterdon County – GIS Parcel Update Project

Not to exceed \$70,000

Hunterdon County intends to complete a thorough review and update of all parcel data in the County. Existing data will be cross referenced to deeds and easements for accuracy. Updated information will benefit not only the county, but can be incorporated into state systems as well, including the Highlands Council Interactive Map.

Hunterdon County – Economic Sustainability Planning

Not to exceed \$150,000

As the Highlands Council continues to support Hunterdon County in the development of its 'Explore Hunterdon: The Other Side of Jersey' tourism brand, a grant was awarded to aid in promotional planning for the brand via a variety of channels including traditional print media, online, and social media.

Jefferson Township, Morris County – Sustainable Economic Development Plan

Not to exceed \$60,000

Jefferson will develop a Sustainable Economic Development Plan to explore methods for promoting economic development in the township. The plan will focus on the township's existing commercial and developed areas and its historic communities with a mix of residential, commercial, and recreational uses.

Jefferson Township, Morris County – Water Quality Assessment Grant

Not to exceed \$43,500

Jefferson intends to complete a second year of study of trout habitat and population at Lake Hopatcong. The data generated from this work may also inform other important lake management decisions such as watershed improvements, harmful algal bloom (HAB) management, and aeration needs.

Kinnelon Borough, Morris County – Master Plan Update, Climate Change

Not to exceed \$30,000

Kinnelon will update its Master Plan Land Use Element to include a climate change hazard vulnerability assessment referencing Highlands Council and NJDEP guidance and resources.

Mendham Township, Morris County – Initial Assessment Grant

Not to exceed \$15,000

Mendham Township will complete an Initial Assessment study to help the town better understand what is involved in aligning local planning and regulatory documents with the RMP. Mendham Township is located entirely within the Planning Area of the Highlands Region where conforming with the Highlands RMP is completely voluntary.

Montville Township, Morris County - Recreational Trail Planning

Not to exceed \$73,000

Highlands Council funding will be used to support the design and planning of a recreational walking and biking trail. The proposed route will connect South Abbott Road with the downtown region close to the Towaco Train Station and travel through preserved, municipal-owned land in their Highlands Planning Area.

Morris County – Stormwater Management Planning

Not to exceed \$42,500

Morris County will leverage Highlands Council grant funding to complete survey work and engineering design related to the installation of stormwater treatment equipment in Lake Hopatcong. In 2019, the lake experienced a large and persistent HAB, largely caused by excess phosphorus entering the lake through stormwater runoff. The new treatment system is capable of significant filtration that will aid in the prevention of adsorbed phosphorus and hydrocarbons making their way into the lake, potentially resulting in fewer HABs.

Morris County – Lake Management Planning

Not to exceed \$80,300

As part of ongoing efforts to reduce the occurrence of HABs on Lake Hopatcong, Morris County will be conducting a feasibility analysis and developing designs for an oxygenation system for the lake. The goal of the system is to oxygenate the water immediately over the sediments to minimize the internal phosphorus loading process. Additionally, the system can be designed to preserve, and even enhance, the cool-water, carry-over brown trout habitat.

Morris County – Natural Resource Inventory

Not to exceed \$48,600

Morris County will be completing floristic (plant) inventories and assessments at the 44-acre Mount Hope Historical County Park in Wharton and the 420-acre Hedden County Park in Randolph Township. The project will catalog distinct plant types throughout the parks including any rare plants as well as invasive species, evaluate the health and quality of plants, and provide recommendations for ongoing stewardship of the park's flora.

Oxford Township, Warren County – Food Processing Facility Feasibility Plan

Not to exceed \$150,000

Oxford Township will develop an implementation plan, including business and marketing plans, for the Northwest Food Processing and Innovation Center. The Center is envisioned as a regional hub for food processing and an incubator for creative agricultural business development.

Ringwood Borough, Passaic County – Open Space Plan

Not to exceed \$15,000

Ringwood will complete an update of the borough’s Open Space Plan, which was last updated in 1991. The update was recommended in the Borough’s 2022 Master Plan Reexamination Report.

Rockaway Township, Morris County – Local Zoning Local Control Grant

Not to exceed \$10,000

Rockaway Township will be completing a review of local zoning to determine the potential impacts of warehouse development.

Roxbury Township, Morris County – Lake Management Planning

Not to exceed \$113,650

Roxbury Township will complete a dredging project in the Landing Channel section of Lake Hopatcong. Sediments in the channel contain large amounts of phosphorus that can contribute to HABs in the lake. An innovative component of this project is that the dredged material will be used to rehabilitate an island, called “Floating Island,” which aerial imagery reveals has significantly decreased in size over the past 60 years. This is believed to be the first beneficial reuse project for a freshwater ecosystem in New Jersey.

Union Township, Hunterdon County – Planning Area Petition

Not to exceed \$15,000

Union Township is already working to align its local planning and regulatory documents with the provisions of the Highlands RMP for the Preservation Area portion of the municipality (approximately 80% of the township). The township will use funding from the Highlands Council to assess the benefits of expanding the work into the Planning Area portion of the township.

Vernon Township, Sussex County – Lake Management Plan

Not to exceed \$149,000

Vernon Township plans to conduct a watershed assessment. Funding included in this award is for phase one of a two-phase project. In phase one, the township will complete an analysis of 13 of the township’s 24 total lakes. This includes historical data review, hydrologic and pollutant loading analysis, analysis of pollutant removal achievable through the implementation of specific watershed-based management techniques, and a water quality assessment (watershed-based and lake-based).

Vernon Township, Sussex County – Master Plan Update, Climate Change

Not to exceed \$65,000

Vernon Township will update its Master Plan Land Use Element to include a climate change hazard vulnerability assessment, referencing Highlands Council and NJDEP guidance and resources. The township last completed a comprehensive Master Plan update in 1995, with reexamination reports completed between 2012 and 2022.

West Milford Township, Passaic County – Historic Preservation Grant

Not to exceed \$30,500

West Milford intends to complete a Preservation Plan for the Wallisch Homestead historic site (99 acres). The goal of the plan is to identify and prioritize recommendations for restoration and/or stabilization projects at the site. All planning and recommendations will align with the standards of the New Jersey Historic Trust and the NJDEP State Historic Preservation Office.

West Milford Township, Passaic County – Stormwater Management

Not to exceed \$85,250

West Milford will leverage Highlands Council funding to supplement NJDEP funding to comply with enhanced Municipal Separate Stormwater Sewer Systems (MS4) permit requirements.

West Milford Township, Passaic County – Trails Plan

Not to exceed \$55,000

After completing a Highlands Council-funded Trail Feasibility Study for Belcher’s Creek Trail System in April 2023, West Milford now has a four-phase plan to complete the trail. This grant provides funding to design the first phase, which is two miles long and will connect commercial and residential areas.

Advocating for Watershed Moratorium Aid

In December, the Highlands Council passed a resolution authorizing its executive director to advocate for the correction of inequities related to Watershed Moratorium Aid for Highlands municipalities.

Watershed Moratorium Aid is a mechanism for compensating municipalities throughout the state with watershed lands that have been excluded from future development by the legislatively enacted moratorium on conveyance of lands owned by water utilities. It is currently paid through the Highlands Protection Fund, which was created by the Highlands Act and funded through the Realty Transfer Tax.

There are eight Highlands municipalities with significant watershed lands that currently do not receive any of this aid. In addition, there is currently no existing mechanism for excluded qualifying municipalities to apply: the aid was intended to be overseen by a volunteer board, the Highlands Municipal Property Tax Stabilization Board also created in the Highlands Act, but the board has lacked membership for more than a decade.

The resolution passed by Council directs the executive director to ask the legislature to authorize the New Jersey Highlands Council to oversee applications for and allocation of Watershed Moratorium Aid. Or as an alternative to a legislative change, the Governor would appoint the necessary members to the Property Tax Stabilization Board. ♦

Fostering a Thriving Agricultural Industry in the Highlands

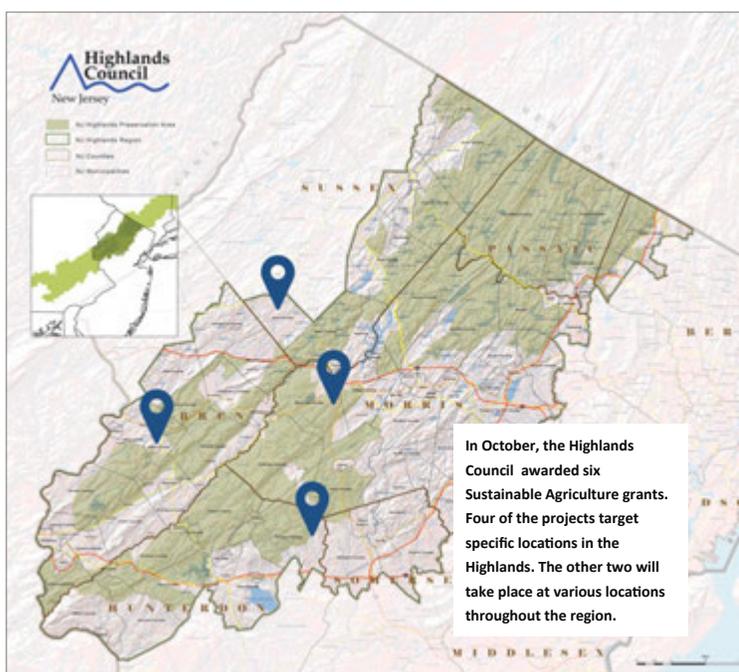
Agriculture is the second largest land use in the Highlands behind residential.

The region contains some of the best soils, not only in New Jersey, but in the world. Agriculture is also a defining characteristic for much of the region and an essential economic driver.

Accordingly, fostering a thriving agricultural industry in the region is a high priority for the Highlands Council.

In June, the Highlands Council announced a Sustainable Agriculture grant program designed to advance innovative sustainable agriculture practices in the Highlands region. The idea for this grant program came directly from agricultural professionals who sit on the Highlands Council Agricultural Advisory Committee and are helping ensure the efforts of the Highlands Council are supporting the needs of this important industry.

The grant program sought proposals for projects that will assist agriculture operations in the Highlands Region including value-added facilities, technical assistance, new farmer programs, sustainable land management, and other sustainable agriculture activity. The Council was looking for projects that would elevate agricultural practices, be innovative in nature, replicable, and aligned with the goals, policies, and objectives of the RMP.



A total of six applications were received. Five were approved at the Highlands Council meeting in October through the Sustainable Agriculture grant program and the sixth proposal was transferred to a different grant program, but also approved for funding at the October meeting, for a total investment of more than \$600,000 to advance sustainable agriculture in the Highlands.

Projects include the introduction of new crops, expansion of sustainable farming practices, education and marketing campaigns, and other efforts aimed at positioning the Highlands to become an agricultural hub for the region and beyond. The selected projects are eligible for continued funding for up to three years. Grants are reimbursement based and annual check points will ensure continued progress, with prior authorization required before proceeding to the next year's funding. Summaries of the funded projects appear on the following pages. ♦

Highlands Council Sustainable

Increasing organic grain production capacity in the Highlands

- Award** \$92,840
Location Multiple
Project Reintroduces high-value grain crops
Wholesale markets for milling, distilling, and malting
Advocates sustainable and regenerative farming practices
Develops capacity to produce, process, and market grains



- Deliverables** Introduce value-added grain crops to at least 20 farms
White paper on developing small-scale organic grain economies
Curriculum and short course series on specialty grain production

Demonstrating the value of organic farming in the Highlands

- Award** \$93,245
Location Tewksbury Township, Hunterdon County
Project Restoration of land through agricultural practices
Diverse on-site ecosystems
11 demonstration projects



- Deliverables** Farmer-to-farmer training programs
Technical resources and guidance documents

Positioning the Highlands as a regional hub for agriculture

- Award** \$150,000 Award to Oxford Township, Warren County
through the Plan Conformance Grant Program

- Project** Grant will support planning efforts for the development of the Northwest Food Processing and Innovation Center, which will be a regional hub for food processing and an incubator for creative agricultural business development. Funding from the Highlands Council will aid in the development of business and marketing plans, the preparation of a preliminary design and project budget to support and facilitate the construction of the center, which is proposed to be built on the site of the former Warren County trash incinerator in Oxford Township. The project also aims to innovate new products, packaging, and distribution ideas.

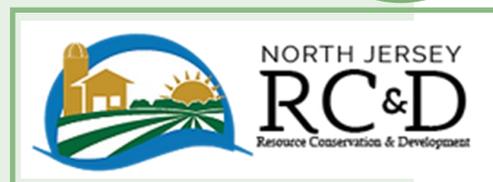


Agriculture Grant Recipients

Expanding the River Friendly Farm program in the Highlands

Award \$90,000
Location Multiple
Project River Friendly Farm Certification
Nutrient, pest, and farmstead management
Waterway protection and water conservation

Deliverables Expand program by 24 farms in the Highlands
Outreach events and marketing materials
Educational materials
Direct technical and financial assistance to farmers



Bringing regenerative farming practices within reach

Award \$90,000
Location South Branch Preserve, Mount Olive Township, Morris County
Project Practical, technical, and financial assistance to foster equitable access to local food and green spaces
Promotes climate resilient farming techniques

Deliverables Expand regenerative farming practices and production
Provide training for new and emerging farmers



Increasing organic food production capacity in the Highlands

Award \$83,930
Location Whittingham Wildlife Management Area
Green Township, Sussex County
Project Establish consistent food supply for indigenous crops to support the Turtle Clan Food Sovereignty
Coordinates activities in Wildlife Management Area with the NJDEP

Deliverables Develop organic farming practices in accordance with policies for leased land in a Wildlife Management Area
Comprehensive reporting and procedures
Video recordings of practices

Ramapough Culture and Land Foundation of the Turtle Clan of the Ramapough Lunaape (Lenape) Nation

Helping Highlands Municipalities Address Stormwater Permit Changes

Overflowing storm drains. Flooded fields and parking lots. Roads closed and even cracked open by gushing water. These are just some of the most visible signs of stormwater damage. What can't be seen – at least not immediately – is the damage to water quality, which is much more difficult – if not impossible – to repair.

This is why stormwater management is so important and why the U.S. Environmental Protection Agency (EPA) sets standards that must be followed throughout the country. At the municipal level in New Jersey, many of these standards are met through the Municipal Separate Storm Sewer System (MS4) permitting process.

In late 2022, the NJDEP announced changes to the MS4 permit in an effort to better address local flooding and nutrient loading in waterways due to stormwater runoff, and to more closely align state standards with federal requirements. Among the changes are new or enhanced ordinances and requirements regarding infrastructure mapping, salt management, erosion control, maintenance facility

management, training, and development of Watershed Improvement Plans.

Perhaps the most significant change is that all municipalities must now meet Tier A requirements. Prior to this update, municipalities in New Jersey were classified as either Tier B or Tier A, depending on the nature of the municipality (rural, suburban, urban) and complexity of its stormwater infrastructure. Of the 58 requirements listed on the NJDEP's 2023 Deliverables Timeline for the MS4 Permit, 50 of them are new or modified for former Tier B towns, and 35 are new or modified for the legacy Tier A towns.

The new permit became effective January 1, 2023, and although municipalities have five years to comply with the new requirements, the work is still daunting and expensive. Of the 88 municipalities in the Highlands, 30 are transitioning from Tier B requirements to Tier A.

In March, the NJDEP announced a grant program offering \$75,000 to former Tier B towns, and \$25,000 to Tier As to assist with the work. Recognizing that more would be needed and that effective stormwater management in the New Jersey Highlands is

Highlands Region Quick Guide
Navigating the 2023 MS4 Permit Changes

The new municipal separate storm sewer system (MS4) permit requires effective on January 1, 2023, municipalities formerly classified as Tier B must now meet the same requirements as Tier A municipalities. Because meeting these requirements advances the goals and purposes of the Highlands Act and Highlands Region Plan (HRP), participating or is made available to any Highlands municipality by 100% financial compliance with:

Step 1 :: Secure NJDEP funding

If you have not already, apply for the MS4P funding. **DEADLINE EXTENDED TO March 31, 2024**

- Apply online through NJDEP application.
- Submit application of MS4P funding to NJDEP.

Step 2 :: Develop a timeline

Develop a timeline for the remaining compliance help with the state and can fund many of the state.

Step 3 :: Access Highlands Region resources

The Highlands Council can be a valuable partner in helping meet MS4 permit requirements. Start working with us and our municipal team to help identify areas that the Highlands Council can fund and assist with the development of an implementation strategy. Digital activities include planning, design and engineering.

What's due when?

Of the 58 requirements listed on the NJDEP's 2023 Deliverables Timeline for the MS4 Permit, 50 of them are new or modified for former Tier B towns, and 35 are new or modified for the legacy Tier A towns. Below is a general summary of requirements in each year. Items in blue can be funded by the Highlands Council.

Year	Tier B to Tier A (2023)	Tier A (2023)
2023	Priority: Infrastructure Mapping, Watershed Improvement Plan (Phase 1)	Priority: Infrastructure Mapping, Watershed Improvement Plan (Phase 1)
2024	Priority: Infrastructure Mapping, Watershed Improvement Plan (Phase 1)	Priority: Infrastructure Mapping, Watershed Improvement Plan (Phase 1)
2025	Priority: Infrastructure Mapping, Watershed Improvement Plan (Phase 1)	Priority: Infrastructure Mapping, Watershed Improvement Plan (Phase 1)
2026	Priority: Infrastructure Mapping, Watershed Improvement Plan (Phase 1)	Priority: Infrastructure Mapping, Watershed Improvement Plan (Phase 1)
2027	Priority: Infrastructure Mapping, Watershed Improvement Plan (Phase 1)	Priority: Infrastructure Mapping, Watershed Improvement Plan (Phase 1)

critical to maintaining water quality and quantity for the entire state, the Highlands Council announced it would be providing funding and technical guidance to supplement NJDEP grants. All planning, engineering and design, and ordinance development required in the permit can be paid for with Highlands Council grants.

In July, the Highlands Council released a “Quick Guide” to navigating the MS4 permit change. It provides a Highlands-specific, high-level look at MS4 compliance, including a timeline of priorities and deliverables. The Quick Guide also highlights the many components of the permit that are eligible for Highlands Council grant funding. In August, the Highlands Council provided municipalities with guidance and

templates for developing scopes of work (SOWs) to request this funding from the Highlands Council. Municipalities are asked to project funding needs for the duration of the five-year permit period, but request funding on an annual basis for budgeting purposes.

As of December 31, 2023, 11 municipalities requested funding for grants ranging from \$34,500 to \$145,000. Three requests were approved before the close of the year and another four were approved in early 2024. The remaining four were in the process of revising SOWs, and several more have initiated the process in 2024. ♣

Landslide tears through Rt. 46 just outside the Highlands



The images of the mudslide and associated damage that occurred on Route 46 just outside the Highlands region were shocking to those unfamiliar with the area and long-time residents alike. There was similar damage in the region and throughout the state, prompting a request from the governor for a federal Major Disaster Declaration in New Jersey.

Severe weather events provide an unfortunate reminder of why land use planning and natural resource management are so important. This is the focus of the work of the Highlands Council. Avoiding exposure to the dangers posed by extreme precipitation events and creating a more resilient built environment is necessary to protect people and property. ♣

Navigating Warehousing Demand in the New Jersey Highlands

The increasing pressure for warehouse development is hitting the Highlands region just like it's hitting the rest of the state, with one important difference – the Highlands is a primary source of drinking water for most of the state's residents. Finding a way to manage this pressure is vital to the well-being of the entirety of New Jersey.

Policy Standards for Warehousing in the New Jersey Highlands Region

In April, the Highlands Council released an important policy document related to warehousing in the Highlands region. The “Policy Standards for Warehousing in the New Jersey Highlands Region” provides guidance for municipal and county officials to help ensure warehousing and similar development occurs in a manner consistent with the RMP.

The statewide guidance regarding warehouse siting, released in September 2022 by the Office of Planning Advocacy, acknowledged the Highlands as a “Special Resource Area” and instructed municipalities in the Highlands to refer to the RMP for direction. The Policy Standards simplify this process for municipalities by coalescing and framing the warehouse-relevant components of the RMP in one place. In 2024, the policy standards are now being proposed for adoption as an amendment to the RMP. Once adopted as an amendment to the RMP, the warehousing standards can easily become a mandatory part of local land use regulation upon adoption of an effectuating municipal ordinance.

The Policy Standards direct warehousing to areas mapped as Existing Community Zone in the RMP as well as to designated Highlands Centers and redevelopment areas. Warehousing will not be permitted within the Preservation

Area or in locations mapped as Conservation Zone or Protection Zone unless sited in one of above-referenced areas. Overburdened communities are also to be avoided. Design standards intended to mitigate impacts from traffic, stormwater and other effects are also included. The Policy Standards require a decommissioning plan to anticipate a future beyond the useful lifespan of any facility that is constructed. Finally, there are innovative measures to account for the loss of any farmland and to offset impervious coverage on a watershed-wide basis that have been incorporated into this RMP amendment.

Funding to better understand local zoning

In late 2022, the Highlands Council announced a grant program to help municipalities take a closer look at local zoning to see where they might be vulnerable to inappropriate development. In many towns, local zoning permits warehousing as-of-right, meaning a warehouse developer does not need to go through a lengthy variance process with the Zoning Board of Adjustment, but can simply gain local site plan approval at the planning board.

The grant program offers funding for a municipality to review a community's current zoning to ensure that all potential as-of-right developments permitted by a zoning ordinance meet the vision for the municipality and its

citizens. An assessment of current zoning will help identify any deficiencies or issues that could lead to inappropriate, unintended, or unwanted development, as well as areas that are better-suited for development and redevelopment within a community.

This is important because often ordinances and codes have been in place for years – long before the current administration’s tenure. If a town is faced with an application for a

development that they feel is not appropriate, they may be shocked to learn they legally can’t stop it.

In January 2023, the Highlands Council passed a resolution setting aside \$50,000 to fund this grant program, which offers up to \$5,000 per municipality to complete the review. Interest in the program has been steady, but funding remains available. ♠

From Proposed Warehouse to Preserved Farmland



In November, plans to build two massive warehouses in White Township, Warren County – one 800,000 square feet and the other 1.8-million square feet – came to a halt when the State Agricultural Development Committee (SADC) stepped in and offered to fund preservation of the farmland on which the warehouses were to be built. ♠

Protecting Highlands Forests

More than half of the New Jersey Highlands region is forested, and because 70% of the state's residents get some or all of their drinking water from the Highlands, management of forests in the Highlands is a matter of state-wide importance.

The Highlands Act includes an exemption for certain forestry activities as long as there is a woodland or forest management plan approved by the State Forester in place. Currently, development and review of those plans is based on the New Jersey Forestry and Wetlands Best Management Practices Manual (statewide BMPs), written in 1995.

Managing forests for their watershed value

Much has happened since 1995. In addition to the passage of the Highlands Act in recognition of the region's critical role in safeguarding New Jersey's water supply, there have also been important advances in the field of forest management around the globe. Understanding about the impacts of climate change on forests has grown significantly in that time, and a large body of science has emerged regarding the direct connection between healthy forests and forest soils and the protection of water quality, water quantity, and water timing.

The U.S. Forest Service, the EPA, the USDA, the NRCS, the New York City Department of



View from Merrill Creek Reservoir, Harmony Township, Warren County

Environmental Protection, and states both neighboring New Jersey and across the country have embraced standards and policies that reflect the need for different practices when managing forests for water, including most notably for the protection of New York City's water supply.

This has not yet happened in New Jersey. The role of the Highlands as a primary source of drinking water for the state's residents calls for special provisions in the management of Highlands forests that differ from the methods used to manage forests elsewhere in the state.

Tapping into local and national expertise

For these reasons, the Highlands Council staff embarked on a project in early 2023 to develop Highlands-specific forestry BMPs that would address this gap in guidance by providing a supplement to the 1995 statewide BMPs using updated information and expert input from a wide range of stakeholders. The Highlands-specific BMPs would inform and guide the process by which the State Forester approves

forest management plans, to help ensure provisions of the Highlands Act are upheld, and the important water resources of the region remained protected.

Staff engaged with experts and other interested parties to better understand the current state of Highlands forests; researched the current scientific recommendations regarding forest watershed management; and investigated how other states manage forests that supply public drinking water. During this process, staff invested over 80 hours interviewing more than 55 stakeholders.

Aligning Highlands practices with the best-available science

The resulting draft Highlands-specific BMPs reflected this robust outreach and research effort, drawing upon accepted best practices from across the country and incorporating the latest science. The draft also included provisions for case-by-case approaches to management as appropriate, consideration of how Highlands-specific BMPs would impact the approval of new plans, and discussion of financial factors.

The finalized Highlands-specific BMPs would have also included consideration of several factors currently missing in the 1995 statewide BMPs, such as:

- Managing invasive species
- Managing the impact of deer on Highlands forests
- Prohibiting seeding with non-native invasive species
- Protection of vernal pools
- A three-zone approach to streamside management zones (SMZs) with an emphasis on preventing sedimentation and increased water temperatures
- Expanded guidance on harvesting trees within a wetland

- How to identify, report, and protect Ceremonial Stone Landscapes and other historically and culturally significant features in the natural landscape

While the statewide BMPs provide far-reaching and comprehensive guidance for the proper management of New Jersey's forests and wetlands, additional protections are required in the Highlands to meet the mandates of the Highlands Act and minimize or prevent long-term negative impacts to water resources for the state.

Planning for the future

Although the original intent was for the Highlands forestry BMPs to stand alone as a separate supplement to the statewide BMPs, the work products – including research, stakeholder notes, and draft documents – were transferred in December to the NJDEP for consideration when they embark upon an update to the existing 1995 statewide BMPs.

In the New Jersey Highlands, managing forested lands in a manner that is optimal for protection of water quality, water quantity, and water timing is essential for the future of the region and the future of the state. New Jersey must take measures now to ensure healthier and more extensive forests in this region well into the future. The state's forestry vision should extend 20, 50, even 100 years into the future. ♠

Thank you!

The Highlands Council expresses our deep gratitude to the many stakeholders who gave generously of their time and expertise in a spirit of collaboration and dedication to the long-term health of Highlands forests.

Enhancing Water Quality at the Watershed Level

The devastating infrastructure damage following the strong storms that blew through the region in July 2023 provide a very visible example of why watershed management is vitally important everywhere, but especially in the New Jersey Highlands. Improperly managed stormwater is a significant contributor to water quality degradation – a much less visible form of damage, but damage that is much more difficult, if not impossible, to repair. Effective watershed management can dramatically reduce the negative impacts from severe storm events like this, which are only going to increase.

In January, the Highlands Council released a request for proposals (RFP) to develop Watershed Restoration and Protection Plans (WRPPs) for one or more subwatersheds in

the Highlands region. While the Highlands Council regularly funds municipal stormwater management plans, lake and stream management and restoration plans, and other water quality related projects, watersheds ignore municipal boundaries so planning at this level provides enhanced benefits for the region.

The RFP specified that the plans must include the EPA’s “9 Minimum Elements of Successful Watershed Plans,” a component that makes the plans eligible for additional federal planning and implementation funding administered through the NJDEP’s Water Quality Restoration Grant program. Local governments, universities and colleges, and nonprofit organizations were among the eligible applicants.

Four proposals were received and three were selected for funding and approved by the Highlands Council at its July meeting. The approvals represent a total investment of nearly \$750,000 in watershed-based planning projects that will set the stage for additional funding and implementation of water quality improvement projects throughout the Highlands.

The three projects together cover whole or partially 34 watersheds (187 HUC14s) and 25 municipalities in the Highlands region. In addition to providing a roadmap to protect and/or improve water quality, the completed WRPPs can be used in the development of Watershed Improvement Plans now required by the Municipal Separate Storm Sewer System (MS4) permit regulations. 💧



Funded Watershed Restoration and Protection Plan Projects

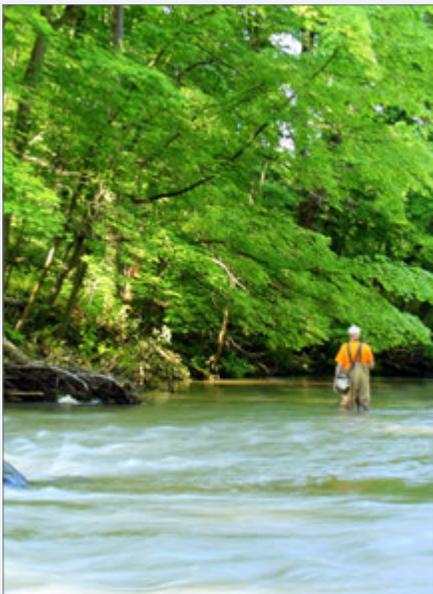
Pohatcong Township Watersheds

Partner Engineering and Land Planning, Inc. along with subconsultant Stroud Water Research Center

Focus Areas Three watersheds: Lopatcong Creek, Pohatcong Creek, and Musconetcong River.

Budget \$41,000

Progress Note Initiated desktop investigation and review along with the nutrient load and reduction modeling.



Pohatcong Creek, Pohatcong Township

Warren County and Morris County Locations

Partner Princeton Hydro, LLC.

Focus Areas Mountain Lake community in Liberty Township (Warren County); four lakes in Roxbury Township (Morris County); and eight lakes in Jefferson Township (Morris County).

Budget \$334,915

Progress Note Completed field survey work for Mountain Lake portion of project.



Photo credit: LibertyTownship.org

Mountain Lake, Liberty Township

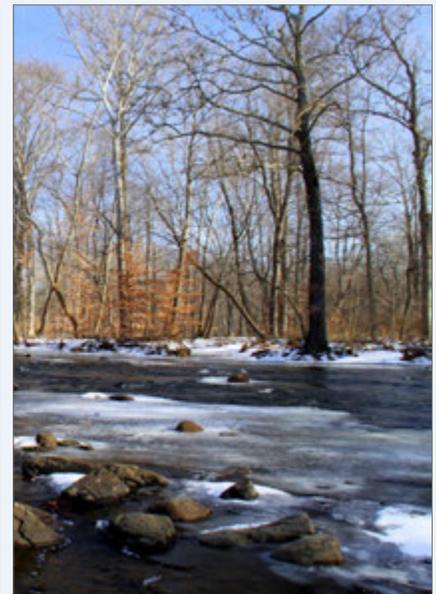
North and South Branch Raritan River and Lamington River

Partner Rutgers Cooperative Extension Water Resources Program along with subconsultants, Raritan Headwaters Association and New Jersey Water Supply Authority

Focus Areas A total of 24 watersheds across 21 municipalities

Budget \$371,562

Progress Note Completed kickoff meeting with project partners.



South Branch Raritan, High Bridge Borough

Meeting Affordable Housing Obligations in the Highlands

Highlands municipalities have a constitutional obligation to provide affordable housing units. At the same time, the Highlands region requires special protection because of the role it plays providing drinking water for the state. These are not mutually exclusive goals, but they do require careful and thoughtful consideration. **The number, location, and manner in which affordable units are built in the Highlands must be informed by the RMP and the overarching need to protect the region's natural, cultural, historic, agricultural and economic resources.**



In anticipation of the fourth round of affordable housing mandates, the Highlands Council at its May 2023 meeting awarded a contract to Colliers Engineering & Design to develop guidance that will help the Council and its 88 constituent municipalities prepare for this latest round of affordable housing obligations. The key objective of the project will be to ensure that the RMP guides decision making when it comes to affordable housing.

Although the Fair Housing Act was passed along with the State Planning Act in an effort to ensure sound planning principles guided affordable housing decisions, with the dissolution of the Council on Affordable Housing (COAH) those principles have not remained at the forefront. As the conclusion of the third round draws near, 67 of the 88 Highlands municipalities have adopted Fair Share Plans or settlement agreements resulting in an obligation of more than 16,000 affordable units. If that obligation is met solely

through inclusionary projects, in which only a portion of a new development is affordable, Highlands Council data indicates this will be far more than the resources of the region can handle.

The Colliers team has extensive experience in the Highlands region working with Highlands municipalities and Council staff on the development of fair share plans and housing plan elements for municipal master plans. The team also includes Surenian, Edwards, Buzak & Nolan, one of the preeminent law firms in the state on matters of municipal compliance involving affordable housing policy and related litigation.

The contracted project – not to exceed \$100,000 and expected to be completed in 2024 – will involve technical analysis and the development of policy and program recommendations that will simultaneously ensure compliance with the Fair Housing Act and effective implementation of the Highlands RMP. Once completed, the project will be rolled out to Highlands municipalities, and grant funding will be available to help towns prepare fourth round plans.

Legislation introduced late in 2023 and then reintroduced in early 2024 began to provide some details regarding new formulas that would be used in the fourth round. Although not yet finalized at time of publication, the current iteration of the legislation emphasizes the importance of ensuring Highlands municipalities are able to meet their mandated affordable housing obligations in a manner that is consistent with the Highlands RMP. The Highlands Council is committed to partnering with our 88 constituent municipalities in navigating this complex area of the law. 💧

Contributing to Harmful Algal Bloom Research

In 2019, Lake Hopatcong, the largest freshwater lake in NJ, experienced an unprecedented Harmful Algal Bloom (HAB) so significant that it closed the beaches and shut down the lake for most of the summer season. Beyond the implications to the health of this important waterbody, the HAB had negative impacts on the local economies of the four municipalities that border the lake.

Although the occurrence of HABs in recent years has been increasing, much is still unknown about what causes the cyanobacteria that form these algal blooms and have the potential to produce toxins.

In February, the Highlands Council science staff met with Dr. Meiyin Wu, Director of the New Jersey Center for Water Science and Technology (NJCWST) at Montclair State University to learn more about her team's ongoing studies of HABs and their origins. Highlands Council staff were invited to participate in this research as a citizen science team within the NJCWST Travelling HAB Lab program. The purpose of the Traveling HAB Lab is to increase understanding and awareness of the environmental and

health impacts of HABs in New Jersey. The citizen science project engages members of the public in HAB research and monitoring.

In preparation for the project, Highlands Council science staff received specialized training on how to identify cyanobacteria and other algae species typically found in Highlands waters. From July through October, Highlands Council staff monitored three separate sampling sites at two water



Frenches Pond in Allamuchy was one of three sites monitored by the Highlands Council citizen science team.

bodies: Durham Pond in Rockaway Township, Morris County, and Frenches Pond in Byram Township, Sussex County. Both sites are owned and managed by the Patriots Path Council of the Boy Scouts of

America. Durham Pond is a natural lake hydrologically connected to Beaver Brook tributary and Split Rock Reservoir, and located within the Upper Passaic, Whippany, and Rockaway Watershed Management Area. Frenches Pond is an artificial lake and hydrologically connected to the Tow Path Creek and Tiny Creek, and within the Musconetcong River Watershed Management Area.

Analysis revealed the presence of several types of algae as well as cyanobacteria cells at Durham Pond indicating that it may have been experiencing a bloom during sampling, although not necessarily a HAB. The pond experienced elevated levels of cyanobacteria from July to October at both sampling locations but further testing by NJDEP personnel indicated no HAB was present. Frenches Pond had minimal cyanobacteria throughout the duration of the sampling program. 💧



Traveling HAB Lab

Highlands Photo Log



Highlands Council staff members participated in field training with the Traveling HAB Lab team from Montclair State University (MSU) on June 7. Although the day started out with only minor impacts from the Canadian wildfires, air quality conditions deteriorated significantly throughout the day.



Highlands Council GIS Manager Jocelyn van den Akker completes in-field data forms at Durham Pond in Rockaway Township, Morris County.



Science staff member Carolyn Klaube takes a temperature reading at Frenches Pond in Byram Township, Sussex County.



Highlands Council staff member Alex Hascha, right, prepares to read monitoring data, while Kelley Curran lowers a probe into Frenches Pond in Byram Township, Sussex County.



Highlands Council staff members Casey Ezyse, left, and Sarah Friend collecting HAB Lab data at Durham Pond in Rockaway Township, Morris County.

Learn more about the Traveling HAB Lab



Highlands Council HAB Lab Team Lead Kelley Curran completes instrument calibration before teams head out to the field for data collection.



Highlands Council HAB Lab Citizen Science Team members (left to right): Jocelyn van den Akker (GIS Manager), Carolyn Klaube (Senior Natural Resource Specialist), Sarah Friend (Environmental Scientist), Alex Hascha (Resource Management Specialist), Kelley Curran (Science Manager/HAB Lab Team Lead), Carole Ann Diction (Communications Manager), Casey Ezyse (Water Resource Management Specialist).

Full HAB Lab Project Results

A data dashboard summarizing all info collected by the Traveling HAB Lab is available online and will continue to be updated. On the data dashboard, the sites monitored by Highlands Council staff are DP1, DP2 and FP1.

Advancing Land Preservation Priorities

Although the Highlands Council's primary focus is on natural resource protection through regional planning, land preservation is also an essential tool for protecting the Highlands. The Highlands Council currently operates two land preservation programs: the Highlands Open Space Partnership Funding Program (OSP) and Highlands Development Credit Purchase Program (HDC program). Both are designed to increase protection of Highlands resources, while also advancing landowner equity priorities through acquisition or deed restriction of land in the region.

The Highlands Council OSP is a matching grant program that is open to government and nonprofit entities. The Highlands Council provides up to a 50% match for acquisitions in fee or via deed restriction. The HDC program is a deed restriction program open to individual property owners wishing to retain ownership of their property while placing a conservation easement on the land. Please see the Highlands Development Credit Bank Report beginning on page 36 for additional details about the HDC program.

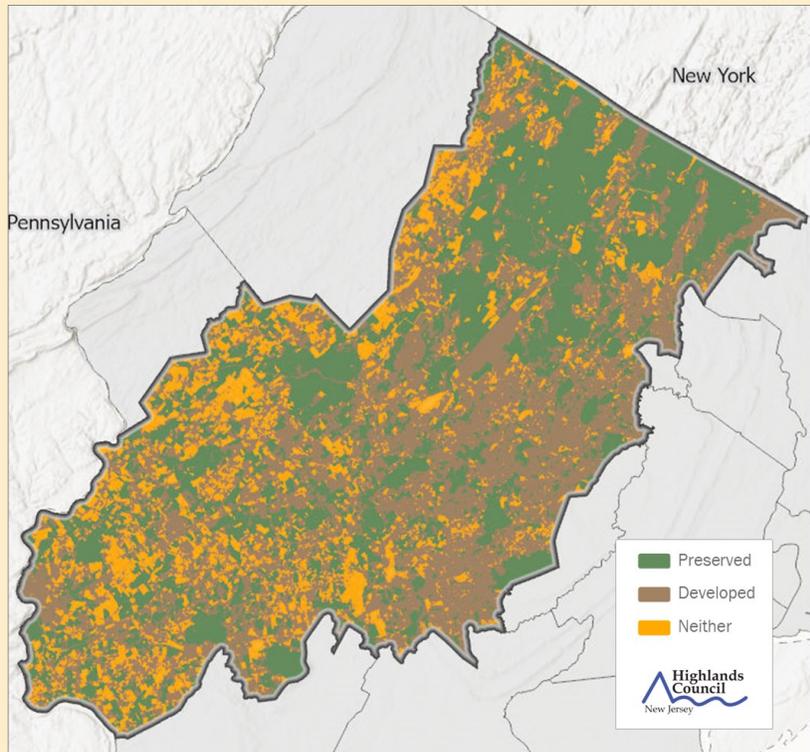
Land Preservation Status in the Highlands

38% Preserved

45% Developed

17% Neither

17% of the land in the Highlands Region is neither preserved nor developed. This translates to about 19,000 individual parcels, 96% of which are 50 acres or smaller. This is due to a historical bias in New Jersey for preserving large parcels. The Highlands Council's land preservation programs fill a unique need by considering parcels of any size that may not qualify for other state preservation programs, but still contain important forest, agricultural, or other resources that would be lost if not preserved.



Source: 2022 Highlands Region Land Preservation Status Report



These two programs fill a unique need among other preservation programs in the state since parcels of any size may qualify and applications for land that is forested, agricultural and/or mixed use are all considered. The programs are administered under the provisions of N.J.A.C. 7:70.

Since inception these two programs have contributed to the preservation of more than 6,000 acres in the New Jersey Highlands. New Jersey state sister agencies, including the State

Agricultural Development Committee (SADC) and Green Acres along with many nongovernmental land conservancies and trusts, also contribute significantly to preserved lands in the region. The 2022 Land Preservation Status Report reveals that 38% of the region is preserved, while approximately 45% is developed. The remaining 17% is neither preserved nor developed. Some of that land might be appropriate for development; some might be better suited to preservation.

Highlands Region Open Space and Recreation Plan

The Highlands Act and the RMP direct the Highlands Council to preserve environmentally sensitive land, farmland, historic sites and resources, and land for recreation purposes including hunting, fishing, and hiking. While the Council has played a role in preserving a significant amount of land already, the Council unfortunately lacks a comprehensive inventory of potential preservation projects and a clear understanding of community needs related to open space and recreation.

In 2023, the Highlands Council applied for and was awarded a capacity building grant available from the United States Fish and Wildlife Service (USFWS) through the federal Highlands Conservation Act (HCA) grant program. The grant allowed the Council to release a Request for Proposals to develop an Open Space and Recreation Plan for the Highlands Region.

The project involves extensive stakeholder outreach and research that will inform specific tasks including an inventory of existing open space assets, identification of recreational needs, development of land preservation goals based on those needs, a list of possible properties for preservation, a priority ranking system for acquisitions, and an acquisition outreach and funding plan.

Seven proposals were received and five teams were invited to interview with staff. In early 2024, a contract was awarded to the team of The Trust for Public Land (TPL) and TwentyTwenty Public Affairs. Project work is expected to be finished before the end of 2025. The USFWS grant – in the amount of \$172,000 – will fund nearly 60% of the cost of the Open Space and Recreation Plan while the Highlands Council will contribute the remaining \$126,500 for the project.

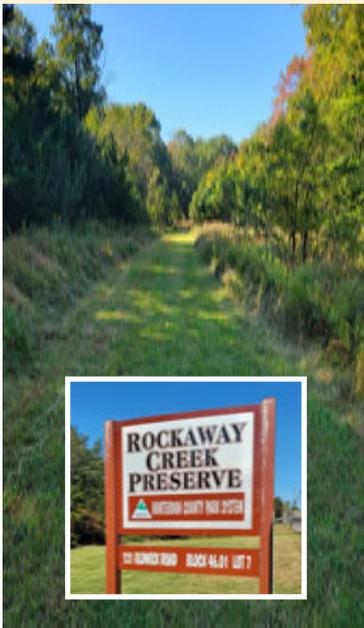
Funding Land Preservation in the New Jersey Highlands

Currently, the Highlands Council has no dedicated source of land preservation funding. Although the HCA provides millions of dollars in matching funds for land conservation projects annually, access to these funds requires a local match. Without a stable source of funding, New Jersey's share of the funding is instead available to Pennsylvania, New York, and Connecticut Highlands preservation projects. In addition to the inability to leverage federal HCA funds, the lack of dedicated funding prevents the Highlands Council from meeting critical landowner equity goals through the HDC program.

In January 2023, the Highlands Council adopted a resolution requesting a dedication of a portion of the Corporation Business Tax (CBT) currently devoted to the state's land preservation programs be redirected to the Highlands Council to address this issue. The Highlands Council received strong support from legislators regarding this request, however to date, no action has been taken. ♣

Progress at Rockaway Creek Preserve

In 2022 a preservation project funded in part by the Highlands Council was completed and the Rockaway Creek Preserve in Tewksbury Township, Hunterdon County was created. Work on the park continues. In October 2023 Highlands Council staff visited the site for monitoring purposes. Signage and mowed paths were in place and the natural beauty of the area was on full display. ♣



Are you involved in land preservation efforts in the New Jersey Highlands Region?

Then you may be able to help us fill in land preservation data gaps. The **Highlands Land Preservation Data Update** tool is a quick and simple online form that helps us capture information about parcels that are not currently included in the NJ Highlands Council's database and correct inaccurate data. Use the QR code to visit the tool and learn more.



Building Climate Resilience

With each passing year, the implications of climate change are becoming more apparent.

In April, the Highlands region experienced a significant wildfire in West Milford Township that burned approximately 1,000 acres of high-quality forest. In early June, smoke from the unprecedented Canadian wildfires clouded the air for weeks, followed by devastating downpours the next month that caused infrastructure damage in and around the Highlands beyond what most residents have seen in their lifetimes. Despite the drought conditions that prevailed during the first 4 months of the year, 2023 saw an astounding average of nearly 70 inches of rainfall across the Highlands region. Seasonal and monthly records for warmth were

set throughout the year. These are examples of the types of erratic climatic conditions that are becoming the norm in the Highlands and beyond.

The implications of climate change for the long-term management of the New Jersey Highlands require focus on responding to and preparing for the impacts that can be expected both within the region and in the state as a whole. Increased frequency of extreme precipitation events, flooding, agricultural impacts, species migration, periodic droughts and higher average temperatures are just some of the expected conditions. Underlying this is the ability of the region to continually provide adequate clean drinking water to the state regardless of these climatic changes. New Jersey has been a leader on the climate front, releasing a statewide Climate Change Resilience strategy in 2021 that, instead of focusing solely on responding to immediate climate impacts, seeks to build proactive climate resiliency. The Highlands region will play a significant role in ensuring that resilience.

Highlands Municipal Climate Resilience Guidance

In 2022 the Highlands Council launched a project to develop guidance that would help municipalities implement changes to Municipal Land Use Law, which now requires the incorporation of a number of climate considerations including a climate change hazard vulnerability assessment. This guidance will have Highlands-specific elements that address both the unique threats to the region and the important role the region will play in the overall resilience of the state by mitigating future climate impacts and helping to meet the state's resource needs in the face of a changing climate. This will require developing coherent policies, goals and action steps to address this challenge with measures that can be implemented at the local, county and state levels. A key deliverable will be a Highlands grant program for implementing the changes outlined in the guidance including a model scope of work for municipalities to use when applying

continued on page 31

continued from page 30

for funding. Guidance materials for Highlands municipalities are expected to be ready by the summer of 2024.

In January 2023, New Jersey Future led a webinar for municipal leaders and planning experts in the Highlands to discuss guidance being developed by the Highlands Council and seek practitioners' input. Hosted by Highlands Council staff, the event was attended by 88 individuals representing municipalities across the Highlands region. Attendees responded meaningfully to polling questions and the Q&A period at the end was robust. All have been invited to continue their involvement in the project as it moves forward. Additional information about this project, including a copy of the presentation and a recording of the session, is available on the project website (QR code to the right).

**Highlands
Climate
Resilience
Project**



Highlands Council staff continues work with Interagency Council on Climate Resilience

Highlands Council staff members continue to contribute to statewide Climate Resilience policy via a seat on the Interagency Council on Climate Resilience (Interagency Council).

September marked the two-year anniversary of the state's Climate Change Resilience Strategy, and the Interagency Council published a report to mark the milestone. The Highlands Council's work on the guidance materials discussed above, our collaboration with the Meadowlands and Pinelands on wetland protection planning, and our grants related to lake, watershed, and stormwater planning were all highlighted among the achievements in the report.

Also in 2023, the Interagency Council began work on the Climate

Resilience Action Plan (RAP) for Extreme Heat and Highlands Council staff have been providing input to ensure Highlands resources are appropriately considered. Water needs increase in hot weather, and these peaks occur when natural resources are often most scarce. Highlands Council input highlighted the fact that as temperatures rise and the growing season lengthens, an increased demand for water for irrigation (e.g., crops, golf courses, and outdoor residential) will put additional strain on the water supply coming from the Highlands. Comments also encouraged increased coordination among the NJDEP, NJDA and the Highlands Council to establish uniform conservation standards for all users of Highlands water.

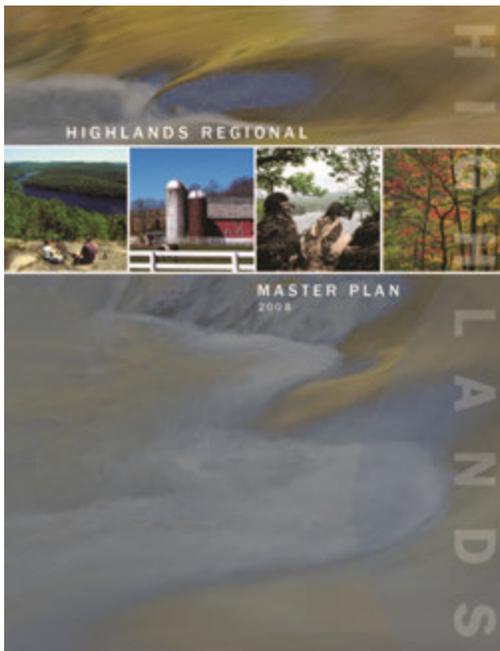
Statewide Strategic Climate Action Plan

In October the Highlands Council provided comments on the draft NJDEP Strategic Climate Action Plan, which had been released in September. Our comments emphasized the critical role that protection of the Highlands Region plays in the long-term resiliency of the state, which is only becoming more acute with the growing impacts of climate change. Not only will the role of the Highlands as the primary source of drinking water for most New Jersey residents become increasingly evident, the role of the region as a stable food source in proximity to large metropolitan areas will increasingly take center stage. It is of vital importance that New Jersey take action now to ensure the protection of natural resources and local economies of this region as articulated in the Highlands Act 20 years ago.

Projections included in the draft plan indicate that the largest increases in precipitation intensity and frequency of intense precipitation events will be in the Highlands. This will mean higher incidents of flash flooding, such as those that occurred in summer 2023. Adequately protecting and restoring Highlands forests and wetlands, along with minimizing increases in impervious coverage, are critical to reducing future climate change-fueled flood risks both within the region and downstream from the Highlands. Consideration of the direct impacts that are coming to the Highlands region is critical to the overall climate resiliency of the state. ♣



As changes in climate continue to intensify, the occurrence of extreme weather patterns will likely increase in frequency. The hot, dry and windy conditions that exacerbated the Canadian wildfires over the summer, which pushed smoke as far south as the Highlands Council office in Chester (photo above) and well beyond, are an example of the implications of these changes.



Amending the Regional Master Plan

Over the summer and into the fall, the Highlands RMP committee met with technical staff to discuss and consider possible amendments to the RMP. **The Highlands RMP is a significant and important document and 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 and a 60-day public comment period.

Two proposed amendments were advanced by the committee for adoption consideration. The first is the incorporation of the previously released guidance document, “Policy Standards for Warehousing in the NJ Highlands Region” (Warehousing Policy). The second is an update to the Highlands Land Use Capability Zone (LUCZ) Map and Technical Report.

The Warehousing Policy was created following the release of statewide guidance regarding warehousing that was released by the Office of Planning Advocacy and directed Highlands municipalities to refer to the RMP for guidance. The Warehousing Policy simplifies this process for Highlands municipalities by assembling all the relevant RMP policies in one place. 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. (For more details, see “Navigating Warehouse Demand in the Highlands,” page 17.)

Changes to LUCZ mapping will be minimal as a result of the proposed update to the LUCZ technical report, but it is important that the land use designations be as accurate as possible since the LUCZ informs much of the Council’s work and is the primary guidance tool for implementation of the RMP. Much 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 will incorporate the adoption of inland flood hazard rules, updated anticipated flood hazard areas in the region, and new land use/land cover data from the NJDEP.

The proposed amendments were released for public comment in early 2024 and are expected to be adopted before fall. ♦

Shaping the Next Generation of Highlands Protectors

Take Your Child to Work Day 2023

A group of eager and energetic young people learned about the water cycle, watersheds, pollution caused by stormwater runoff, and even some basic mapping skills when they joined their parents at work for a day in April at the Highlands Council office in Chester.

Before venturing out to explore Highlands Ridge Park, adjacent to the office, students learned all about being mindful of pests as they participated in the Tick Safety Dance, created and led by Highlands GIS specialist, Weston Strubert. On a short hike around the property, Senior Natural Resources Specialist Carolyn Klaube taught our visitors how to identify native plants and the important role they play in keeping the Highlands Region healthy. The outdoor portion of the program concluded with monitoring an adjacent stream for nitrate, chloride, and macroinvertebrates, led by Science Manager Kelley Curran. During their investigations, the scientists -in-training detected low levels of pollutants as well as stonefly, caddisfly and dragonfly nymphs – which indicate a healthy waterbody. ♡



(clockwise from top left) Learning about watersheds with Science Manager, Kelley Curran; Making discoveries during stream sampling; Learning the Tick Safety Dance with GIS specialist Weston Strubert; Exploring specimens up close.

Learn the Tick Safety Dance

The Year Ahead...

2024 is the year when New Jersey will mark the 20th anniversary of the Highlands Water Protection and Planning Act. When reflecting on this landmark legislation, it's important to keep in mind all that went into creating the Highlands Act.

National attention first turned to the Highlands region in 1992 with a study of the New York and New Jersey Highlands region that was later updated in 2002. These reports caught the attention of New Jersey legislators and led to the creation of the Highlands Task Force in September of 2003. In January 2004, the task force launched www.savethehighlands.org (now defunct) to provide members of the public with information about the work of the task force and solicit individual input about how best to manage the region. Support at the time was overwhelmingly in favor of legislation to protect the Highlands.

The need to protect the Highlands and the work of the Highlands Council is just as critical today,

if not more so, as it was 20 years ago. Population continues to grow, and the added threat of climate change make it vital to current and future generations of New Jersey residents that we care for the Highlands.

The Highlands Council will be marking the occasion later this year near the anniversary of the signing and the first meeting of the Council.

In addition to preparing for the anniversary, Highlands Council priorities in 2024 will largely mirror those of its constituent municipalities and counties: addressing affordable housing, MS4 permit compliance, climate change resilience, warehousing, and economic sustainability. The Council will also continue its efforts to support and strengthen the agricultural community and looks forward to the completion of two important regionwide initiatives: creating an Open Space and Recreation Plan and a Branding and Marketing Plan for the Highlands Region. ♦



Pinwheel Vista, Appalachian Trail, Vernon Township, Sussex County

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.

As of December 31, 2023, 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 2023, Highlands Council staff revised its easement monitoring program, dividing the program into fall and spring seasons. Staff visited 14 HDC properties in fall of 2023 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. The remaining properties will be inspected in the spring of 2024. ♦

Highlands Development Credit Registry

As of December 31, 2023

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

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
						1,814	\$ 27,772,000	2,565.14

* 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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