

RARITAN HEADWATERS ASSOCIATION



STRATEGIC PLAN FISCAL YEARS 2018 – 2020



Raritan Headwaters Association (RHA) is on a mission to protect water in our rivers, our streams and our homes. The 470-square-mile region provides drinking water to more than 1.8 million residents of 38 municipalities in Hunterdon, Morris, and Somerset Counties and beyond, into the state's urban areas. We are the largest watershed organization in New Jersey with thousands of members, participants and volunteers. RHA protects, preserves, and improves water quality and other natural resources through our highly regarded science, education, and advocacy programs. Since 1959 we have:

- Educated more than 60,000 school children in our WaterWays, RiverFest and other formal and informal science education programs
- Helped preserve 6,800 acres of land and natural habitat
- Removed more than 90 tons of trash from streams and waterways
- Completed 30,000 well tests in 40 New Jersey municipalities
- Monitored 1,400 miles of streams for pollution, engaging hundreds of citizen scientists
- Influenced land use decisions and policies that protect water resources

The drainage basin of the entire Raritan River covers approximately 1,100 square miles, making it the largest river basin located entirely within the State of New Jersey. The South Branch of the Raritan River is 51 miles long from its source in Budd Lake to its confluence with the North Branch in Branchburg. The North Branch of the Raritan River originates as a spring-fed stream in Morris County to day soccer tips and flows south for approximately 23 miles to its confluence with the South Branch. The Raritan River empties into Raritan Bay on the Atlantic Ocean.

Raritan Headwaters Association is a 501(c)(3) non-profit organization that was formed from the 2011 merger of the South Branch (SBWA) and Upper Raritan (URWA) watershed associations.



Pond at Fairview Farm in Bedminster, Somerset County

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LETTER FROM THE BOARD PRESIDENT AND EXECUTIVE DIRECTOR

Every one of us should be concerned about having access to clean drinking water now and in the future. In parts of our country and around the world, water pollution and water shortages are accelerating at an alarming rate. That is why our mission—protecting water in our rivers, our streams and our homes—is more critical now to public health and quality of life than ever before.

An award-winning, independent, grassroots nonprofit, Raritan Headwaters is the only organization in the region solely focused on protecting clean water. For nearly 60 years, our scientists, educators, advocates and volunteers have been hard at work protecting the water you and your family rely on every day. As a conservation leader in the country's most densely populated state, we are committed to making a difference in the health and well-being of our watershed communities and to being a nationally recognized model for clean water protection.

Our Board and staff have developed a strategic plan that defines concrete actions to be taken to make sure that everyone in the Raritan Basin has access to safe, clean water that is swimmable, fishable and, above all, drinkable. Today, with a professional staff of sixteen and a diverse Board, we are well positioned to take on new challenges to water quality, land use and potentially adverse legislation affecting the Raritan River region and beyond.

Raritan Headwaters inspires and educates people to understand that the quality and quantity of our water can never be taken for granted. We will continue to be your watchdog and public advocate for ensuring the water you depend upon is safe. We believe that clean sources of water are necessary for successful local farms, food production, business, tourism and other components of a healthy economy. We fight for better governmental policies and actions to protect clean water. We are your go-to resource for water protection in the Raritan River region.

The Raritan headwaters region is our home too. We are personally invested in protecting the quality of life unique to our watershed. It is with great enthusiasm that we share our strategic plan with you and invite you to join us in securing the future for generations to come.



John F. Parker, Board President



Cindy Ehrenclou, Executive Director

EXECUTIVE SUMMARY

The Challenge

Every river begins somewhere and that somewhere is the network of little streams that blanket the landscape as they merge and flow downstream, becoming a river system. Headwaters are the small swales, creeks, streams, and wetlands that are the origins of larger streams and rivers.

Headwater streams may be ephemeral, intermittent, or perennial. *Ephemeral streams* contain flowing water during limited periods—typically after major rainstorms. *Intermittent streams* flow only during the wet season each year. *Perennial streams* have water flowing year-round. Because water flows, its quality in the headwaters has a strong influence on water quality downstream. Efforts to protect water quality in major streams, rivers, lakes, and even estuaries must begin at their sources. In the past, headwaters were regarded as insignificant because they are often small and discrete. In recent years, we have truly gained an appreciation for the role that headwaters play in protecting water quality across watersheds.

Sediment Control: Because headwater streams frequently originate in forests and meadows, they are often surrounded by vegetated buffers that help to stop large quantities of sediment from travelling downstream. Collectively, headwater streams can prevent siltation from becoming a problem in the larger streams and rivers into which they flow. This means less flooding and a reduced need for dredging downstream.

Pollution Control: Headwater streams filter pollutants (including excessive levels of nutrients) and thereby help keep downstream waters clean, making them suitable for both human use and wildlife habitat.

Flood Control: Headwater streams are closely linked to wetlands and groundwater, and they play an important role in controlling how much water flows into the larger streams they feed. Local and downstream flooding and erosion can be prevented, or at least minimized, when headwater streams are intact.

Wildlife Habitat Corridors: Headwater streams serve as habitat for native wildlife. The biological diversity of natural systems is highly dependent on the health of headwater stream systems. This is important not just to wildlife—human recreation opportunities and even property values are greatly enhanced when wildlife habitat values are high.

Water and Food Supply: The food and beverage industry is the second largest sector of New Jersey's economy. The Garden State would not be able to supply fresh, local produce and abundant, clean drinking water without headwaters streams providing safe water for consumption and irrigation.

Protecting Groundwater: Headwater streams are intimately connected to the groundwater that supplies most of our local wells. Groundwater from shallow aquifers provides base flow for headwater streams during dry periods. Headwater streams, along with wetlands and vernal pools, help recharge groundwater.

Our headwaters are threatened on a daily basis by unwise development, poor agricultural practices, polluted stormwater, excessive fertilization, failed septic systems, and unregulated or failing landfills. These activities degrade the land, fragment wildlife habitats, and add pollutants

to the land and water nearby. Unless they are mitigated in some way, they not only reduce the quality of our water, they also reduce our ability to withstand natural disasters like floods, storms, and droughts.

Healthy headwaters protect us, enable us to bounce back from disaster, and improve our quality of life—wildlife, flora, and human alike. That is the future we wish to pass on to our children.

“Water is the most critical resource issue of our lifetime and our children’s lifetime. The health of our waters is the principal measure of how we live on the land” – Luna Leopold

Our Role

RHA is a regional conservation organization focused on protecting water in our rivers, our streams and our homes. We know that water can no longer be taken for granted. Along with the rest of the world, our region is facing a critical shortage of clean water and a changing climate with increasingly stronger, more damaging weather patterns. The solution begins with recognizing that it is people who determine the health of their environment.

We are dedicated to scientifically monitoring and assessing the health of the water and land in our region. We believe in educating residents, landowners, businesses, and decision-makers about critical watershed protection issues and the innovative tools that can be used to resolve them.

Our three-pronged approach—science, education, and advocacy—ensures that we are basing all of our efforts on scientific fact while empowering and inspiring the community to stand up and defend what is important to them. We are widely recognized by our peers and policymakers as an expert in water and land use issues and a reliable and effective partner.

RHA’s Strategic Plan

Our Strategic Plan articulates a common purpose and direction for the organization, grounded in the urgent and important mission to protect clean water. The plan provides a framework for setting goals and allocating resources. It includes the following elements:

- *Mission Statement*—our purpose
- *Values Statement*—who we are and how we operate
- *Conservation Vision*—what success looks like over the long term
- *Conservation Approach*—how we get results; our model for impact
- *Value Proposition*—why donors should support us
- *Priority Strategies*—how we will focus our work

By aligning RHA’s many strengths within this integrated framework, we believe we can have an impact far beyond our size in protecting water across the region, thus making a lasting difference. We owe nothing less to our watershed, its residents, and our members.

MISSION STATEMENT

Raritan Headwaters Association is a conservation organization with a mission to protect water in our rivers, our streams and our homes.

VALUES STATEMENT

“Just as our aims are clear, so also are some of the ways of achieving our goals. Our Association should act as the spark to initiate conservation action projects. At times it will be appropriate for this group to be the coordinator between local people and government agencies to accomplish special jobs. But our day in and day out function will be in the field of conservation information and education. Most of us know all too little about the water conditions, soil, forestry, and other resource problems right here in our own community. And yet, our living, our comfort, and the beauty of this unique watershed depend largely on how well we look after our natural resources.” — Headwaters, 1961 (Upper Raritan Watershed Association newsletter)

This quote from one of our originating organizations holds true today. At the heart of our organization is conservation information and education to be shared with all in order to protect our watershed. We strive to:

- Use our mission, the best available science, and our experience to inform and guide our decisions.
- Think big, honor our commitments, and maximize our impact while using our resources responsibly.
- Minimize our organization's footprint in the environment by conserving our resources in our daily work.
- Be inquisitive and bring passion to our work.
- Be respectful, open to new ideas, and collaborative.
- Be fair, honest, and transparent in everything we do.
- Support everyone's need for a balanced life; remember that humor is a key part of our culture and strive not to take ourselves too seriously.

CONSERVATION VISION

Our vision of a successful future includes the following three outcomes.

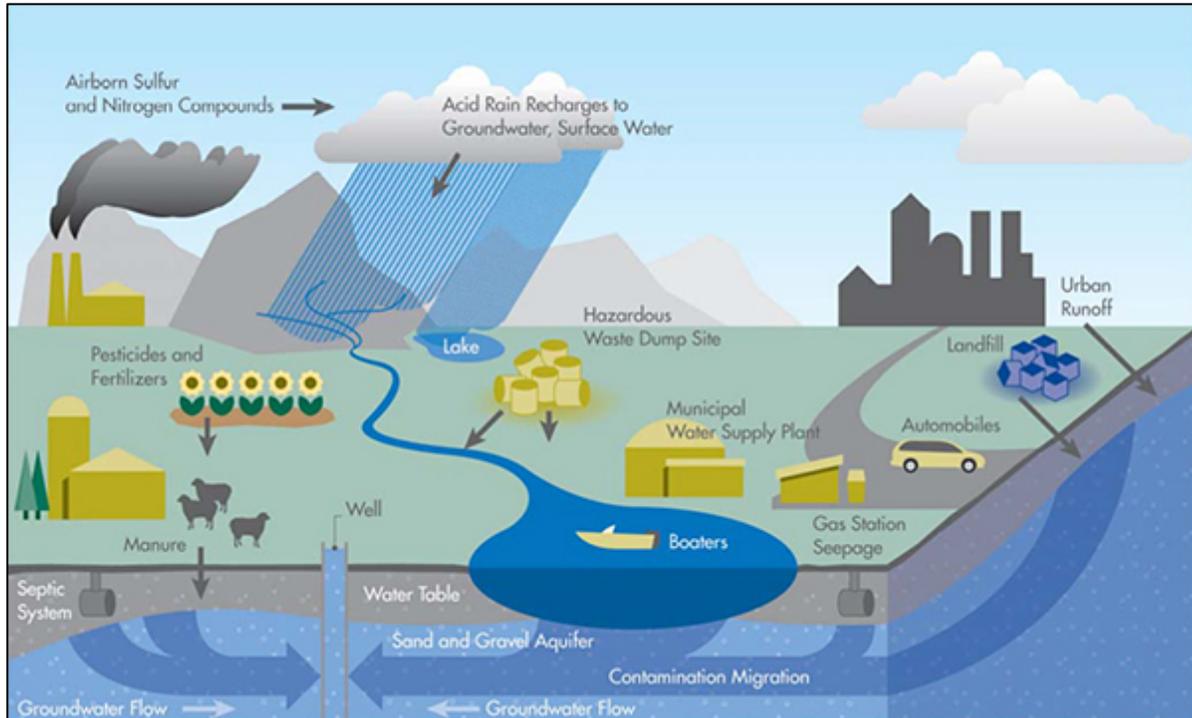
1. *A safe, clean water supply that can sustain the local population of flora, fauna, and humans effectively.* Every living thing requires clean water to survive. It should be freely available when it is needed.
2. *A diverse ecosystem that can withstand and recover from major weather events like hurricanes, droughts, and floods.* It has been proven time and time again that biodiversity is the key to a system's ability to withstand pressures and change.
3. *An attractive environment for business, recreation, and a healthy lifestyle.* We look to education to change behaviors and ensure every person knows they play a role in keeping our water safe and then welcoming the rewards that brings.

CONSERVATION APPROACH

Science

The ecosystems that protect water quality are wetlands, soils, and forests. When these ecosystems are working properly, they are able to slow stormwater runoff and filter out pollutants that can contaminate our streams, rivers, aquifers, and ultimately, our drinking water supplies.

Figure 1: Sources of Pollution



Pollution Probe (Source: The Source Water Protection Primer 2004)

Education

We connect children to nature, offering lessons and experiences that foster environmental stewardship today and throughout their lifetimes. Citizen scientists, volunteers, teachers, municipal leaders, and service groups are educated and trained to monitor, restore, and improve natural habitats and water resources. We do this to ensure that the future of our water quality is in good hands and that new generations will join us to further our mission.

Advocacy

As Watershed Watchdog, we address key water-related issues at all levels of politics, from local planning boards to the state and federal levels. We educate elected and appointed officials to ensure they understand the environmental ramifications of the decisions before them. We also alert our members to environmental threats and to actions they can take to protect their health and quality of life.

Figure 2: Water Use



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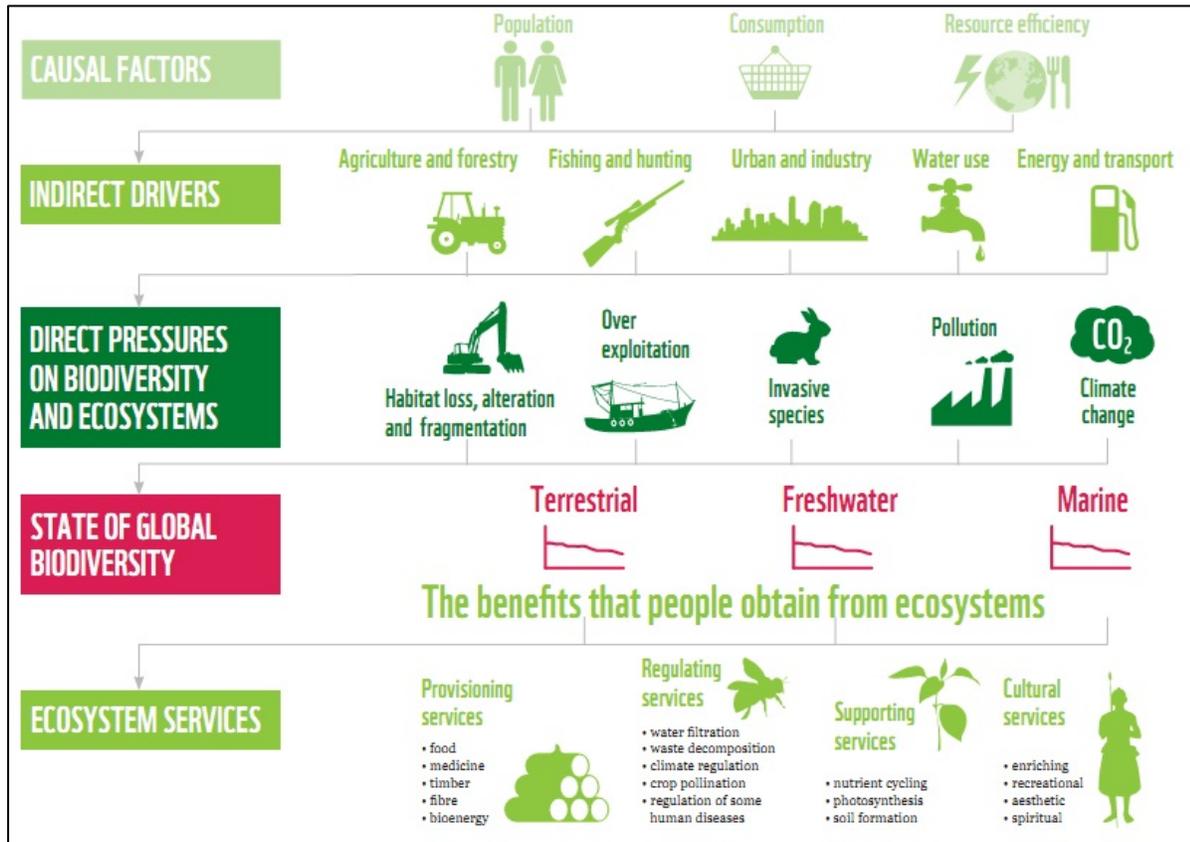
Land Preservation - Stewardship

The preservation and stewardship of land across the region are key methods to ensuring these ecosystem components are kept in working order and able to handle all that our changing climate and continuing development throws at us. As leaders in the science of conservation, we are uniquely qualified to bring together the right partners to preserve the lands that protect important water resources. Our land preservation program is guided by a watershed-wide Conservation Plan and Land Trust Standards and Practices that ensure that our preservation projects meet a selection criteria that ensures the protection of critical surface and groundwater sources.

We have a legacy of preserving lands that protect important conservation values. We have taken on the perpetual responsibility of monitoring and enforcing conservation easements and stewarding donated and purchased land, all of which is open to the public for passive recreation and the enjoyment of their beauty, flora, and fauna. We respect this great legacy and will always

live up to our responsibility, continually looking to the best science available to guide our work to care for the land entrusted to us. Today, we are in the process of achieving Land Trust Accreditation, ensuring that we meet high standards in land conservation, stewardship and non-profit management.

Figure 3: The Value of Biodiversity and Ecosystems



(Source: WWF Living Planet Report 2012)

VALUE PROPOSITION

We are uniquely positioned to make a difference in the health and well-being of our watershed communities. RHA is the only organization in the region solely focused on protecting clean water. There are many great organizations in the region—some protect land, others protect wildlife, still others work with children, but none do all that we do. Only RHA has the data to report that, in 2016, 58% of the streams in the overall headwaters region of the Raritan River were non-impaired. At the 12 sites that received fair or poor water quality ratings for two years in a row, we actively investigate the sources of the problem by monitoring the water chemistry quarterly (see **Figure 4**).

We are experts in the science of water and how to protect it. We don't guess, we don't assume. We base our actions on the surface and ground water data that we have been collecting for decades. Our Stream Monitoring Program is one of the most comprehensive efforts to protect

water quality in New Jersey. We provide data that otherwise would not be available for improving conservation and water quality throughout the region. We are a 30-year leader in private well testing education and services, programs that help residents assess the safety of their drinking water and give us the opportunity to assess the health of the region’s ground water.

Figure 4: Summary of Water Quality Changes in the Raritan Headwaters 2015–2016

Changes between 2015-16	# of sites
Remained Good	26 (42%)
Remained Poor	12 (19%)
Improved	7 (11%)
Declined	11 (18%)
New	5 (8%)
No Data	1 (2%)

We provide education opportunities for children, adults, families, municipal and business leaders. Our content is steeped in water science and offered up in innovative, hands-on ways to ensure full understanding and lots of fun.

We own and manage 11 wildlife preserves encompassing 476 acres and hold 33 conservation easements protecting 890 acres. We have partnered with others to preserve a total of 6,800 acres of critical watershed lands.

We are leaders among our peers, helping to establish policy positions that inform legislative and local land use decisions. We host the annual *State of Our Watershed Conference* at which we report our findings and provide an opportunity for stakeholders to learn about the health of our watershed and issues of concern throughout the region. Our expertise in geographic information system (GIS) technology has helped communities define goals and set objectives for municipal master plans, environmental protection, and open space planning.

Decades of accomplishments have created a solid foundation for attaining our mission. Imagine how different this region would be if we had not been here for nearly six decades. If we did not exist:

- The Port Authority of New York and New Jersey may have located a metropolitan jetport in Readington Township in the 1960s, significantly degrading the region’s natural and community environments.
- There might not be a Hunterdon County Park Commission nor local environmental commissions to ensure that natural resources are protected by municipal leaders creating local policies and plans.
- The Combe Fill South Landfill, containing 60 different chemicals, eight heavy metals, and radioactivity, might still be leaching these contaminants into our groundwater rather than being listed on the Superfund National Priority List in 1983 and responsibly mitigated and closed.
- The NJDEP might have “solved” the 1980s water supply crisis by constructing a pipeline to divert massive amounts of North Branch Raritan River water to the Upper Passaic River, reducing flow and supply to the residents around the North Branch.

- The NJ Water Supply Bond Act of 1981, the cornerstone of water supply planning in the State, may not have been passed.
- Morris and Somerset Counties might have multiple sites, 11 and 9 respectively, for new solid waste landfills accepting waste created across the tri-state area.
- The Hazardous Waste Facilities Siting Commission might have built a toxic waste incinerator along the Lamington River and a “land emplacement” facility in Bedminster.
- New Jersey’s Open Space Funding may have been lost in 2014.
- Frequent spills, illegal discharges, and land use violations might have been ignored and allowed to destroy precious natural resources.

If we did not exist our region would look very different, our ecosystems would be imperiled, and the health of our water severely degraded.

We have not done it alone. The work of our small staff is amplified every year by the efforts of more than 3,500 volunteers who help conduct programs of environmental education, habitat restoration, and citizen science in stream monitoring, well testing, species inventories, and habitat cleanup. We enjoy strong relationships with conservation partners across the state, including land trusts, grassroots groups, local governments, businesses, and state and regional conservation organizations.

Key partners include Rutgers University, New Jersey Water Supply Authority (NJWSA), New Jersey Highlands Coalition, NJ Conservation Foundation (NJCF), Association of NJ Environmental Commissions (ANJEC), and NY/NJ Baykeeper. We collaborate with the Stony Brook-Millstone Watershed Association, working together on the River-Friendly Program and in conducting similar stream monitoring programs. We play an active role in the Keep It Green coalition, NJ Council of Watersheds, Sustainable Raritan River Initiative, NJ Land Trust Network, ANJEC Environmental Summit, and Alliance for NJ Environmental Education.

PRIORITY STRATEGIES

Over the next three years, we will focus on four primary goals, each with a set of strategies.

Goal 1. Citizens and decision-makers are well informed and engaged in safeguarding the Raritan headwaters.

- a) Strategically collect and use scientific data to demonstrate the ongoing status and vulnerabilities of the Raritan headwaters and the successes of our efforts. We will increase data collection and reporting to encompass the entire region.
- b) Advocate for state and local rules, policies, and plans that enable and protect clean water in the Raritan headwaters.
- c) Educate the public about the connection between land use and water quality.
- d) Grow community involvement in the preservation and stewardship of watershed lands that are most critical to the health of our water supply.

Goal 2. Local residents and leaders hold water quality protection as a top community priority.

- a) Educate targeted audiences on the issues, solutions, and importance of protecting water resources.

- b) Encourage individuals and families to be outdoors to enjoy and recognize the value of the region's natural resources.
- c) Connect water protection to what matters to the various stakeholders of the Raritan headwaters.

Goal 3. RHA enjoys a regional reputation as the leading headwaters advocate and protector.

- a) Continue building a visible, credible, and persistent presence for conservation across the entire Raritan headwaters.
- b) Identify and cultivate influential individuals, organizations, social networks, and media to spread awareness and support for the Association and our mission.
- c) Educate the community on the value of our programs to build the reputation of the entire organization so that we may be more effective in what we do.

Goal 4. RHA is a focused, cohesive, and sustainable organization.

- a) Develop leadership depth and continuity across the organization, including board and staff.
- b) Develop a diverse and dependable stream of revenue and human resources to support our mission.
- c) Invest in practices, systems, and infrastructure essential to an effective organization

Within the framework of these strategic priorities, we will continue to expand and calibrate key water protection program activities including stream monitoring, well testing, stream cleanup, WaterWays, RiverFest, Nature Camp, state and local advocacy measures, conservation planning, land preservation, habitat restoration, stewardship activities, and broad community outreach to inspire and engage New Jersey residents in safeguarding the watershed.

