



ANNUAL REPORT 2019

Resource
Institute

ABOUT RESOURCE INSTITUTE

Resource Institute, Inc. (RI) is a nonprofit 501(c)(3) with a mission to restore America's streams, rivers, and wetlands. RI works predominantly in North Carolina but has completed restoration work in surrounding states and across the US. Since its inception, RI has:

- Restored over 1.4 million feet of stream (269 miles)
- Completed 140 projects
- Restored 2,135 acres of wetlands
- Managed and administered almost 140 million in funding
- RI was instrumental in bringing 7,363 acres under conservation easements
- RI is also the leader in Natural Channel Design Restoration training
- 6,794 restoration professionals have completed RI training programs



OUR PARTNERS

Resource Institute's mission to restore streams, rivers, and wetlands cannot be accomplished alone. RI partners with many organizations to realize this mission.



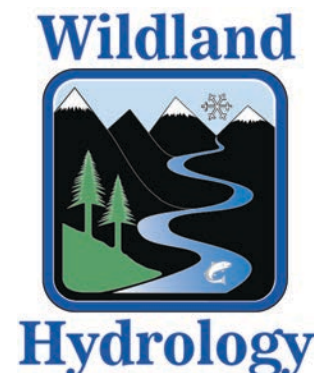
**NORTH CAROLINA
LAND & WATER
• F U N D •**



**NORTH CAROLINA
Environmental Quality**



**United States
Department of
Agriculture**



BOARD OF DIRECTORS

RI's dedicated Board Members guided the organization through a spectacular year. The Board's vision and diligent work ensured that several projects came to fruition, furthering our mission to restore America's streams, rivers, and wetlands.

Freshman Board Member, John Fuller, completed his first year of service with RI. Sadly, founding board member Lynn McCaskill retired after 19 years of service. Lynn was replaced by Kirk Otey, Charlotte, North Carolina. Kirk brings 35 years' experience in title insurance, public service, and nonprofit management to the Board.

BOARD CHAIR



Michael "Squeak" Smith, Morganton, NC

Squeak has held leadership positions in several conservation organizations for 30+ years. Squeak grew up in Michigan. Under the tutelage of his grandfather, a fishing guide, he caught his first fish on a fly rod at age 3. He's been fishing ever since! Squeak has traveled and lived all over the world due to his service in the Air Force. Squeak was medically retired in 1983 due to Multiple Sclerosis. He became active in environmental issues and organizations in 1986 after moving to NC for the fishing opportunities.

BOARD VICE-CHAIR



Ken White, Advance, NC

Ken is currently serving as the Executive Development Coordinator for the MBA program at Appalachian State University. Before working for ASU, he had a long career with Mack Trucks, where he retired as the Business Development Manager for Western NC. Ken served on active duty with the US Marine Corps during the Viet Nam conflict. Upon honorable discharge, Ken returned to college while working as a State Trooper. He enjoys speaking to groups using humorous stories of his life experiences.

BOARD OF DIRECTORS

MEMBER



Lynn McCaskill, Ellerbe, NC

Lynn is a native of Richmond Co. NC. He holds a degree in pharmacy from the University of North Carolina, Charlotte. Lynn married the love of his life, Linda Smith, in 1966. Lynn and Linda returned to Ellerbe, NC in 1971 and opened Ellerbe Pharmacy. They owned and ran the pharmacy until 2014 when they semi-retired. Lynn believes our water resources are critical for the next generation. He is the current chair of Environmental Impact RC&D as well as a founding board member of Resource Institute.

TREASURER



Meyressa Schoonmaker, Winston-Salem, NC

Meyressa is a graduate of Wake Forest University and attended the Free University of Berlin. She is a practicing attorney and a certified family law specialist. She also served at Wake Forest University as an assistant to the president for legal affairs, associate general counsel, and adjunct professor of law. She founded the NC Center for Laws Affecting Women. She was instrumental in drafting and passage of the first Equitable Distribution law in NC and domestic violence 50B protective pro se laws.

MEMBER



Dick Barber, Washington, NC

Dick joined Morris Insurance Agency in December 1973, after graduating from NC State. He has licenses in Property and Casualty and Life and Health insurance, and he spends the majority of his time with commercial clients and the management of the Agency. He was elected president of Morris Insurance in 1987, and he continues in that role today. Dick and his wife, Jane, have two daughters and four grandchildren living in Raleigh.

BOARD OF DIRECTORS

MEMBER



Roy Pender, Southport, NC

Roy received a Bachelor of Landscape Architecture, 1967 from North Carolina State University, School of Design. Roy established a Landscape Architecture firm in 1979, Roy H. Pender, RLA, ASLA. Roy's wide range of projects and clients cover the coast from Wilmington to South Carolina and extend to the northwestern Piedmont of North Carolina. Present and past clients range from municipalities, architects, developers, corporations, nonprofits, contractors, and custom single-family residential.

MEMBER



G. Richard Mode, Morganton, NC

Richard holds a BS in Industrial Technology from Appalachian State University. Richard began his career in the NC school system where he taught furniture manufacturing and drafting. He also coached football and track. Richard also served as a Manufacturer's representative in the home furnishing industry for 30 years. In 2008, Richard started a new career with National Wildlife Federation, serving as Consultant to NWF and as Outreach Coordinator to the sportsman community and the conservation community in NC & VA.

MEMBER



John Fuller, Hickory, NC

John Fuller holds a Juris Doctor from Campbell University School of Law and a Bachelor of Arts from Lenoir-Rhyne College. After law school, John practiced law with his father, Manley K. Fuller, Jr. In 1990, John began a solo law practice. He specializes in Real Estate Law, Wills and Trusts, and Estate Administration. Additionally, John served on the Board of North Carolina Wildlife Federation from 2009 to 2018. He is currently Chair of Wild Places, Wild Lives Legacy Society of the North Carolina Wildlife Federation.

STREAM RESTORATION PROJECTS



2019 was an extraordinary year for Resource Institute. RI launched several multi-year projects and completed several multi-year stream restoration projects. The majority of RI's projects are complex and implemented over a two to three-year period. Our restoration projects begin with a landowner, community, or other entity realizing there is a problem with their water resource. After the landowner/community contacts RI:

- RI performs an initial assessment and makes a recommendation to resolve the issue. If the landowner/community wishes to proceed, RI assists with grant writing to obtain funding.
- RI will also assemble a specialized resource team. RI works with a cadre of water resource scientists and restoration professionals.
- RI will bring in an engineering firm with the technical skills needed to provide a solution.
- The engineering team will perform an in-depth analysis, create design and engineering plans, and a budget.
- RI and the engineering team apply for the proper permits while a construction company is brought in to implement the project.
- After instream construction is complete, a team will seed and plant a riparian buffer.
- Lastly, RI will close out the project with invoices and reports to the funders. RI provides a complete "turn-key" project for the landowner/community.

COMPLETED RESTORATION PROJECTS

Linville River Project

Avery County, NC

Status: Complete

Restored: ~1,500 feet

Partners: Clean Water Management Trust Fund, NC Forest Service, NC Department of Agriculture, Jennings Environmental, North State Environmental

Resource Concern/Issues: Low water bridge has caused a mid-stream bar to form due to a modification of river flow over decades of existence/obstruction. The stream has become laterally unstable, aggrading, degrading, and contains bank erosion.

Project Objectives: Floodplain and bench construction and enhancements, creation of new channel Introduction of buffer plantings and removal of invasive species, removal of low water bridge, and implementation of a water fjord.



COMPLETED RESTORATION PROJECTS

Fisher River Park

Surry County, NC

Status: Complete

Stream Restored: ~1,700 feet

Partners: Clean Water Management Trust Fund, Surry County, Ecosystem Planning and Restoration, North State Environmental

Resource Concern/Issues: Invasive species, degraded riparian buffers, active erosion, the Project is located downstream of drinking water intake.

Project Objectives: Stabilize streambanks, reduce severe bank erosion, provide stable dimensions, pattern, and profile, improve aquatic habitat.



COMPLETED RESTORATION PROJECTS



Western North Carolina Stream Initiative

In 2013, Resource Institute partnered with USDA NRCS and other state agencies to establish the WNCSI, managing over 10 million dollars in the last four funding cycles. The WNCSI was formed to address water resource issues in Western North Carolina, particularly soil loss from upland cropland and pasture fields. The WNCSI concentrates efforts on water resources and stream restoration to reduce soil loss of agricultural lands from stream bank erosion. The WNCSI has 45 completed projects with 22 miles of restored stream. Another 30 projects are ongoing.

Resource Institute completed 5 under the WNCSI in 2019. These projects total 9,800 linear feet of stream restored and several tons of reduced sediment.

- * **Cane Creek** – 900 linear feet
Mitchell County
- * **Crooked Creek** – 2,200 linear feet
Stokes County
- * **Cove Creek** – 2,400 linear feet
Watauga County
- * **North Fork New River** – 3,000 linear feet
Ashe County
- * **South Fork Mitchell River** – 1,300 linear feet
Surry County

COMPLETED RESTORATION PROJECTS



Hurricane Matthew Disaster Relief

In 2016, Hurricane Matthew ripped through the Caribbean and the US East Coast. Hurricane Matthew damaged or destroyed as many as 98,000 homes in Eastern North Carolina and nearly 20,000 businesses. It also damaged roads, water supply and waste treatment systems. NC Department of Agriculture launched a multi-partner program aimed at restoring and repairing agricultural ponds damaged by the high winds and flooding of Hurricane Matthew. This ongoing project aids farmers whose agricultural ponds were breached during the natural disaster.



Resource Institute completed 3 projects under the Hurricane Matthew Disaster Relief Program in 2019. RI repaired approximately 6.75 acres of agricultural ponds.

- * **Lick Creek** – 1,200 feet
Lee County
- * **Chris Wood Pond** – 3 acres
Lee County
- * **Gary Mileski Pond** – 3.5 acres
Johnson County

RESTORATION EDUCATION

Rocky Mountain Stream Restoration Conference

Resource Institute hosted the 4th Rocky Mountain Stream Restoration Conference in June 2019. This year's conference took place at the fantastic and historical (haunted even) Stanley Hotel, Estes Park, Colorado. The conference included:

- **Over 60 presentations** from 15 states, 18 agencies, and 20 private companies in the stream restoration profession.
- **Almost 200** dedicated researchers and practitioners attend the conference to discuss **Constrained Realities: The Role of Restoration in the Reality of Watershed Extremes**.



RESTORATION EDUCATION



Mid-Atlantic Stream Restoration Conference

The 9th Mid-Atlantic Restoration Conference in November 2019 returned to the Renaissance Baltimore Harbor Place, overlooking the expansive Inner Harbor. The conference included:

- **Over 100 presentations** from 15 states, 18 agencies, and 30 private companies in the stream restoration profession.
- **46 Exhibitors and Sponsors**
- **Almost 500** dedicated researchers and practitioners attend the conference. The conference was our most well-attended event!



RESTORATION EDUCATION

Stream Restoration & River Morphology with Dave Rosgen, Wildland Hydrology

Resource Institute continued a 23-year partnership with Wildland Hydrology. Twice a year since 1996, Resource Institute brings Dave Rosgen, PhD, PH to North Carolina. Seasoned and budding stream restoration professionals flock to these courses to learn from the guru of Natural Stream Design restoration. The classes range from 5 to 10 intense days.

Resource Institute also supplemented the introductory course with the *Basics of Survey* course. The course familiarizes students with stream survey techniques to expedite the field experience during regular classes. Resource Institute bases the program in Asheville, NC, and incorporates its local stream restoration projects to augment the student experience.

- Rosgen I March 11 -15 45 Students
- Rosgen II March 18 - 22 45 Students
- Rosgen I November 4 - 8 45 Students



WHAT'S NEXT FOR 2020



The Year of Completion

2020 will be the year of project completion! Resource Institute plans to complete a record number of multi-year stream restoration projects. Resource Institute is also planning and coordinating the first National Stream Restoration Conference. A few of the projects up for completion are:



Shaw Creek

Tributary of the French Broad River
Hendersonville, Henderson Co, NC

Brevard Water Treatment Plant - Cathey's Creek

Tributary of the Broad River
Transylvania County, NC



Payne Branch

Tributary of the Middle Fork of the New River
Blowing Rock, NC

Reedy Patch Creek

Tributary of the Broad River
Edneyville, NC



Stingy Branch

Tributary of the Pigeon River
Iron Duff, NC

Methodist University

Unnamed Tributary of the Cape Fear River
Fayetteville, NC