



Water Resources
ENVIRONMENTAL QUALITY

2018 Application for Section 205(j) Water Quality Planning Grant

Division of Water Resources
North Carolina Department of Environmental Quality

| 1. Basic Information | | | |
|---|-------------------------------------|--------------------------|-----------------------|
| Project Title: | Haskett Creek Watershed Plan | | |
| Project start date: | February 15, 2019 | Project end date: | March 31, 2020 |
| Project Abstract: | | | |
| <p>Haskett Creek is a headwater tributary of the Deep River. It originates from the city center of Asheboro and flows north and east through sections of Randolph County to its confluence with the Deep River. Haskett Creek, from its source to the Deep River, has been listed on the federal 303(d) impaired waters list since 1998 for failing to meet water quality standards for dissolved oxygen and copper and for having a poor benthic community. It is suspected that much of the stream’s impairments are a result of its urban setting, however, the only study to investigate potential non-point sources of pollution was a stressor study done in 2003. The City of Asheboro also operates a large wastewater treatment plant near the confluence of Haskett Creek and the Deep River. At the same time, the NC Division of Water Resources (DWR) is seeking to help develop watershed restoration and protection plans for 58 waters across North Carolina, which have been scheduled through 2022 to fulfill federal obligations of WQ-27 to increase the percentage of priority areas with approved watershed plans or alternative restoration approaches. Haskett Creek is one of the 58 waters that have been prioritized by the state for watershed plan development.</p> <p>In order to help fill this need, the Piedmont Triad Regional Council (PTRC) is proposing to partner with NC DWR and local stakeholders to develop a 9-Element watershed plan for Haskett Creek. To meet the required nine elements, PTRC will review existing water quality data, analyze environmental and land use conditions, and engage stakeholders to develop a list of goals, strategies, and recommendations to restore water quality conditions. Local project partners will include the City of Asheboro, Randolph County Soil & Water, Piedmont Land Conservancy, NC Wildlife Resources Commission, Asheboro Zoo, and Keep Randolph County Beautiful.</p> <p>NC DWR has developed a suite of tools to help build and implement restoration and protection plans at multiple scales. It is their hope that through this alternative planning approach, more plan areas become eligible for implementation projects and 319 funding. The Haskett Creek Watershed Plan would be one of two pilot projects to test this suite of watershed planning tools and streamline local and state planning processes, which could benefit future watershed planning efforts across the state. The completed watershed plan and supporting materials will be hosted through an interactive web map to increase access and usability.</p> | | | |
| 205(j) Grant Funds Requested | | \$18,201 | |
| Match (optional, recommended) | | \$11,186 | |
| Total Project Cost | | \$29,387 | |



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| | | | | | |
|---|--|----------------|--------------|------------|-------|
| 2a. Primary Contact or Project Manager: <i>A one-page Statement of Qualifications must be provided in Section 4 of the application form to confirm that anyone designing, installing, or monitoring the proposed project is qualified to do so.</i> | | | | | |
| Name | Cameron Colvin | | | | |
| Title | Regional Planner I | | | | |
| Organization Name | Piedmont Triad Regional Council | | | | |
| Mailing Address | 1398 Carrollton Crossing Drive | | | | |
| City | Kernersville | State | NC | ZIP | 27284 |
| Email Address | ccolvin@ptrc.org | | | | |
| Telephone | 336-904-0300 | FAX No. | 336-904-0309 | | |

| | | | | | |
|---|--|----------------|----|------------|-------|
| 2b. Administrative Address: <i>Address where contract will be mailed for signature.</i> | | | | | |
| Name | Matthew L. Dolge | | | | |
| Title | Executive Director | | | | |
| Organization Name | Piedmont Triad Regional Council | | | | |
| Mailing Address | 1398 Carrollton Crossing Drive | | | | |
| City | Kernersville | State | NC | ZIP | 27284 |
| Email Address | mdolge@ptrc.org | | | | |
| Telephone | 336-904-0300 | FAX No. | | | |
| Federal Tax ID Number | 56-1241166 | | | | |

| | | | | | |
|--|--|----------------|----|------------|-------|
| 2c. Payment Address: <i>Address where invoice payments will be mailed.</i> | | | | | |
| Name | Jarrod Hand | | | | |
| Title | Assistant Finance Director | | | | |
| Organization Name | Piedmont Triad Regional Council | | | | |
| Mailing Address | 1398 Carrollton Crossing Drive | | | | |
| City | Kernersville | State | NC | ZIP | 27284 |
| Email Address | jhand@ptrc.org | | | | |
| Telephone | 336-904-0300 | FAX No. | | | |

3. Statement of Qualifications for project manager and primary partners

Please include qualifications of people, not organizations. Do not copy and paste entire CVs. Briefly describe relevant experience, noting any relevant 205(j) grant funded projects.

Piedmont Triad Regional Council

Cameron Colvin, Regional Planner I will serve as the Project Manager for this project and ensure its timely delivery, including all quarterly reports. Mr. Colvin currently manages PTRC's Water Resources Program, administrating and producing meaningful deliverables both for project stakeholders and grant agencies on a variety of water quality projects. He holds a B.S. in Sustainable Development from Appalachian State University and Master's of City and Regional Planning from Clemson University.

His immediate duties for this project will be to work with local stakeholders to identify sources of impairment and develop goals and strategies to restore water quality conditions in Haskett Creek. Mr. Colvin has worked on a number of federal and state planning grants to develop watershed plans, including several 205(j)-funded technical projects that better enable planners to address local watershed needs. Relevant projects include:

- Southwest High Point Green Infrastructure Plan (Ongoing) - \$69,500 Clean Water Grant
- Eden Watershed Outreach & Education (Ongoing) - \$12,576 205(j) Grant
- Swearing Creek Watershed Restoration Plan (2018) - \$75,000 Clean Water Grant
- Guilford County Watershed Prioritization Plan (2017) - \$19,404 205(j) Grant

Malinda Ford, GISP, Senior Regional Planner has nearly 10 years of experience in GIS analysis, mapping, and database management. She received her B.A. in Environmental Biology and Master's in Geography with a Certificate in GIS from the University of North Carolina – Greensboro and supports a variety of planning projects related to transportation, environmental, land use, recreation and economic issues.

Ms. Ford has been the technical lead on all six 205(j)-supported GIS-based watershed prioritization projects the PTRC has been involved with, using ESRI ArcGIS to anticipate watershed management needs based upon land use and land cover data. She won a National Association of Development Organizations' Innovation Award for this work. She will be providing a similar role for this project, coordinating data collection, analysis, and sharing to guide the restoration planning process.

- Swearing Creek Watershed Restoration Plan (2018) - \$75,000 Clean Water Grant
- Guilford County Watershed Prioritization Plan (2017) – 19,404 205(j) Grant
- Eden Area Watershed Restoration Plan (2014) – \$29,000 Clean Water Grant
- Piedmont Triad Regional Watershed Assessment (2013) – \$6,750 205(j) Grant
- Upper Cape Fear River Basin Assessment (2012) – \$42,315 205(j) Grant
- Dan River Basin Conservation & Restoration Plan (2012) – \$29,050 205(j) Grant
- Yadkin River Basin Priority Watershed Analysis (2010) - \$51,100 205(j) Grant
- Lower Abbotts Creek Watershed Plan (2010) – \$27,000 Clean Water Grant
- Rich Fork Creek Watershed Plan (2009) – \$80,000 Clean Water Grant

Other Project Partners

The PTRC will be working closely with Paul Clark, URW Program Coordinator, and Cam McNutt, Environmental Program Consultant, from the NC Division of Water Resources, to share data and resources and host final plan documents through an interactive online portal. NC DWR staff will also provide technical assistance to estimate nutrient reductions. The overall goal is to develop a process and suite of online tools for watershed plan development that can be replicated across the state.

Additional project support will be provided by local agencies, including the City of Asheboro, Randolph County, Piedmont Land Conservancy, NC Wildlife Resources Commission, Asheboro Zoo, & Keep Randolph County Beautiful, who will serve on an advisory committee to provide local input and technical support to assist in watershed plan development and coordination.

4. Project Partner Information:

If further space is needed to adequately describe partners' role/contribution to project, please include in the Statement of Qualifications section.

| | | | |
|------------------------------|--|-----------|----------------------|
| Agency Name | City of Asheboro | | |
| Agency Address | 146 N. Church Street PO Box 1106, Asheboro, NC 27204 | | |
| Role/contribution to Project | Staff will serve on steering committee to review watershed data and help develop watershed plan goals, strategies, and implementation plan | | |
| Contact Person | Michael Rhoney | Phone No. | 336-626-1201 ext 258 |
| E-mail address | mrhoney@ci.asheboro.nc.us | | |
| Agency Name | Randolph County Soil & Water | | |
| Agency Address | 222-A South Fayetteville St., Asheboro, NC 27203 | | |
| Role/contribution to Project | Staff will serve on steering committee to review watershed data and help develop watershed plan goals, strategies, and implementation plan | | |
| Contact Person | Jenny Parks | Phone No. | 336-318-6490 |
| E-mail address | Jenny.Parks@randolphcountync.gov | | |
| Agency Name | Piedmont Land Conservancy | | |
| Agency Address | P.O. Box 4025, Greensboro, NC 27404-4025 | | |
| Role/contribution to Project | Staff will serve on steering committee to review watershed data and help develop watershed plan goals, strategies, and implementation plan | | |
| Contact Person | Palmer McIntyre | Phone No. | |
| E-mail address | pmcintyre@piedmontland.org | | |
| Agency Name | NC DEQ Division of Water Resources | | |
| Agency Address | 1611 Mail Service Center, Raleigh, NC 27699-1611 | | |
| Role/contribution to Project | Provide technical assistance and help host plan deliverables through web map portal | | |
| Contact Person | Paul Clark | Phone No. | 919-707-9115 |
| E-mail address | Paul.Clark@ncdenr.gov | | |

5. General Goal of the Project (per the Clean Water Act Section 604(b)/205(j) grant purpose)

| | | | |
|---|---|---|---|
| Identify most cost effective and locally acceptable facility and nonpoint source measure to meet and maintain water quality standards | Develop implementation plan to obtain state and local financial and regulatory commitments to implement measures identified | Determine the nature, extent, and cause of water quality problems in various areas of the state | Other—please specify water quality planning purpose |
| X | X | X | |

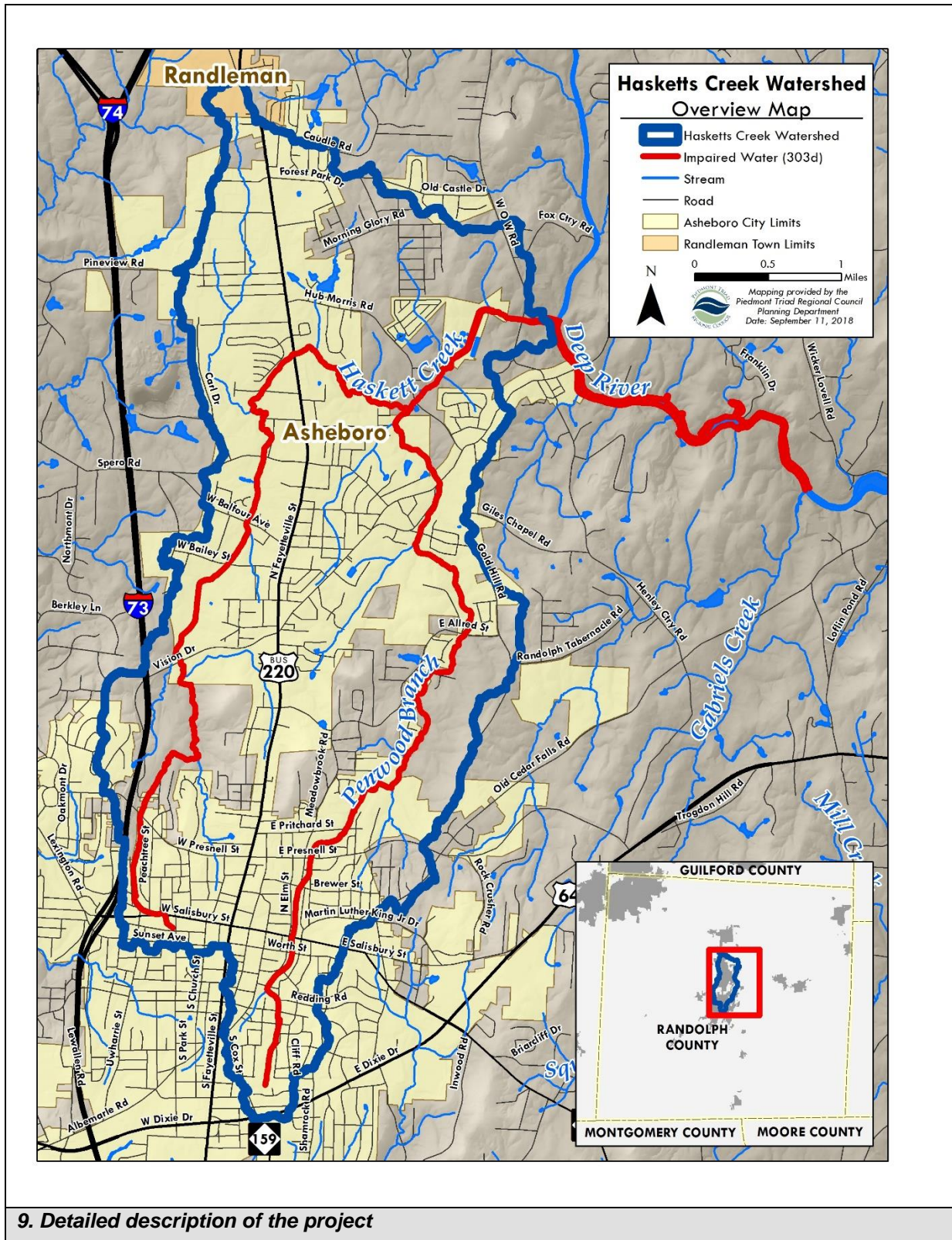
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| 6. Project Area | |
|---|---|
| Results Site-Specific, Regional, or Statewide? | Site-Specific, with potential statewide benefits |
| River Basin | Cape Fear |
| Need identified in Basin Plan? (Y/N; note plan name, date, pg#) | N; Cape Fear River Basin Restoration Priorities 2009. However, NC DWR has directly identified this watershed as a priority for watershed plan development to meet WQ-27 requirements. |
| Watershed name | Haskett Creek-Deep River (12-Digit HUC) |
| Watershed size | 34.3 square miles |
| (For site-specific projects only) 12 digit USGS HUC(s) | 030300030110 Note: Project area is smaller than the 12-Digit HUC (see map) |
| County | Randolph |

| 7. Project Milestone Schedule | | |
|--|--|---|
| <i>If anticipating starting project in second quarter, can leave first quarter blank. Please note anticipated dollar amount, percent of grant spent that quarter, and cumulative percent of grant spent for project. Quarterly invoices will only be reimbursed up to percent indicated. Unused funds will carry forward to next quarter. Note that 10% of grant will be held until receipt of Final Project Report.</i> | | |
| Quarter | Activities or outputs to be accomplished | Anticipated \$ amount / % of funding spent / cumulative % spent |
| First Quarter Jan-Mar 2019 | Project kick-off meeting with steering committee; Review and summarize existing water quality data and local ordinances; Begin preliminary desktop analysis to determine sources of impairment | \$3,640.2 20% 20% cumulative |
| Second Quarter Apr-June 2019 | Begin fieldwork to support identification of impairment sources and restoration project opportunities using NCDWR developed tools; Hold steering committee meeting to review preliminary results | \$3,640.2 20% 40% cumulative |
| Third Quarter Aug-Jul - Sept 2019 | Review and summarize causes and sources of impairment; Meet with stakeholders to prioritize restoration project opportunities & develop watershed action plan | \$3,640.2 20% 60% cumulative |
| Fourth Quarter Oct - Dec 2019 | Coordinate with NC DWR to estimate potential load reductions; Develop supporting graphics/documentation to be included in web map; | \$3,640.2 20% 80% cumulative |
| Fifth Quarter Jan - Mar 2020 | Coordinate with NC DWR to host watershed plan deliverables through ESRI ArcGIS Online Story Map; Hold final stakeholder meeting to share plan results; Submit plan for EPA approval | \$3,640.2 20% 100% cumulative |
| Sixth Quarter Apr - Jun 2020 | | |

8. Map of project area: Please copy map into document as a small image file.

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(Note: if developing a Watershed Restoration Plan, please also complete section 16)

The Piedmont Triad Regional Council (PTRC) is proposing to partner with NC DWR and local stakeholders to develop a 9-Element watershed plan for the Haskett Creek watershed in Randolph County. In order to meet the required nine elements, the PTRC will first review and analyze existing conditions within the watershed, including water quality, local ordinances, land use, and environmental characteristics. Water quality data is collected by NC DWR and the Upper Cape Fear River Basin Association (UCFRBA) who maintain two stations below the City of Asheboro WWTP and just downstream on the Deep River. To inform watershed goals and policy recommendations, the PTRC will briefly review existing watershed protection and development ordinances. A GIS geodatabase will be created to include topography, soil, land cover, land use, and point source data. These features will be mapped and analyzed to identify causes and sources of impairment. In addition, PTRC will inventory and assess riparian buffer conditions throughout the watershed using the most current aerial imagery.

The PTRC will ground-truth desktop analysis results through a series of field visits. PTRC will utilize a suite of planning and data development tools that NC DWR developed to help build and implement restoration and protection plans at multiple scales. The Haskett Creek watershed plan will be one of two pilot studies to help test these watershed planning tools and refine local and state planning processes, which could benefit watershed planning efforts across the state. Tools of particular interest include the Source and Conveyance Identification Tool (SCITS), which helps collect information on potential sources of water quality stressors or stressor source areas and prioritize areas in the watershed for development of implementation plans, and the Water Resource Valuation Tool (WR Val), which helps place a dollar value on water resources and analyze the cost/benefit of various projects. Field work will also be used to assess the feasibility of certain management measures at each impacted site. It is anticipated that stormwater control measures will be essential to restore water quality conditions due to the stream's urban setting.

Local stakeholders including the City of Asheboro, Randolph County Soil & Water, Piedmont Land Conservancy, NC Wildlife Resources Commission, Asheboro Zoo, and Keep Randolph County Beautiful will be engaged throughout the planning process. Project partners will serve on a steering committee to review collected data, provide local context, and help develop watershed goals, and strategies, to be included in the watershed plan. Watershed goals and recommendations will be designed to target water quality impairments, as indicated by existing water quality data and the watershed assessment. The PTRC will work with local stakeholders to prioritize non-point source management measures and develop a reasonable timeline to ensure local capacity and feasibility. Goals will be divided into short (1-2 years), mid-term (2-5 years), and long-term goals (5+ years) and accompanied by potential funding sources and project partners who will be responsible for strategy implementation. PTRC will reference NC DWR's "Financial Assistance for Watershed Water Quality Grants, Cost Shares, and Loans" to identify funding mechanisms. Once impacted areas and management measures have been finalized, the PTRC will coordinate with NC DWR staff to estimate load reductions using USGS StreamStats, which allows watershed planners to simulate watershed condition scenarios and calculate flow statistics. Other resources, such as the NC State BMP Manual or case studies from similarly situated watersheds may be used to make best estimates.

Information generated over the course of the project will be uploaded and formatted as an ESRI ArcGIS Online Story Map, which is an interactive web map template that allows users to combine maps with narrative text, images, and multimedia content. This unique format will enable users to easily access plan information and simplify the implementation process. NC DWR will host all data related to the watershed plan to ensure its upkeep and sustainability. PTRC will develop supporting graphics/documentation to be included as part of the Story Map narrative and shared as educational materials to raise public awareness about the plan. Once completed, the final watershed plan and 9-element check list will be submitted for review and approval. Stakeholders will help monitor watershed restoration progress and programmatic success, by tracking water quality, the number, type, and location of future restoration projects, and other criteria as determined through the planning process.

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10a. Related Projects in the Watershed

Please note any other water quality or conservation projects in the same watershed that contribute to the same goals as the proposed project. These could be own or partners' related water quality planning or implementation projects. If few or none, note how this project will fill a need.

- **City of Asheboro** completed some restoration work on Penwood Branch that flows into Hasketts Creek
- **Randolph County Soil & Water** recently completed a number of plantings along Haskett Creek to improve riparian buffers
- **Piedmont Conservation Council** is applying for grant funding to implement additional stormwater control measures in the watershed
- **Deep River Trail Conceptual Plan** was developed to expand the Deep River State Trail and connect several conservation lands with recreational opportunities and cultural resources.
- **Piedmont Land Conservancy** holds a number of conservation easements along the Deep River and is working to conserve additional land to support the Deep River State Trail.

While there have been a few water quality and conversation projects completed within the watershed, there is not currently a comprehensive watershed management plan in place. The proposed project will help fill this need and prioritize future restoration efforts.

10b. Relevance to Proposed Project (if applicable)

Help reviewers understand local capacity:

- *How might these projects might benefit or complement the proposed project?*
- *When were they completed?*
- *Who implemented/maintains them?*

Stream restoration and riparian buffers along Penwood Branch and Haskett Creek are important management measures that will complement the watershed plan in restoring healthy water quality conditions. As part of the proposed project, the PTRC will inventory the remaining sections of Haskett Creek to prioritize further riparian buffer improvements and stream restoration opportunities. The City of Asheboro and Randolph County Soil & Water helped implement and maintain these stream improvements and will serve on the project's steering committee to provide technical assistance and coordinate future watershed restoration efforts. The Piedmont Conservation Council is also currently seeking grant funding to implement additional stormwater control measures. If funded, this would provide a head start on needed restoration projects to improve water quality conditions.

The *Deep River Trail Conceptual Plan* was completed in 2017 through a collaborative effort between Randolph County, the Randolph County Tourism Development Authority, the Town of Franklinville, City of Asheboro, Town of Ramseur, City of Randleman, and the PTRC. This plan identifies potential trail alignments to connect conservation lands, recreational opportunities, and cultural resources along the Deep River, and provides recommendations to move trail development forward. Proposed trail alignments include a section (Section 2) that crosses the Haskett Creek Watershed. This may provide opportunities to coordinate conservation efforts to better protect water resources. Local stakeholders are responsible for implementing sections of the proposed trail. The PTRC provides consultation as needed and helps maintain the plan.

The Piedmont Land Conservancy holds a number of conservation easements along the Deep River and is working to conserve additional land to support the Deep River State Trail and its connected greenways. As mentioned, sections of the proposed trail are within the Haskett Creek watershed, which provides an opportunity to coordinate watershed restoration and recreational goals. These conservation efforts will also complement the proposed project by providing water quality benefits downstream of Haskett Creek, improving water quality in the Deep River. The PLC will serve on the project steering committee to provide plan input and context and coordinate any future conservation efforts within the watershed.

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11. What funding sources exist to implement the results of the project?

There are a variety of funding sources that could be used to implement watershed restoration plans, depending on the type of management measure, including:

Local Sources

- City of Asheboro (if approved through municipal budget)
- Randolph County Soil & Water (CRP & CREP, CCAP, EQIP, WHIP, & Ag Cost-Share programs)

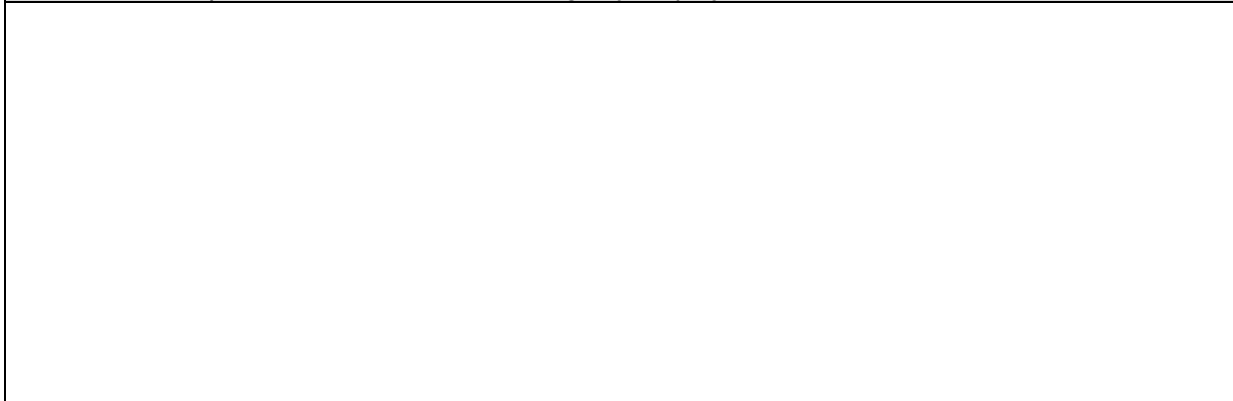
State & Federal Sources

- 319 Grant Program
- Clean Water Management Trust Fund
- Clean Water State Revolving Fund
- Water Resources Development Project Grants

Other Sources

- Duke Energy Water Resources Fund
- Z. Smith Reynolds Foundation Grants

12. (Optional) Photos or diagrams: *include photos or diagrams if they would supplement project narrative and improve reviewers' understanding of your project.*



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| 13. Funding Requested | | | | | |
|--|-----------------|-----------------|--|-----------------|--|
| <i>Note: If a significant portion of funding is in contractual line, please break down contractual line items in section 15.</i> | | | | | |
| Budget Categories (itemize all categories) | Section 205(j) | | Non-Federal Match (recommended, but not required) | Total | Justification (Include explanation for each budget line item) |
| | Year 1 | Year 2 | | | |
| Personnel/Salary | \$4,486 | \$6,728 | \$6,600 | \$17,814 | In-kind stakeholder staff time to serve on steering committee, provide plan input, technical assistance, & feedback (time commitment & rates vary) |
| Fringe Benefits | \$1,951 | \$2,927 | - | \$4,878 | PTRC fringe benefit (43.5%) |
| Supplies | \$100 | - | - | \$100 | Supplies for stakeholder meetings, paper & ink/copies of educational materials to increase awareness of plan |
| Equipment | - | - | - | - | |
| Travel | \$160 | \$240 | - | \$400 | Mileage at \$0.535/mile |
| Contractual | - | - | - | - | |
| Other | - | - | - | - | |
| Total Direct | \$6,697 | \$9,895 | - | \$16,592 | |
| Indirect (max. 10% of direct costs, per 40 CFR 35.268) | \$644 | \$965 | \$4,586 | \$6,195 | PTRC's portion of indirect costs not covered by grant (rate is 38.5%) |
| Annual Totals | \$7,341 | \$10,860 | - | \$18,201 | |
| Grand Total | \$18,201 | | \$11,186 | \$29,387 | |
| % of Total Budget | 62% | | 38% | 100% | |

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| 14. Match summary (if applicable—recommended, but not required) | |
|--|---|
| Total Match amount | \$11,186 |
| Cash Match | \$4,586 |
| Source(s): | PTRC indirect services to support staff not eligible for grant support |
| In-kind Match | \$6,600 |
| Source(s): | City of Asheboro, Randolph County Soil & Water, Piedmont Land Conservancy, and NC Wildlife Resources Commission staff time to serve on steering committee, provide technical assistance, plan input & feedback, and coordinate local water quality efforts. |

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| 15. Contractual budget – IF APPLICABLE | | | | | | |
|---|----------------|--------|--|-------|--|--|
| <i>If a significant portion of funding is in contractual line, please break down contractual line items here.</i> | | | | | | |
| Budget Categories (itemize all categories) | Section 205(j) | | Non-Federal Match (recommended, but not required) | Total | Justification (Include explanation for each budget line item) | |
| | Year 1 | Year 2 | | | | |
| Personnel/Salary | | | | | | |
| Fringe Benefits | | | | | | |
| Supplies | | | | | | |
| Equipment | | | | | | |
| Travel | | | | | | |
| Contractual | | | | | | |
| Other | | | | | | |
| Total Direct | | | | | | |
| Indirect (max. 10% of direct costs, per 40 CFR 35.268) | | | | | | |
| Annual Totals | | | | | | |
| Grand Total | | | | | | |
| % of Total Budget | % | | % | 100% | | |

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| 16. (Only for applicants developing a 9-Element Watershed Restoration Plan) Please indicate below what sources you will use to find or develop the information necessary to meet EPA's 9 Key Elements. | |
|---|--|
| 1 | An identification of the causes and sources or groups of similar sources that will need to be controlled to achieve the load reductions estimated in the watershed |
| | The PTRC will identify causes and sources of water quality impairment through a combination of GIS analysis, aerial imagery, field work, and local stakeholder engagement. GIS analysis will involve mapping features that contribute to water quality, including topography, land use, land cover, soil types, and point sources within the watershed to determine particular areas that are most in need of NPS management measures. Aerial imagery will be used to further investigate areas that may be contributing to poor water quality conditions, such as areas with minimal riparian buffer protections. PTRC will then ground truth desktop analysis results by conducting field work and walking segments of Haskett Creek. PTRC will utilize data collection & watershed planning tools that were developed by NC DWR to map and inventory sites in need of NPS management measures. Local stakeholders will review collected data & provide additional input to validate plan recommendations. |
| 2 | A description of the NPS management measures that will need to be implemented to achieve load reductions as well as to achieve other watershed goals identified in the watershed based plan |
| | Based on existing water quality data and the information generated through GIS analysis and fieldwork, PTRC will develop a list of watershed goals and management measures that is locally informed through stakeholder engagement. Recommended management measures will target the stressors and sources identified in Element 1. Specific projects will be identified through a combination of GIS analysis and field work, and then reviewed and prioritized by local stakeholders based on project feasibility. |
| 3 | An estimate of the load reductions expected for the management measures |
| | The PTRC will coordinate with NC DWR staff to estimate load reductions from recommended management measures using USGS StreamStats, which allows watershed planners to simulate scenarios within the watershed and calculate flow statistics. Reduction estimates will also be informed by academic literature and previous case studies in similarly situated watersheds. Other resources could include the NC State BMP Manual and SNAP nutrient accounting tool. |
| 4 | An estimate of the amount of technical and financial assistance needed associated costs and or sources and authorities that will be relied upon, to implement the plan |
| | The amount of technical assistance needed for each recommended management measure will be determined through discussions with local stakeholders. The proposed project steering committee is made up of a wide range of environmental professionals with diverse skillsets that will likely be involved in future project implementation. Project costs will be estimated for each recommended management measure based on average local costs for materials and services. Cost ranges will be provided to reflect the variability of site specific projects and funding sources. PTRC will reference NC DWR's "Financial Assistance for Watershed Water Quality Grants, Cost Shares, and Loans" to identify funding mechanisms |

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| 5 | An information/education component that will be used to enhance public understanding of the project |
| | <p>Local stakeholders including the City of Asheboro, Randolph County, Piedmont Land Conservancy, NC Wildlife Resources Commission, and NC DWR will be engaged throughout the watershed planning process to inform watershed goals and strategies. Educational materials, such as a project website, summary sheet, and other graphics, will be generated and shared with stakeholders, who regularly engage with local citizens through a variety of venues. PTRC's Stormwater SMART program also regularly works with the Asheboro Zoo and Keep Randolph County Beautiful to provide educational programs for Randolph County schools and at events and festivals. PTRC will utilize these opportunities to further increase public awareness about the Haskett Creek watershed plan. The final watershed plan will be hosted through an innovative web map platform that can be easily viewed and shared with a wide audience.</p> |
| 6 | A schedule for implementing the NPS management measures identified in this plan that is reasonably expeditious |
| | <p>The PTRC will work with local stakeholders to prioritize NPS management measures and develop a reasonable timeline and implementation plan to ensure local capacity and feasibility. Goals will be divided into short (1-2 years), mid-term (2-5 years), and long-term goals (5+ years) and accompanied by potential funding sources and groups who will likely be responsible for strategy implementation in the future.</p> |
| 7 | A description of interim, measurable milestones for determining whether NPS management measures or other control actions are being implemented |
| | <p>Similar to Element 6 above, PTRC will work with local stakeholders to develop a list of measurable milestones and implementation strategies to support watershed plan goals and recommendations. Stakeholders will help track the number, type, and location of future restoration projects. Implementation of management measures and water quality conditions will be the two primary indicators of success and will rely heavily on continued partner stakeholder involvement and leadership.</p> |
| 8 | A set of criteria that can be used to determine whether loading reductions are being achieved overtime and substantial progress is being made towards attaining water quality standards |
| | <p>Watershed plan goals and recommendations will be designed to target water quality impairments, as indicated by existing water quality data. The PTRC will work with local stakeholders to develop criteria that can be used to determine whether loading reductions are being achieved. Water quality will continue to be monitored as described in Element 9 below to help measure programmatic success. Other criteria will include qualitative measures, such as aquatic life and the number, type, and location of projects implemented.</p> |

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|---|--|
| 9 | A monitoring component to evaluate the effectiveness of the implementation efforts over time measured against the criteria established under item 8. |
| | <p>The City of Asheboro operates a wastewater treatment plant along Haskett Creek, near its confluence with the Deep River, and regularly monitors incoming and effluent water quality conditions. The Upper Cape Fear River Basin Association also maintains two ambient monitoring stations at the WWTP and downstream on the Deep River near Central Falls. Water quality data from these two sources will continue to be maintained and reviewed to determine the effectiveness of implementation efforts over time. City, County, and other stakeholders will also track the number, type, and location of future restoration projects. Additional sampling of aquatic life or water quality could be supported through citizen science efforts, like StreamWatch, which are growing in the region through the Asheboro Zoo and Keep Randolph County Beautiful.</p> |

If you have questions or need assistance filling out this application, please do not hesitate to contact 205(j) grant administrator Maya Cough-Schulze at (919) 807-6442 or maya.cough-schulze@ncdenr.gov.