



STATE OF NORTH CAROLINA
DEPARTMENT OF ADMINISTRATION

ROY COOPER
GOVERNOR

MACHELLE SANDERS
SECRETARY

January 7, 2019

Ms. Lynn Jarvis
North Carolina Department of Commerce
Utilities Commission
4325 Mail Service Center
Raleigh, North Carolina 27699-4325

Re: SCH File # 19-E-4600-0136; Application of Duke Energy Progress, LLC for Certificate to construct a Microgrid Solar and Battery Storage Facility in Madison Co. Docket #E-2, Sub 1185

Dear Ms. Jarvis:

The above referenced environmental impact information has been reviewed through the State Clearinghouse under the provisions of the North Carolina Environmental Policy Act.

Attached to this letter are comments made in the review of this document. Because of the nature of the comments, it has been determined that no further State Clearinghouse review action on your part is needed for compliance with the North Carolina Environmental Policy Act. The attached comments should be taken into consideration in project development.

Sincerely,

A handwritten signature in blue ink that reads "Crystal Best".

Crystal Best
State Environmental Review Clearinghouse

Attachments
cc: Region B



NORTH CAROLINA
Environmental Quality

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

JAMIE RAGAN
Director

MEMORANDUM

To: Crystal Best
State Clearinghouse Coordinator
Department of Administration

From: Lyn Hardison
Division of Environmental Assistance and Customer Service
Environmental Assistance and Project Review Coordinator
Washington Regional Office

RE: 19-0136
Environmental Review –Application of Duke Energy Progress, LLC for the
Certificate to construct a Microgrid Solar and Battery Storage Facility
Madison County

Date: January 3, 2019

The Department of Environmental Quality has completed its review of the proposal for the referenced project. Based on the information provided, several of our agencies have identified permits that may be required and offered some valuable guidance. The comments are attached for the applicant's review.

If the applicant has any questions pertaining to NCDEQ permitting processes, please ask them to contact Alison Davidson, Permit Assistance Coordinator, in the Department's Asheville Regional Office, (828)296-4596. The proposed project is located within her geographic working territory.

Thank you for the opportunity to respond.

Attachment





☒ North Carolina Wildlife Resources Commission ☒

Gordon Myers, Executive Director

MEMORANDUM

TO: Lyn Hardison, Environmental Assistance and SEPA Coordinator
NCDENR Division of Environmental Assistance and Customer Services

FROM: Andrea Leslie, Mountain Region Coordinator *Andrea Leslie*
Habitat Conservation

DATE: 27 December 2018

SUBJECT: Duke Energy Progress Microgrid Solar and Battery Storage Facility
Project No. 19-0136

Biologists with the North Carolina Wildlife Resources Commission (NCWRC) have reviewed the proposed project description. Our comments are provided in accordance with certain provisions of the N.C. Environmental Policy Act (G.S. 113A-1 through 113A-10; 1 NCAC 25) and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.).

Duke Energy Progress proposes to construct a microgrid solar and battery storage facility on a 15-acre parcel in Madison County. This facility will incorporate a 3 MW DC and 2 MW AC solar photovoltaic electric generator and 4 MW lithium battery storage. The facility would be located at 172 Andrews Avenue in Hot Springs on mostly cleared land. Installing solar panels on previously cleared and disturbed land rather than forested land will have less impact on wildlife and is preferred.

The site drains to Spring Creek, near its confluence with the French Broad River. Both of these streams are in the Lower French Broad River Aquatic Habitat, a natural area rated Exceptional by the NC Natural Heritage Program due to the richness of rare species it contains. In the vicinity of the project, the streams support a number of listed and rare aquatic species, including the Logperch (*Percina caproides*, NC Threatened), Banded Sculpin [*Cottus carolinae*, NC SC (Special Concern)], Olive Darter (*P. squamata*, NC SC), Freshwater Drum (*Aplodinotus grunniens*, NC SC), Ohio Lamprey (*Ichthyomyzon bdellium*, NC SC), Mountain Madtom (*Noturus eleuthurus*, NC SC), Eastern Spiny Softshell (*Apalone spinifera spinifera*, NC SC), American Brook Lamprey (*Lethenteron appendix*, NC SC), French Broad River Crayfish [*Cambarus reburus*, US Federal Species of Concern, NC SR (Significantly Rare)], Highland Shiner (*Notropis micropteryx*, NC SR), Sauger (*Sander canadensis*, NC SR), and Blotched Chub

(*Erimystax insignis*, NC SR). These species are especially sensitive to excess sediment, and vigilant attention should be used in ensuring adequate sediment and erosion control during construction.

We offer the following recommendations:

1. Maintain or establish a minimum 100-foot undisturbed, native forested buffer along each side of perennial streams and 50-foot undisturbed, native forested buffer along each side of intermittent streams and wetlands. Forested riparian buffers provide habitat areas for aquatic and terrestrial wildlife species and travel corridors for terrestrial wildlife. In addition, forested riparian buffers protect water quality by stabilizing stream banks and filtering stormwater runoff.
2. The project footprint should be surveyed for wetlands and streams to ensure there are no impacts to these areas. In addition to providing wildlife habitat, wetland areas perform important functions of flood control and water quality protection. United States Army Corps of Engineers Section 404 permits and NC Division of Water Resources Section 401 Certifications are needed for any impacts to jurisdictional streams or wetlands.
3. Use bridges for all permanent roadway crossings of streams and associated wetlands to eliminate the need to fill and culvert, where practicable. If culverts must be used, the culvert should be designed to allow aquatic life passage. Fords may be appropriate and preferred for intermittent stream crossings or where crossings will be used only once or twice a year. For fords, crossings in riffles are preferred with the banks lowered upstream and downstream of the crossing. Geo-textile fabric and rock to stabilize the stream bottom are preferred over concrete.
4. The solar facility will connect to existing utility lines; impacts to wildlife habitat will be minimized by connecting along pathways that do not contain quality wildlife habitat, such as cleared or agricultural land. If additional overhead transmission lines will be installed, measures to minimize impacts to birds should be implemented. These can include increasing line visibility, insulating wires to cover exposed connections, and increasing the distance between wires so no contact with ground or other energized wire can be made. For more information see <http://www.fws.gov/birds/documents/powerlines.pdf>.
5. If site and/or transmission line maintenance is needed, avoid mowing between April 1 and October 1 to minimize impacts to nesting wildlife. We suggest a maintenance schedule that incorporates a portion of the area (e.g., one-third of the area) each year. Pesticides, fertilizers, and other chemicals should not be used in wetland areas or near streams.
6. If pesticides or chemicals will be used for site maintenance, stormwater runoff from the site should be directed to bioretention areas prior to discharge to streams or wetlands; this will provide additional protection for water quality and aquatic and terrestrial wildlife habitats.
7. It is especially important to ensure that sediment and erosion control measures are installed prior to any land clearing or construction, as this site drains to such important aquatic habitats. These measures should be routinely inspected and properly maintained. Excessive silt and sediment loads can have numerous detrimental effects on aquatic resources including destruction of spawning habitat, suffocation of eggs, and clogging of gills of aquatic species.

8. We recommend that a wildlife-friendly buffer outside of the solar array be planted with a mix of native warm season grasses and shrubs such as dogwood, button bush, and berry bushes. Please contact me for a list of species and management recommendations.
9. We strongly recommend incorporating a native pollinator mix on site, which can provide pollinator habitat and ultimately reduce maintenance costs.
10. Develop a decommissioning plan that identifies the party responsible for decommissioning the facility and the conditions under which decommissioning will occur. In addition, the plan should include that all equipment is removed from the site and the land restored to pre-construction conditions.

Thank you for the opportunity to review and comment on this project. If I can be of further assistance, please contact me at (828) 803-6054 or at andrea.leslie@ncwildlife.org.

ec: Allen Ratzlaff



NORTH CAROLINA
Environmental Quality

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

MICHAEL SCOTT
Director

Date: December 11, 2018

To: Michael Scott, Director
Division of Waste Management

Through: Janet Macdonald
Inactive Hazardous Sites Branch – Special Projects Unit

From: Bonnie S. Ware
Inactive Hazardous Sites Branch

Subject: SEPA Project #19-0136, NC Department of Commerce, Madison County, North Carolina

The Superfund Section has reviewed the proximity of sites under its jurisdiction to the NC Department of Commerce project. Proposed project is for the application of Duke Energy Progress, LLC for Certificate to construct a Microgrid Solar and Battery Storage Facility in Madison Co.

Two sites were identified within one mile of the project as shown on the attached report. The Superfund Section recommends that site files be reviewed to ensure that appropriate precautions are incorporated into any construction activities that encounter potentially contaminated soil or groundwater. Superfund Section files can be viewed at: <http://deq.nc.gov/waste-management-laserfiche>.

Please contact Janet Macdonald at 919.707.8349 if you have any questions.



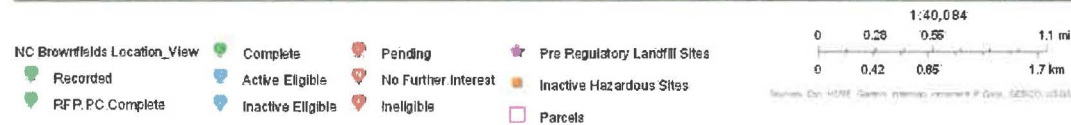
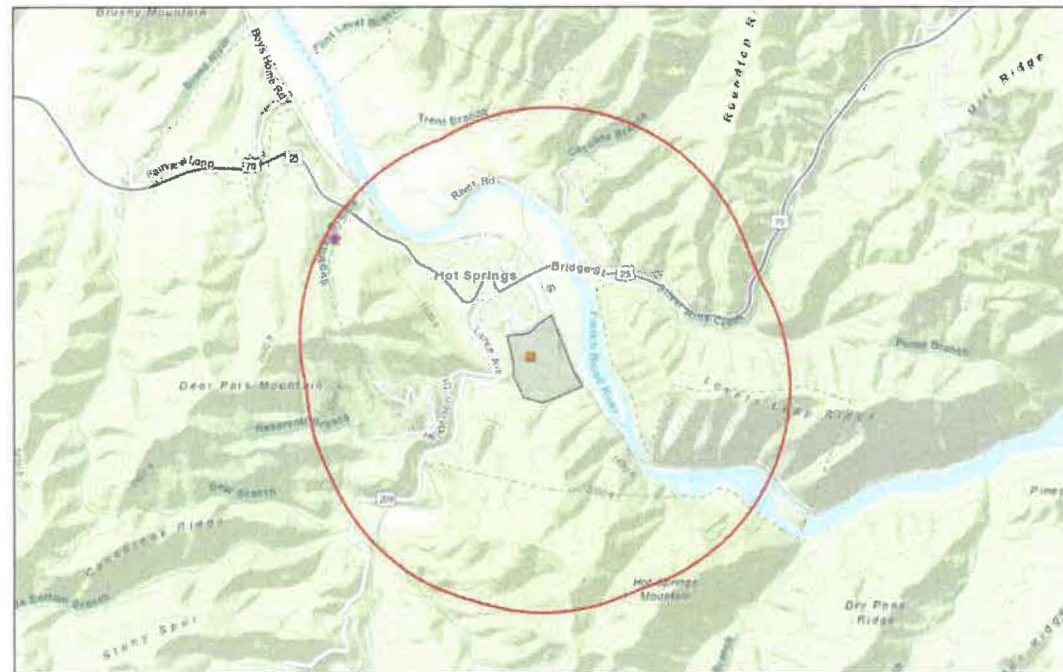


SEPA/NEPA Review Report

Area of Interest (AOI) Information

Area : 2,851.48 acres

Dec 11 2018 12:47:52 Eastern Standard Time



19-0136 Madison County

Summary

| Name | Count | Area(acres) | Length(mi) |
|----------------------------------|-------|-------------|------------|
| Certified DSCA Sites | 0 | N/A | N/A |
| Federal Remediation Branch Sites | 0 | N/A | N/A |
| Inactive Hazardous Sites | 1 | N/A | N/A |
| Pre-Regulatory Landfill Sites | 1 | N/A | N/A |
| Brownfields Program Sites | 0 | N/A | N/A |

Inactive Hazardous Sites

| # | EPAID | SITENAME | Count |
|---|--------------|-----------------------|-------|
| 1 | NONCD0002955 | MADISON MANUFACTURING | 1 |

Pre-Regulatory Landfill Sites

| # | EPAID | SITENAME | Count |
|---|--------------|-----------------------------|-------|
| 1 | NONCD0000416 | Hot Springs Refuse Disposal | 1 |



NORTH CAROLINA
Environmental Quality

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MICHAEL S. REGAN
Secretary

MICHAEL SCOTT
Director

DATE: December 11, 2018

TO: Michael Scott, Division Director through Sharon Brinkley

FROM: Deb Aja, Western District Supervisor - Solid Waste Section

RE: SEPA Project 19-0136, Madison County, N.C.
Duke Energy Progress, LLC Microgrid Project – Hot Springs

The Solid Waste Section has reviewed the Application of Duke Energy Progress, LLC for Certificate to construct a Microgrid Solar and Battery Storage Facility at 172 Andrews Ave. in Hot Springs, Madison County, North Carolina. The review has been completed and has found no adverse impact on the surrounding community and likewise knows of no situations in the community, which would affect this project from a solid waste perspective.

During the project, every feasible effort should be made to minimize the generation of waste, to recycle materials for which viable markets exist, and to use recycled products and materials in the development of this project where suitable. Any wastes generated by this project that cannot be beneficially reused or recycled must also be disposed of at a solid waste management facility approved to manage the respective waste type. The Section strongly recommends that any contractors are required to provide proof of proper disposal for all waste generated as part of the project.

A list of permitted solid waste management facilities is available on the Solid Waste Section portal site at: <http://deq.nc.gov/about/divisions/waste-management/waste-management-rules-data/solid-waste-management-annual-reports/solid-waste-permitted-facility-list>

Please contact Mr. Kris Riddle, Environmental Senior Specialist, with any questions regarding solid waste management for this project. Mr. Riddle may be reached at (828) 296-4705 or by email at kris.riddle@ncdenr.gov.

Cc: Jason Watkins, Field Operations Branch Head
Kris Riddle, Environmental Senior Specialist





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MICHAEL SCOTT
Director

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Jan 07 2019

TO: Lyn Hardison, Environmental Coordinator

FROM: Caroline LaFond, Regional UST Supervisor

COPY: Scott Bullock, Corrective Action Branch Head
Sharon Brinkley, Administrative Secretary

DATE: December 12, 2018

RE: SEPA Review – Project Number 19-0136 Madison County – Application of Duke Energy Progress, LLC for Certificate to construct a Microgrid Solar and Battery Storage Facility.

I searched the Petroleum Underground Storage Tank (UST) and Non-UST Databases and those databases did not indicate any petroleum releases on/near the proposed project area.

The following comments are pertinent to my review:

The Asheville Regional Office (ARO) UST Section recommends removal of any abandoned or out-of-use petroleum USTs or petroleum ASTs within the project area. The UST Section should be contacted regarding use of any proposed or on-site petroleum USTs or ASTs. We may be reached at (828) 296-4500.

Any petroleum USTs or ASTs must be installed and maintained in accordance with applicable local, state, and federal regulations. For additional information on petroleum ASTs it is advisable that the North Carolina Department of Insurance at (919) 661-5880 ext. 239, USEPA (404) 562-8761, local fire department, and Local Building Inspectors be contacted.

Any petroleum spills must be contained, and the area of impact must be properly restored. Petroleum spills of significant quantity must be reported to the North Carolina Department of Environmental Quality (NCDEQ) – Division of Waste Management (DWM) UST Section in the ARO.

Any soils excavated during demolition or construction that show evidence of petroleum contamination, such as stained soil, odors, or free product must be reported immediately to the local Fire Marshall to determine whether explosive or inhalation hazards exist. Also, notify the UST Section of the ARO. Petroleum contaminated soils must be handled in accordance with all applicable regulations.

Any questions or concerns regarding spills from petroleum USTs, ASTs, or vehicles should be directed to the UST Section at (828) 296-4500.

If you have any questions or need additional information, please contact me via email at caroline.lafond@ncdenr.gov or by phone at (828) 296-4644.

State of North Carolina Department of Environmental Quality
 INTERGOVERNMENTAL REVIEW PROJECT COMMENTS

Reviewing Regional Office: Asheville
 Project Number: 19-0136 Due Date: 12/31/2018
 County: Madison

After review of this project it has been determined that the DEQ permit(s) and/or approvals indicated may need to be obtained in order for this project to comply with North Carolina Law. Questions regarding these permits should be addressed to the Regional Office indicated on the reverse of the form. All applications, information and guidelines relative to these plans and permits are available from the same Regional Office.

| | PERMITS | SPECIAL APPLICATION PROCEDURES or REQUIREMENTS | Normal Process Time (statutory time limit) |
|-------------------------------------|--|--|--|
| <input type="checkbox"/> | Permit to construct & operate wastewater treatment facilities, non-standard sewer system extensions & sewer systems that do not discharge into state surface waters. | Application 90 days before begins construction or award of construction contracts. On-site inspection may be required. Post-application technical conference usual. | 30 days (90 days) |
| <input type="checkbox"/> | Permit to construct & operate, sewer extensions involving gravity sewers, pump stations and force mains discharging into a sewer collection system | Fast-Track Permitting program consists of the submittal of an application and an engineer's certification that the project meets all applicable State rules and Division Minimum Design Criteria. | 30 days (N/A) |
| <input type="checkbox"/> | NPDES - permit to discharge into surface water and/or permit to operate and construct wastewater facilities discharging into state surface waters. | Application 180 days before begins activity. On-site inspection. Pre-application conference usual. Additionally, obtain permit to construct wastewater treatment facility-granted after NPDES. Reply time, 30 days after receipt of plans or issue of NPDES permit-whichever is later. | 90-120 days (N/A) |
| <input type="checkbox"/> | Water Use Permit | Pre-application technical conference usually necessary. | 30 days (N/A) |
| <input type="checkbox"/> | Well Construction Permit | Complete application must be received and permit issued prior to the installation of a groundwater monitoring well located on property not owned by the applicant, and for a large capacity (>100,000 gallons per day) water supply well. | 7 days (15 days) |
| <input type="checkbox"/> | Dredge and Fill Permit | Application copy must be served on each adjacent riparian property owner. On-site inspection. Pre-application conference usual. Filling may require Easement to Fill from N.C. Department of Administration and Federal Dredge and Fill Permit. | 55 days (90 days) |
| <input type="checkbox"/> | Permit to construct & operate Air Pollution Abatement facilities and/or Emission Sources as per 15 A NCAC (2Q.0100 thru 2Q.0300) | Application must be submitted and permit received prior to construction and operation of the source. If a permit is required in an area without local zoning, then there are additional requirements and timelines (2Q.0113). | 90 days |
| <input checked="" type="checkbox"/> | Any open burning associated with subject proposal must be in compliance with 15 A NCAC 2D.1900 | N/A | 60 days (90 days) |
| <input type="checkbox"/> | Demolition or renovations of structures containing asbestos material must be in compliance with 15 A NCAC 20.1110 (a) (1) which requires notification and removal prior to demolition. Contact Asbestos Control Group 919-707-5950 | Please Note - The Health Hazards Control Unit (HHCU) of the N.C. Department of Health and Human Services, must be notified of plans to demolish a building, including residences for commercial or industrial expansion, even if no asbestos is present in the building. | 60 days (90 days) |
| <input type="checkbox"/> | The Sedimentation Pollution Control Act of 1973 must be properly addressed for any land disturbing activity. An erosion & sedimentation control plan will be required if one or more acres are to be disturbed. Plan must be filed with and approved by applicable Regional Office (Land Quality Section) at least 30 days before beginning activity. A NPDES Construction Stormwater permit (NCG010000) is also usually issued should design features meet minimum requirements. A fee of \$65 for the first acre or any part of an acre. An express review option is available with additional fees. | | 20 days (30 days) |
| <input type="checkbox"/> | Sedimentation and erosion control must be addressed in accordance with NCDOT's approved program. Particular attention should be given to design and installation of appropriate perimeter sediment trapping devices as well as stable Stormwater conveyances and outlets. | | (30 days) |
| <input type="checkbox"/> | Sedimentation and erosion control must be addressed in accordance with _____ Local Government's approved program. Particular attention should be given to design and installation of appropriate perimeter sediment trapping devices as well as stable Stormwater conveyances and outlets. | | Based on Local Program |
| <input type="checkbox"/> | Compliance with 15A NCAC 2H .0126 - NPDES Stormwater Program which regulates three types of activities: Industrial, Municipal Separate Storm Sewer System & Construction activities that disturb ≥1 acre. | | 30-60 days (90 days) |
| <input type="checkbox"/> | Compliance with 15A NCAC 2H 1000 -State Stormwater Permitting Programs regulate site development and post-construction stormwater runoff control. Areas subject to these permit programs include all 20 coastal counties, and various other counties and watersheds throughout the state. | | 45 days (90 days) |

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State of North Carolina Department of Environmental Quality
 INTERGOVERNMENTAL REVIEW PROJECT COMMENTS

Reviewing Regional Office: Asheville
 Project Number: 19-0136 Due Date: 12/31/2018
 County: Madison

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Jan 07 2019

| | PERMITS | SPECIAL APPLICATION PROCEDURES or REQUIREMENTS | Normal Process Time (statutory time limit) |
|-------------------------------------|---|---|--|
| <input type="checkbox"/> | Mining Permit | On-site inspection usual. Surety bond filed with DEQ Bond amount varies with type mine and number of acres of affected land. Affected area greater than one acre must be permitted. The appropriate bond must be received before the permit can be issued. | 30 days (60 days) |
| <input type="checkbox"/> | Dam Safety Permit | If permit required, application 60 days before begin construction. Applicant must hire N.C. qualified engineer to: prepare plans, inspect construction, and certify construction is according to DEQ approved plans. May also require a permit under mosquito control program. And a 404 permit from Corps of Engineers. An inspection of site is necessary to verify Hazard Classification. A minimum fee of \$200.00 must accompany the application. An additional processing fee based on a percentage or the total project cost will be required upon completion. | 30 days (60 days) |
| <input type="checkbox"/> | Oil Refining Facilities | N/A | 90-120 days (N/A) |
| <input type="checkbox"/> | Permit to drill exploratory oil or gas well | File surety bond of \$5,000 with DEQ running to State of NC conditional that any well opened by drill operator shall, upon abandonment, be plugged according to DEQ rules and regulations. | 10 days (N/A) |
| <input type="checkbox"/> | Geophysical Exploration Permit | Application filed with DEQ at least 10 days prior to issue of permit. Application by letter. No standard application form. | 10 days (N/A) |
| <input type="checkbox"/> | State Lakes Construction Permit | Application fee based on structure size is charged. Must include descriptions & drawings of structure & proof of ownership of riparian property | 15-20 days (N/A) |
| <input type="checkbox"/> | 401 Water Quality Certification | Compliance with the T15A 02H .0500 Certifications are required whenever construction or operation of facilities will result in a discharge into navigable water as described in 33 CFR part 323. | 60 days (130 days) |
| <input type="checkbox"/> | Compliance with Catawba, Goose Creek, Jordan Lake, Randleman, Tar Pamlico or Neuse Riparian Buffer Rules is required. Buffer requirements: http://deq.nc.gov/about/divisions/water-resources/water-resources-permits/wastewater-branch/401-wetlands-buffer-permits/401-riparian-buffer-protection-program | | |
| <input type="checkbox"/> | Nutrient Offset: Loading requirements for nitrogen and phosphorus in the Neuse and Tar-Pamlico River basins, and in the Jordan and Falls Lake watersheds, as part of the nutrient-management strategies in these areas. DWR nutrient offset information: http://deq.nc.gov/about/divisions/water-resources/planning/nonpoint-source-management/nutrient-offset-information | | |
| <input type="checkbox"/> | CAMA Permit for MAJOR development | \$250.00 - \$475.00 fee must accompany application | 75 days (150 days) |
| <input type="checkbox"/> | CAMA Permit for MINOR development | \$100.00 fee must accompany application | 22 days (25 days) |
| <input type="checkbox"/> | Abandonment of any wells, if required must be in accordance with Title 15A. Subchapter 2C.0100. | | |
| <input checked="" type="checkbox"/> | Notification of the proper regional office is requested if "orphan" underground storage tanks (USTS) are discovered during any excavation operation. | | |
| <input type="checkbox"/> | Plans and specifications for the construction, expansion, or alteration of a public water system must be approved by the Division of Water Resources/Public Water Supply Section prior to the award of a contract or the initiation of construction as per 15A NCAC 18C .0300 et. seq., Plans and specifications should be submitted to 1634 Mail Service Center, Raleigh, North Carolina 27699-1634. All public water supply systems must comply with state and federal drinking water monitoring requirements. For more information, contact the Public Water Supply Section, (919) 707-9100. | | 30 days |
| <input checked="" type="checkbox"/> | If existing water lines will be relocated during the construction, plans for the water line relocation must be submitted to the Division of Water Resources/Public Water Supply Section at 1634 Mail Service Center, Raleigh, North Carolina 27699-1634. For more information, contact the Public Water Supply Section, (919) 707-9100. | | 30 days |
| <input type="checkbox"/> | Plans and specifications for the construction, expansion, or alteration of the _____ water system must be approved through the _____ delegated plan approval authority. Please contact them at _____ for further information. | | |

State of North Carolina Department of Environmental Quality
 INTERGOVERNMENTAL REVIEW PROJECT COMMENTS

Reviewing Regional Office: Asheville
 Project Number: 19-0136 Due Date: 12/31/2018
 County: Madison

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Jan 07 2019

Other Comments (attach additional pages as necessary, being certain to comment authority)

| Division | Initials | No comment | Comments | Date Review |
|-------------------------------|----------|--------------------------|---|-------------|
| DAQ | PVB | <input type="checkbox"/> | Any open burning associated with this project must be in compliance with the NC State regulations. | 12/11/18 |
| DWR-WQROS (Aquifer & Surface) | & | <input type="checkbox"/> | If wetland or stream impacts are proposed, this project will need to comply with/secure a 404 permit from the USACE and obtain a 401 Water Quality Certification authorization. | / / / / |
| DWR-PWS | WPC | <input type="checkbox"/> | Contact the 811 call center to determine if existing water lines exist within the project boundary. | 12/18/18 |
| DEMLR (LQ & SW) | | <input type="checkbox"/> | If there will greater than one acres of land disturbance, an Erosion Sedimentation control plan will be required. | |
| DWM – UST | CEL | <input type="checkbox"/> | <p>I searched the Petroleum Underground Storage Tank (UST) and Non-UST Databases and those databases did not indicate any petroleum releases on/near the proposed project area.</p> <p>The following comments are pertinent to my review:</p> <p>The Asheville Regional Office (ARO) UST Section recommends removal of any abandoned or out-of-use petroleum USTs or petroleum ASTs within the project area. The UST Section should be contacted regarding use of any proposed or on-site petroleum USTs or ASTs. We may be reached at (828) 296-4500.</p> <p>Any petroleum USTs or ASTs must be installed and maintained in accordance with applicable local, state, and federal regulations. For additional information on petroleum ASTs it is advisable that the North Carolina Department of Insurance at (919) 661-5880 ext. 239, USEPA (404) 562-8761, local fire department, and Local Building Inspectors be contacted.</p> <p>Any petroleum spills must be contained and the area of impact must be properly restored. Petroleum spills of significant quantity must be reported to the North Carolina Department of Environmental Quality (NCDEQ) – Division of Waste Management (DWM) UST Section in the ARO.</p> <p>Any soils excavated during demolition or construction that show evidence of petroleum contamination, such as stained soil, odors, or free product must be reported immediately to the local Fire Marshall to determine whether explosive or inhalation hazards exist. Also, notify the UST Section of the ARO. Petroleum contaminated soils must be handled in accordance with all applicable regulations.</p> <p>Any questions or concerns regarding spills from petroleum USTs, ASTs, or vehicles should be directed to the UST Section at (828) 296-4500.</p> <p>If you have any questions or need additional information, please contact me via email at caroline.lafond@ncdenr.gov or by phone at (828) 296-4644.</p> | 12/12/18 |
| Other Comments | | <input type="checkbox"/> | | / / |

REGIONAL OFFICES

Questions regarding these permits should be addressed to the Regional Office marked below.

State of North Carolina Department of Environmental Quality
INTERGOVERNMENTAL REVIEW PROJECT COMMENTS

Asheville Regional Office
2090 U.S. 70 Highway
Swannanoa, NC 28778-8211
Phone: 828-296-4500
Fax: 828-299-7043

Fayetteville Regional Office
225 Green Street, Suite 714,
Fayetteville, NC 28301-5043
Phone: 910-433-3300
Fax: 910-486-0707

Mooresville Regional Office
610 East Center Avenue, Suite 301,
Mooresville, NC 28115
Phone: 704-663-1699
Fax: 704-663-6040

Raleigh Regional Office
3800 Barrett Drive,
Raleigh, NC 27609
Phone: 919-791-4200
Fax: 919-571-4718

Washington Regional Office
943 Washington Square Mall,
Washington, NC 27889
Phone: 252-946-6481
Fax: 252-975-3716

Wilmington Regional Office
127 Cardinal Drive Ext.,
Wilmington, NC 28405
Phone: 910-796-7215
Fax: 910-350-2004

Winston-Salem Regional Office
450 Hanes Mill Road, Suite 300,
Winston-Salem, NC 27105
Phone: 336-776-9800
Fax: 336-776-9797

NORTH CAROLINA STATE CLEARINGHOUSE
DEPARTMENT OF ADMINISTRATION
INTERGOVERNMENTAL REVIEW

DEL 12 2018

COUNTY: MADISON

H11: ENERGY RELATED
FACILITIES/ACTIVITIES

STATE NUMBER: 19-E-4600-013
DATE RECEIVED: 12/05/2018
AGENCY RESPONSE: 12/31/2018
REVIEW CLOSED: 01/04/2019

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Jan 07 2019

MS CINDY WILLIAMS
CLEARINGHOUSE COORDINATOR
DPS - DIV OF EMERGENCY MANAGEMENT
FLOODPLAIN MANAGEMENT PROGRAM
4218 MAIL SERVICE CENTER
RALEIGH NC

REVIEW DISTRIBUTION

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DEPT OF NATURAL & CULTURAL RESOURCE
DEPT OF TRANSPORTATION
DNCR - NATURAL HERITAGE PROGRAM
DPS - DIV OF EMERGENCY MANAGEMENT
LAND OF SKY REGIONAL COUNCIL

PROJECT INFORMATION

APPLICANT: North Carolina Department of Commerce
TYPE: State Environmental Policy Act
Environmental Review

DESC: Application of Duke Energy Progress, LLC for Certificate to construct a Microgrid Solar and Battery Storage Facility in Madison Co. Docket #E-2, Sub 1185 - View document at <http://starw1.ncuc.net/NCUC/portal/ncuc/page/Dockets/portal.aspx>, Type E-2 Sub 1185 in the Docket Number search line.

Located in Madison County, NC

The attached project has been submitted to the N. C. State Clearinghouse for intergovernmental review. Please review and submit your response by the above indicated date to 1301 Mail Service Center, Raleigh NC 27699-1301.

If additional review time is needed, please contact this office at (919)807-2425.

AS A RESULT OF THIS REVIEW THE FOLLOWING IS SUBMITTED: NO COMMENT COMMENTS ATTACHED

SIGNED BY:

Daniel Halverson

DATE:

12/18/18

Not in SFHA.

RECEIVED
Secretary's
JAN 02 2019

Office
DOA

NORTH CAROLINA STATE CLEARINGHOUSE
DEPARTMENT OF ADMINISTRATION
INTERGOVERNMENTAL REVIEW

*Heather Heldebrandt
Cooper*

COUNTY: MADISON

H11: ENERGY RELATED
FACILITIES/ACTIVITIES

STATE NUMBER: 19-E-4600-013
DATE RECEIVED: 12/05/2018
AGENCY RESPONSE: 12/31/2018
REVIEW CLOSED: 01/04/2019

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Jan 07 2019

MS CARRIE ATKINSON
CLEARINGHOUSE COORDINATOR
DEPT OF TRANSPORTATION
STATEWIDE PLANNING - MSC #1554
RALEIGH NC

REVIEW DISTRIBUTION

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DPS - DIV OF EMERGENCY MANAGEMENT
LAND OF SKY REGIONAL COUNCIL

Transportation Planning
Division

DEC 12 2018

PROJECT INFORMATION

APPLICANT: North Carolina Department of Commerce
TYPE: State Environmental Policy Act
Environmental Review

DESC: Application of Duke Energy Progress, LLC for Certificate to construct a Microgrid Solar and Battery Storage Facility in Madison Co. Docket #E-2, Sub 1185 - View document at <http://starw1.ncuc.net/NCUC/portal/ncuc/page/Dockets/portal.aspx>, Type E-2 Sub 1185 in the Docket Number search line.

Located in Madison County, NC

The attached project has been submitted to the N. C. State Clearinghouse for intergovernmental review. Please review and submit your response by the above indicated date to 1301 Mail Service Center, Raleigh NC 27699-1301.

If additional review time is needed, please contact this office at (919)807-2425.

AS A RESULT OF THIS REVIEW THE FOLLOWING IS SUBMITTED: NO COMMENT COMMENTS ATTACHED

SIGNED BY: *[Signature]*

DATE: *12/19/18*

Unable to access Docket website

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Secretary's
DEC 27 2018
Office
DOA

NORTH CAROLINA STATE CLEARINGHOUSE
DEPARTMENT OF ADMINISTRATION
INTERGOVERNMENTAL REVIEW

COUNTY: MADISON

H11: ENERGY RELATED
FACILITIES/ACTIVITIES

STATE NUMBER: 19-E-4600-0136
DATE RECEIVED: 12/05/2018
AGENCY RESPONSE: 12/31/2018
REVIEW CLOSED: 01/04/2019

MR RODNEY BUTLER
CLEARINGHOUSE COORDINATOR
DNCR - NATURAL HERITAGE PROGRAM
1651 MAIL SERVICE CENTER
RALEIGH NC

REVIEW DISTRIBUTION

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AS A RESULT OF THIS REVIEW THE FOLLOWING IS SUBMITTED: NO COMMENT COMMENTS ATTACHED

SIGNED BY:

M. Waff

DATE:

12/21/18

OFFICIAL COPY

Jan 07 2019



Roy Cooper, Governor
Susi Hamilton, Secretary
Walter Clark, Director, Land and Water Stewardship

NCNHDE-7799

December 21, 2018

Michelle Warf
NCNHP
121 West Jones Street
Raleigh, NC 27601
RE: Clearinghouse 19-0136

Dear Michelle Warf:

The North Carolina Natural Heritage Program (NCNHP) appreciates the opportunity to provide information about natural heritage resources for the project referenced above.

A query of the NCNHP database indicates that there are records for rare species, important natural communities, natural areas, and/or conservation/managed areas within the proposed project boundary. These results are presented in the attached 'Documented Occurrences' tables and map.

The attached 'Potential Occurrences' table summarizes rare species and natural communities that have been documented within a one-mile radius of the property boundary. The proximity of these records suggests that these natural heritage elements may potentially be present in the project area if suitable habitat exists. Tables of natural areas and conservation/managed areas within a one-mile radius of the project area, if any, are also included in this report.

If a Federally-listed species is documented within the project area or indicated within a one-mile radius of the project area, the NCNHP recommends contacting the US Fish and Wildlife Service (USFWS) for guidance. Contact information for USFWS offices in North Carolina is found here: <https://www.fws.gov/offices/Directory/ListOffices.cfm?statecode=37>.

Please note that natural heritage element data are maintained for the purposes of conservation planning, project review, and scientific research, and are not intended for use as the primary criteria for regulatory decisions. Information provided by the NCNHP database may not be published without prior written notification to the NCNHP, and the NCNHP must be credited as an information source in these publications. Maps of NCNHP data may not be redistributed without permission.

Also please note that the NC Natural Heritage Program may follow this letter with additional correspondence if a Dedicated Nature Preserve, Registered Heritage Area, Clean Water Management Trust Fund easement, or an occurrence of a Federally-listed species is documented near the project area.

If you have questions regarding the information provided in this letter or need additional assistance, please contact Rodney A. Butler at rodney.butler@ncdcr.gov or 919-707-8603.

Sincerely,
NC Natural Heritage Program

Natural Heritage Element Occurrences, Natural Areas, and Managed Areas Intersecting the Project Area
 Clearinghouse 19-0136
 December 21, 2018
 NCNHDE-7799

Element Occurrences Documented Within Project Area

| Taxonomic Group | EO ID | Scientific Name | Common Name | Last Observation Date | Element Occurrence Rank | Accuracy | Federal Status | State Status | Global Rank | State Rank |
|------------------------|-------|-----------------------------|-----------------------------|-----------------------|-------------------------|----------|----------------|--------------------|-------------|------------|
| Crustacean | 529 | Cambarus reburus | French Broad River Crayfish | 2014-06-05 | E | 3-Medium | --- | Significantly Rare | G3 | S2 |
| Dragonfly or Damselfly | 33305 | Neurocordulia yamaskanensis | Stygian Shadowdragon | 1998-07-09 | E | 3-Medium | --- | Significantly Rare | G5 | S1? |
| Freshwater Fish | 6464 | Aplodinotus grunniens | Freshwater Drum | 2014-06-05 | E | 3-Medium | --- | Special Concern | G5 | S1 |
| Freshwater Fish | 17245 | Cottus carolinae | Banded Sculpin | 2017-10-04 | E | 3-Medium | --- | Special Concern | G5 | S1 |
| Freshwater Fish | 11263 | Erimonax monachus | Spotfin Chub | 1888 | X | 3-Medium | Threatened | Threatened | G2 | S1 |
| Freshwater Fish | 29275 | Erimystax insignis | Blotched Chub | 2017-10-04 | E | 3-Medium | --- | Significantly Rare | G4 | S2 |
| Freshwater Fish | 18613 | Etheostoma vulneratum | Wounded Darter | 1870 | X | 3-Medium | --- | Special Concern | G3 | S2 |
| Freshwater Fish | 15487 | Ichthyomyzon bdellium | Ohio Lamprey | 2017-10-04 | E | 3-Medium | --- | Special Concern | G3G4 | S1 |
| Freshwater Fish | 4325 | Lethenteron appendix | American Brook Lamprey | 2009-10-07 | E | 3-Medium | --- | Special Concern | G4 | S1 |
| Freshwater Fish | 29286 | Notropis micropteryx | Highland Shiner | 2017-10-04 | E | 3-Medium | --- | Significantly Rare | G5 | S2 |
| Freshwater Fish | 12827 | Noturus eleutherus | Mountain Madtom | 2014-06-05 | E | 3-Medium | --- | Special Concern | G4 | S1 |
| Freshwater Fish | 12354 | Percina caprodes | Logperch | 2017-10-04 | E | 3-Medium | --- | Threatened | G5 | S1 |
| Freshwater Fish | 19712 | Percina squamata | Olive Darter | 2011-10-05 | E | 3-Medium | --- | Special Concern | G3 | S2 |
| Freshwater Fish | 17990 | Sander canadensis | Sauger | 1997-07-30 | E | 3-Medium | --- | Significantly Rare | G5 | S1 |
| Reptile | 15703 | Apalone spinifera spinifera | Eastern Spiny Softshell | 2010-10-06 | E | 3-Medium | --- | Special Concern | G5T5 | S1 |

Natural Areas Documented Within Project Area

| Site Name | Representational Rating | Collective Rating |
|--|-------------------------|-------------------|
| Deep Water Bridge Area | R2 (Very High) | C4 (Moderate) |
| FRB/Lower French Broad River Aquatic Habitat | R2 (Very High) | C1 (Exceptional) |

Managed Areas Documented Within Project Area*

| Managed Area Name | Owner | Owner Type |
|--|-------------------|------------|
| Pisgah National Forest - Appalachian Ranger District | US Forest Service | Federal |

*NOTE: If the proposed project intersects with a conservation/managed area, please contact the landowner directly for additional information. If the project intersects with a Dedicated Nature Preserve (DNP), Registered Natural Heritage Area (RHA), or Federally-listed species, NCNHP staff may provide additional correspondence regarding the project.

Definitions and an explanation of status designations and codes can be found at <https://ncnhde.natureserve.org/content/help>. Data query generated on December 21, 2018; source: NCNHP, Q4 Oct 2018. Please resubmit your information request if more than one year elapses before project initiation as new information is continually added to the NCNHP database.

Natural Heritage Element Occurrences, Natural Areas, and Managed Areas Within a One-mile Radius of the Project Area
 Clearinghouse 19-0136
 December 21, 2018
 NCNHDE-7799

Element Occurrences Documented Within a One-mile Radius of the Project Area

| Taxonomic Group | EO ID | Scientific Name | Common Name | Last Observation Date | Element Occurrence Rank | Accuracy | Federal Status | State Status | Global Rank | State Rank |
|------------------------|-------|---|-----------------------------|-----------------------|-------------------------|----------|----------------|--------------------|-------------|------------|
| Amphibian | 9371 | <i>Cryptobranchus alleganiensis alleganiensis</i> | Eastern Hellbender | 2017-06-27 | AB | 3-Medium | --- | Special Concern | G3G4T 2 | S3 |
| Crustacean | 529 | <i>Cambarus reburus</i> | French Broad River Crayfish | 2014-06-05 | E | 3-Medium | --- | Significantly Rare | G3 | S2 |
| Dragonfly or Damselfly | 33305 | <i>Neurocordulia yamaskanensis</i> | Stygian Shadowdragon | 1998-07-09 | E | 3-Medium | --- | Significantly Rare | G5 | S1? |
| Freshwater Fish | 19498 | <i>Acipenser fulvescens</i> | Lake Sturgeon | 2017-10-17 | Er | 3-Medium | --- | Special Concern | G3G4 | S1 |
| Freshwater Fish | 6464 | <i>Aplodinotus grunniens</i> | Freshwater Drum | 2014-06-05 | E | 3-Medium | --- | Special Concern | G5 | S1 |
| Freshwater Fish | 3542 | <i>Carpionodes carpio</i> | River Carpsucker | 2006-09-11 | E | 3-Medium | --- | Special Concern | G5 | S1 |
| Freshwater Fish | 27488 | <i>Carpionodes cyprinus</i> | Quillback | 2014-06-05 | E | 3-Medium | --- | Significantly Rare | G5 | S2 |
| Freshwater Fish | 17245 | <i>Cottus carolinae</i> | Banded Sculpin | 2017-10-04 | E | 3-Medium | --- | Special Concern | G5 | S1 |
| Freshwater Fish | 11263 | <i>Erimonax monachus</i> | Spotfin Chub | 1888 | X | 3-Medium | Threatened | Threatened | G2 | S1 |
| Freshwater Fish | 29275 | <i>Erimystax insignis</i> | Blotched Chub | 2017-10-04 | E | 3-Medium | --- | Significantly Rare | G4 | S2 |
| Freshwater Fish | 18613 | <i>Etheostoma vulneratum</i> | Wounded Darter | 1870 | X | 3-Medium | --- | Special Concern | G3 | S2 |
| Freshwater Fish | 9876 | <i>Hiodon tergisus</i> | Mooneye | 2007-05-18 | E | 3-Medium | --- | Special Concern | G5 | S1 |
| Freshwater Fish | 15487 | <i>Ichthyomyzon bdellium</i> | Ohio Lamprey | 2017-10-04 | E | 3-Medium | --- | Special Concern | G3G4 | S1 |
| Freshwater Fish | 27532 | <i>Ictiobus bubalus</i> | Smallmouth Buffalo | 2014-06-05 | E | 3-Medium | --- | Significantly Rare | G5 | S1 |
| Freshwater Fish | 27582 | <i>Ictiobus niger</i> | Black Buffalo | 2001-08-21 | E | 3-Medium | --- | Significantly Rare | G5 | S1 |
| Freshwater Fish | 4325 | <i>Lethenteron appendix</i> | American Brook Lamprey | 2009-10-07 | E | 3-Medium | --- | Special Concern | G4 | S1 |

Element Occurrences Documented Within a One-mile Radius of the Project Area

| Taxonomic Group | EO ID | Scientific Name | Common Name | Last Observation Date | Element Occurrence Rank | Accuracy | Federal Status | State Status | Global Rank | State Rank |
|-------------------------------------|-------|---|---------------------|-----------------------|-------------------------|----------|----------------|-------------------------------------|-------------|------------|
| Freshwater Fish | 29282 | Moxostoma breviceps | Smallmouth Redhorse | 2014-06-05 | E | 3-Medium | --- | Significantly Rare | G5 | S2 |
| Freshwater Fish | 29286 | Notropis micropteryx | Highland Shiner | 2017-10-04 | E | 3-Medium | --- | Significantly Rare | G5 | S2 |
| Freshwater Fish | 29300 | Notropis volucellus | Mimic Shiner | 2010-10-06 | E | 3-Medium | --- | Threatened | G5 | S2 |
| Freshwater Fish | 12827 | Noturus eleutherus | Mountain Madtom | 2014-06-05 | E | 3-Medium | --- | Special Concern | G4 | S1 |
| Freshwater Fish | 12354 | Percina caprodes | Logperch | 2017-10-04 | E | 3-Medium | --- | Threatened | G5 | S1 |
| Freshwater Fish | 19712 | Percina squamata | Olive Darter | 2011-10-05 | E | 3-Medium | --- | Special Concern | G3 | S2 |
| Freshwater Fish | 11061 | Polyodon spathula | Paddlefish | 1983 | H? | 4-Low | --- | Endangered | G4 | SH |
| Freshwater Fish | 17990 | Sander canadensis | Sauger | 1997-07-30 | E | 3-Medium | --- | Significantly Rare | G5 | S1 |
| Freshwater or Terrestrial Gastropod | 11699 | Triodopsis tennesseensis | Budded Threetooth | 1991 | B? | 3-Medium | --- | Significantly Rare | G4 | S1 |
| Mammal | 36193 | Perimyotis subflavus | Tricolored Bat | 2017-01-24 | E | 2-High | --- | Significantly Rare | G2G3 | S3 |
| Moss | 11684 | Tortula papillosa | Papillose Tortula | 1967-02-28 | H | 3-Medium | --- | Significantly Rare | G5 | S1 |
| Moss | 23680 | Tortula plinthobia | A Chain-teeth Moss | 1967-02-28 | H | 3-Medium | --- | Peripheral Significantly Rare Other | G4G5 | S1? |
| Natural Community | 29418 | Acidic Cove Forest (Typic Subtype) | --- | 2010-06-19 | BC | 3-Medium | --- | --- | G5 | S4 |
| Natural Community | 17346 | Acidic Shale Slope Woodland | --- | 2010-06-19 | A | 3-Medium | --- | --- | G2? | S1 |
| Natural Community | 12128 | Acidic Shale Slope Woodland | --- | 2010-04-20 | B? | 3-Medium | --- | --- | G2? | S1 |
| Natural Community | 29404 | Chestnut Oak Forest (Dry Heath Subtype) | --- | 2010-04-20 | A | 3-Medium | --- | --- | G5 | S5 |
| Natural Community | 17956 | Montane Alluvial Forest (Large River Subtype) | --- | 2009-08-16 | B | 2-High | --- | --- | G2? | S1 |
| Natural Community | 19918 | Montane Cliff (Acidic Herb Subtype) | --- | 2000-10-26 | B | 4-Low | --- | --- | G3G4 | S3 |

Element Occurrences Documented Within a One-mile Radius of the Project Area

| Taxonomic Group | EO ID | Scientific Name | Common Name | Last Observation Date | Element Occurrence Rank | Accuracy | Federal Status | State Status | Global Rank | State Rank |
|-------------------|-------|---|-------------------------|-----------------------|-------------------------|----------|----------------|--------------------|-------------|------------|
| Natural Community | 29419 | Montane Oak--Hickory Forest (Basic Subtype) | --- | 2010-06-19 | BC | 2-High | --- | --- | G3 | S3 |
| Natural Community | 29414 | Rich Cove Forest (Montane Rich Subtype) | --- | 2010-04-27 | BC | 2-High | --- | --- | G3G4 | S3 |
| Reptile | 15703 | Apalone spinifera spinifera | Eastern Spiny Softshell | 2010-10-06 | E | 3-Medium | --- | Special Concern | G5T5 | S1 |
| Vascular Plant | 5810 | Adlumia fungosa | Climbing Fumitory | 2010-04-20 | D | 2-High | --- | Special Concern | G4 | S2 |
| Vascular Plant | 23460 | Agastache nepetoides | Yellow Giant-hyssop | 1966-10-08 | H | 3-Medium | --- | Vulnerable | G5 | S1 |
| Vascular Plant | 14365 | Arabis patens | Spreading Rockcress | 1998-07-09 | A? | 3-Medium | --- | Significantly Rare | G3 | S1 |
| Vascular Plant | 16783 | Arabis patens | Spreading Rockcress | 2010-03-19 | A | 3-Medium | --- | Peripheral | G3 | S1 |
| Vascular Plant | 4948 | Asplenium pinnatifidum | Lobed Spleenwort | 1980-05-05 | E | 3-Medium | --- | Significantly Rare | G4 | S2 |
| Vascular Plant | 5802 | Carex eburnea | Bristle-leaf Sedge | 1984 | H | 3-Medium | --- | Peripheral | G5 | S1 |
| Vascular Plant | 21230 | Celastrus scandens | American Bittersweet | 1954-08-14 | H | 3-Medium | --- | Threatened | G5 | S2? |
| Vascular Plant | 6605 | Corydalis micrantha | Slender Corydalis | 2010-04-27 | BC | 2-High | --- | Endangered | G5T4 | S1 |
| Vascular Plant | 19755 | Dicentra eximia | Bleeding Heart | 2010-04-27 | C | 3-Medium | --- | Threatened | G4 | S3 |
| Vascular Plant | 13001 | Draba ramosissima | Branching Draba | 1969-04 | H | 4-Low | --- | Significantly Rare | G4 | S2 |
| Vascular Plant | 19185 | Draba ramosissima | Branching Draba | 2010-03-19 | AB | 3-Medium | --- | Peripheral | G4 | S2 |
| | | | | | | | | Special Concern | | |
| | | | | | | | | Vulnerable | | |
| | | | | | | | | Special Concern | | |
| | | | | | | | | Vulnerable | | |

Element Occurrences Documented Within a One-mile Radius of the Project Area

| Taxonomic Group | EO ID | Scientific Name | Common Name | Last Observation Date | Element Occurrence Rank | Accuracy | Federal Status | State Status | Global Rank | State Rank |
|-----------------|-------|--|------------------------|-----------------------|-------------------------|----------|----------------|-------------------------------------|-------------|------------|
| Vascular Plant | 10346 | <i>Draba ramosissima</i> | Branching Draba | 1985-05 | E | 3-Medium | --- | Special Concern Vulnerable | G4 | S2 |
| Vascular Plant | 23511 | <i>Heuchera pubescens</i> | Downy Alumroot | 1974-07 | H | 3-Medium | --- | Significantly Rare | G4? | S1 |
| Vascular Plant | 26927 | <i>Heuchera pubescens</i> | Downy Alumroot | 2009 | C | 2-High | --- | Peripheral Significantly Rare | G4? | S1 |
| Vascular Plant | 6574 | <i>Myriopteris alabamensis</i> | Alabama Lipfern | 1985-12 | D | 3-Medium | --- | Peripheral Significantly Rare | G4G5 | S1 |
| Vascular Plant | 13071 | <i>Robinia hispida</i> var. <i>kelseyi</i> | Kelsey's Locust | 1967-04-29 | H | 4-Low | --- | Peripheral Significantly Rare Other | G4T1 | S1 |
| Vascular Plant | 33551 | <i>Ruellia purshiana</i> | Pursh's Wild-petunia | 1998-07-09 | E | 2-High | --- | Special Concern Vulnerable | G3 | S2 |
| Vascular Plant | 15176 | <i>Stachys cordata</i> | Heartleaf Hedge-nettle | 1981-08-16 | F | 3-Medium | --- | Significantly Rare Peripheral | G5? | S1 |
| Vascular Plant | 8239 | <i>Symphotrichum oblongifolium</i> | Aromatic Aster | 1958-10-08 | H | 3-Medium | --- | Threatened | G5 | S1 |
| Vascular Plant | 26547 | <i>Symphotrichum oblongifolium</i> | Aromatic Aster | 1998-07-09 | E | 2-High | --- | Threatened | G5 | S1 |
| Vascular Plant | 18893 | <i>Thaspium pinnatifidum</i> | Mountain Thaspium | 1969-05 | H | 3-Medium | --- | Threatened | G2G3 | S1 |

Natural Areas Documented Within a One-mile Radius of the Project Area

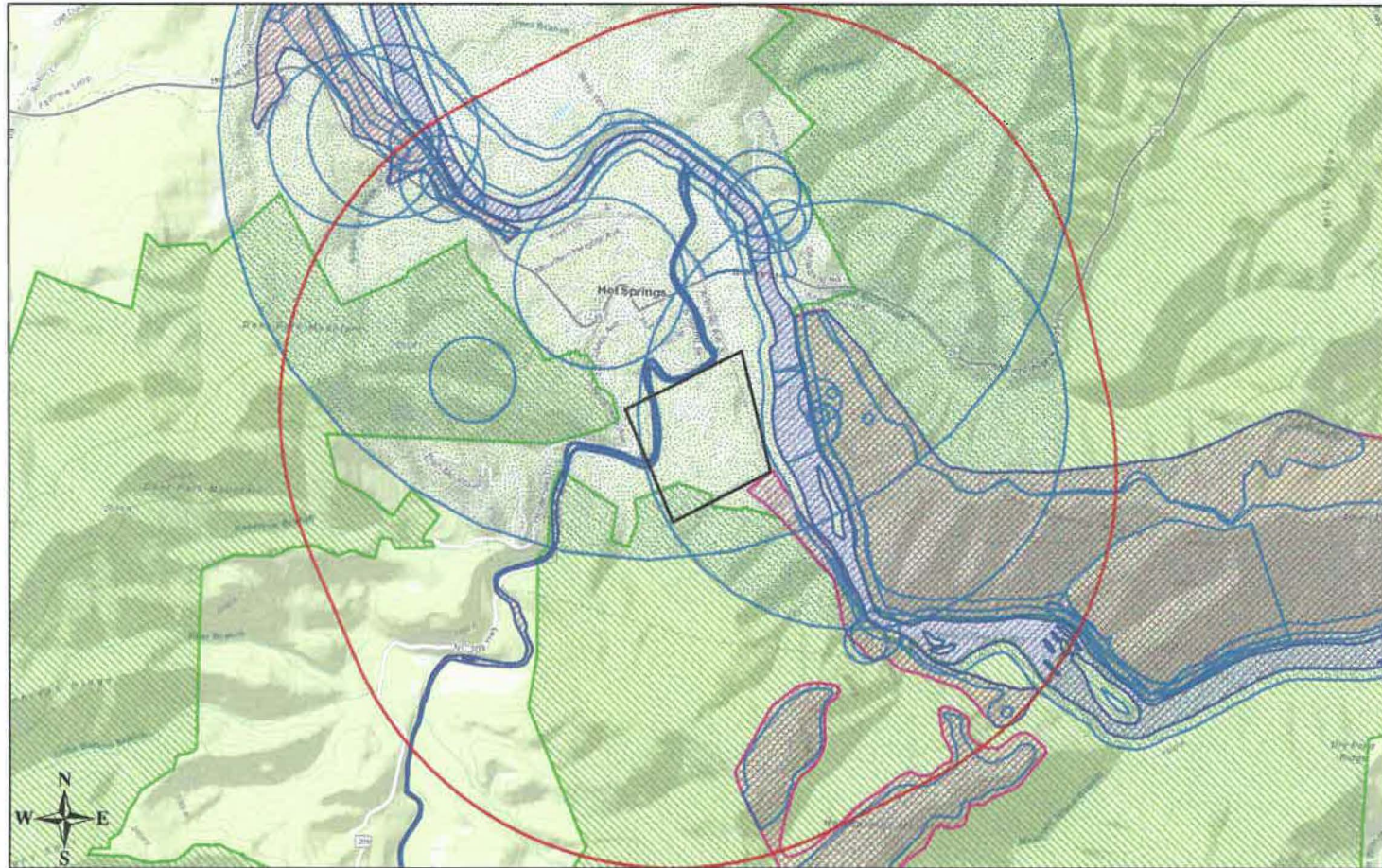
| Site Name | Representational Rating | Collective Rating |
|--|-------------------------|-------------------|
| Deep Water Bridge Area | R2 (Very High) | C4 (Moderate) |
| Stokely Hollow and Ridge | R2 (Very High) | C4 (Moderate) |
| Hot Springs Mountain | R5 (General) | C5 (General) |
| FRB/Lower French Broad River Aquatic Habitat | R2 (Very High) | C1 (Exceptional) |
| Lovers Leap/Stackhouse Slopes | R1 (Exceptional) | C2 (Very High) |

Managed Areas Documented Within a One-mile Radius of the Project Area





| Managed Area Name | Owner | Owner Type |
|--|-------------------|------------|
| Pisgah National Forest - Appalachian Ranger District | US Forest Service | Federal |

Definitions and an explanation of status designations and codes can be found at <https://ncnhde.natureserve.org/content/help>. Data query generated on December 21, 2018; source: NCNHP, Q4 Oct 2018. Please resubmit your information request if more than one year elapses before project initiation as new information is continually added to the NCNHP database.

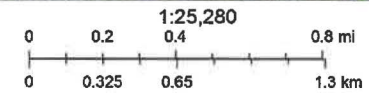
NCNHDE-7799: Clearinghouse 19-0136



December 21, 2018

-  Project Boundary
-  Buffered Project Boundary
-  Natural Heritage Element Occurrence (NHEO)
-  NHP Natural Area (NHNA)

 Managed Area (MAREA)



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community