

ATTACHMENT 3. NATURAL RESOURCES AGENCY CONSULTATIONS



COMMONWEALTH of VIRGINIA
DEPARTMENT OF CONSERVATION AND RECREATION

217 Governor Street
Richmond, Virginia 23219-2010
(804) 786-7951 FAX (804) 371-2674

February 1, 2010

Lisa Billow
Stokes Environmental Associates, Ltd.
4101 Granby Street, Suite 404
Norfolk, VA 23504

Re: #09-3690, WVBE AM Tower Array Modification

Dear Ms. Billow:

The Department of Conservation and Recreation's Division of Natural Heritage (DCR) has searched its Biotics Data System for occurrences of natural heritage resources from the area outlined on the submitted map. Natural heritage resources are defined as the habitat of rare, threatened, or endangered plant and animal species, unique or exemplary natural communities, and significant geologic formations.

According to the information currently in our files, the Roanoke River – North and South Forks Stream Conservation Unit (SCU) is downstream of the project site. SCUs identify stream reaches that contain aquatic natural heritage resources, including 2 miles upstream and 1 mile downstream of documented occurrences, and all tributaries within this reach. SCUs are given a biodiversity significance ranking based on the rarity, quality, and number of element occurrences they contain; on a scale of 1-5, 1 being most significant. The Roanoke River – North and South Forks SCU has been given a biodiversity significance ranking of B2, which represents a site of very high significance. The natural heritage resources of concern associated with this SCU are:

Noturus gilberti
Percina rex

Orangefin madtom
Roanoke logperch

G2/S2/SOC/LT
G1G2/S1S2/LE/LE

The Orangefin madtom, native to the upper Roanoke drainage in Virginia and North Carolina, inhabits moderate to strong riffles and runs having little or no silt in moderate-gradient, intermontane and upper Piedmont streams. This species is an intersticine dweller, found in or near cavities formed by rubble and boulders (Jenkins and Burkhead, 1993). Please note that this species is currently classified as a species of concern by the United States Fish and Wildlife Service (USFWS) and as threatened by the Virginia Department of Game and Inland Fisheries (VDGIF).

The Roanoke logperch is endemic to the Roanoke and Chowan River drainages in Virginia (Burkhead and Jenkins, 1991) and inhabits medium and large, warm and usually clear rivers with sandy to boulder spotted bottoms (TNC et. al., 1991). The Roanoke logperch is threatened by channelization, siltation, impoundment, pollution, and de-watering activities (Burkhead & Jenkins, 1991). Please note that this species is currently classified as endangered by the USFWS and the VDGIF.

In addition, the Roanoke River has been designated by the VDGIF as a "Threatened and Endangered Species Water". The species associated with this T & E Water are the Orange-fin madtom and the Roanoke logperch.

To minimize adverse impacts to the aquatic ecosystem as a result of the proposed activities, DCR recommends the implementation of and strict adherence to applicable state and local erosion and sediment control/storm water management laws and regulations. Due to the legal status of the Roanoke logperch and Orange-fin madtom, DCR also recommends coordination with the USFWS and the VDGIF to ensure compliance with protected species legislation.

The Virginia Karst Program and the Virginia Speleological Survey have also reviewed this project for documented sensitive karst features and caves. This project is situated on karst-forming carbonate rock. If karst features such as sinkholes, caves, disappearing streams, and large springs are encountered during the project, please coordinate with Wil Orndorff (540-394-2552, Wil.Orndorff@dcv.virginia.gov) to document and minimize adverse impacts. Discharge of runoff to sinkholes or sinking streams, filling of sinkholes, and alteration of cave entrances can lead to surface collapse, flooding, erosion and sedimentation, groundwater contamination, and degradation of subterranean habitat for natural heritage resources. If the project involves filling or "improvement" of sinkholes or cave openings, DCR would like detailed location information and copies of the design specifications. In cases where sinkhole improvement is for stormwater discharge, copies of VDOT Form EQ-120 will suffice.

Furthermore, according to the United States Fish and Wildlife Service Guidance dated September 14, 2000 "new construction of communication towers creates a potentially significant impact on migratory birds, especially some 350 species of night-migrating birds". "Communications towers are estimated to kill 4-5 million birds per year and some of these species affected are also protected under the Endangered Species Act and Bald and Golden Eagle Act" (USFWS, 2000). Therefore, DCR recommends voluntary implementation of USFWS interim guidelines for Communication Tower Siting, Construction, Operation, and Decommissioning (<http://www.fws.gov/northeast/virginiafield/pdf/endspecies/Cell%20Towers/Cell%20Guidance.PDF>).

Our files do not indicate the presence of any State Natural Area Preserves under DCR's jurisdiction in the project vicinity.

Under a Memorandum of Agreement established between the Virginia Department of Agriculture and Consumer Services (VDACS) and the Virginia Department of Conservation and Recreation (DCR), DCR represents VDACS in comments regarding potential impacts on state-listed threatened and endangered plant and insect species. The current activity will not affect any documented state-listed plants or insects.

New and updated information is continually added to Biotics. Please contact DCR for an update on this natural heritage information if a significant amount of time passes before it is utilized.

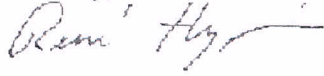
A fee of \$125.00 has been assessed for the service of providing this information. Please find enclosed an invoice for that amount. Please return one copy of the invoice along with your remittance made payable to the Treasurer of Virginia, **DCR - Division of Natural Heritage, 217 Governor Street Richmond, VA 23219**. Payment is due within thirty days of the invoice date. Please note the change of address for remittance of payment as of July 1, 2008. Late payment may result in the suspension of project review service for future projects.

The Virginia Department of Game and Inland Fisheries maintains a database of wildlife locations, including threatened and endangered species, trout streams, and anadromous fish waters that may contain

information not documented in this letter. Their database may be accessed from <http://vafwis.org/fwis/> or contact Shirl Dressler at (804) 367-6913.

Should you have any questions or concerns, feel free to contact me at 804-371-2708. Thank you for the opportunity to comment on this project.

Sincerely,

A handwritten signature in cursive script, appearing to read "S. Rene' Hypes", with a long horizontal flourish extending to the right.

S. Rene' Hypes
Project Review Coordinator

CC: Tylan Dean, USFWS
Ernie Aschenbach, VDGIF
Wil Orndorff, DCR-Karst

Literature Cited

Burkhead, N.M. and R.E. Jenkins. 1991. Roanoke logperch. In Virginia's Endangered Species: Proceedings of a Symposium. K. Terwilliger ed. The McDonald and Woodward Publishing Company, Blacksburg, Virginia. p. 395-397.

Jenkins, R. E., and N. M. Burkhead. 1993. Freshwater fishes of Virginia. American Fisheries Society, Bethesda, Maryland.

The Nature Conservancy and The Network of Natural Heritage Programs and Conservation Data Centers. 1991. Natural Heritage Conservation Databases. Accessed through the Biosource web site project. The Nature Conservancy, Arlington, VA. (7/14/99).

U.S. Fish and Wildlife Service. 2000. Interim Guidelines for Recommendations on Communications Tower Siting, Construction, Operation, and Decommissioning.

**STOKES
ENVIRONMENTAL
ASSOCIATES, LTD.**

FILE COPY

28 December 2009

Rene Hypes
Environmental Review Coordinator
Virginia Department of Conservation and Recreation
203 Governor Street, Suite 213
Richmond, Virginia 23219

RE: Project Review
WVBE (AM) Array Modification
1002 Newman Drive
Salem, Virginia

Dear Ms. Hypes:

I am conducting a Federal Communications Commission (FCC) National Environmental Policy Act (NEPA) investigation of a modification of an existing antenna array at WVBE (AM) located at 1002 Newman Drive in Salem, Virginia. This is a request for review from the Virginia Department of Conservation and Recreation (DCR) of the proposed project.

The site contains five towers: four self-supporting towers at a height of 380 feet, and one guyed tower at a height of 350 feet. The proposed project is to replace the guyed tower and add an additional 350-foot guyed tower. The towers are currently lit with red lights.

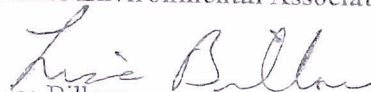
The property is mostly grassland used in the production of hay. Two intermittent streams on the property have been altered. A portion of the tower site is located in the floodplain. The site is surrounded by a single-family residential neighborhood. Based on a search of DCR records, we did not identify any threatened or endangered species, designated critical habitats, wilderness areas, or wildlife preserves at or in the immediate vicinity.

The site location is noted on the enclosed U. S. Geological Survey (USGS) topographic map for the Salem, Virginia Quadrangle and aerial photograph.

Thank you for your assistance with this matter. Please do not hesitate to call me, if you have any questions or need further information.

With best regards.

Sincerely,
Stokes Environmental Associates, Ltd.


Lisa Billow

enclosures



Department of Conservation & Recreation
CONSERVING VIRGINIA'S NATURAL & RECREATIONAL RESOURCES

INFORMATION SERVICES ORDER FORM

Updated 1/09



Print out and fill in this form and mail to:

Project Review Coordinator
DCR Division of Natural Heritage
217 Governor St.
Richmond, VA 23219
Voice: (804) 786-7951 Fax: (804) 371-2674
nhreview@dcr.virginia.gov

ENVIRONMENTAL REVIEW SERVICES:

- ☒ **Project Review** (30 calendar day turnaround)...\$90 per site; add \$35 for 1-5 occurrence, \$60 for 6 or more occurrences.
Multi-quad project area \$90 per quad.
- ☐ **Project Review with Accompanying Map**...\$250 per site; for projects with potential impact to Natural Heritage Resources, written comments with 8.5 X 11 map displaying Natural Heritage Screening Coverage.
- ☐ **Priority Service** (5 business day turnaround)...\$500 surcharge

Details: Describe project in the space below, please include detailed project description, project location information, acreage, and existing site conditions (photographs if available). Fax additional information as necessary. In order to ensure an accurate assessment, please fax a **site map** (preferably from a USGS topo map with identified project boundaries) to: **Environmental Review Coordinator @ (804) 371-2674**. Or you may send electronic copies of all information to nhreview@dcr.virginia.gov. Incomplete submittal of information will delay the review process.

see attached

Natural Heritage Resource Reports & Distribution Maps

- ☐ Custom NHR Maps (describe, call for more information).....\$80/hour
- ☐ Custom NHR Reports (describe, call for more information).....\$60/hour



Department of Conservation & Recreation
CONSERVING VIRGINIA'S NATURAL & RECREATIONAL RESOURCES

INFORMATION SERVICES ORDER FORM

Updated 1/09



4. If fees are assessed, an invoice will be included with the response. Please do not pre-pay.
Payment is due within 30 days of receipt. Minimum charge for hourly fees is \$60.

I understand and agree to the above conditions: ☒ Yes (Required for Fee Services)

PUBLICLY AVAILABLE PRODUCTS

DCR maintains lists of natural heritage resources monitored by the Natural Heritage Program. These lists provide information on taxonomy, rarity and federal/state legal statuses. These reports are not site specific and are **NOT** to be substituted for a project review or for on-site surveys required for environmental assessments of specific project areas.

Due to staff and budget constraints we ask that you use the online service whenever possible to download these lists of natural heritage resources:

 [Natural Heritage Resources of Virginia: Rare Animals \(PDF\)](#)

 [Natural Heritage Resources of Virginia: Rare Plants \(PDF\)](#)

County lists of natural heritage resources can be generated using the Internet Database Search Tool:

[County Lists of Natural Heritage Resources](#)

Send data and invoice (if applicable) to: (Please be sure to include a phone number so we may contact you if we have any questions regarding your data needs)

LISA BILLOW

Name:

Stokes Environmental Associates, Ltd

Company:

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Address:

City/State/Zipcode: Norfolk VA 23504

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Email:

Phone: 757-623-0777 FAX: 757-623-2785 Taxpayer ID#: 54-1551001

Additional Site Information

The WVBE (AM) antenna array is located at 1002 Newman Drive in Salem, Virginia. The array was constructed in 1947 when the station was licensed under the call letters WSLS. The site is labeled as such on the USGS Salem, Virginia topographic map. The approximately 40-acre site contains five towers used as an AM Directional Array with a sequential numeric nomenclature. Towers 1 through 4 are self-supporting at approximately 380-feet, "in-line" along a NW/SE path bisecting the property. Tower 5 is a guyed tower at approximately 350-feet, located northeast of the "in-line towers.

The antenna array includes a ground system for AM antennas consisting of a series of 120 "radial" wires, #10AWG solid copper wires, buried 6 to 14 inches in the ground. The wires are laid out evenly every three degrees stretched out away from the towers for approximately the length of the towers. Where the radials intersect radials from other towers, they are truncated and bonded together using a perpendicular run of copper strap, 3 to 6 inches wide. Screens of copper mesh are buried around the base of the towers at a radius of 20 feet.

The site contains a 2500 SF structure that was used for a studio and office. It is currently vacant. A paved gated driveway provides access to the site. At the base of each tower is a small structure housing tuning network components.

The objective of the modification is to allow the station power increase its signal to 610kHz. It will also facilitate co-location of and subsequent power increase for WFIR(AM) at 960kHz. The proposed modification is the replacement of Tower 5 and construction of an additional tower, Tower 6. Tower 5 will be removed and replaced by a 350-foot guyed tower approximately 100 feet to the south west of the current Tower 5 location. Tower 6 will be a 350-foot guyed tower constructed southwest of Tower 3.

The site is grassland used in production of hay. The topography is rolling with elevations ranging from approximately 1054 AMSL in the floodplain to 1129 AMSL in the northern corner of the site. The property contains two intermittent streams with their confluence located at the southeastern corner of the site. The Lick Branch (Gish Branch on the USGS Salem, Virginia quadrangle) bisects the west side of the property. The streams have been channelized. City sewer lines are buried in the channels and along the western border of the site. The north, west and south borders of the property are forested with mature deciduous trees.

The adjacent land use is single-family residential neighborhoods developed in the 1950s to 1960s.