



STATE OF NORTH CAROLINA
DEPARTMENT OF ADMINISTRATION

ROY COOPER
GOVERNOR

MACHELLE SANDERS
SECRETARY

August 31, 2020

Kimberley Campbell
North Carolina Department of Commerce
Utilities Commission
4325 Mail Service Center
Raleigh, North Carolina 27699-4325

Re: SCH File # 21-E-4600-0681 Application of Sweetleaf Solar, LLC for Certificate to construct a 94 MW Solar Facility in Halifax Co. Docket #EMP-111 Sub 0.

Dear Ms. Campbell:

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 **additional comments** made in the review of this document. The attached comments should be taken into consideration in project development.

Sincerely,

A handwritten signature in cursive script that reads "Crystal Best".

Crystal Best
State Environmental Review Clearinghouse

Attachments



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: 21-0681
Environmental Review - Application of Sweetleaf, LLC for a
Certificate of Public Convenience and Necessity to Construction
a 94 MW Solar Facility, Docket #EMP-111 Sub 0.
Halifax County

Date: August 19, 2020

Please find attached additional comments from the NC Wildlife Resources Commission. They are offering some valuable guidance to minimize impacts to the natural resources, aquatic and terrestrial wildlife resources within and around the project area.

Please forward these to the applicant and assembled into our previous comment package.

Thank you for the opportunity to respond.

Attachment






North Carolina Wildlife Resources Commission

Cameron Ingram, Executive Director

MEMORANDUM

TO: Lyn Hardison, Environmental Assistance Coordinator
NCDEQ Division of Environmental Assistance and Outreach (DEAO)

FROM: Maria T. Dunn, Coastal Habitat Coordinator
Habitat Conservation Division 

DATE: August 18, 2020

SUBJECT: Sweetleaf Solar, LLC, 94 MW Solar Facility, Docket #EMP-111 Sub 0, Halifax County, North Carolina.
OLIA No. 21-0681

Biologists with the North Carolina Wildlife Resources Commission (NCWRC) have reviewed the subject document and we are familiar with the habitat values of the area. Our comments are provided in accordance with provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661-667e), and North Carolina General Statutes (G.S. 113-131 et seq.).

The applicant proposes to construct a 94 MW solar facility located generally west and east of Justice Branch Road, between Delmar Road and Beaverdam Road, north of Enfield, NC.

A map of the proposed project site indicates the solar facility is situated in open agricultural fields as well as in vegetated areas. The conversion of forests and wetlands to support solar development is causing increasing concern due to the loss of wildlife habitat, the fragmentation of wildlife habitat, and vegetative management needed post conversion for wetland and other forested areas. The cumulative impact from this project as well as other developments in the vicinity may pose significant impacts to important aquatic resources.

The project area is subject to the NCDWR's Tar-Pamlico Basin buffer rules and is adjacent to jurisdictional features that serve that drain into the Tar River. The Tar River and tributaries are known to have numerous fresh water mussel species. Included in the USFWS Halifax County records and potentially within the Fishing Creek Subasin are the federal Dwarf wedgemussel (*Alasmidonta heterodon*), Tar River spiny mussel (*Parvaspina steinstansana*), Yellow lance (*Elliptio lanceolata*), Atlantic pigtoe (*Fusconaia masoni*), Green floater (*Lasmigona subviridis*), and Chowanoke crayfish (*Orconectes virginienis*). In addition to the invertebrates, Carolina madtom (*Noturus furiosus*) and Neuse River waterdog (*Necturus lewisi*) may be found in Fishing Creek and tributaries. **Therefore, the**

NCWRC recommends a 200-foot native, forested buffer on perennial streams and a 100-foot forested buffer on intermittent streams, or the full extent of the 100-year floodplain, adjacent to features that contain threatened or endangered species. This is greater than the buffer requirements for the NCDWR's Tar / Pamlico Basin Buffer Rules, but maintaining undisturbed, forested buffers along these areas would reduce impacts to aquatic and terrestrial wildlife resources and improve water quality. Grassed buffers do not provide the necessary and highly valuable functions that forested buffers provide. Any sediment and erosion control structures should also be located outside of these buffers.

In addition to the concerns above, the following statements should be observed:

1. As mentioned above, a 200-foot native, forested buffer on perennial streams and a 100-foot forested buffer on intermittent streams, or the full extent of the 100-year floodplain, adjacent to features that contain threatened or endangered species should be established.
2. 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. Stabilize the stream bottom with geo-textile fabric and rock; concrete should not be used for bed stabilization.
3. Avoid or minimize impacts to wetlands during construction. In addition to providing wildlife habitat, wetland areas perform important functions of flood control and water quality protection. US Army Corps of Engineers Section 404 permits and NCDWR Section 401 Certifications are required for any impacts to jurisdictional streams or wetlands. Temporarily disturbed wetland areas should be returned to original soils and contours, and reseeded with annual small grains appropriate for the season (e.g. oats, millet, rye, wheat, or rye grass) and should be allowed to revert to natural wetland vegetation.
4. If additional overhead transmission lines will be installed, then 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. Consider establishing vegetative cover on the site that is beneficial to wildlife. Plantings should include native warm season grasses and/or wildflower seed mixes to create pollinator habitat within the project boundary. Shade-tolerant plants that are grow between 12 to 18 inches can be selected for planting both underneath and around solar panels. Further information and free technical guidance from the NCWRC is available upon request.
6. 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, herbicides, and other chemicals should not be used in wetland areas or near streams.
7. If pesticides or chemicals will be used for site maintenance, then stormwater runoff from the site should be directed to bio-retention areas prior to discharge to streams or wetlands to provide additional protection for water quality and aquatic and terrestrial wildlife habitats.

8. Sediment and erosion control measures should be installed prior to any land clearing or construction. The use of biodegradable and wildlife-friendly sediment and erosion control devices is strongly recommended. Silt fencing, fiber rolls and/or other products should have loose-weave netting that is made of natural fiber materials with movable joints between the vertical and horizontal twines. Silt fencing or similar materials that have been reinforced with plastic or metal mesh should be avoided as they impede the movement of terrestrial wildlife species. All sediment and erosion control 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.
9. A plan should be developed that identifies the party responsible for decommissioning the facility as well as the conditions under which decommissioning will occur. In addition, the plan should emphasize that all equipment must be removed from the sites, and the land should be restored to pre-construction conditions.
10. Measures to mitigate secondary and cumulative impacts can be found in NCWRC's *Guidance Memorandum to Address and Mitigate Secondary and Cumulative Impacts to Aquatic and Terrestrial Wildlife Resources and Water Quality* (August 2002; http://www.ncwildlife.org/Portals/0/Conserving/documents/2002_GuidanceMemorandumforSecondaryandCumulativeImpacts.pdf).

Thank you for the opportunity to comment on this project. If our agency can be of further assistance, please contact me at (252) 948-3916 or at maria.dunn@ncwildlife.org.