



North Carolina  
Department of Administration

Pat McCrory, Governor

Bill Daughtridge, Jr., Secretary

June 15, 2015

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

**Re: SCH File # 15-E-4600-0622; Amended Application of Bladen City Solar, LLC for Certificate to construct a 50 MW Solar Photovoltaic Electric Generating Facility in Halifax Co. Docket #SP-5220 Sub 0.**

Dear Ms. Mount:

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 cursive script that reads "Crystal Best".

Crystal Best

State Environmental Review Clearinghouse

Attachments

cc: Region N

**Mailing Address:**  
1301 Mail Service Center  
Raleigh, NC 27699-1301

**Telephone:** (919)807-2425  
Fax (919)733-9571  
State Courier #51-01-00  
*e-mail* [state.clearinghouse@doa.nc.gov](mailto:state.clearinghouse@doa.nc.gov)

**Location Address:**  
116 West Jones Street  
Raleigh, North Carolina



North Carolina Department of Environment and Natural Resources

Pat McCrory  
Governor

Donald R. van der Vaart  
Secretary

MEMORANDUM

To: Crystal Best  
State Clearinghouse

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

RE: 15-0622 (15-0472)  
Environmental Review –Amended Application of Bladen Solar, LLC for the Certificate to  
construct a 50 MW Solar Photovoltaic Electric Generating Facility  
Bladen County

Date: June 12, 2015

The Department of Environment and Natural Resources has reviewed 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 to minimize impacts to the natural resources, aquatic and terrestrial wildlife resources within and around the project area. If rare species are found within and around the project area, please contact the staff at the NC Natural Heritage Program, NC Wildlife Resources Commission and the US Fish and Wildlife Services. The comments are attached for the applicant's review.

If the applicant has any questions pertaining to NCDENR permitting processes, please suggest to the applicant to contact David Lee, Permit Assistance Coordinator, in the Department's Raleigh Regional Office, (919)791-4200 for more permitting assistance. The proposed project is located within his geographic working territory.

Thank you for the opportunity to respond.

Attachments



North Carolina Department of Environment and Natural Resources  
Office of Land and Water Stewardship

Pat McCrory  
Governor

Bryan Gossage  
Director

Donald R. van der Vaart  
Secretary

June 10, 2015

**TO:** Lyn Hardison, NC DENR State Clearinghouse Coordinator

**FROM:** Allison (Schwarz) Weakley, North Carolina Natural Heritage Program *Allison Weakley*

**SUBJECT:** Environmental Review – AMENDED Application of Bladen Solar, LLC for Certificate to Construct a 50 MW Solar Photovoltaic Electric Generating Facility on Old Fayetteville Road, Fayetteville, Bladen County, North Carolina

**CC:** Gabriella Garrison, North Carolina Wildlife Resources Commission

**REFERENCE:** Project No. 15-0622 (see also 15-0472)

Thank you for the opportunity to provide information from the North Carolina Natural Heritage Program (NCNHP) database for the proposed project referenced above. Our office provided comments previously for this project on March 31, 2015 (attached for reference), based on the original application. We have mapped the revised project area (based on the parent parcels involved as shown in the amended application) and intersected those parcels with our database to provide the comments below. The source of the parent parcel data we used is 2014 parcel data from Bladen County.

As stated in our previous comments, the NCNHP database shows that the proposed project is within the Horseshoe Lake (Suggs Mill Pond) and Marshy Bay natural area, and includes a record for a high-quality Cypress-Gum Swamp (Blackwater Subtype) natural community within the northern and eastern portions of the proposed project along Turnbull Creek. Our previous comments also provided information on records for rare species within/adjacent to the original project area, and stated that the proposed project is adjacent to properties designated as Game Lands and managed for conservation as a Dedicated Nature Preserve by the North Carolina Wildlife Resources Commission.

Based on the amended application, attached are tables showing records from the NCNHP database for element occurrences (rare species and natural communities), natural areas, and conservation/managed areas that have been documented within/adjacent to the amended project area (mapped as the parent parcels) and records documented within a one-mile radius. Also attached is a map that shows natural heritage resources documented within/adjacent to the parent parcels and within one mile of the parent parcels. As stated in our previous comments, the locations of natural areas and conservation/managed areas may be viewed by accessing the Natural Heritage Data Explorer online map viewer, or by downloading and using GIS data; both options are available from the NCNHP Data Services webpage (see [www.ncnhp.org](http://www.ncnhp.org)).

Also as stated previously, occurrences of rare species documented within one mile of the proposed project area increase the likelihood that these species may be present within the project area if suitable habitat exists. The use of Natural Heritage Program data should not be substituted for actual field surveys if needed, particularly if the project area contains documented occurrences or suitable habitat

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JUN 15 2015

Environmental Review – AMENDED Application of Bladen Solar, LLC for Certificate to Construct a 50 MW Solar Photovoltaic Electric Generating Facility on Old Fayetteville Road, Fayetteville, Bladen County, North Carolina  
Project No. 15-0622 (see also 15-0472)  
June 10, 2015  
Page 2

for rare species. If rare species are found during field surveys, the NCNHP would appreciate receiving this information so that we may update our database.

If the applicant would like more information on the natural heritage resources within/adjacent to and nearby the parent parcels (including the amended project area), or has questions about the information we have provided, we would be happy to provide more specific information. I can be reached at [Allison.Weakley@ncdenr.gov](mailto:Allison.Weakley@ncdenr.gov) or 919-707-8629.

**Natural Heritage Element Occurrences, Natural Areas, and Managed Areas Intersecting the Project Area**  
**Bladen Solar, LLC - Old Fayetteville Road, Fayetteville, Bladen County (AMENDED)**  
 Project No. 15-0622  
 June 10, 2015  
 NCNHDE-354

**Element Occurrences Documented Within Project Area**

Taxonomic Group	EO ID	Scientific Name	Common Name	Last Observation Date	Element Occurrence Status	Accuracy	Federal Status	State Status	Global Rank	State Rank
Amphibian	33425	Hyla andersonii	Pine Barrens Treefrog	2014-06-26	Current	1-Very High	---	Significantly Rare	G4	S3
Natural Community	25030	Cypress--Gum Swamp (Blackwater Subtype)	---	2007-06-25	Current	2-High	---	---	G4?	S4
Vascular Plant	7997	Dionaea muscipula	Venus Flytrap	1981	Historical	3-Medium	Species of Concern	Special Concern Vulnerable	G3	S2

**Natural Areas Documented Within Project Area**

Site Name	Representational Rating	Collective Rating
Horseshoe Lake (Suggs Mill Pond) and Marshy Bay	R1 (Exceptional)	C1 (Exceptional)

**Managed Areas Documented Within Project Area**

Managed Area Name	Owner	Owner Type
Suggs Mill Pond Game Land	NC Wildlife Resources Commission	State
Suggs Mill Pond Game Land	NC Wildlife Resources Commission	State
Suggs Mill Pond Game Land DNP	NC Wildlife Resources Commission	State
Suggs Mill Pond Game Land DNP	NC Wildlife Resources Commission	State

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 June 10, 2015; source: NCNHP, Q2 April 2015. 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  
 Bladen Solar, LLC - Old Fayetteville Road, Fayetteville, Bladen County (AMENDED)

Project No. 15-0622

June 10, 2015

NCNHDE-354

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 Status	Accuracy	Federal Status	State Status	Global Rank	State Rank
Amphibian	24392	<i>Eurycea quadridigitata</i>	Dwarf Salamander	2006-PRE	Current	5-Very Low	---	Special Concern	G5	S2
Amphibian	24315	<i>Hyla andersonii</i>	Pine Barrens Treefrog	1979-09	Current	2-High	---	Significantly Rare	G4	S3
Amphibian	33425	<i>Hyla andersonii</i>	Pine Barrens Treefrog	2014-06-26	Current	1-Very High	---	Significantly Rare	G4	S3
Amphibian	11746	<i>Pseudacris ornata</i>	Ornate Chorus Frog	2014-02-20	Current	2-High	---	Significantly Rare	G5	S1S2
Animal Assemblage	32534	Colonial Wading Bird Colony	---	2009-05-07	Current	2-High	---	---	G5	S3
Bird	14116	<i>Picoides borealis</i>	Red-cockaded Woodpecker	1977-07	Historical	3-Medium	Endangered	Endangered	G3	S2
Butterfly	2649	<i>Callophrys hesseli</i>	Hessel's Hairstreak	2002-03-24	Current	4-Low	---	Significantly Rare	G3G4	S3
Dragonfly or Damselfly	33737	<i>Somatochlora georgiana</i>	Coppery Emerald	2004-PRE	Historical	5-Very Low	---	Significantly Rare	G3G4	S2?
Dragonfly or Damselfly	33779	<i>Stylurus ivae</i>	Shining Clubtail	2004-PRE	Historical	5-Very Low	---	Significantly Rare	G4	S2S3
Freshwater Fish	32367	<i>Enneacanthus obesus</i>	Banded Sunfish	1997-03-24	Current	3-Medium	---	Significantly Rare	G5	S3
Natural Community	30475	Coastal Plain Semipermanent Impoundment (Cypress-Gum Subtype)	---	2010	Current	4-Low	---	---	G4G5	S4
Natural Community	5547	Coastal Plain Semipermanent Impoundment (Open Water Subtype)	---	2010	Current	2-High	---	---	G5	S4
Natural Community	25030	Cypress-Gum Swamp (Blackwater Subtype)	---	2007-06-25	Current	2-High	---	---	G4?	S4

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 Status	Accuracy	Federal Status	State Status	Global Rank	State Rank
Natural Community	30476	Floating Bog	---	2010	Current	4-Low	---	---	G1?	S1
Natural Community	7093	Low Pocosin (Gallberry-Fetterbush Subtype)	---	2010	Current	4-Low	---	---	G2	S2
Natural Community	30434	Pocosin Opening (Sedge-Fern Subtype)	---	2010	Current	4-Low	---	---	G1G2	S1S2
Natural Community	8856	Pond Pine Woodland (Typic Subtype)	---	1995-06-07	Current	6-Unknown	---	---	G3	S3
Natural Community	17363	Pond Pine Woodland (Typic Subtype)	---	1986	Current	4-Low	---	---	G3	S3
Natural Community	4291	Xeric Sandhill Scrub (Typic Subtype)	---	2004-09-09	Current	1-Very High	---	---	G3?	S3S4
Reptile	32727	Alligator mississippiensis	American Alligator	2000-09-17	Current	3-Medium	Threatened Similar Appearance	Threatened	G5	S3
Reptile	27981	Deirochelys reticularia	Chicken Turtle	2008	Current	3-Medium	---	Significantly Rare	G5	S3
Reptile	6389	Masticophis flagellum	Coachwhip	1986-05	Current	4-Low	---	Significantly Rare	G5	S3
Reptile	27980	Masticophis flagellum	Coachwhip	2008	Current	4-Low	---	Significantly Rare	G5	S3
Vascular Plant	7997	Dionaea muscipula	Venus Flytrap	1981	Historical	3-Medium	Species of Concern	Special Concern	G3	S2
Vascular Plant	9275	Drosera filiformis	Threadleaf Sundew	2014-07-11	Current	2-High	---	Vulnerable Special Concern	G4	S2
Vascular Plant	23815	Eriogonum tomentosum	Southern Wild-buckwheat	1890	Historical	5-Very Low	---	Historical Special Concern	G4G5	SH
Vascular Plant	19300	Hypericum suffruticosum	Pineland St. John's-wort	1954-04-24	Historical	4-Low	---	Historical Special Concern	G4G5	SH
Vascular Plant	10861	Rhexia aristosa	Awned Meadow-beauty	1979-09	Historical	4-Low	Species of Concern	Historical Special Concern	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 Status	Accuracy	Federal Status	State Status	Global Rank	State Rank
Vascular Plant	12099	Rhynchospora alba	Northern White Beaksedge	2014-07-08	Current	3-Medium	---	Significantly Rare Peripheral	G5	S2
Vascular Plant	33489	Sagittaria isoetiformis	Quillwort Arrowhead	2014-05-26	Current	1-Very High	---	Threatened	G4?	S2

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

Site Name	Representational Rating	Collective Rating
Horseshoe Lake (Suggs Mill Pond) and Marshy Bay	R1 (Exceptional)	C1 (Exceptional)
Mill Bay Natural Area	R2 (Very High)	C3 (High)

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

Managed Area Name	Owner	Owner Type
Bladen Lakes State Forest	NC Department of Agriculture, Forest Service	State
Suggs Mill Pond Game Land	NC Wildlife Resources Commission	State
Suggs Mill Pond Game Land	NC Wildlife Resources Commission	State
Suggs Mill Pond Game Land	NC Wildlife Resources Commission	State
Nature Conservancy Easement	The Nature Conservancy	Private
Suggs Mill Pond Game Land DNP	NC Wildlife Resources Commission	State
Suggs Mill Pond Game Land DNP	NC Wildlife Resources Commission	State
Suggs Mill Pond Game Land DNP	NC Wildlife Resources Commission	State

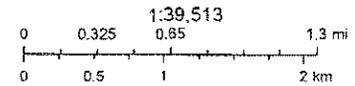
Definitions and an explanation of status designations and codes can be found at <https://ncnhde.natureserve.org/content/help>. Data query generated on June 10, 2015; source: NCNHP, Q2 April 2015. Please resubmit your information request if more than one year elapses before project initiation as new information is continually added to the NCNHP database.

NCNHDE-354: Bladen Solar, LLC - Old Fayetteville Road, Fayetteville, Bladen County (AMENDED)



June 10, 2015

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



Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL,



North Carolina Department of Environment and Natural Resources  
Office of Land and Water Stewardship

Pat McCrory  
Governor

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Secretary

March 31, 2015

**TO:** Lyn Hardison, NCDENR State Clearinghouse Coordinator

**FROM:** Allison (Schwarz) Weakley, North Carolina Natural Heritage Program *Allison Weakley*

**CC:** Gabriela Garrison, North Carolina Wildlife Resources Commission

**SUBJECT:** Environmental Review – Application of Bladen Solar, LLC, for Certificate to Construct a 50 MW Solar Photovoltaic Electric Generating Facility west of Braxton Edge Road, west of Old Fayetteville Road, and east of Walter West Road, Fayetteville, Bladen County, North Carolina

**REFERENCE:** Project No. 15-0472

Thank you for the opportunity to provide information from the North Carolina Natural Heritage Program (NCNHP) database for the proposed project referenced above. The NCNHP database shows that the proposed project is within the Horseshoe Lake (Suggs Mill Pond) and Marshy Bay natural area, and includes a record for a high-quality Cypress-Gum Swamp (Blackwater Subtype) natural community within the northern and eastern portions of the proposed project area along Turnbull Creek. The Horseshoe Lake (Suggs Mill Pond) and Marshy Bay natural area includes a large expanse of rolling sandhills with several large and small Carolina bays, and represents an outstanding cluster of rare plants, rare animals, and important natural communities associated with peat-filled Carolina bays and sandy longleaf pine communities.

There is also a record for Pine Barrens Treefrog within the northern portion of the project area along Turnbull Creek, and a record for Venus Flytrap along the western portion of the project. Further, the proposed project area is adjacent to the Suggs Mill Pond Game Land, owned and managed by the North Carolina Wildlife Resources Commission as a Dedicated Nature Preserve, on both the eastern and western boundaries of the proposed project area.

Within one mile of the proposed project area, the NCNHP database shows element occurrence records for the following rare species:

SCIENTIFIC NAME	COMMON NAME	ELEMENT OCCURRENCE STATUS	ACCURACY	STATE STATUS	FEDERAL STATUS
<i>Alligator mississippiensis</i>	American Alligator	Current	Medium	T	T(S/A)
<i>Colophrys hesseli</i>	Hessel's Hairstreak	Current	Low	SR	---
<i>Deirochelys reticularia</i>	Chicken Turtle	Current	Medium	SR	---
<i>Dionaea muscipula</i>	Venus Flytrap	Historical	Medium	SC-V	FSC
<i>Drosera filiformis</i>	Threadleaf Sundew	Current	High	SC-V	---

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JUN 15 2015

SCIENTIFIC NAME	COMMON NAME	ELEMENT OCCURRENCE STATUS	ACCURACY	STATE STATUS	FEDERAL STATUS
<i>Enneacanthus obesus</i>	Banded Sunfish	Current	Medium	SR	---
<i>Eriogonum tomentosum</i>	Southern Wild-buckwheat	Historical	Very Low	SC-H	---
<i>Eurycea quadridigitata</i>	Dwarf Salamander	Current	Very Low	SC	---
<i>Hyla andersonii</i>	Pine Barrens Treefrog	Current (2 records)	High	SR	---
			Medium		
<i>Masticophis flagellum</i>	Coachwhip	Current (2 records)	Low (2 records)	SR	---
<i>Picoides borealis</i>	Red-cockaded Woodpecker	Historical	Medium	E	E
<i>Pseudacris ornata</i>	Ornate Chorus Frog	Current	Low	SR	---
<i>Rhexia aristosa</i>	Awned Meadow-beauty	Historical	Low	SC-V	FSC
<i>Rhynchospora alba</i>	Northern White Beaksedge	Current	Medium	SR-P	---
<i>Sagittaria isoetiformis</i>	Quillwort Arrowhead	Current	Very High	T	---
<i>Somatochlora georgiana</i>	Coppery Emerald	Historical	Very Low	SR	---
<i>Stylurus ivae</i>	Shining Clubtail	Historical	Very Low	SR	---

\*For status and accuracy definitions, please see the Rare Species Status Definitions and Element Occurrences documents at <https://ncnhde.natureserve.org/content/help>.

The occurrences of American Alligator, Hessel’s Hairstreak, Chicken Turtle, Red-cockaded Woodpecker, Ornate Chorus Frog, Awned Meadow Beauty, Northern White Beaksedge, and Quillwort Arrowhead are all located in and around Suggs Mill Pond (Horseshoe Lake), immediately west of the project area.

As noted above, the occurrence of Venus Flytrap is located along the western portion of the proposed project area, and the occurrence of Threadleaf Sundew is just southwest of the project area in a savanna on the eastern side of Suggs Mill Pond.

The occurrence of Banded Sunfish is located in Turnbull Creek, ca. 0.6 miles north of the project area. An occurrence of a Colonial Wading Bird Colony is also documented at Turnbull Creek, southeast of the project area.

There are two occurrences of Pine Barrens Treefrog within one mile of the project area; as noted above, one occurrence is located within the northern portion of the project area along Turnbull Creek, and the other is located at Suggs Mill Pond just west of the project area. There are also two occurrences of Coachwhip within one mile; one is documented at Suggs Mill Pond, and the other is just southeast of the project area in the vicinity of Ammon.

The occurrence records for Southern Wild-buckwheat, Dwarf Salamander, Coppery Emerald, and Shining Clubtail all have very low accuracy due to the lack of site-specific locational information associated with these records, but these species have been documented in Bladen County.

The NCNHP database also shows records for the following high-quality natural communities within one mile of the project area, all located within the Horseshoe Lake (Suggs Mill Pond) and Marshy Bay natural

area: Coastal Plain Semi-permanent Impoundment (Cypress-Gum and Open Water Subtypes), Cypress-Gum Swamp (Blackwater Subtype), Floating Bog, and Pond Pine Woodland (Typic Subtype). As noted above, a portion of the high-quality Cypress-Gum Swamp natural community occurs within the northern and eastern portions of the project area along Turnbull Creek.

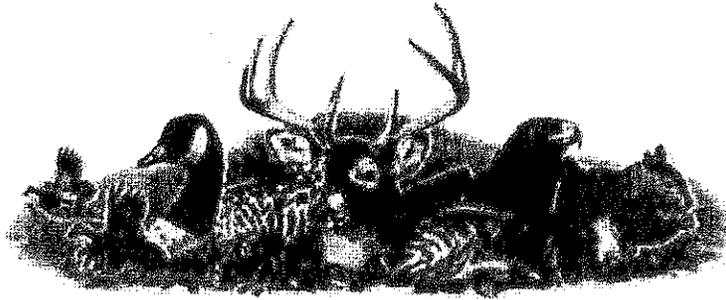
In addition, the NCNHP database shows that the Bladen Lake State Forest is located ca. 0.9 miles northeast of the project area.

The locations of natural areas and conservation/managed areas near the project area may be viewed by accessing the Natural Heritage Data Explorer online map viewer, or by downloading and using Geographic Information System (GIS) data; both options are available from the NCNHP Data Services webpage (see [www.ncnhp.org](http://www.ncnhp.org)).

Please note that although the NCNHP database may not show records for rare species within the proposed project area, it does not necessarily mean that they are not present; it may simply mean that the area has not been surveyed. Occurrences of rare species documented within one mile of the proposed project area increase the likelihood that these species may be present within the project area if suitable habitat exists. The use of Natural Heritage Program data should not be substituted for actual field surveys if needed, particularly if the project area contains suitable habitat for rare species. If rare species are found during field surveys, the NCNHP would appreciate receiving this information so that we may update our database.

Due to the occurrence of a Federal listed species within one mile of the proposed project area, the applicant may want to contact the U.S. Fish and Wildlife Service – Raleigh office directly. Also, because the proposed project area is adjacent to the Suggs Mill Game Land and a Dedicated Nature Preserve on both the eastern and western portions of the project, the applicant may want to contact the North Carolina Wildlife Resources Commission directly.

Please feel free to contact me at [Allison.Weakley@ncdenr.gov](mailto:Allison.Weakley@ncdenr.gov) or 919-707-8629 if you have questions or need additional information.



## ◇ 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: Gabriela Garrison  
Eastern Piedmont Coordinator  
Habitat Conservation *Gabriela Garrison*

DATE: June 8, 2015

SUBJECT: Comments on Bladen City Solar, LLC Solar Facility in Bladen County; Project Number 15-0622 (previously submit as 15-0472).

Biologists with the North Carolina Wildlife Resources Commission (NCWRC) have reviewed the proposed project description. Comments are provided in accordance with certain provisions of the North Carolina 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.).

Bladen City Solar, LLC (previously submit as Bladen Solar, LLC, 15-0472) proposes to construct a 50 MW solar photovoltaic electric generating facility in Bladen County. The facility would be located on both the east and west sides of Old Fayetteville Road, east of the intersection with Walter West Road, southeast of Fayetteville.

An aerial view of the proposed location suggests the project is sited on both forested and cleared land. The western portion of the property is within the Horseshoe Lake and Marshy Bay Natural Heritage Natural Area. Clearing trees from this site and installing solar panels will significantly diminish this sensitive habitat and displace a diverse array of wildlife species. The NCWRC urges the applicant to install solar panels on previously cleared and disturbed land. Solar projects should be sited to avoid impacts to wetlands, streams, riparian buffers and priority wildlife habitat.

Aerial images and maps indicate Turnbull Creek flows in between the eastern and western portions of the property. There are records for the state- special concern (SSC) dwarf salamander (*Eurycea quadridigitata*) on the project site. The NCWRC-owned Suggs Mill Pond Game Lands (SMGL) are located both east and west of the project site. In the western section of the SMGL, there are records for the following species: the state-significantly rare (SSR), chicken turtle (*Deirochelys reticularia*), ornate chorus frog (*Pseudacris ornata*), pine barrens treefrog (*Hyla andersonii*) and coachwhip (*Masticophis flagellum*); the state-threatened and federally threatened (due to similarity of appearance) American

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**Mailing Address:** Division of Inland Fisheries • 1721 Mail Service Center • Raleigh, NC 27699-1721  
**Telephone:** (919) 707-0220 • **Fax:** (919) 707-0028

June 8, 2015  
Bladen City Solar, LLC  
DENR Project No. 15-0622

alligator (*Alligator mississippiensis*); and the SSC dwarf salamander. In the eastern section of the SMGL, there are records for the following species: the SSR coachwhip, the SSC dwarf salamander and a great blue heron (*Ardea herodias*) rookery. Due to the presence of these rare and sensitive species, the NCWRC continues to stress the importance of minimizing disturbance, protecting water quality and enhancing habitat. The following recommendations will minimize impacts to aquatic and terrestrial wildlife resources:

1. The project footprint should be surveyed for wetlands and streams to ensure there are no impacts to surface waters. In addition to providing wildlife habitat, wetland areas and streams aid in 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 required for any impacts to jurisdictional streams or wetlands.
2. 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 and travel corridors for wildlife species. In addition, forested riparian buffers protect water quality by stabilizing stream banks and filtering stormwater runoff.
3. 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>.
4. Consider contacting Tom Padgett, District Wildlife Biologist, at (910) 645-4115 or [thomas.padgett@ncwildlife.org](mailto:thomas.padgett@ncwildlife.org) for information and ideas on establishing vegetation or incorporating other measures that are beneficial for wildlife.
5. If pesticides or chemicals will be used for site maintenance, stormwater runoff from the site should be funneled to bio-retention areas prior to discharge to streams or wetlands. Pesticides, fertilizers and other chemicals should not be used in wetland areas or near streams.
6. 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 that has been reinforced with plastic or metal mesh should be avoided as it impedes the movement of terrestrial wildlife species. Excessive silt and sediment loads can have detrimental effects on aquatic resources including destruction of spawning habitat, suffocation of eggs and clogging of gills.

Thank you for the opportunity to review and comment on this project. If I can be of further assistance, please contact me at (910) 409-7350 or [gabriela.garrison@ncwildlife.org](mailto:gabriela.garrison@ncwildlife.org).

ec: Tom Padgett, NCWRC

State of North Carolina  
 Department of Environment and Natural Resources  
 INTERGOVERNMENTAL REVIEW - PROJECT COMMENTS

Reviewing Office: FRO

Project Number 15-0622 Due Date: 6/8/2015  
 County BLADEN

After review of this project it has been determined that the ENR 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.

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Jun 15 2015

	PERMITS	SPECIAL APPLICATION PROCEDURES or REQUIREMENTS	Normal Process Time (statutory time limit)
<input type="checkbox"/>	Permit to construct & operate wastewater treatment facilities, sewer system extensions & sewer systems not discharging into state surface waters.	Application 90 days before begin construction or award of construction contracts. On-site inspection. Post-application technical conference usual.	30 days (90 days)
<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 begin 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 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 Encasement 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 type="checkbox"/>	Permit to construct & operate Transportation Facility as per 15A NCAC (2D.0800, 2Q.0601)	Application must be submitted at least 90 days prior to construction or modification of the source.	90 days
<input 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.		
<input type="checkbox"/>	Complex Source Permit required under 15 A NCAC 2D.0800		
<input checked="" 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 to be disturbed. Plan filed with proper Regional Office (Land Quality Section) At least 30 days before beginning activity. 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"/>	Mining Permit	On-site inspection usual. Surety bond filed with ENR Bond amount varies with type mine and number of acres of affected land. Any are mined 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"/>	North Carolina Burning permit	On-site inspection by N.C. Division Forest Resources if permit exceeds 4 days	1 day (N/A)
<input type="checkbox"/>	Special Ground Clearance Burning Permit - 22 counties in coastal N.C. with organic soils	On-site inspection by N.C. Division Forest Resources required "if more than five acres of ground clearing activities are involved. Inspections should be requested at least ten days before actual burn is planned."	1 day (N/A)
<input type="checkbox"/>	Oil Refining Facilities	N/A	90-120 days (N/A)
<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, certify construction is according to ENR approved plans. May also require 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 of the total project cost will be required upon completion.	30 days (60 days)

February 11, 2015

County <b>BLADEN</b>		Project Number: <u>15-0622</u>	Due Date: <u>6/8/2015</u>	Normal Process Time (statutory time limit)
PERMITS		SPECIAL APPLICATION PROCEDURES or REQUIREMENTS		
<input type="checkbox"/>	Permit to drill exploratory oil or gas well	File surety bond of \$5,000 with ENR running to State of NC conditional that any well opened by drill operator shall, upon abandonment, be plugged according to ENR rules and regulations.		10 days N/A
<input type="checkbox"/>	Geophysical Exploration Permit	Application filed with ENR 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 checked="" type="checkbox"/>	401 Water Quality Certification	N/A		60 days (130 days)
<input type="checkbox"/>	CAMA Permit for MAJOR development	\$250.00 fee must accompany application		55 days (150 days)
<input type="checkbox"/>	CAMA Permit for MINOR development	\$50.00 fee must accompany application		22 days (25 days)
<input type="checkbox"/>	Several geodetic monuments are located in or near the project area. If any monument needs to be moved or destroyed, please notify: N.C. Geodetic Survey, Box 27687 Raleigh, NC 27611			
<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"/>	Compliance with 15A NCAC 2H 1000 (Coastal Stormwater Rules) is required.			45 days (N/A)
<input type="checkbox"/>	Catawba, Jordan Lake, Randalman, Tar Pamlico or Neuse Riparian Buffer Rules required.			
<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 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

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

Division	Initials	No comment	Comments	Date Review
DAQ	GWR	<input checked="" type="checkbox"/>		5/18/15
DWR-WQROS (Aquifer & Surface)	BSH	<input type="checkbox"/>		/ / 5/21/15
DWR-PWS		<input type="checkbox"/>		/ /
DEMLR (LQ & SW)	LHB	<input checked="" type="checkbox"/>		5/19/15
DWM - UST	KEC	<input checked="" type="checkbox"/>		5/18/15

**REGIONAL OFFICES**

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

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> <b>Asheville Regional Office</b><br>2090 US Highway 70<br>Swannanoa, NC 28778<br>(828) 296-4500                           | <input type="checkbox"/> <b>Mooresville Regional Office</b><br>610 East Center Avenue, Suite 301<br>Mooresville, NC 28115<br>(704) 663-1699 | <input type="checkbox"/> <b>Wilmington Regional Office</b><br>127 Cardinal Drive Extension<br>Wilmington, NC 28405<br>(910) 796-7215              |
| <input type="checkbox"/> <b>Fayetteville Regional Office</b><br>225 North Green Street, Suite 714<br>Fayetteville, NC 28301-5043<br>(910) 433-3300 | <input type="checkbox"/> <b>Raleigh Regional Office</b><br>3800 Barrett Drive, Suite 101<br>Raleigh, NC 27609<br>(919) 791-4200             | <input type="checkbox"/> <b>Winston-Salem Regional Office</b><br>450 West Hanes Mill Road, Suite 300<br>Winston-Salem, NC 27105<br>(336) 771-9800 |
|  | <input type="checkbox"/> <b>Washington Regional Office</b><br>943 Washington Square Mall<br>Washington, NC 27889<br>(252) 946-6481          |   |

NORTH CAROLINA STATE CLEARINGHOUSE  
DEPARTMENT OF ADMINISTRATION  
INTERGOVERNMENTAL REVIEW

COUNTY: BLADEN

H11: ENERGY RELATED  
FACILITIES/ACTIVITIES

STATE NUMBER: 15-E-4600-0620  
DATE RECEIVED: 05/13/2015  
AGENCY RESPONSE: 06/08/2015  
REVIEW CLOSED: 06/12/2015

MS ELIZABETH HEATH  
CLEARINGHOUSE COORDINATOR  
DEPT OF AGRICULTURE  
1001 MSC - AGRICULTURE BLDG  
RALEIGH NC

REVIEW DISTRIBUTION

CC&PS - DIV OF EMERGENCY MANAGEMENT  
DENR LEGISLATIVE AFFAIRS  
DEPT OF AGRICULTURE  
DEPT OF CULTURAL RESOURCES  
DEPT OF TRANSPORTATION  
LUMBER RIVER COG

PROJECT INFORMATION

APPLICANT: N.C. Department of Commerce  
TYPE: State Environmental Policy Act  
Environmental Review

DESC: Amended Application of Bladen City Solar, LLC for Certificate to construct a 50 MW Solar Photovoltaic Electric Generating Facility in Halifax Co. Docket #SP-5220 Sub 0. - View document at <http://starwl.ncuc.net/NCUC/portal/ncuc/page/Dockets/portal.aspx>, Type SP-5220 Sub 0 in the Docket Number search line.

Located on both east and west sides of Old Fayetteville Road, east of the intersection with Walter West Road, Fayetteville, NC

Amended due to shift in location and addition of land.

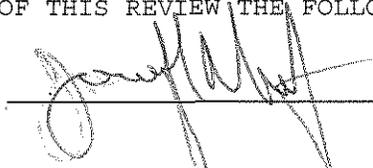
CROSS-REFERENCE NUMBER: 15-E-4600-0472

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:



DATE:

5/22/2015



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Jun 15 2015

NORTH CAROLINA STATE CLEARINGHOUSE  
DEPARTMENT OF ADMINISTRATION  
INTERGOVERNMENTAL REVIEW

*Phil Geary*

COUNTY: BLADEN

H11: ENERGY RELATED  
FACILITIES/ACTIVITIES

STATE NUMBER: 15-E-4600-0620  
DATE RECEIVED: 05/13/2015  
AGENCY RESPONSE: 06/08/2015  
REVIEW CLOSED: 06/12/2015

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

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DEPT OF CULTURAL RESOURCES  
DEPT OF TRANSPORTATION  
LUMBER RIVER COG

PROJECT INFORMATION

APPLICANT: N.C. Department of Commerce  
TYPE: State Environmental Policy Act  
Environmental Review

DESC: Amended Application of Bladen City Solar, LLC for Certificate to construct a 50 MW Solar Photovoltaic Electric Generating Facility in Halifax Co. Docket #SP-5220 Sub 0. - View document at <http://starwl.ncuc.net/NCUC/portal/ncuc/page/Dockets/portal.aspx>, Type SP-5220 Sub 0 in the Docket Number search line.

Located on both east and west sides of Old Fayetteville Road, east of the intersection with Walter West Road, Fayetteville, NC

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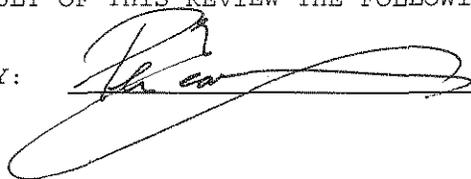
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AS A RESULT OF THIS REVIEW THE FOLLOWING IS SUBMITTED:  NO COMMENT  COMMENTS ATTACHED

SIGNED BY:



DATE:

*5/28/15*



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JUN 15 2015

NORTH CAROLINA STATE CLEARINGHOUSE  
DEPARTMENT OF ADMINISTRATION  
INTERGOVERNMENTAL REVIEW

COUNTY: BLADEN

H11: ENERGY RELATED  
FACILITIES/ACTIVITIES

STATE NUMBER: 15-E-4600-0622  
DATE RECEIVED: 05/13/2015  
AGENCY RESPONSE: 06/08/2015  
REVIEW CLOSED: 06/12/2015

MS CAROLYN PENNY  
CLEARINGHOUSE COORDINATOR  
CC&PS - DIV OF EMERGENCY MANAGEMENT  
FLOODPLAIN MANAGEMENT PROGRAM  
MSC # 4719  
RALEIGH NC

MAY 18 2015

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DEPT OF TRANSPORTATION  
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PROJECT INFORMATION

APPLICANT: N.C. Department of Commerce  
TYPE: State Environmental Policy Act  
Environmental Review

DESC: Amended Application of Bladen City Solar, LLC for Certificate to construct a 50 MW Solar Photovoltaic Electric Generating Facility in Halifax Co. Docket #SP-5220 Sub 0. - View document at <http://starw1.ncuc.net/NCUC/portal/ncuc/page/Dockets/portal.aspx>, Type SP-5220 Sub 0 in the Docket Number search line.

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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:

*Donna Herby*

DATE:

*5/10/15*

*Not in SFHA.*



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JUN 15 2015