



M–NPPC APPROVAL STAMP

Exhibit 9f CU 25-07



March 15, 2024

Kelly Crum
Bowman Consulting Group, Ltd.
13461 Sunrise Valley Drive
Suite 500
Herndon, VA 20171

RE: Environmental Review for Barnesville Road Solar Project, 17700 Barnesville Road, Poolesville, Montgomery County, Maryland

Dear Kelly Crum:

The Wildlife and Heritage Service has no official records for State or Federal listed, candidate, proposed, or rare plant or animal species within the project area shown on the map provided. As a result, we have no specific concerns regarding potential impacts to such species or recommendations for protection measures at this time.

We would like to point out, however, that our remote analysis suggests that the forested area on this property contains Forest Interior Dwelling Species (FIDS) habitat, especially for birds. Populations of many bird species which depend on this type of forested habitat are declining in Maryland and throughout the Eastern United States. The declines in FIDS populations have been attributed in part to the loss and fragmentation of forests due largely to urbanization, agriculture, and some forest management practices. The key to maintaining suitable breeding habitat for FIDS, and halting or reversing their declines, is the protection of extensive, unbroken forested areas throughout the region. The conservation of FIDS habitat throughout Maryland is strongly encouraged by the Wildlife and Heritage Service.

If the project changes in the future such that the limits of proposed disturbance or overall site boundaries are modified, please provide us with revised project maps and we will provide you with an updated evaluation. Thank you for allowing us the opportunity to review this project. If you should have any further questions regarding this information, please contact me at lori.byrne@maryland.gov or at (410) 260-8573.

Sincerely,

Lori A. Byrne,
Environmental Review Coordinator
Wildlife and Heritage Service
MD Dept. of Natural Resources

ER# 2024.0328.mo
Cc: F. Kelley, DNR

Tawes State Office Building – 580 Taylor Avenue – Annapolis, Maryland 21401
410-260-8DNR or toll free in Maryland 877-620-8DNR – dnr.maryland.gov – TTY Users Call via the Maryland Relay



June 12, 2024

Kelly Crum
Bowman Consulting Group, Ltd.
13461 Sunrise Valley Drive
Suite 500
Herndon, VA 20171

RE: Environmental Review for Barnesville Road Solar Project - Tax Map CV62 Parcel 20, 17700 Barnesville Road, 105.7 Acres, Montgomery County, Maryland.

Dear Kelly Crum:

The Wildlife and Heritage Service has no official records for State or Federal listed, candidate, proposed, or rare plant or animal species within the project area shown on the map provided. As a result, we have no specific concerns regarding potential impacts to such species or recommendations for protection measures at this time.

We would like to point out, however, that our remote analysis suggests that the forested area on this property contains Forest Interior Dwelling Species (FIDS) habitat, especially for birds. Populations of many bird species which depend on this type of forested habitat are declining in Maryland and throughout the Eastern United States. The declines in FIDS populations have been attributed in part to the loss and fragmentation of forests due largely to urbanization, agriculture, and some forest management practices. The key to maintaining suitable breeding habitat for FIDS, and halting or reversing their declines, is the protection of extensive, unbroken forested areas throughout the region. The conservation of FIDS habitat throughout Maryland is strongly encouraged by the Wildlife and Heritage Service.

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Sincerely,

Lori A. Byrne,
Environmental Review Coordinator
Wildlife and Heritage Service
MD Dept. of Natural Resources

ER# 2024.0925.mo
Cc: F. Kelley, DNR

Tawes State Office Building – 580 Taylor Avenue – Annapolis, Maryland 21401
410-260-8DNR or toll free in Maryland 877-620-8DNR – dnr.maryland.gov – TTY Users Call via the Maryland Relay

FOREST STAND DATA COLLECTION METHODOLOGY

TREE DIAMETERS WERE MEASURED USING A FORESTRY DIAMETER TAPE. THE SIZE AND FREQUENCY OF FOREST SAMPLE POINTS WERE DETERMINED IN ORDER TO MAXIMIZE THE RESOLUTION OF SAMPLING AND CAPTURE SMALL CHANGES OF SPECIES COMPOSITION THAT TYPICALLY OCCUR ACROSS A FOREST. SAMPLE POINT LOCATIONS WERE CHOSEN RANDOMLY. THE LOCATION OF THE SAMPLE POINTS WERE FIELD MAPPED BASED ON EXISTING CONDITIONS AND TOPOGRAPHIC MAPPING.

THE REFERENCE INFORMATION WAS VERIFIED BY A SITE INSPECTION CONDUCTED BY BCG ON MARCH 12, 2024. A 1/10 ACRE (37.5' RADIUS) FIXED PLOT SAMPLING TECHNIQUE WAS USED TO SAMPLE FOREST STAND CONDITIONS AT 5 POINTS ACROSS THE SITE, AND THE FOREST STRUCTURE ANALYSIS WAS CALCULATED FROM DATA TALLIED AT EACH OF THE SAMPLE POINT LOCATIONS. EXISTING VEGETATION WAS CHARACTERIZED BY SPECIES COMPOSITION AND DIVIDED INTO STANDS.

FOUR FOREST STAND TYPES WERE IDENTIFIED ON THE PROPERTY INCLUDING 11.17 ACRES OF BLACK LOCUST FOREST (SAF FOREST COVER TYPE #50), 17.73 ACRES OF BLACK CHERRY/ MAPLE FOREST (SAF FOREST COVER TYPE #28), 8.90 ACRES OF SASSAFRAS/ PERSIMMON FOREST (SAF FOREST COVER TYPE #64), & 23.67 ACRES OF YELLOW-POPLAR (SAF FOREST COVER TYPE #57) . THERE IS APPROXIMATELY 61.47 ACRES OF QUALIFYING FOREST THAT EXISTS ON THE PROPERTY.

TREE TABLE

TREE NO.	BOTANICAL NAME	COMMON NAME	D.B.H. (in)	CONDITION	(CRZ) CRITICAL ROOT ZONE
101*	Prunus serotina	Black Cherry	24	70	36
102*	Prunus serotina	Black Cherry	29	50	44
103*	Prunus serotina	Black Cherry	27	45	41
104**	Prunus serotina	Black Cherry	30	30	45
105**	Ulmus americana	American Elm	33.5	40	50
106*	Prunus serotina	Black Cherry	26	50	39
107	Prunus serotina	Black Cherry	22.5	60	34
108	Prunus serotina	Black Cherry	20	0	30
109	Prunus serotina	Black Cherry	22	50	33
110*	Prunus serotina	Black Cherry	28.5	65	43
111	Ulmus americana	American Elm	22	60	33
112**	Ulmus americana	American Elm	73	40	110
113*	Juglans nigra	Black Walnut	25.5	50	38
114**	Ulmus americana	American Elm	32	40	48

NOTES:

- * DENOTES A SIGNIFICANT TREE (24–29" DBH), 6 TREES WITHIN DETAILED STUDY AREA
- ** DENOTES A SPECIMEN TREE, 4 TREES WITHIN DETAILED STUDY AREA

SOILS TABLE

SOIL SERIES	SLOPE CATEGORY	EROSION HAZARD	K FACTOR	HYDRIC SOILS	HYDRIC INCLUSIONS	PRIME AGRICULTURAL	SERPENTINITE
5A	0–3%	SLIGHT	0.37	NO	BAILE	NO	NO
5B	3–8%	SLIGHT	0.37	NO	BAILE	NO	NO
6A	0–3%	SLIGHT	0.37	YES	N/A	NO	NO
9B	3–8%	SLIGHT	0.24	NO	BAILE	NO	NO
16B	3–8%	SLIGHT	0.20	NO	BAILE	NO	NO
16C	8–15%	SLIGHT	0.20	NO	BAILE	NO	NO
16D	15–25%	MODERATE	0.24	NO	BAILE	NO	NO
17B	3–8%	SLIGHT	0.37	NO	BAILE	NO	NO
17C	8–15%	SLIGHT	0.37	NO	BAILE	NO	NO
54A	0–3%	SLIGHT	0.49	YES	N/A	NO	NO
109D	15–25%	MODERATE	0.24	NO	BAILE	NO	NO
116E	25–45%	SEVERE	0.28	NO	BAILE	NO	NO

NOTES:

- SOILS INFORMATION PROVIDED IN TABLE WAS OBTAINED FROM A COMBINATION OF THE USDA WEB SOIL SURVEY AND APPENDIX E OF THE MONTGOMERY COUNTY TREES TECHNICAL MANUAL.

RESOURCE DATA TABLE

EXISTING FORESTED AREA (AC.)	EXISTING WETLANDS (AC.)	FORESTED WETLANDS (AC.)	EXISTING FLOODPLAINS (AC.)	FORESTED FLOODPLAIN (AC.)	EXISTING STREAM BUFFER (AC.)	FORESTED STREAM BUFFER (AC.)
61.47 ACRES	4.12 ACRES	3.35 ACRES	0.00 ACRES	0.00 ACRES	24.28 ACRES	20.52 ACRES

FOREST STAND DESCRIPTIONS

FOREST STAND 'A'

FOREST STAND SAMPLE POINTS A1, A2, & A3 WERE COLLECTED WITHIN FOREST STAND 'A'. THIS FOREST STAND CONSISTS OF APPROXIMATELY 10.76 ACRES OF UPLAND EARLY/MID SUCCESSION DECIDUOUS FOREST DOMINATED BY AMERICAN ELM (27%), BLACK LOCUST (19%), WHITE MULBERRY (17%), RED MAPLE (12%) & BLACK WALNUT (9%). THE STAND CONTAINS AN AVERAGE OF 260 STEMS/ACRE WITH 46% OF STEMS RANGING FROM 2"–5.9" DBH, 23% RANGING FROM 6"–9.9" DBH, 26% RANGING FROM 10"–17.9" DBH, 4% RANGING FROM 18"–29.9" DBH, & 1% GREATER THAN 30" DBH. A MODERATE AMOUNT OF INVASIVE SPECIES, INCLUDING POISON IVY, ENGLISH IVY, VINCA, WINTERCREEPER, HONEYSUCKLE AND MULTI-FLORA ROSE WERE OBSERVED WITHIN FOREST STAND 'A'. OVERALL, THE STAND WAS FOUND TO BE IN FAIR TO GOOD HEALTH/CONDITION AND DEMONSTRATES GOOD FOREST STRUCTURE. THE FOREST STAND IS CONSIDERED TO BE SAF FOREST COVER TYPE #50 – BLACK LOCUST AND IS CLASSIFIED AS PRIORITY AREA 1 (HIGH) BASED ON THE PRESENCE OF NONTIDAL WETLANDS & THEIR ASSOCIATED BUFFERS, SLOPES OVER 25%, AND THE PRESENCE OF SPECIMEN TREES.

FOREST STAND 'B'

FOREST STAND SAMPLE POINT B1 & B2 WERE COLLECTED WITHIN FOREST STAND 'B'. THIS FOREST STAND CONSISTS OF APPROXIMATELY 0.41 ACRES OF UPLAND EARLY/MID SUCCESSION DECIDUOUS FOREST DOMINATED BY PERSIMMON (20%), BLACK LOCUST (20%), BLACK CHERRY (18%), TREE OF HEAVEN (16%), & WHITE MULBERRY (11%). THE STAND CONTAINS AN AVERAGE OF 220 STEMS/ACRE WITH 27% OF STEMS RANGING FROM 2"–5.9" DBH, 30% RANGING FROM 6"–9.9" DBH, AND 36% RANGING FROM 10"–17.9" DBH, AND 7% RANGING FROM 18"–29.9" DBH. A MODERATE AMOUNT OF INVASIVE SPECIES, INCLUDING POISON IVY, ENGLISH IVY, VINCA, AND MULTI-FLORA ROSE WERE OBSERVED WITHIN FOREST STAND 'B'. OVERALL, THE STAND WAS FOUND TO BE IN GOOD TO FAIR HEALTH/CONDITION AND DEMONSTRATES GOOD FOREST STRUCTURE. THE FOREST STAND IS CONSIDERED TO BE SAF FOREST COVER TYPE #50 – BLACK LOCUST AND IS CLASSIFIED AS PRIORITY AREA 1 (HIGH) BASED ON THE PRESENCE OF SLOPES OVER 25%.

FOREST STAND 'C'

FOREST STAND SAMPLE POINTS C1, C2, C3, & C4 WERE COLLECTED WITHIN FOREST STAND 'C'. THIS FOREST STAND CONSISTS OF APPROXIMATELY 17.73 ACRES OF UPLAND EARLY/MID SUCCESSION DECIDUOUS FOREST DOMINATED BY BLACK CHERRY (20%), BLACK WALNUT (17%), AMERICAN ELM (11%), BLACK GUM (9%), RED MAPLE (6%), & BLACK LOCUST (6%). THE STAND CONTAINS AN AVERAGE OF 132 STEMS/ACRE WITH 30% OF STEMS RANGING FROM 2"–5.9" DBH, 33% RANGING FROM 6"–9.9" DBH, 24% RANGING FROM 10"–17.9" DBH, 4% RANGING FROM 18"–29.9" DBH AND 2% RANGING >30" DBH. A SIGNIFICANT MODERATE OF INVASIVE SPECIES, POISON IVY, ENGLISH IVY, VINCA, HONEYSUCKLE, WINTERCREEPER AND MULTI-FLORA ROSE WERE OBSERVED WITHIN FOREST STAND 'C'. OVERALL, THE STAND WAS FOUND TO BE IN GOOD TO FAIR HEALTH/CONDITION AND DEMONSTRATES GOOD FOREST STRUCTURE. THE FOREST STAND IS CONSIDERED TO BE SAF FOREST COVER TYPE #28 – BLACK CHERRY/ MAPLE AND IS CLASSIFIED AS PRIORITY AREA 1 (HIGH) BASED ON THE PRESENCE OF NONTIDAL WETLANDS & THEIR ASSOCIATED BUFFERS, SLOPES OVER 25%, AND THE PRESENCE OF SPECIMEN TREES.

FOREST STAND 'D'

FOREST STAND SAMPLE POINTS D1, D2, & D3 WERE COLLECTED WITHIN FOREST STAND 'D'. THIS FOREST STAND CONSISTS OF APPROXIMATELY 8.90 ACRES OF BOTTOMLAND EARLY/MID SUCCESSION DECIDUOUS FOREST DOMINATED BY BLACK WALNUT (30%), PERSIMMON (29%), BOXELDER (11%), AMERICAN ELM (8%), TULIP POPLAR (7%), AND HACKBERRY (7%). THE STAND CONTAINS AN AVERAGE OF 104 STEMS/ACRE WITH 39% OF STEMS RANGING FROM 2"–5.9" DBH, 22% RANGING FROM 6"–9.9" DBH, 10% RANGING FROM 10"–17.9" DBH, 5% RANGING FROM 18"–29.9" DBH, AND 1% RANGING GREATER THAN 30" DBH. A MODERATE AMOUNT OF INVASIVE SPECIES, INCLUDING POISON IVY, ENGLISH IVY, VINCA, HONEYSUCKLE, AND MULTI-FLORA ROSE WERE OBSERVED WITHIN FOREST STAND 'D'. OVERALL, THE STAND WAS FOUND TO BE IN GOOD TO FAIR HEALTH/CONDITION AND DEMONSTRATES GOOD FOREST STRUCTURE. THE FOREST STAND IS CONSIDERED TO BE SAF FOREST COVER TYPE #64 – SASSAFRAS/PERSIMMON AND IS CLASSIFIED AS PRIORITY AREA 1 (HIGH) BASED ON THE PRESENCE OF NONTIDAL WETLANDS & THEIR ASSOCIATED BUFFERS, SLOPES OVER 25%, AND THE PRESENCE OF SPECIMEN TREES.

FOREST STAND 'E'

FOREST STAND SAMPLE POINTS E1, E2, E3, E4, E5, E6, E7, & E8 WERE COLLECTED WITHIN FOREST STAND 'E'. THIS FOREST STAND CONSISTS OF APPROXIMATELY 23.67 ACRES OF BOTTOMLAND EARLY/MID SUCCESSION DECIDUOUS FOREST DOMINATED BY TULIP POPLAR (18%), RED MAPLE (16%), AMERICAN BEECH (13%), AND BLACK GUM (12%). THE STAND CONTAINS AN AVERAGE OF 198 STEMS/ACRE WITH 47% OF STEMS RANGING FROM 2"–5.9" DBH, 18% RANGING FROM 6"–9.9" DBH, 25% RANGING FROM 10"–17.9" DBH, 8% RANGING FROM 18"–29.9" DBH, AND 4% RANGING GREATER THAN 30" DBH. A MODERATE AMOUNT OF INVASIVE SPECIES, INCLUDING POISON IVY, VINCA, SHRUB HONEYSUCKLE, JAPANESE BARBERRY, WINEBERRY AND MULTI-FLORA ROSE WERE OBSERVED PREDOMINATELY ON THE EDGES OF FOREST STAND 'E'. OVERALL, THE STAND WAS FOUND TO BE IN GOOD TO FAIR HEALTH/CONDITION AND DEMONSTRATES GOOD FOREST STRUCTURE. THE FOREST STAND IS CONSIDERED TO BE SAF FOREST COVER TYPE #57 – YELLOW-POPLAR AND IS CLASSIFIED AS PRIORITY AREA 1 (HIGH) BASED ON THE PRESENCE OF SLOPES OVER 25% AND THE PRESENCE OF SPECIMEN TREES.

Bowman

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NRI-FSD NOTES & TABLES (1 OF 2)
17700 BARNESVILLE ROAD
WSSC GRID #230NW17, 230NW18, 231NW17 & 230NW18
TAX MAP: CV62, GRID: 0000, PARCEL: P020
MNCPPC PLAN #: 420242090

ELECTION DISTRICT 11

MONTGOMERY COUNTY, MARYLAND

PLAN #TBD



08/29/24

PLAN STATUS

08/10/24 1ST SUBMISSION
08/14/24 2ND SUBMISSION
08/29/24 3RD SUBMISSION

DATE DESCRIPTION

DESIGN GDE DRAWN GDE

SCALE H: N/A V: N/A

JOB No. 140362-01-001

DATE : AUGUST, 2024

FILE No.

SHEET 6 OF 7