1 1.0 Biological Resources

2 1.1 Introduction

- 3 This Technical Memorandum describes the biological resources in the Proposed Action's Region of
- 4 Influence (ROI) and potential impacts on these resources from the Proposed Action (i.e., Preferred
- 5 Alternative) and No Action Alternative. Measures to reduce potential adverse effects on biological resources
- from the Proposed Action are also identified.
- 7 Biological resources include plants, animals, and habitats/vegetation communities. Special status species
- 8 and natural resources that receive protection under federal and state laws and regulations are also
- 9 addressed. One special status species, the bald eagle (Haliaeetus leucocephalus), is not subject to further
- analysis as no suitable habitat for this species is present within the ROI. The closest known bald eagle nest
- is located approximately 0.6 mile to the south of the Project Site (MBCP, 2020).
- 12 Treasury received comments related to biological resources from stakeholders during the public scoping
- period. Scoping comments expressed concern over the potential biological impacts of the Proposed Action,
- such as from habitat loss and degradation; removal or disturbance of resident wildlife; and impacts to wildlife
- 15 from noise and light. Some comments reflected public concern over potential impacts from wastewater
- 16 discharge and surface runoff from the Proposed Action, particularly downstream effects on Beaverdam
- 17 Creek. The reader is referred to the <u>Utilities Technical Memorandum</u> and the <u>Water Resources</u>
- 18 <u>Technical Memorandum</u> for information on wastewater disposal and stormwater runoff, respectively. In
- short, no impacts to biological resources from such activities are anticipated.
- 20 Please refer to Treasury's Public Scoping Report for further details on the comments received during the
- 21 scoping period. Concerns expressed during public scoping regarding biological resources are considered
- 22 and addressed in this analysis.

23 1.2 Affected Environment

24 1.2.1 Region of Influence

- The ROI for biological resources includes the Project Site and areas within a 1,500-foot radius of the Project
- 26 Site, an approximately 809.7-acre area (see Figure 1). The ROI includes areas where biological resources
- 27 could reasonably be affected by the Proposed Action. Beyond 1,500 feet from the Project Site, potential
- 28 impacts on biological resources would not be anticipated, and proposed noise and light would attenuate to
- 29 ambient levels (see the Noise Technical Memorandum and the Visual Resources Technical
- 30 *Memorandum*, respectively).

31 1.2.2 Applicable Guidance

- 32 Table 1 identifies federal and state guidance and regulations relevant to this analysis. Treasury would
- 33 comply with these guidelines and requirements under the Proposed Action.

34 1.2.3 Existing Conditions

- 35 **1.2.3.1 Vegetation**
- 36 Vegetation communities within the ROI are quantified in Table 2 and shown on Figure 1.

37

38

Table 1: Biological Resource Applicable Guidance and Regulations

Guidance/Regulation	Description/Applicability to Proposed Action	
Endangered Species Act (ESA) of 1973 (16 United States Code [USC] 1531 et seq.)	Protects federal-listed threatened and endangered plant and animal species and their habitats; prohibits jeopardizing the recovery of listed species or adversely modifying critical habitat essential to their survival.	
Northern Long-Eared Bat (NLEB) Final 4(d) Rule (adopted at 50 Code of Federal Regulations [CFR] 17.40[o])	United States (US) Fish and Wildlife Service (USFWS) promulgated rule that identifies ESA protections for the NLEB (<i>Myotis septentrionalis</i>). Termed the 4(d) rule, it also addresses protections relative to NLEB hibernaculum or maternity roost trees, as analyzed in the NLEB Programmatic Biological Opinion (USFWS, 2016a).	
Migratory Bird Treaty Act (MBTA) of 1918 (16 USC 703 et seq.)	Prohibits taking, killing, possessing, transporting, and importing migratory birds, their eggs, parts, and nests, except as authorized under a valid permit or as otherwise deemed incidental to lawful activities in accordance with USDOI, 2017).	
Executive Order (EO) 13186, Responsibilities of Federal Agencies to Protect Migratory Birds (2001)	Mandates the conservation of migratory birds by federal agencies and their consideration in the National Environmental Policy Act (NEPA) process.	
EO 13751, Safeguarding the Nation from the Impacts of Invasive Species (2016)	Amends EO 13112, <i>Invasive Species</i> (1999), and directs federal efforts to prevent and control invasive plant and animal species.	
Maryland Nongame and Endangered Species Conservation Act (1975)	Governs the legal listing of threatened and endangered species within the state of Maryland.	
Maryland Forest Conservation Act (FCA) (1991)	Requires developers to identify and prioritize existing on-site forest resources during planning and design of projects greater than or equal to 40,000 square feet. This data is then used to conserve and mitigate forests during development in accordance with required minimum thresholds.	

Table 2: Vegetation Communities within the ROI

Vegetation Community / Land Cover	Dominant Vegetation	Acres in Project Site	Acres in ROI	Percent of ROI
Forest	Oak (<i>Quercus spp.</i>), Red Maple (<i>Acer rubrum</i>), Sweetgum (<i>Liquidambar styraciflua</i>)	17.2	206.7	25.5
Agriculture	Rotation of Corn (<i>Zea mays</i>), Soybean (<i>Glycine max</i>), and cover crops	21.1	208.8	25.8
Open meadow w/ mature trees	Oaks and grasses	63.6	215.8	26.7
Emergent wetlands	Emergent wetlands Soft rush (Juncus effusus) and reed canary grass (Phalaris arundinacea)		3.0	0.4
Surface water (e.g., ponds, streams)	Not Applicable	0.0	4.2	0.5
Developed land	Not Applicable; some grassy areas and landscape trees/shrubs present	17.4	171.3	21.2
Total	Not Applicable	122.2	809.7	100

39 Note: Errors in math due to rounding.

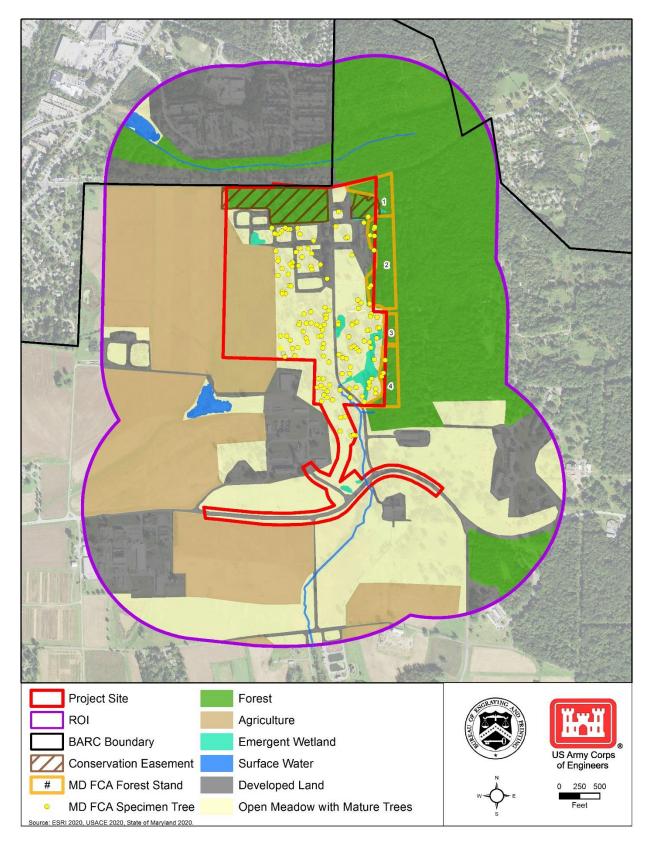


Figure 1: Existing Features in the Biological Resources ROI

- 42 Vegetation on the Project Site is similar to the rest of the ROI, including forested areas, open meadows with
- 43 mature trees, agricultural areas, and developed areas. Please see Figure 1 and Table 2 for more
- 44 information on each existing vegetation community.
- Two areas totaling 12.6 acres along the northern boundary of the Project Site are under an existing forest
- 46 conservation easement¹. Wetlands are also present in portions of the Project Site. The Waters of the United
- 47 <u>States Delineation Report</u> provides more information about wetland vegetation.
- 48 In accordance with the Maryland FCA (see **Table 1**), Treasury conducted a Forest Stand Delineation (FSD)
- 49 and survey of specimen trees (e.g., trees 30 inches or greater in diameter at breast height) within the Project
- 50 Site. The FSD identified 149 specimen trees within the Project Site, of which 10 are within forest stands
- and 139 are scattered throughout the central and southern portions of the Project Site (see **Figure 1**).
- 52 Treasury assigned these forest stands a priority ranking based on the presence of wetlands, specimen
- 53 trees, streams, steep slopes, and invasive species; cover type; successional stage; and wildlife value.
- Priority 1 stands are more valuable than priority 2 stands because they exhibit more favorable features
- 55 (e.g., wetlands and streams, low occurrence of invasive species, specimen trees). Treasury designated
- 56 Forest Stands 1, 2, and 4 as priority 1, and Forest Stand 3 as priority 2. A complete list of plant species
- 57 identified in the forest stands is available in the FSD (USACE, 2020).

58 1.2.3.2 Wildlife

- 59 Wildlife species in the ROI are those common to semi-rural/suburban areas in central Maryland. Wildlife
- 60 habitat in the ROI includes forest, open meadows, agricultural fields, emergent wetlands, and surface water.
- 61 Wildlife commonly associated with wetlands include muskrat (Ondatra zibethicus), blue heron (Ardea
- 62 herodias), eastern box turtle (Terrapene carolina carolina), American toad (Anaxyrus americanus), and red-
- 63 bellied water snake (Nerodia erythrogaster) (USFWS, 1995). Wildlife that favor forest edge habitats include
- 64 white-tailed deer (Odocoileus virginianus), eastern gray squirrel (Sciurus carolinensis), eastern chipmunk
- 65 (Tamias striatus), eastern cottontail rabbit (Sylvilagus floridanus), red fox (Vulpes vulpes), and species of
- 66 birds and bats (SDI, 2020).
- 67 The Project Site contains numerous bird nest boxes that are maintained by a private citizen with permission
- 68 from the Beltsville Agricultural Research Center (BARC) and provide habitat for cavity-nesting bird species
- 69 such as eastern bluebird (Sialia sialis) and tree swallow (Tachycineta bicolor).
- 70 Certain common wildlife species in the ROI also have value as game species. For example, the US
- 71 Department of Agriculture (USDA) permits the hunting of white-tailed deer and Canada geese (Branta
- 72 canadensis) at BARC. Between 1995 and 2018, participants in BARC's hunting program harvested an
- annual average of 264 deer on BARC (BARC, 2019a); between 2013 and 2018, participants harvested an
- 74 annual average of 155 Canada geese on BARC (BARC, 2019b). Hunting use of the Project Site and ROI,
- however, are generally restricted due to the ROI's proximity to off-site, developed lands.

76 1.2.3.3 Special Status Species

77

Federal- and State-Listed Species

- 78 Treasury identified federal-listed threatened and endangered species with potential to occur in the ROI by
- 79 using the USFWS' Information for Planning and Consultation (IPaC) database. The only species with the

¹ A conservation easement is a legally binding agreement in which the landowner foregoes the right to develop the land while retaining full ownership (CBF, 2004). Conservation easements on the Project Site were established as a mitigation measure for the Intercounty Connector Project (Maryland Route 200) in 2014 (BEP, 2019).

- 80 potential to occur within the ROI is the NLEB, listed as "threatened" under the ESA (USFWS, 2020a).
- 81 Treasury conducted an acoustic survey for the NLEB on and near the Project Site in June 2019; however,
- 82 no NLEBs were found (USACE, 2019). Further, no NLEB hibernaculum or maternity roosts exist in Prince
- 83 George's County (USFWS, 2019).
- 84 Treasury consulted with the Maryland Department of Natural Resources (MDNR) Wildlife and Heritage
- 85 Service (WHS) to determine the potential presence of state-listed species in the ROI. In a letter dated July
- 86 14, 2020, the MDNR-WHS confirmed that no state-listed species have been recorded previously in the
- 87 Project Site. Further, the MDNR-WHS expressed no specific concerns with regard to the Proposed Action's
- 88 potential impacts on special status species under its jurisdiction (see **Appendix A**).

Migratory Birds

89

98

- 90 BARC is located within the <u>Atlantic Flyway</u>, a primary bird migration corridor that extends north to south
- along the Atlantic Coast (i.e., extending from northern breeding grounds to southern wintering areas).
- 92 Migratory birds use BARC, including the Project Site, as seasonal feeding ground, breeding ground, or for
- 93 temporary stop-over during migration (USFWS, 2020b). In addition to bald eagles (see Section 1.1), the
- 94 USFWS identifies 12 migratory birds with the potential to occur on the Project Site; these birds are also
- 95 designated as Birds of Conservation Concern (BCCs²) (USFWS, 2020c). All 12 migratory birds have been
- 96 observed on BARC, although only eight have been specifically reported within the ROI (see Table 3)
- 97 (Cornell Lab of Ornithology, 2020).

Table 3: Migratory Birds with the Potential to Occur in the ROI

Common Name	Scientific Name	Observed in the ROI	Potential Use of the ROI
Black-billed Cuckoo	(Coccyzuz erythropthalmus)	No	Foraging and nesting; breeds May 15 to October 10
<u>Bobolink</u>	(Dolichonyx oryzivorus)	Yes	Foraging and nesting; breeds May 20 to July 31
Canada Warbler	(Cardellina canadensis)	Yes	Foraging and nesting; breeds May 20 to July 31
<u>Dunlin</u>	(Calidris alpine arcticola)	No	Foraging in aquatic areas; breeds elsewhere
Golden-winged Warbler	(Vermivora crysoptera)	No	Foraging and nesting; breeds May 1 to July 20
Lesser Yellowlegs	(Tringa flavipes)	Yes	Foraging in aquatic areas; breeds elsewhere
Prairie Warbler	(Dendroica discolor)	No	Foraging and nesting; breeds May 20 to July 31
Prothonotary Warbler	(Protonotaria citrea)	Yes	Foraging and nesting; breeds April 1 to July 31
Red-headed Woodpecker	(Melanerpes erythrocephalus)	Yes	Foraging and nesting; breeds May 10 to September 10
Rusty Blackbird	(Euphagus carolinus)	Yes	Foraging; breeds elsewhere
Semipalmated Sandpiper	(Calidris pusilla)	Yes	Foraging in aquatic areas; breeds elsewhere
Wood Thrush	(Hylocichla mustelina)	Yes	Foraging and nesting; breeds May 10 to August 31

⁹⁹ Source: (USFWS, 2020c; Audubon, 2020; Cornell Lab of Ornithology, 2020)

Proposed Currency Production Facility
Biological Resources Technical Memorandum

² BCCs are defined as "migratory and non-migratory bird species (beyond those already designated as federally threatened or endangered) that represent [the USFWS's] highest conservation priorities" (USFWS, 2015).

100 1.3 Environmental Effects

- This section analyzes potential effects on biological resources within the ROI that could occur under the
- 102 Proposed Action (i.e., Preferred Alternative) and No Action Alternative. Measures to reduce potential
- 103 adverse effects on biological resources from the Proposed Action are also identified.

1.3.1 Approach to the Analysis

- 105 For this analysis, Treasury defined a significant adverse impact as one that would:
- Substantially reduce regionally or locally important habitat.
- Substantially diminish a regionally or locally important plant or animal species.
- Adversely affect recovery of a federal- or state-listed species.
- 109 Potential impacts on biological resources from noise and light encroachment are also analyzed. Overall,
- 110 *no significant adverse impacts* to biological resources are anticipated.

111 1.3.2 No Action Alternative

- 112 Under the No Action Alternative, Treasury would not construct or operate the Proposed Action. Biological
- resources within the ROI would not change due to Treasury's proposed activities. The USDA's relocation
- of activities from three Project Site structures to off-site locations would reduce human activity on the Project
- 115 Site, potentially providing a *minor beneficial impact* on biological resources, notably wildlife species
- sensitive to human presence.

117 1.3.3 Preferred Alternative

118 **1.3.3.1 Vegetation**

119 Construction

104

- 120 The construction limits of disturbance (LOD) of the Proposed Action include approximately 100.3 acres, or
- 121 82.1 percent, of the Project Site. Under the Preferred Alternative, this entire LOD would be converted to
- developed land, resulting in permanent removal of the existing vegetation communities (i.e., approximately
- 123 83.6 acres of vegetation, with the balance of the acreage already developed) within the LOD.
- 124 Table 4 identifies the acreage of each existing vegetation community that would be removed from the
- 125 Project Site, as well as the associated percentage of removal of each vegetation community within the ROI.
- 126 Figure 2 depicts the area of the Project Site that would be converted to developed land under the Preferred
- 127 Alternative.

Table 4: Vegetation Community Removal during Proposed Construction

Vegetation Community	Acres	Percent of Community in ROI
Forest	3.6	1.7
Agriculture	20.7	9.9
Open meadow w/ mature trees	58.4	27.1
Emergent wetlands	0.9	30.0
Total	83.6	N/A

As shown in **Figure 2**, proposed forest clearing (i.e., approximately 3.6 acres) would occur along the eastern boundary of the Project Site; this clearing would be near the edge of the forest and would not result in fragmentation of existing forest. No vegetation removal would occur outside of the Project Site.

Up to 125 of the 149 total specimen trees on the Project Site (i.e., 84 percent) would be removed. These include specimen trees in Forest Stand 2 and in the open meadows within the central and southern portions of the Project Site (see **Figure 1**).³

The removal of specimen trees and forested areas during construction of the Proposed Action would be offset by Treasury's compliance with the FCA. To mitigate tree removal under the Proposed Action, Treasury would develop a Forest Conservation Plan (FCP) and Planting Plan that identifies where Treasury would plant new (i.e., replacement) trees or retain existing trees under a conservation easement. Further, the FCP would specify additional tree protection measures, such as pruning and/or fertilizing, to retain and maintain tree health of retained trees on the Project Site during and after construction (CBF, 2004).

Overall, tree removal under the Proposed Action would be *less than significant* on the Project Site and *negligible* in the context of the overall ROI. BARC manages approximately 3,074 acres of forest land (USDA ARS, 2000); as such, removal of 3.6 acres of forest land within BARC (i.e., 0.1 percent), 125 specimen trees, and 80.0 acres of other non-forest vegetation communities would result in *less-than-significant adverse impacts* to forest resources and vegetation in the ROI.

Operation

Proposed post-construction vegetation on the Project Site is summarized in **Table 5** and shown in **Figure 2**. Treasury would revegetate approximately 47.3 acres (47.2 percent) of the 100.3 acres disturbed during construction of the Preferred Alternative. Revegetated areas would consist of maintained lawn or other typical landscape vegetation for security, aesthetic, and grounds maintenance purposes; these areas would have minimal value as biological resources. No natural vegetation communities would re-establish within the construction LOD. Portions of the Project Site not included in the construction LOD (i.e., approximately 21.9 acres) would remain as they are under existing conditions. The proposed stormwater management features may support limited aquatic vegetation on the Project Site.

Table 5: Post-Construction Vegetation Communities within the ROI

Vegetation Community / Land Cover	Acres of Project Site	Acres of ROI	Percent of ROI
Forest	13.6	203.1	25.1
Agriculture	0.4	188.1	23.2
Open meadow w/ mature trees	5.2	157.4	19.4
Emergent wetlands	2.0	2.1	0.3
Surface water (e.g., ponds, streams)	0.0	4.2	0.5
Developed land (non-vegetated)	53.7	254.9	31.5
Developed land (grass)	47.3	204.9	31.5
Total	122.2	809.7	100

Note: Errors in math due to rounding.

³ In areas proposed for revegetation (see **Figure 2**), Treasury would attempt to avoid removing specimen trees to the extent possible during construction; however, Treasury anticipates that the majority of these specimen trees would be removed. These trees are included in the impact total presented herein.

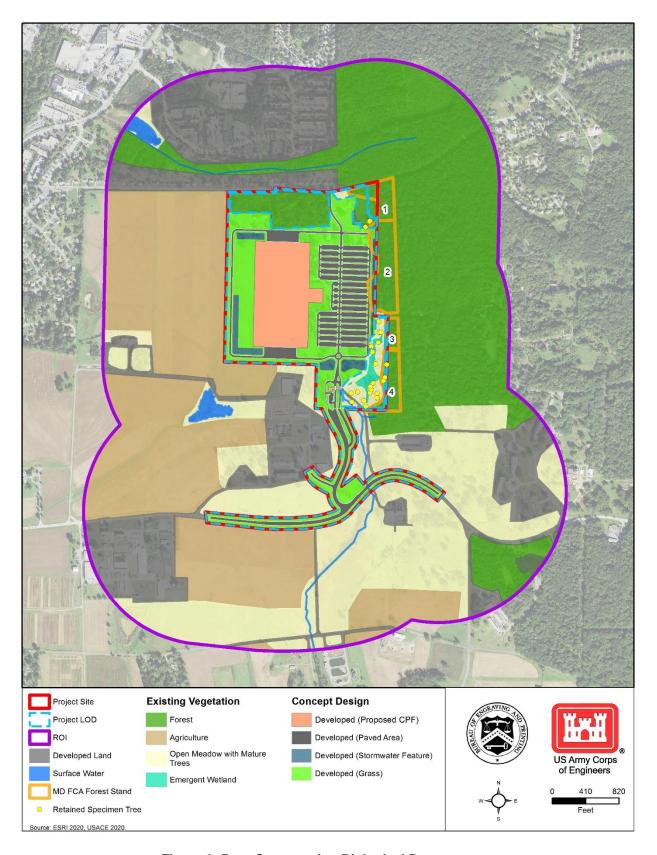


Figure 2: Post-Construction Biological Resources

- 159 Implementation of the FCP would retain and protect on-site specimen trees to the maximum extent possible.
- Additionally, as noted previously, Treasury would establish the location(s) of forest retention and/or
- reforestation in the FCP and associated Planting Plan; these locations could be in portions of the Project
- Site outside the construction LOD or in an appropriate off-site location (e.g., elsewhere on BARC). These
- 163 retention/reforestation areas would be permanently protected through legal means (e.g., a forest
- 164 conservation easement).
- Overall, these changes would result in *negligible impacts* to vegetation during operation of the proposed
- 166 Currency Production Facility (CPF). The Proposed Action would not substantially reduce regionally or
- locally important habitat or substantially diminish a regionally or locally important plant or animal species.
- 168 1.3.3.2 Wildlife
- 169 Construction
- 170 Construction of the Proposed Action would permanently remove approximately 83.6 acres of existing,
- vegetated wildlife habitat within the Project Site (see **Table 4** and **Figure 1**). As described above,
- 172 revegetated areas would not consist of natural vegetation communities; therefore, these areas would not
- 173 provide equivalent habitat for wildlife. The proposed stormwater management features may provide limited
- 174 aquatic habitat on the Project Site.
- During construction, wildlife would be displaced from the Project Site into adjacent areas in the ROI; wildlife
- 176 within the ROI would be disturbed by both construction noise and wildlife moving from the Project Site to
- 177 adjacent areas. Less mobile species on the Project Site could be killed by construction equipment. As the
- 178 Project Site does not include areas critical to wildlife movement, wildlife habitat fragmentation would be
- 179 *negligible*. As part of the Proposed Action, Treasury would coordinate with the owner(s) of the on-site bird
- 180 nest boxes to have them relocated from the Project Site prior to construction. Relocation would occur during
- the non-nesting period for bluebirds and tree swallows.
- 182 Treasury would minimize the potential for on-site and downstream impacts to aquatic wildlife habitats
- through compliance with the Clean Water Act (CWA) (33 USC 1251 et seq.), Section 438 of the Energy
- 184 Independence and Security Act (EISA) (42 USC 17094 et seg.), and EO 13508, Chesapeake Bay Protection
- and Restoration. Please refer to the <u>Water Resources Technical Memorandum</u> for more information.
- 186 Overall, wildlife habitat loss associated with the Preferred Alternative would not contribute to an appreciable
- decline in wildlife populations in the ROI, nor would it substantially affect hunting on BARC. All other
- potential impacts to wildlife from construction would be localized and occur on a temporary basis. As such,
- 189 construction of the Preferred Alternative would result in *less-than-significant adverse impacts* on wildlife.
- 190 The Proposed Action would not substantially reduce regionally or locally important habitat or substantially
- diminish a regionally or locally important plant or animal species.
- 192 Operation
- 193 The proposed CPF would operate 24 hours per day, 5 days per week, increasing noise and light in the ROI
- 194 (see the *Noise Technical Memorandum* and *Visual Resources Technical Memorandum*, respectively).
- 195 Wildlife on and near the Project Site would experience a permanent change in ambient levels of noise and
- light. These changes could disturb some local wildlife species, particularly those inhabiting the Project Site.
- Over time, many local wildlife species would adapt to these new conditions or relocate to other areas in the
- 198 ROI.
- 199 Noise and light generated from proposed CPF operations would attenuate to ambient levels at
- approximately 800 feet from source. Measures to reduce operational noise and light impacts, including

- 201 using lighting fixtures that direct light on on-site areas, would minimize these impacts, resulting in less-
- 202 than-significant adverse impacts to wildlife.
- 203 1.3.3.3 Special Status Species
- 204 Federal- and State-Listed Species
- 205 Construction
- 206 No effect on federal- or state-listed special status species would be anticipated from the construction of
- the Proposed Action except the federally threatened NLEB. While the NLEB was not documented on or
- 208 near the Project Site during the June 2019 bat acoustic surveys and no known hibernaculum or maternity
- 209 roosts occur in the ROI, potential suitable roosting habitat does occur on-site.
- 210 Using the USFWS IPAC determination key, Treasury determined that the Proposed Action may affect the
- 211 NLEB. However, any take that may occur under the Proposed Action would not be prohibited under the
- 212 ESA Section 4(d) rule adopted for NLEBs. The USFWS provided a letter, dated March 3, 2020, concurring
- with this determination (see **Appendix A**).
- As such, the Proposed Action would not adversely affect recovery of a federal- or state-listed species.
- 215 Operation
- 216 No effect on federal- or state-listed special status species would be anticipated from operation of the
- 217 Proposed Action.
- 218 Migratory Birds
- 219 Construction
- 220 Construction of the Proposed Action could impact migratory birds in the ROI from site disturbance,
- 221 particularly if construction would occur between May and September (see Table 3). However, most birds
- would likely avoid the Project Site or relocate to nearby habitat areas on BARC, in the ROI, or regionally.
- 223 Therefore, construction of the Preferred Alternative would result in *less-than-significant adverse impacts*
- 224 on migratory birds.
- 225 Operation

239

- 226 Potential impacts on migratory birds from operation of the Proposed Action would be like those described
- above for wildlife. Additionally, there could be occasional migratory bird mortality resulting from window
- 228 strikes; however, the proposed CPF's windows would primarily be located in the limited office areas, and
- 229 would comprise a small percentage of the overall building surface area. Bird collision deterrence options
- 230 would be assessed during the building and design process using the Leadership in Energy and
- 231 Environmental Design (LEED) framework and implemented as appropriate. Overall, operational activities
- 232 would have *less-than-significant adverse impacts* on migratory birds.
- 233 1.4 Impact-Reduction Measures
- As part of the Proposed Action, Treasury would implement the following impact-reduction measures to
- 235 minimize potential adverse impacts to biological resources:
- Implement the FCP/Planting Plan as required by the FCA. Forest areas identified as retention, reforestation, or afforestation areas in the FCP would be placed under a long-term protection agreement (e.g., a conservation easement or similar framework).
 - Implement pre-construction activities, such as pruning and/or fertilizing, as specified in the FCP to ensure retained specimen tree health.

- Comply with the applicable provisions of the CWA, Section 438 of the EISA, and EO 13508 to control and manage erosion and minimize discharge, such as the preparation of a site-specific Erosion and Sedimentation Control Plan (ESCP) and incorporation of green infrastructure and low impact development (GI/LID) design features and techniques.
 - Revegetate disturbed areas with native species.
- Limit or avoid construction (e.g., tree removal or noise-intensive activities) within the nesting season
 of migratory birds observed on the Project Site (i.e., May 1 to September 10) to the extent possible.
- Coordinate with the owner(s) of bird nest boxes to relocate nest boxes during the non-nesting period for the bluebird and tree swallow prior to construction.
- Incorporate noise and light abatement or shielding features into the design of the proposed CPF as identified in other resource areas (see the <u>Noise Technical Memorandum</u> and <u>Visual Resources Technical Memorandum</u>, respectively).
 - Using the LEED framework, evaluate the need for design measures to reduce the likelihood of bird mortality from window strikes, such as patterns on glass windows and use of non-reflective windows.

256 **1.5 Mitigation Measures**

245

253

254

255

259

260261

262

263

- Treasury should implement the following project-specific mitigation measures to further reduce the potential for adverse impacts to biological resources:
 - Apply voluntary conservation measures to reduce potential impacts to the NLEB, as identified in the <u>NLEB Programmatic Biological Opinion</u>. These measures may include avoiding tree removal activities within the NLEB pup season (June 1 to July 31) and/or the active season (April 1 to October 31).
 - Construct and maintain the proposed stormwater management features to provide as much wildlife habitat value as possible.
- 265 1.6 References
- 266 Audubon. (2020). Audubon. Retrieved March 10, 2020, from https://www.audubon.org/
- 267 BARC. (2019a). Deer Harvest Data, 1995 to 2018.
- 268 BARC. (2019b). Goose Harvest.
- 269 BEP. (2019). Environmental Constraints Report.
- 270 CBF. (2004). A Citizen's Guide to the Forest Conservation Act.
- Cornell Lab of Ornithology. (2020). *ebird: Hotspot Map Beltsville Agricultural Research Center*. Retrieved
 February 27, 2020, from https://ebird.org/hotspot/L486305
- 273 MBCP. (2020). Bald Eagle Nest Mapper. Retrieved January 30, 2020, from
- https://www.google.com/maps/d/u/0/viewer?mid=1oEK2mnOwFEeST8eJYJGTTgXvGJI&ll=39.03 452068944332%2C-76.86647649263489&z=14
- 276 SDI. (2020). *Forest Edges*. Retrieved February 2, 2020, from http://sustainabledevelopmentinstitute.org/grcode 002/
- 278 USACE. (2019). Results of Bat Survey for Proposed Bureau of Engraving and Printing Site.
- 279 USACE. (2020). Draft Forest Stand Delineation Report.

280 281	USDA ARS. (2000). Annotated List of the Flora of the Beltsville Agricultural Research Center, Beltsville Maryland.
282 283	USDOI. (2017). Memorandum 37050: The Migratory Bird Treaty Act Does Not Prohibit Incidental Take. Retrieved February 17, 2020, from https://www.doi.gov/sites/doi.gov/files/uploads/m-37050.pdf
284 285	USFWS. (1995). National Wetlands Inventory Wetlands of Maryland. Retrieved February 17, 2020, from https://www.fws.gov/wetlands/Documents%5CWetlands-Of-Maryland.pdf
286 287	USFWS. (2015b). <i>Birds of Conservation Concern</i> . Retrieved April 14, 2020, from https://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
288 289	USFWS. (2016a). Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-Eared Bat and Activties Excepted from Take Prohibitions. Bloomington, MN: Midwest Regional Office.
290 291 292	USFWS. (2019). Chesapeake Bay Field Office Northern Long-eared Bats and your Project. Retrieved March 25, 2020, from https://www.fws.gov/chesapeakebay/saving-wildlife/project-review/step-1.html
293	USFWS. (2020a). IPAC Official Species List.
294 295	USFWS. (2020b). <i>Migratory Bird Flyways</i> . Retrieved February 2, 2020, from https://www.fws.gov/birds/management/flyways.php
296	USFWS. (2020c). IPaC Resource List.

US Army Corps of Engineers – Baltimore District	US Department of the Treasury
Appendix A: Agency Consultation	
3, 3, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	

US Army Corps of Engineers – Baltimore District	US Department of the Treasury
This was no to to attend the author than	· fi l. l. · · · l.
This page intentionally I	ett diank.
Proposed Currency Production Facility	November 6, 2020 I Appendix A



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Chesapeake Bay Ecological Services Field Office 177 Admiral Cochrane Drive Annapolis, MD 21401-7307 Phone: (410) 573-4599 Fax: (410) 266-9127

http://www.fws.gov/chesapeakebay/

http://www.fws.gov/chesapeakebay/endsppweb/ProjectReview/Index.html



In Reply Refer To: June 22, 2020

Consultation Code: 05E2CB00-2020-SLI-1366

Event Code: 05E2CB00-2020-E-03772

Project Name: Construction and Operation of a Currency Production Facility

Subject: List of threatened and endangered species that may occur in your proposed project

location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. This species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Wetlands

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Chesapeake Bay Ecological Services Field Office 177 Admiral Cochrane Drive Annapolis, MD 21401-7307 (410) 573-4599

Project Summary

Consultation Code: 05E2CB00-2020-SLI-1366

Event Code: 05E2CB00-2020-E-03772

Project Name: Construction and Operation of a Currency Production Facility

Project Type: DEVELOPMENT

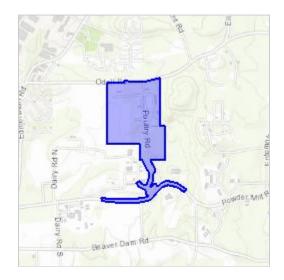
Project Description: The US Department of the Treasury proposed to construct and operate a

currency production facility at the Beltsville Agricultural Research Center

in Prince George's County Maryland.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/39.03761943477946N76.88427654164272W



Counties: Prince George's, MD

Threatened

Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 1 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME STATUS

Northern Long-eared Bat Myotis septentrionalis

No critical habitat has been designated for this species.

This species only needs to be considered under the following conditions:

Projects with a federal nexus that have tree clearing = to or > 15 acres: 1. REQUEST A
SPECIES LIST 2. NEXT STEP: EVALUATE DETERMINATION KEYS 3. SELECT
EVALUATE under the Northern Long-Eared Bat (NLEB) Consultation and 4(d) Rule
Consistency key

Species profile: https://ecos.fws.gov/ecp/species/9045

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

Wetlands

Impacts to <u>NWI wetlands</u> and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local <u>U.S. Army Corps of Engineers District</u>.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Chesapeake Bay Ecological Services Field Office 177 Admiral Cochrane Drive Annapolis, MD 21401-7307 Phone: (410) 573-4599 Fax: (410) 266-9127

http://www.fws.gov/chesapeakebay/

http://www.fws.gov/chesapeakebay/endsppweb/ProjectReview/Index.html



In Reply Refer To: July 16, 2020

Consultation Code: 05E2CB00-2020-TA-1366

Event Code: 05E2CB00-2020-E-04180

Project Name: Construction and Operation of a Currency Production Facility

Subject: Verification letter for the 'Construction and Operation of a Currency Production

Facility' project under the January 5, 2016, Programmatic Biological Opinion on Final

4(d) Rule for the Northern Long-eared Bat and Activities Excepted from Take

Prohibitions.

Dear Benjamin Obenland:

The U.S. Fish and Wildlife Service (Service) received on July 16, 2020 your effects determination for the 'Construction and Operation of a Currency Production Facility' (the Action) using the northern long-eared bat (*Myotis septentrionalis*) key within the Information for Planning and Consultation (IPaC) system. This IPaC key assists users in determining whether a Federal action is consistent with the activities analyzed in the Service's January 5, 2016, Programmatic Biological Opinion (PBO). The PBO addresses activities excepted from "take" prohibitions applicable to the northern long-eared bat under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, the Action is consistent with activities analyzed in the PBO. The Action may affect the northern long-eared bat; however, any take that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the PBO satisfies and concludes your responsibilities for this Action under ESA Section 7(a)(2) with respect to the northern long-eared bat.

Please report to our office any changes to the information about the Action that you submitted in IPaC, the results of any bat surveys conducted in the Action area, and any dead, injured, or sick northern long-eared bats that are found during Action implementation. If the Action is not completed within one year of the date of this letter, you must update and resubmit the information required in the IPaC key.

2

If the Action may affect other federally listed species besides the northern long-eared bat, a proposed species, and/or designated critical habitat, additional consultation between you and this Service office is required. If the Action may disturb bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act is recommended.

[1] Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [ESA Section 3(19)].

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

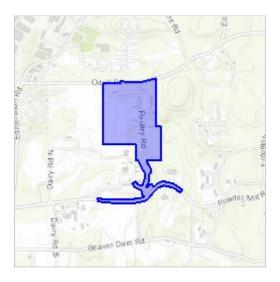
Construction and Operation of a Currency Production Facility

2. Description

The following description was provided for the project 'Construction and Operation of a Currency Production Facility':

The US Department of the Treasury proposed to construct and operate a currency production facility at the Beltsville Agricultural Research Center in Prince George's County Maryland.

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/39.03761943477946N76.88427654164272W



Determination Key Result

This Federal Action may affect the northern long-eared bat in a manner consistent with the description of activities addressed by the Service's PBO dated January 5, 2016. Any taking that may occur incidental to this Action is not prohibited under the final 4(d) rule at 50 CFR §17.40(o). Therefore, the PBO satisfies your responsibilities for this Action under ESA Section 7(a)(2) relative to the northern long-eared bat.

Determination Key Description: Northern Long-eared Bat 4(d) Rule

This key was last updated in IPaC on May 15, 2017. Keys are subject to periodic revision.

This key is intended for actions that may affect the threatened northern long-eared bat.

The purpose of the key for Federal actions is to assist determinations as to whether proposed actions are consistent with those analyzed in the Service's PBO dated January 5, 2016.

Federal actions that may cause prohibited take of northern long-eared bats, affect ESA-listed species other than the northern long-eared bat, or affect any designated critical habitat, require ESA Section 7(a)(2) consultation in addition to the use of this key. Federal actions that may affect species proposed for listing or critical habitat proposed for designation may require a conference under ESA Section 7(a)(4).

Determination Key Result

This project may affect the threatened Northern long-eared bat; therefore, consultation with the Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.) is required. However, based on the information you provided, this project may rely on the Service's January 5, 2016, *Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-Eared Bat and Activities Excepted from Take Prohibitions* to fulfill its Section 7(a)(2) consultation obligation.

Qualification Interview

- Is the action authorized, funded, or being carried out by a Federal agency?

 Yes
- 2. Have you determined that the proposed action will have "no effect" on the northern long-eared bat? (If you are unsure select "No")

 No
- 3. Will your activity purposefully **Take** northern long-eared bats? *No*
- 4. [Semantic] Is the project action area located wholly outside the White-nose Syndrome Zone?

Automatically answered No

5. Have you contacted the appropriate agency to determine if your project is near a known hibernaculum or maternity roost tree?

Location information for northern long-eared bat hibernacula is generally kept in state Natural Heritage Inventory databases — the availability of this data varies state-by-state. Many states provide online access to their data, either directly by providing maps or by providing the opportunity to make a data request. In some cases, to protect those resources, access to the information may be limited. A web page with links to state Natural Heritage Inventory databases and other sources of information on the locations of northern long-eared bat roost trees and hibernacula is available at www.fws.gov/midwest/endangered/mammals/nleb/nhisites.html.

Yes

6. Will the action affect a cave or mine where northern long-eared bats are known to hibernate (i.e., hibernaculum) or could it alter the entrance or the environment (physical or other alteration) of a hibernaculum?

No

7. Will the action involve Tree Removal?

Yes

- 8. Will the action only remove hazardous trees for the protection of human life or property? *No*
- 9. Will the action remove trees within 0.25 miles of a known northern long-eared bat hibernaculum at any time of year?

No

10. Will the action remove a known occupied northern long-eared bat maternity roost tree or any trees within 150 feet of a known occupied maternity roost tree from June 1 through July 31?

No

Project Questionnaire

If the project includes forest conversion, report the appropriate acreages below. Otherwise, type '0' in questions 1-3.

1. Estimated total acres of forest conversion:

102.3

- 2. If known, estimated acres of forest conversion from April 1 to October 31 *102*.3
- 3. If known, estimated acres of forest conversion from June 1 to July 31 *102.*3

If the project includes timber harvest, report the appropriate acreages below. Otherwise, type '0' in questions 4-6.

4. Estimated total acres of timber harvest

0

5. If known, estimated acres of timber harvest from April 1 to October 31

0

6. If known, estimated acres of timber harvest from June 1 to July 31

If the project includes prescribed fire, report the appropriate acreages below. Otherwise, type '0' in questions 7-9.

7. Estimated total acres of prescribed fire

0

8. If known, estimated acres of prescribed fire from April 1 to October 31 $\,$

0

9. If known, estimated acres of prescribed fire from June 1 to July 31 σ

If the project includes new wind turbines, report the megawatts of wind capacity below. Otherwise, type '0' in question 10.

10. What is the estimated wind capacity (in megawatts) of the new turbine(s)? θ



Larry Hogan, Governor Boyd Rutherford, Lt. Governor Jeannie Haddaway-Riccio, Secretary

July 14, 2020

Mr. Benjamin Obenland AECOM 1420 Milestone Center Drive Suite 150 Germantown, MD 20876

RE: Environmental Review for US Department of Treasury Proposed Construction of Currency Production Facility at Beltsville Agricultural Research Center - amended plan, Prince George's County, Maryland.

Dear Mr. Obenland:

The Wildlife and Heritage Service has determined that there are no official State or Federal records for listed plant or animal species within the delineated area shown on the map provided. As a result, we have no specific concerns regarding potential impacts or recommendations for protection measures at this time. Please let us know however if the limits of proposed disturbance or overall site boundaries change 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 (410) 260-8573.

Sincerely,

Lori A. Byrne,

Louia. Bym

Environmental Review Coordinator Wildlife and Heritage Service MD Dept. of Natural Resources

ER# 2020.1030.pg