1.0 Water Resources

1.1 Introduction

This Technical Memorandum describes the water resources in the Proposed Action's Region of Influence (ROI) and potential impacts on these resources from the Proposed Action (i.e., Preferred Alternative) and No Action Alternative. Measures to reduce potential adverse impacts on water resources from the Proposed Action are identified.

Water resources include surface waters and water quality, wetlands, floodplains, stormwater, groundwater, and areas designated to protect these resources such as Chesapeake Bay Critical Areas and Maryland's coastal zone resources.

Two water resources have no potential to be impacted by the Proposed Action; these resources are not subject to further analysis:

- **Floodplains**: The Project Site is not located within a Federal Emergency Management Agency (FEMA)-designated 100-year floodplain. Neither construction nor operation of the proposed Currency Production Facility (CPF) would impact the quality or function of floodplains (FEMA, 2016).
- **Chesapeake Bay Critical Area:** The Project Site is not located in and would not disturb or affect any Chesapeake Bay Critical Areas (DNR, 2020).

Treasury received comments related to potential impacts on water quality from stakeholders during the public scoping period. These comments reflected public concern over wastewater treatment and disposal, addressed in the ***Utilities Technical Memorandum***; potential impacts on the water quality of Beaverdam Creek; implementation of stormwater management and erosion/sedimentation controls; and permitting for potential impacts on jurisdictional Waters of the United States (WOUS), including wetlands.

Please refer to Treasury's Public Scoping Report for further details on the comments received during the scoping period. Concerns expressed during public scoping regarding water resources are considered and addressed in this analysis.

1.2 Affected Environment

1.2.1 Region of Influence

The ROI for water resources consists of surface water features, including wetlands, and groundwater located within and receiving drainage down-gradient from the Project Site. These primarily include on-site water resources; Indian Creek and Beaverdam Creek, both perennial streams that ultimately receive runoff from the Project Site, and their tributaries; and areas down-gradient from the Project Site to the southwest where groundwater flows (see **Figure 1**) (USACE, 2020a).

1.2.2 Applicable Guidance

Table 1 identifies federal and state guidance and regulations relevant to water resources. Treasury would comply with all federal and state water resources laws and regulations in association with the Proposed Action.

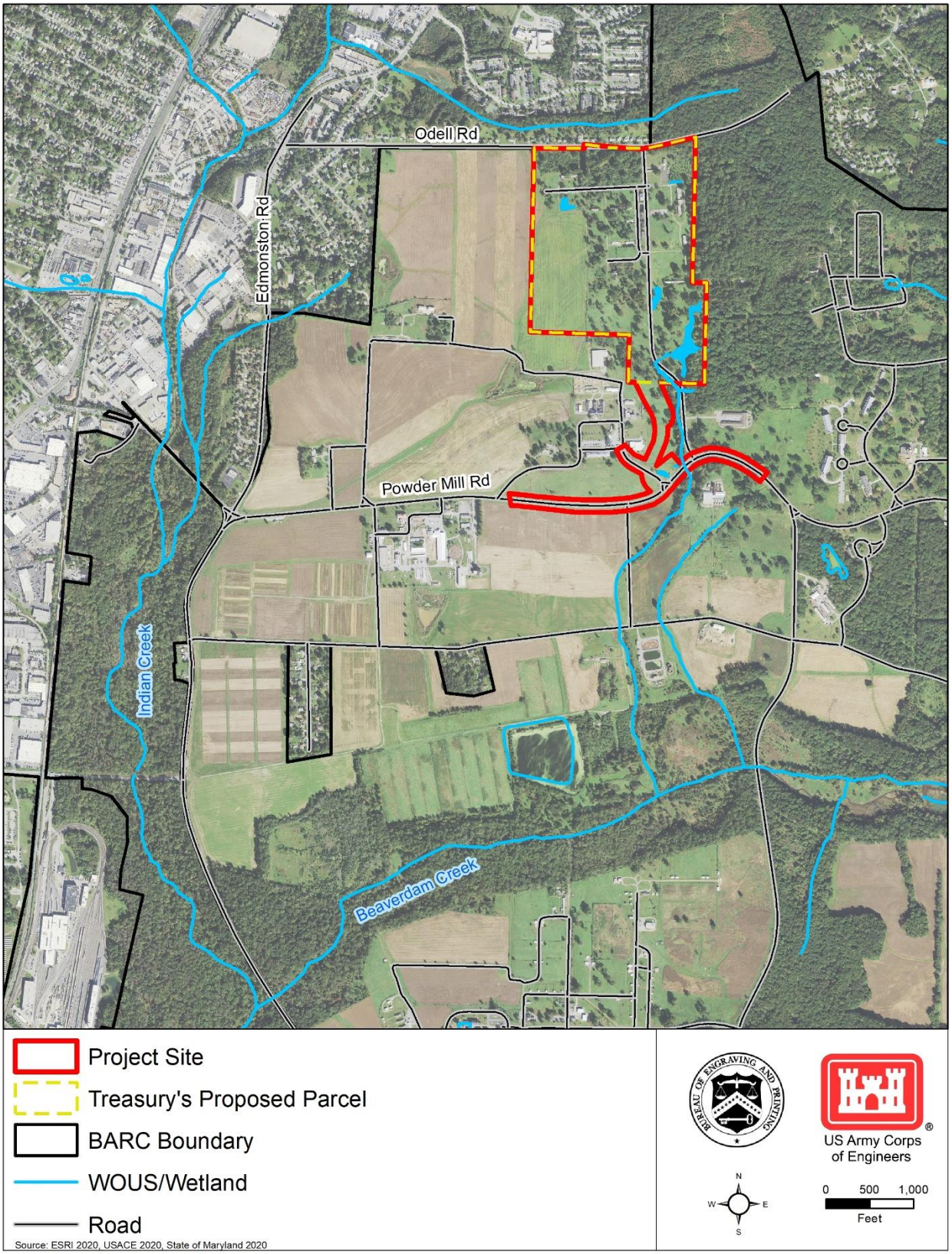

Figure 1: Water Resources ROI

39 **Table 1: Applicable Guidance and Regulations for Water Resources**

Guidance/Regulation	Description/Applicability to Proposed Action
Clean Water Act (CWA) of 1972 (33 United States Code [USC] 1251 *et seq.*)	Establishes requirements for regulating discharges of pollutants into surface water bodies (also referred to as WOUS) and developing surface water quality standards. Key provisions include: • Section 404 – authorizes the United States Army Corps of Engineers (USACE) to regulate impacts to jurisdictional wetlands and streams. • Section 401 – requires that applicants for a federal permit or license for any activity that may result in a discharge to WOUS obtain state Water Quality Certification to ensure compliance with state water quality standards. • Section 303(d) – establishes water quality standards and requires states to maintain a list of "impaired waters" and develop total maximum daily loads (TMDLs) for such waters. • Sections 402 and 319 – establishes the National Pollutant Discharge Elimination System (NPDES) program, which regulates the discharge of point and nonpoint sources of water pollution.
Energy Independence and Security Act (EISA) of 2007 (42 USC 17094 *et seq.*)	Requires the incorporation of low-impact development (LID) features for projects which disturb 5,000 square feet or more of land. The United States Environmental Protection Agency (USEPA) provides additional guidance on implementing Section 438 stormwater runoff requirements (USEPA, 2009).
Coastal Zone Management Act (CZMA) of 1972 (16 USC 1451 *et seq.*)	Authorizes states to implement federally approved coastal programs to protect coastal areas. Requires federal project proponents to submit a Federal Consistency Determination addressing the project's consistency with the state's enforceable coastal zone policies and potential effects on coastal zone resources.
40 Code of Federal Regulations (CFR) 131.12	Requires states to establish a statewide water antidegradation policy to protect water bodies and maintain the condition of high-quality waters.
Maryland Antidegradation Policy Implementation Procedures (Code of Maryland Regulations [COMAR] 26.08.02.04-1)	Establishes the process for identifying high-quality waters (also referred to as "Tier II" waters). Establishes the process for completing a Tier II antidegradation review, including when a review is necessary and possible determinations from a review.
Maryland Nontidal Wetlands Protection Act of 1991 (Article 4, Sections 5-901 to 911)	Restricts activities that could impact nontidal wetlands. Stipulates "no net loss" of wetlands by requiring mitigation or compensation for wetland losses. Regulates a 25-foot buffer around nontidal wetlands.
Executive Order (EO) 11990, *Protection of Wetlands* (1977)	Directs federal agencies to minimize or avoid the destruction, loss, or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands.

Guidance/Regulation	Description/Applicability to Proposed Action
EO 13508, *Chesapeake Bay Protection and Restoration* (2009)	Directs federal agencies to make efforts to protect and restore the Chesapeake Bay, and to establish strategies to address water pollution coming from federal lands and facilities. Pursuant to this EO, the USEPA published its *Guidance for Federal Land Management in the Chesapeake Bay Watershed*, which applies to federal agencies with land, installations, or other management responsibilities affecting 10 or more acres within the watershed (e.g. the Beltsville Agricultural Research Center [BARC]), and provides methods to address nonpoint source pollution that are specific to different land categories. The chapter for urban and suburban land contains a list of suggested stormwater best management practices (BMPs) to reduce runoff such as infiltration, bioretention cells, green and blue roofs, and soil restoration (USEPA, 2016).

1.2.3 Existing Conditions

Surface Waters and Water Quality

Surface waters[1] within the ROI generally drain from the northeast to the southwest (USACE, 2019). There are two surface waters within the Project Site, both of which are unnamed intermittent streams (see **Figure 2**):

- The first unnamed intermittent stream is located in the southern portion of Treasury's proposed parcel (USACE, 2020c). This stream receives drainage from the southern approximately 40 percent of the proposed parcel and flows south between the existing Poultry Road and the proposed entrance road. This intermittent stream is also located within the Project Site where it passes through a culvert under Powder Mill Road. South of Powder Mill Road, it flows south to Beaverdam Creek (USACE, 2020d).
- The second unnamed intermittent stream is located within the Project Site south of Treasury's proposed parcel. It flows southeast from Wetland 8 under Powder Mill Road to the above-referenced unnamed intermittent stream (USACE, 2020d).

Beaverdam Creek and Indian Creek were historically listed as impaired by the state of Maryland under CWA Section 303(d)[2]; however, the Maryland Department of the Environment (MDE) established TMDLs[3] to address pollutants in these streams, and subsequently removed these streams from the Section 303(d) list of impaired streams in Maryland in 2008 (MDE, 2018).

[1] Surface waters USACE regulates the alteration of and discharges to surface waters under Section 404 of the CWA. Under Section 401 of the CWA, discharges to WOUS must comply with the State's WQS.

[2] Maryland maintains a list of impaired waters (i.e., waters that do not meet the WQS) in accordance with Section 303(d) of the CWA and establishes TMDLs as needed to address pollutants in impaired waters (MDE, 2019).

[3] A TMDL is the maximum amount of a pollutant that a waterbody can receive while still meeting applicable WQS.

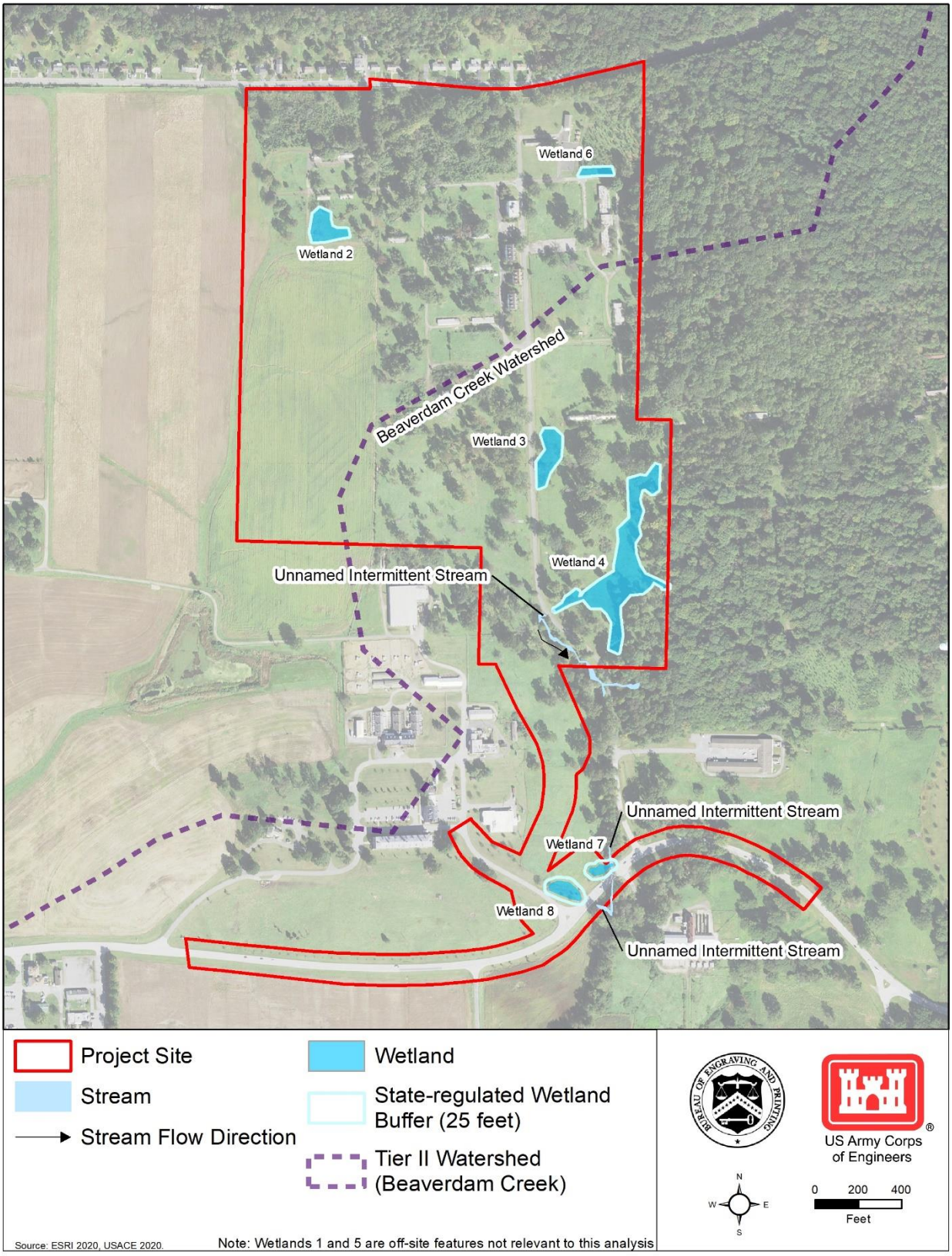

Figure 2: Surface Waters on the Project Site

Beaverdam Creek is currently designated by the state of Maryland as a Tier II water, indicating that its quality is substantially better than the minimum requirements established under Maryland's Water Quality Standards (WQS). Tier II waters in Maryland, and their tributaries, are subject to antidegradation requirements as described in COMAR 26.08.02.04-1. State antidegradation reviews for Tier II watersheds (see **Figure 2**) ensure that potential impacts to these streams are avoided, minimized, or mitigated; these reviews occur concurrently with state waterways permitting. Beaverdam Creek has remaining assimilative capacity, which means it is able to receive additional wastewater or pollutants, in accordance with applicable TMDLs and permitting requirements, relative to current conditions while still maintaining its status as a Tier II water (MDE, 2017). Beaverdam Creek currently receives sanitary sewer discharge from the BARC East Wastewater Treatment Plant (WWTP), located approximately 0.3 mile south of the Project Site (see the ***Utilities Technical Memorandum***).

Indian Creek (and therefore Beaverdam Creek) discharges to the Anacostia River, which ultimately discharges to the Potomac River and Chesapeake Bay. The Anacostia Watershed in Prince George's County is 85 square miles and includes 18 percent of the County's total land area. Of this area, 62 percent (approximately 53 square miles) is classified as developed, 22 percent is classified as developing, and 16 percent (14 square miles) is classified as rural; the Project Site is within the rural classification (MNCPPC, 2010).

Due to the intense development of the Anacostia Watershed, the watershed has poor ecological conditions and degraded water quality. A 2019 "report card" issued by the Anacostia Watershed Society gave the Anacostia Watershed a grade of 51 percent for overall health, its second highest grade on record (Anacostia Watershed Society, 2020). The MDE has established numerous TMDLs to address impairments of this watershed (MDE, 2020a).

The Anacostia Watershed is a portion of the Chesapeake Bay Watershed, which covers approximately 64,000 square miles and includes six states and Washington, DC. Water quality in the Chesapeake Bay has also historically been impacted by development. The USEPA established a Chesapeake Bay-wide TMDL in 2010 in response to the poor water quality; this TMDL also serves as a key commitment of federal strategy to protect and restore the Chesapeake Bay under EO 13508 (USEPA, 2019a). Additionally, Prince George's County created a Watershed Implementation Plan (WIP) in 2011 in response to this TMDL, including projects specific to the Anacostia Watershed. The 2018 Anacostia River Restoration Plan for Prince George's County includes target loads to both meet the Chesapeake Bay TMDL and improve water quality of the Anacostia River (USACE, 2018).

Stormwater

Stormwater[4] is conveyed across the Project Site and within the ROI primarily to the west, southwest, and south, following topography (see the ***Geology, Topography, and Soils Technical Memorandum***) and existing stormwater management infrastructure. The north-central portion of Treasury's proposed parcel drains to stormwater management infrastructure along Odell Road, while the western portion of the proposed parcel drains to stormwater management systems on BARC to the southwest; both of these drainage sub-basins, encompassing approximately 51 percent of the Project Site (62.9 acres), drain to Indian Creek. The southern approximately 49 percent of the Project Site (59.3 acres), including the area around Powder Mill Road, drains to the two intermittent streams in the southern portion of the Project Site, which flow to Beaverdam Creek.

[4] Stormwater is generated from rainfall or storm events and flows into surface water bodies or recharges groundwater. The velocity and volume of stormwater generally increase in proportion to the amount of impervious surfaces and compacted soils present within the drainage area. Stormwater runoff can accumulate pollutants and debris as it flows across the land surface and may also result in increased erosion and sedimentation of receiving surface water bodies.

The Project Site currently contains 17.3 acres of impervious surfaces (i.e., 14.2 percent of the site) from existing roads and buildings. The primarily pervious nature of the site facilitates stormwater infiltration into the ground; the site is also largely vegetated (see the ***Biological Resources Technical Memorandum***), so runoff does not contain high concentrations of pollutants or sediment.

Federal projects and operations are subject to stormwater management guidelines and requirements (see **Table 1**). These primarily include the NPDES permit program, Section 438 of the EISA, and, within the Chesapeake Bay Watershed, EO 13508. NPDES requirements regulate and control water pollution by limiting point and nonpoint sources that discharge to WOUS (USEPA, 2019b).

In Maryland, the MDE administers the NPDES program under Section 402 of the CWA. Construction activities disturbing 1 acre or more of land are required to obtain coverage under the *General Permit for Stormwater Associated with Construction Activity*. To be covered under this General Permit, the project proponent must prepare a Notice of Intent (NOI) for coverage under the General Permit and an Erosion and Sediment Control Plan (ESCP). The United States Department of Agriculture (USDA) operations at BARC are currently permitted under a NPDES Municipal Separate Storm Sewer System (MS4) Phase II General Permit that establishes minimum control measures to manage stormwater on BARC.

Section 438 of the EISA directs federal agencies to incorporate stormwater management designs in development projects to maintain or restore a site's pre-development hydrology.[5] Compliance is achieved by incorporating green infrastructure/low impact development (GI/LID) features into a federal project's design to the maximum extent technically feasible. GI/LID measures include filtration, infiltration, evaporation, plant transpiration, and rainwater reuse to retain and treat stormwater on-site, in contrast to conventional management practices that temporarily store and ultimately discharge stormwater to receiving water bodies, such as through detention basins. Examples of GI/LID features typically include rain gardens, porous pavement, green roofs, site revegetation, and bioswales (USEPA, 2009); no GI/LID features are present within the Project Site.

Wetlands

Wetlands[6] are areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support vegetation typically adapted for life in saturated soil conditions. The USACE regulates wetlands as a type of WOUS under Sections 404 and 401 of the CWA (see **Table 1**). The MDE further regulates nontidal wetlands in accordance with the Maryland Nontidal Wetlands Protection Act, which addresses isolated (i.e., non-jurisdictional) wetlands and includes wetland buffer and mitigation requirements. Any construction activities in Maryland that occur within the regulated 25-foot nontidal wetland buffer require a permit or permit exemption from the MDE (MDE, 2020b).

Wetlands at BARC are associated with storm drainage channels, ponds, maintained open space, and backwater areas. Overall, BARC contains approximately 815 acres of wetlands (USDA, 1996). As shown

[5] To comply with Section 438 of the EISA, federal agencies are required to conduct an analysis of pre-development hydrology to establish a baseline condition and set design objectives for stormwater management that maintain pre-development conditions with regard to temperature, rate, volume, and duration of flow associated with federal proposed actions.

[6] Wetlands generally include swamps, marshes, bogs, and similar areas (33 CFR 328.3). Wetlands perform diverse hydrologic functions such as water quality improvement, groundwater recharge, pollution mitigation, nutrient cycling, and stormwater and floodwater storage. Wetlands also provide wildlife habitat and have socioeconomic benefits, including providing hunting and recreation areas.

on **Figure 2**, USACE delineated six palustrine wetlands[7], totaling 2.94 acres, on the Project Site (USACE, 2020c; USACE, 2020d); these wetlands comprise approximately 0.36 percent of the total wetlands on BARC. No other wetland type was identified on the Project Site. **Table 2** summarizes on-site wetlands.

Table 2: Wetlands on the Project Site

Wetland[1]	Classification	Wetland Acreage	25-foot Buffer Acreage	Location in the Project Site	Jurisdictional Determination[2]
Wetland 2	Palustrine emergent	0.33	0.10	Northwest corner	Isolated
Wetland 3	Palustrine emergent	0.40	0.12	East central	Isolated
Wetland 4	Palustrine emergent	1.95	0.49	Southeast corner abutting on-site stream, flows southwest off-site	Preliminary Jurisdictional
Wetland 6	Palustrine emergent / scrub shrub	0.08	0.07	North central portion, adjacent to forest conservation easement	Isolated
Wetland 7	Palustrine emergent	0.04	0.18	South of Treasury's proposed parcel, along Powder Mill Road between Animal Husbandry Road and Poultry Road	Preliminary Jurisdictional
Wetland 8	Palustrine emergent	0.14	0.24	South of Treasury's proposed parcel, near intersection of Animal Husbandry Road and Powder Mill Road	Preliminary Jurisdictional
Total	**N/A**	**2.94**	**1.20**	**N/A**	**N/A**

Source(s): (USACE, 2020c; USACE, 2020d).
1. Wetlands 1 and 5 are off-site features not relevant to this analysis.
2. An official jurisdictional determination (JD) on the Project Site has not yet been verified by USACE or the MDE. This column reflects the USACE's preliminary determinations provided in the wetland delineation report. An approved JD is required to confirm these results.

As identified in **Table 2**, Treasury preliminarily determined that three of the six wetlands on the Project Site are isolated and not subject to USACE regulation under CWA Section 404. These wetlands are still subject to MDE regulation at the state level. Generally, if total impacts on isolated, nontidal wetlands are less than 1 acre (e.g., only 0.81 acre of these wetlands occur on the Project Site), mitigation is not required (MDE, 2020c). Treasury preliminarily determined Wetland 4, the largest on-site wetland, and Wetlands 7 and 8 to be jurisdictional wetlands subject to regulation under CWA Section 404 (BEP, 2020; USACE, 2020d).

[7] Palustrine wetlands are non-tidal wetlands characterized by trees, shrubs, and emergent vegetation (Cowardin, et al. 1979).

Groundwater and Water Quality

Groundwater is water stored beneath the ground surface in soil and geological formations. Groundwater comprises both confined and unconfined aquifers, and wells that are commonly used for human consumption, irrigation, or industrial uses. There is no sole-source aquifer within a 10-mile radius of the Project Site (USEPA, 2020).

The ROI contains geology of the Potomac Group, including the Patuxent, Arundel, and Patapsco Formations. The Patuxent and Patapsco Formations contain important aquifers for Prince George's County; the Arundel Formation facilitates vertical groundwater movement from for these aquifers in some locations (USACE, 2020b). Regional groundwater aquifers flow to the southeast, although shallow groundwater on-site flows down-gradient to the southwest (USACE, 2020a; USACE, 2020b).

An unconfined portion of the Patuxent aquifer, within the Patuxent Formation, recharges in the western portions of BARC (USACE, 2020b). The USDA pumps water from this aquifer under unconfined water table conditions and uses the water for various purposes throughout BARC (USDA, 2011). No USDA pumps or wells are located on the Project Site. The Patuxent Formation is primarily composed of sand and gravel; however, subsurface deep clay deposits at the Project Site underlie the sand and gravel deposits, partially inhibiting access to groundwater.

Several testing wells installed on the Project Site in October 2019 during a Phase II Environmental Site Assessment (ESA) either did not encounter groundwater or were slow to recharge following sampling. The average depth to groundwater in testing wells that did encounter groundwater at the Project Site was 10.3 feet (USACE, 2020b). Groundwater levels typically vary by season and are closest to the ground surface following the fall and winter months when precipitation is more frequent (Maryland Water Management Administration, 2013).

During the Phase II ESA, USACE identified the following contaminants in groundwater at the Project Site that could impact groundwater quality. The levels of these contaminants, however, are either below maximum contaminant levels (MCL)[8] or otherwise consistent with natural background levels for the ROI (USACE, 2020b):

- Concentrations of arsenic, chromium, and lead exceeding applicable USEPA MCLs, but consistent with local background levels.
- Cyanide and volatile organic compounds (VOCs) at concentrations below applicable MCLs.

Maryland's Coastal Zone

The CZMA (see **Table 1**) assists states, in cooperation with federal and local agencies, to develop land and water use programs in coastal zones. Maryland has developed and implemented a federally approved Coastal Zone Management Program (CZMP) administered by the Maryland Department of Natural Resources (MDNR) and consisting of a network of state agencies and local governments that regulate Maryland's coastal zone lands and resources.

Maryland's coastal zone includes all of Prince George's County, including the Project Site. As a federally owned property, BARC is statutorily excluded from the state's coastal zone. In accordance with the CZMA, however, federal actions that have the potential to affect coastal zone resources must be consistent, to the maximum extent practicable, with the state's enforceable coastal zone policies. Because the Proposed Action would have the potential to affect Maryland's coastal zone resources, Treasury is required to determine the Proposed Action's consistency with the enforceable policies of the Maryland CZMP.

[8] MCLs are standards set by the USEPA for drinking water quality under the Safe Drinking Water Act.

1.3 Environmental Effects

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

1.3.1 Approach to the Analysis

For this analysis, Treasury defined a significant adverse impact as one that would:

- Permanently alter, dam, divert, or redirect more than 200 linear feet of a jurisdictional stream segment; or substantially alter hydrological connections to WOUS. The 200 linear feet of potential disturbance is based on WOUS mitigation thresholds for CWA Section 404/401 permitting (e.g., the Maryland State Programmatic General Permit [MDSPGP-5]) (USACE, 2016).
- Adversely change the volume, rate, or quality of stormwater discharged from the Project Site, and/or increase erosion and sedimentation on- and off-site, such that Treasury would degrade the quality of nearby surface waters, exceed applicable pollutant TMDLs, and/or violate requirements of Section 438 of the EISA.
- Fill or substantially alter more than 1 percent (i.e., 8.15 acres) of the total wetland acreage at BARC.
- Release concentrations of contaminants exceeding applicable MCLs to aquifers underlying the Project Site, or inhibit groundwater recharge such that a net deficit in aquifer volume or a lowering of the local water table occurs.
- Not be consistent to the maximum extent practicable with one or more enforceable policies of the Maryland CZMP.

1.3.2 No Action Alternative

Under the No Action Alternative, Treasury would not construct or operate the Proposed Action. Water resources within the ROI would not change due to Treasury's proposed activities. Ongoing stormwater infiltration, groundwater recharge, and WOUS acreages and functions would continue. Therefore, the No Action Alternative would have ***no impact*** on water resources.

1.3.3 Preferred Alternative

Surface Waters and Water Quality (excluding Wetlands)

Construction

Construction of the Proposed Action would divert approximately 117 linear feet of the delineated intermittent stream in the southern portion of Treasury's proposed parcel to avoid the proposed entrance road and the proposed vehicle entry control facility (see **Figure 3**); Treasury would likely relocate this portion of the stream to the east of the proposed development. Diversion of the intermittent stream on the proposed parcel would result in a small permanent impact to this resource, but would not permanently impede this stream segment or its connection to other WOUS (e.g., Wetland 4). Further, the new stream channel would be designed to match the existing stream flow and hydrologic function, including its connection to other WOUS. This intermittent stream would not be impacted during the Powder Mill Road modifications as no changes are proposed to the existing water crossing in that location.

Construction of the Proposed Action would also fill and not replace approximately 109 linear feet of the second on-site intermittent stream flowing southeast from Wetland 8 (see **Figure 3**). As discussed below, Wetland 8 would also be filled.

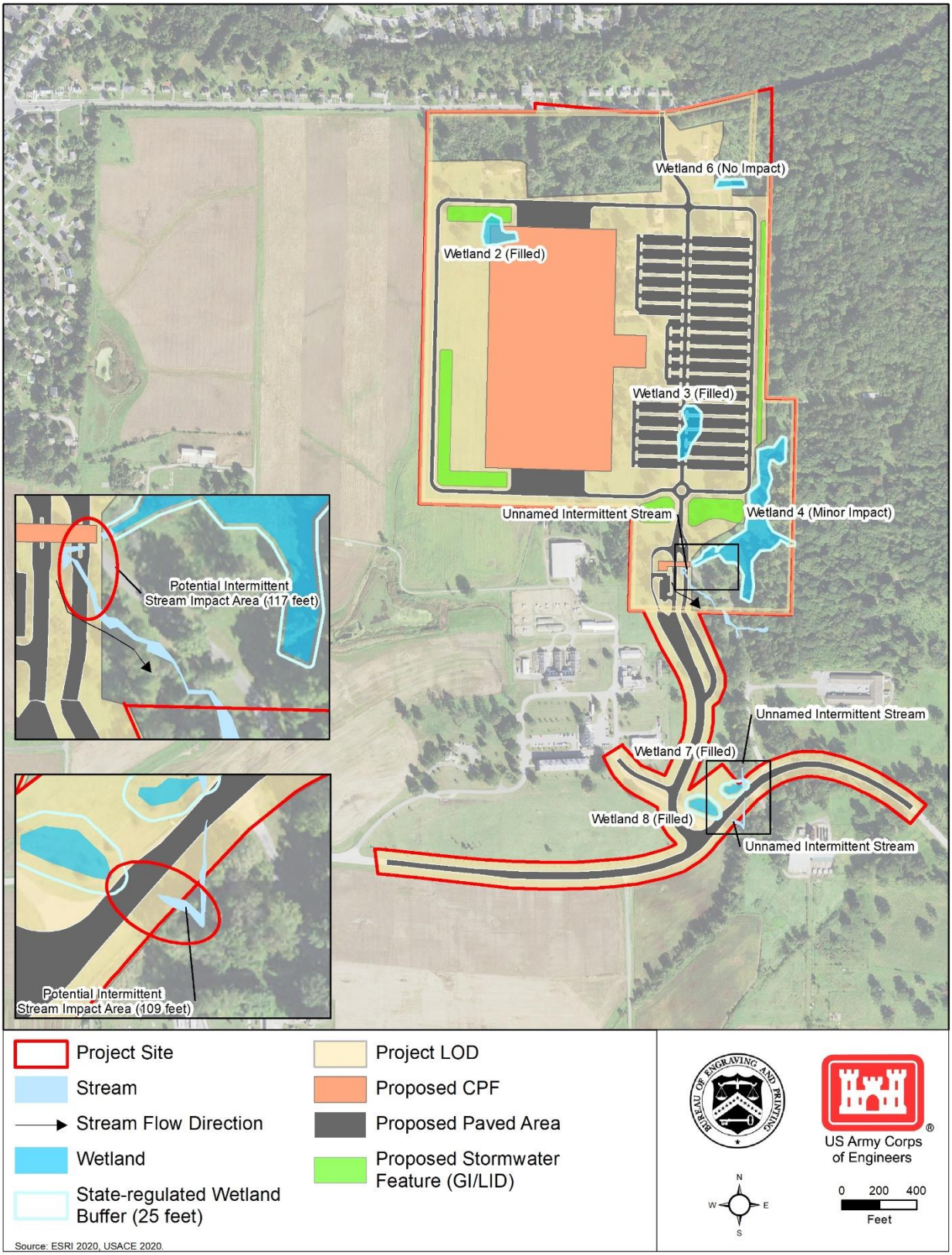

Figure 3: Potentially Impacted Water Bodies and Proposed Stormwater Infrastructure

In total, approximately 226 linear feet of stream within the Project Site would be impacted, resulting in a ***potentially significant adverse impact***. Treasury would minimize these potential impacts through compliance with Sections 404/401 of the CWA; permitting would require adherence to applicable water quality maintenance, avoidance, compensation, and mitigation measures (BEP, 2020) (see **Section 1.4**).

Construction-related ground disturbance could increase on- and off-site soil erosion and sedimentation that could impact surface waters in the ROI. Compliance with NPDES permit requirements (e.g., use of silt fences and sediment traps), however, would minimize or eliminate these potential impacts, resulting in ***no or negligible adverse impacts***.

Operation

Operation of the proposed CPF would produce approximately 120,000 gallons per day (gpd) of wastewater that would be treated to applicable effluent standards at the BARC East WWTP and discharged to nearby surface waters in accordance with BARC's existing WWTP discharge permit (see ***Utilities Technical Memorandum***).

The WWTP operates under a permit issued by the MDE and has sufficient existing permitted capacity to treat both existing and planned future wastewater at BARC, as well as the anticipated volume of wastewater from the Proposed Action (BEP, 2020). The daily discharge of this wastewater volume from the Proposed Action could increase downstream surface water flow, but downstream water quality would not be affected as it would meet MDE-required WWTP discharge thresholds, and Beaverdam Creek has remaining assimilative capacity. The WWTP would continue to comply with existing permit requirements and established TMDLs for the receiving waterbody. Therefore, operation of the Proposed Action could increase water volumes downstream of the BARC East WWTP, but these increases would be minor and would result in ***less-than-significant adverse impacts*** on the flow of surface waters in the ROI, including Beaverdam Creek.

Operation of the proposed CPF would not involve water withdrawals, in-water work, or alteration of surface waterbodies. Thus, in the long term, the Proposed Action would have ***no impacts*** to on-site surface waters.

Stormwater

Construction

Construction of the Proposed Action would disturb approximately 100.3 acres of land. Ground disturbance would include tree removal, grading and other earth-moving activities, and building demolition, all of which could increase on- and off-site soil erosion and sedimentation within the ROI from stormwater discharges. As noted above, however, compliance with NPDES permit requirements would minimize or eliminate these potential impacts, resulting in ***no or negligible adverse impacts*** (see **Section 1.4**).

Operation

Once constructed, the Proposed Action would increase impervious surface cover on the Project Site by 29.4 acres for a total of 46.7 acres, or 38.2 percent of the Project Site. As a result, stormwater runoff volumes discharging from the Project Site to receiving waterbodies could increase, with corresponding increases in concentrations of pollutants and sediments.

As shown on **Figure 3**, however, Treasury would properly design, construct, and maintain GI/LID stormwater infrastructure on the Project Site that would comply with state of Maryland requirements and Section 438 of the EISA, ensuring that pre-development hydrology is maintained on-site to the maximum extent technically feasible and no significant adverse impacts related to stormwater occur. Stormwater control BMPs identified under EO 13508 would also be integrated into the Project Site design to control and reduce water pollution coming from federal facilities to protect the Chesapeake Bay and its tributaries. As such, ***no or negligible adverse impacts*** to stormwater would be expected (see **Section 1.4**).

Wetlands

Construction

Construction of the Proposed Action would fill Wetlands 2 and 3, both isolated and totaling 0.73 acre, and Wetlands 7 and 8, both potentially jurisdictional and totaling 0.18 acre, as well as their MDE-regulated nontidal wetland buffers (see **Figure 3**). Construction of the proposed security fence along the boundary of Treasury's proposed parcel could also impact 0.03 acre of potentially jurisdictional Wetland 4, the largest on-site wetland, and <0.01 acre of its buffer. In total, the Proposed Action would impact 0.94 acre of wetlands within the Project Site. Because these features only represent approximately 0.11 percent of the total wetland acreage at BARC, potential wetland impacts from construction of the Proposed Action would be considered ***less than significant***. Construction of the Proposed Action would also impact a total of 0.65 acre of MDE-regulated 25-foot nontidal wetland buffer around Wetlands 2, 3, 4, 7, and 8.

Based on its alternatives analysis, Treasury has found that there is no practicable alternative to impacting wetlands through construction of the CPF; Treasury has developed the concept site plan for the CPF in a manner that reduces potential adverse wetland impacts to the extent feasible. Treasury prepared a Draft Finding of No Practicable Alternative for the Proposed Action in compliance with EO 11990 (see **Appendix A**).

As the Proposed Action would impact less than 1 acre of isolated, nontidal wetlands, Treasury would apply for an exemption from mitigation requirements for those wetlands under Maryland's Nontidal Wetlands Protection Program. Treasury would also comply with any conditions specified by MDE's exemption approval (see **Section 1.4**). However, the Proposed Action would also impact 0.21 acre of potentially jurisdictional wetlands. As discussed previously, Treasury would comply with all required CWA Section 404/401 permitting requirements, including adherence to applicable water quality maintenance, avoidance, compensation, and mitigation measures.

Operation

Proposed development features (e.g., entrance road, parking lots, sidewalks) would be set back from Wetlands 4 and 6 and their associated buffers. No operational activities of the proposed CPF would encroach upon these resources. Therefore, operation of the Proposed Action would have ***no adverse impacts*** on wetlands.

Groundwater

Construction

As described in **Section 1.2.3**, groundwater at the Project Site is approximately 10 feet below ground surface (bgs). Construction of the proposed CPF's foundation would generally involve excavation up to a depth of approximately 5 feet bgs over approximately 20.8 acres of the Project Site (see **Figure 3**), with excavation reaching a depth of 25 feet bgs in some locations for new utility corridors or other underground features. Demolition of existing buildings with basements could require excavations up to approximately 10 feet bgs; removal of existing underground utilities at the Project Site would involve excavation to a depth of approximately 5 feet bgs.

These excavation activities could intersect groundwater underlying the Project Site and potentially mobilize contaminants in the soil or discharge other pollutants that may enter the surficial groundwater. If heavy metals or VOCs contained in the soil are released into groundwater, regulated concentrations could potentially be exceeded, particularly since existing levels of arsenic, chromium, and lead already exceed their MCLs (see **Section 1.2.3**) (USACE, 2020b). These impacts would be expected to be maintained at ***less-than-significant*** levels through implementation of the measures identified in **Section 1.4**.

Operation

Once construction is complete, ***no impacts*** to groundwater quality would occur from the proposed CPF. Hazardous materials would be used at the proposed CPF during production operations, but waste would be properly disposed of or stored (see ***Hazardous and Toxic Materials and Waste Technical Memorandum***). With standard processes and procedures in place to manage hazardous and toxic materials and waste generated by the proposed CPF, groundwater impacts would not be expected.

The Proposed Action would use water supplied by the Washington Suburban Sanitary Commission (WSSC) and the USDA (see ***Utilities Technical Memorandum***) within their existing supply capacities. While the proposed CPF may increase demand on USDA groundwater withdrawals in the ROI, these increases would be within the USDA's capacity and supplemental (e.g., for external fire protection) to WSSC's primary water supply for the Proposed Action. Therefore, ***negligible impacts*** on groundwater would occur during operation.

Coastal Zone

Treasury determined that the Proposed Action would be consistent, to the maximum extent practicable, with the enforceable policies of Maryland's CZMP (see **Appendix B**). As such, ***no adverse impacts*** to Maryland's coastal zone would occur.

1.4 Impact-Reduction Measures

As part of the Proposed Action, Treasury would implement the following impact-reduction measures to minimize potential adverse impacts to water resources:

Pre-Construction

- Incorporate into the Proposed Action a suitable diversion of the unnamed intermittent stream on-site such that it does not overlap the project limits of disturbance (LOD). This diversion would need to maintain the existing stream flow and hydrologic function of the stream to the extent practicable.
- Obtain and adhere to appropriate permits (or letters of exemption) from the MDE and USACE to comply with Sections 404/401 of the CWA and comply with all best management practices (BMPs) established through this consultation process.
- Obtain a *Maryland General Permit for Stormwater Associated with Construction Activity* to manage stormwater associated with construction of the Proposed Action. As more than 1 acre of land would be disturbed, Treasury would prepare and adhere to a state-approved ESCP and submit an NOI to meet the requirements of the federal NPDES program. Treasury would also manage stormwater discharges and maintain water quality through compliance with existing TMDLs. Adherence to these requirements would ensure that runoff from the Project Site during construction would have no potential to further degrade water quality in receiving surface water bodies located downstream in the ROI.
- Incorporate into the Proposed Action, as required by Section 438 of the EISA (see **Table 1**), GI/LID measures to maintain the pre-development hydrology of the Project Site to the maximum extent technically feasible during operation, minimizing any change in the rate, volume, and temperature of stormwater discharging to off-site areas.
- Incorporate into the Proposed Action, as required by EO 13508, stormwater control BMPs to manage and reduce pollution flowing from the Project Site into the Chesapeake Bay and its tributaries.

- Submit a Federal Consistency Determination (FCD) to MDNR for review and concurrence (see **Appendix B**).

Construction

- Demarcate the construction LOD in the field to prevent encroachment on unpermitted surface water resources.
- Establish construction staging areas at least 100 feet away from surface water resources.
- When excavating below the groundwater table, incorporate measures that minimize potential impacts to local shallow groundwater, including dewatering these areas, preventing discharge of any water potentially contaminated during the construction/demolition process, and restoring sites to natural subsurface conditions prior to construction of the proposed CPF.

Operation

- Obtain and adhere to the requirements of a *Maryland General Permit for Discharges of Stormwater Associated with Industrial Activity* to regulate the quantity and quality of stormwater runoff generated by operation of the proposed CPF. Alternatively, in coordination with the USDA, Treasury may amend the NPDES MS4 Phase II General Permit that currently covers BARC operations to include the proposed CPF.
- Maintain and continue to comply with the existing discharge permit issued by the MDE for the BARC East WWTP.

1.5 Mitigation Measures

Treasury should implement the following project-specific mitigation measure to further reduce the potential for adverse impacts to water resources:

- As an alternative to diverting approximately 117 linear feet of the unnamed intermittent stream on-site, modify the LOD associated with proposed entrance road upgrades and the proposed vehicle entry control facility to avoid this stream.
- Conduct excavation activities at the Project Site when the groundwater table is seasonally lower (e.g., late summer or early fall) to minimize potential encounters with this resource.

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Appendix A: Finding of No Practicable Alternative to Construction in Wetlands

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DEPARTMENT OF THE TREASURY

DRAFT FINDING OF NO PRACTICABLE ALTERNATIVE FOR CONSTRUCTION AND OPERATION OF A CURRENCY PRODUCTION FACILITY AT THE BELTSVILLE AGRICULTURAL RESEARCH CENTER, MARYLAND

1.0 Introduction

Comprised of nearly 6,600 acres of land, the Henry A. Wallace Beltsville Agricultural Research Center (BARC) is situated 10 miles northeast of Washington, DC and 20 miles southwest of Baltimore, Maryland. Just outside the Capital Beltway (i.e. Interstate I-495) BARC is bordered by the suburban community of Beltsville, the cities of Greenbelt and College Park, and by several other federal properties.

The United States Department of the Treasury proposes to construct and operate a new Currency Production Facility (CPF) on a 104-acre parcel of land within the Central Farm area of BARC to replace the Bureau of Engraving and Printing's existing production facility located in downtown Washington, DC (Proposed Action). Field investigations conducted in support of the National Environmental Policy Act (NEPA) analysis for this Proposed Action documented approximately 2.94 acres of wetlands within the 104-acre parcel and the additional 18-acre study area that will provide for traffic improvements off Powder Mill Road used to access the site.

Under Executive Order (EO) 11988, *Floodplain Management*, federal agencies must find that there is no practicable alternative to development within the 100-year floodplain. Under EO 11990, *Protection of Wetlands,* federal agencies must avoid undertaking new construction located in wetlands unless the head of the agency finds that there is no practicable alternative to such construction. Further, the Treasury must take all practicable measures to minimize harm to or within floodplains and wetlands. The Treasury has determined that elements of the Proposed Action must be located within wetlands on the BARC parcel. No floodplains exist within the study area and will not be addressed in this document.

This preliminary finding incorporates the analysis and conclusions of the November 2020 *Construction and Operation of a Currency Production Facility at the Beltsville Agricultural Research Center, Draft Environmental Impact Statement* (Draft EIS). It is being made available with the Draft EIS for public comment, in accordance with both EOs.

2.0 Notice of Wetland Involvement

EO 11990 requires that each federal agency, to the extent permitted by law, "shall avoid undertaking or providing assistance for new construction located in wetlands unless the head of the agency finds: (1) that there is no practicable alternative to such construction; and, (2) that the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use." The term "wetlands" means "those areas that are inundated by surface or ground water with a frequency sufficient to support and under normal circumstances does or would support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction."

Portions of the Proposed Action would be constructed in the wetlands on the BARC parcel (**Figure 1**). Development can impact these natural resources via the loss or degradation of their natural functional benefits such as water storage, infiltration, and filtration. These impacts extend to the intrinsic value of these resources or the benefits associated with their use, such as wildlife habitat, recreation, and aesthetic enjoyment. Wetland functions and values are also susceptible to changes in the volume, rate, and quality of stormwater discharge, particularly as influenced by the amount of impervious surface within a watershed.

Publication in the *Federal Register* of the Notice of Availability (NOA) for the Draft EIS commences a 45-day public review period. The notice also states that the 45-day public comment period applies to this Draft Finding of No Practicable Alternative (FONPA). Comments on the Draft FONPA may also be offered at the public hearing for the Draft EIS.

3.0 Description of the Proposed Action and Discussion of Alternatives

The Proposed Action is to construct and operate an approximately 1 million square-foot currency production facility on the 104-acre parcel within the Central Farm on BARC. The Proposed Action would provide a modernized, efficient facility located within the National Capital Region (NCR) to replace the over 100-year-old facility located in downtown Washington, DC.

Alternatives Selection Criteria

The Treasury, through a 20-year planning process, undertook a robust, logical, and sequential site screening process described in detail in the Draft EIS. Once it was determined that construction of a new facility was the best course of action, 81 potential sites were identified, of which 31 sites met the initial criteria of adequate parcel size (i.e., 60 acres or more) and appropriate location (i.e., within a 30-mile radius of central Washington, DC and within 10 miles of a major interstate). Of these 31 sites, only 6 were already under federal control, a follow-on requirement as described in the Draft EIS, Section 2.3. The six sites were further narrowed down to a single site based on the following: location, accessibility of the site to major roadways, availability for transfer to the Treasury in a timely manner, adequate parcel size, and developability (site must not be unduly constrained to development due to terrain or other construction or use limitations).

Alternatives Subject to Further Analysis

Based on the selection criteria analysis described above, only the Treasury's Proposed Action on the 104-acre BARC parcel, which is the Preferred Alternative, and the No Action Alternative were carried forward for detailed analysis.

No Action Alternative

Under the No Action Alternative, the Treasury would not construct and operate a new CPF at BARC. Existing conditions at BARC would continue for the foreseeable future, and the Treasury would continue operations in its existing, obsolete, owned and leased facilities. The No Action Alternative did not meet the screening criteria developed by the Treasury, but was carried forward for analysis in the EIS in accordance with NEPA requirements to provide a baseline against which impacts of the Proposed Action could be measured. Because it does not meet the purpose and need for the Proposed Action, this alternative is not "practicable" within the meaning of EO 11990.

Preferred Alternative

The Preferred Alternative would implement the Proposed Action to construct and operate a new CPF on the 104-acre parcel on BARC. In addition to the approximately 1 million square foot CPF, the Treasury would also construct a new entrance road connecting its proposed parcel to Powder Mill Road, together with several minor modifications to Powder Mill Road in the vicinity of the intersection with the new entrance road to reduce potential impacts on traffic flow. Specifically, the Treasury would install a traffic control device (i.e. a traffic light) at the intersection of Powder Mill Road and the entrance road, widen Powder Mill Road to accommodate additional lanes, and remove the existing rumble strips on Powder Mill Road. These proposed modifications/upgrades would result in construction activities within an additional 18 acres, bringing the combined Project Site to a total of approximately 122 acres.

This alternative meets the purpose and need of the Proposed Action. It is the only practicable alternative within the meaning of EO 11990.

Impacts and Mitigation Measures

There are 2.94 acres of wetlands identified within the Project Action Site. The Proposed Action would permanently affect approximately 0.94 acres of wetlands and up to 2 additional acres of wetlands may be subject to temporary, construction-related effects.

Construction of the Proposed Action would place fill in Wetlands 2 and 3 (Figure 1), both isolated and not regulated by the U.S. Army Corps of Engineers Regulatory (USACE), and totaling 0.73 acre. Wetland 2 falls largely within the footprint of the proposed building itself and Wetland 3 falls within the parking area.

Site constraints render avoiding impacts to these two wetlands highly impractical: an existing mandatory reforestation area associated with previous Intercounty Connector construction is located south of Odell Road within the northern

portion of the study area. Wetland 4, the largest of the wetlands, is situated in the southeast corner of the project site. Three site configurations were evaluated by the design team, all of which incorporated on-site preservation of these two large natural features. Elements of the main design, to include the orientation of the main axis of the building, the location of a possible expansion area, and the parking lot, were considered in different layouts across the three scenarios in an effort to reduce direct impacts to wetlands and other natural features to the maximum extent practicable, while still meeting the minimum design parameters for the CPF (including a perimeter fence, patrol road, an earthen berm along the building's production floor, and stormwater management features).

Wetlands 7 and 8, connected downstream to Beaver Dam Creek by an unnamed, intermittent channel, total 0.18 acre in size and are regulated by USACE and the Maryland Department of the Environment (MDE). These wetlands are located within the project Limit of Disturbance (LOD) associated with improvements to the existing configuration of Powder Mill Road. Construction of the proposed security fence along the boundary of the Treasury's proposed parcel could impact 0.03 acre of Wetland 4, also connected to surface waters downstream and regulated by USACE and MDE. The perimeter fence is necessary to ensure this essential building is secured and would only impact a peripheral outcrop of the wetland at its easternmost extent. The Treasury has made deliberate efforts not to locate any appurtenant structures within this wetland, the largest of the on-site wetlands.

In total, the Proposed Action would impact 0.94 acre of wetlands within the Project Site (i.e., 0.11 percent of wetlands on BARC) and 0.65 acre of MDE-regulated nontidal wetland buffer. As the Proposed Action would impact less than 1 acre of isolated, nontidal wetlands, an exemption from mitigation requirements for those wetlands under Maryland's Nontidal Wetlands Protection Program will be applied for and any required mitigation will be implemented as directed.

No operational activities of the proposed CPF would encroach upon Wetlands 4 and 6 and their associated buffers. Therefore, operation of the Proposed Action would have no adverse impacts on these wetlands.

EO 11990 requires that the proposed action include "all practicable measures to minimize harm to wetland[s]." Prior to implementing projects impacting wetlands, the construction contractor would obtain coverage under applicable permits issued by the US Army Corps of Engineers in accordance with the Clean Water Act (CWA). Adherence to avoidance, mitigation, and compensation measures specified in the permits would be required. These include all practicable measures available to ensure that wetland impacts are mitigated to the extent possible.

Additionally, Environmental Protection Measures (EPMs), Regulatory Compliance Measures (RCMs), and Best Management Practices (BMPs) will be incorporated into the Proposed Action to avoid or minimize impacts on these wetland resources and are collectively described, as follows:

- Incorporate a suitable diversion of the unnamed intermittent stream on-site such that it does not overlap the project limits of disturbance (LOD). This diversion would need to maintain the existing stream flow and hydrologic function of the stream to the extent practicable.
- Obtain and adhere to appropriate permits (or letters of exemption) from the MDE and USACE to comply with Sections 404/401 of the CWA and comply with all Best Management Practices (BMPs) established throughout this consultation process.
- Obtain a *Maryland General Permit for Stormwater Associated with Construction Activity* to manage stormwater associated with construction of the Proposed Action. Treasury would prepare and adhere to a state-approved Erosion and Sediment Control Plan (ESCP) and submit an NOI to meet the requirements of the federal National Pollutant Discharge Elimination System (NPDES) program. Treasury would also manage stormwater discharges and maintain water quality through compliance with existing total maximum daily loads (TMDLs).
- Incorporate, as required by Section 438 of the Energy Independence and Security Act (EISA), green infrastructure or low impact development (GI/LID) measures to maintain the pre-development hydrology of the Project Site to the maximum extent technically feasible during operation, minimizing any change in the rate, volume, and temperature of stormwater discharging to off-site areas.
- Incorporate, as required by EO 13508, stormwater control BMPs to manage and reduce pollution flowing from the Project Site into the Chesapeake Bay and its tributaries.
- Submit a Federal Consistency Determination (FCD) to the Maryland Department of Natural Resources (MDNR) for review and concurrence.

- Demarcate the construction LOD in the field to prevent encroachment or unpermitted surface water resources.
- Establish construction staging areas at least 100 feet away from surface water resources.
- When excavating below the groundwater table, incorporate measures that minimize potential impacts to local shallow groundwater, including dewatering these areas, preventing discharge of any water potentially contaminated during the construction/demolition process, and restoring sites to natural subsurface conditions prior to construction of the proposed CPF.

The above steps would be implemented as "mitigation by design" and are a proactive means of minimizing environmental impacts. Taken together, these and other yet to be determined BMPs and mitigation measures would avoid or minimize the loss of and impacts on wetlands at the BEP project area. These measures represent all practicable measures to minimize harm to wetlands.

4.0 Finding

During development of the CPF site design, the Treasury considered alternatives for the site layout and sought ways to minimize impacts to resources early in the design process using information obtained from the Site Constraints Report dated December 2019. The Treasury has made, and will continue to make, efforts to site the needed facilities entirely outside of wetlands and other regulated waters while still addressing the facility's operational needs and safety requirements. Due to the location of waters in proximity to established roadways necessary to access the site, and the need for a perimeter fence to provide security, it was determined that complete avoidance of wetlands was not feasible. Alternatives that would entirely avoid developing in wetlands were also eliminated from consideration, for the reasons discussed above. As such, the Treasury has determined there are no practicable alternatives to avoiding development within wetlands on BARC.

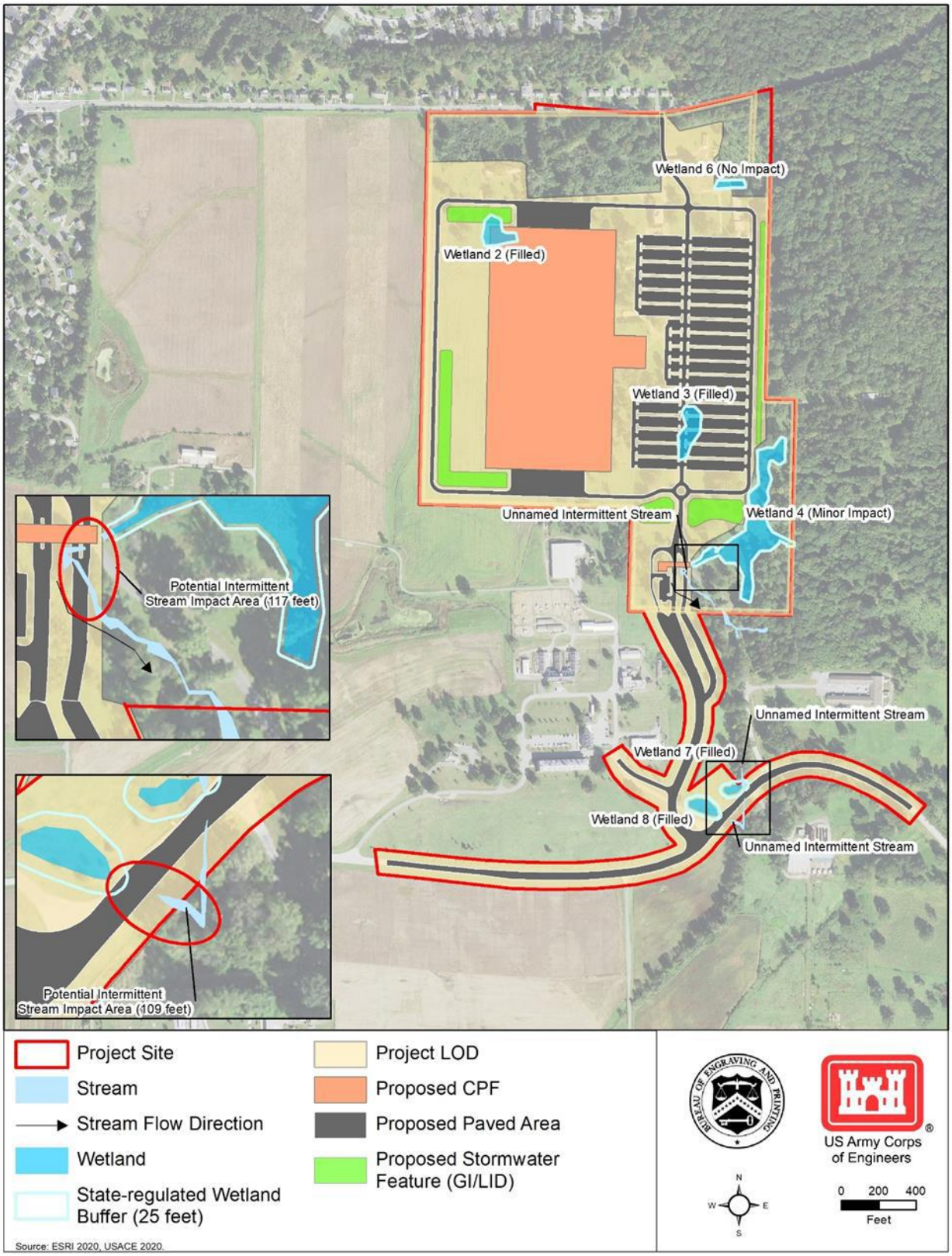
Following a thorough evaluation of alternate plans that would satisfy the purpose and need for Proposed Action, I find that there is no practicable alternative to siting elements of the Proposed Action entirely outside of wetlands. Therefore, the Treasury will ensure that all practicable measures to minimize harm to wetlands are incorporated into the Proposed Action.

Date

Charles C. Davis, P.E.
Program Manager
Bureau of Engraving and Printing

Attachments: Figure 1. Potentially Impacted Water Bodies and Proposed Stormwater Infrastructure (Figure 3.7-3 of DEIS)

Figure 1. Potentially Impacted Water Bodies and Proposed Stormwater Infrastructure



Appendix B: Federal Consistency Determination

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DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, BALTIMORE DISTRICT
2 HOPKINS PLAZA
BALTIMORE, MD 21201

November 6, 2020

Ms. Denise Keehner
Federal Consistency Coordinator
Maryland Department of the Environment
Wetlands and Waterways Program
1800 Washington Boulevard, Suite 430
Baltimore, MD 21230-1708

Subject: Federal Consistency Determination
Construction and Operation of a Proposed Currency Production Facility,
Beltsville Agricultural Research Center, Beltsville, Prince George's County, Maryland

Dear Ms. Keehner,

The United States Army Corps of Engineers, Baltimore District (USACE) is submitting the enclosed Federal Consistency Determination on behalf of the United States (US) Department of the Treasury (Treasury), Bureau of Engraving and Printing (BEP), pursuant to Section 307(d) of the Coastal Zone Management Act (CZMA) of 1972 and 15 Code of Federal Regulations (CFR) Part 930, Subpart F for the proposed construction and operation of a Currency Production Facility (CPF) at the Henry A. Wallace Beltsville Agricultural Research Center (BARC) in Prince George's County, Maryland.

BARC is located in Beltsville, approximately 10 miles northeast of Washington, DC (see **Figure 1**). It is operated and used by the US Department of Agriculture (USDA) for agricultural research. It consists of nearly 6,600 acres of land, and is split into five farm sections. BARC is primarily open, agricultural land, but is surrounded by the suburban community of Beltsville and the cities of Greenbelt and College Park (see **Figure 2**).

The Proposed Action would include the construction and operation of a new CPF to replace Treasury's existing production facility located in downtown Washington, DC (DC Facility). Current manufacturing processes at the DC Facility are inefficient and pose safety risks to staff, and the DC Facility is not compliant with modern physical security standards. The Proposed Action would replace the operationally deficient DC Facility and provide Treasury with a modern, more efficient, scalable production facility of sufficient size that can be reconfigured as needed in response to economic or technological changes.

Prince George's County is located within the state of Maryland's designated coastal zone. Although BARC, as a federally owned facility, is statutorily excluded from the coastal zone, the Proposed Action would have the potential to affect Maryland's coastal uses or resources. Therefore, Treasury has prepared this Federal Consistency Determination to evaluate the Proposed Action's effects on coastal resources, and its consistency with the enforceable policies of Maryland's federally approved Coastal Zone Management Program (CZMP). Based on the analysis presented in the enclosed Federal Consistency Determination, Treasury has determined that the Proposed Action would be consistent to the maximum extent practicable with the enforceable policies of Maryland's CZMP.

Pursuant to 15 CFR Section 930.41, the Maryland CZMP has **sixty (60) days** from the receipt of this letter in which to concur with or object to the Treasury's consistency determination, or to request an extension under 15 CFR Section 930.41(b). Maryland's concurrence will be presumed if its response is not received by Treasury on the 60th day from receipt of this determination.

The USACE, under an interagency agreement with Treasury, is providing environmental program support for the Proposed Action. The state of Maryland's response or requests for additional information should be sent to:

Mr. Harvey Johnson
(410) 962-7961
BEP-EIS@usace.army.mil

Sincerely,

_____ _____

Harvey Johnson
Programs and Project Management Division
USACE – Baltimore District

Date

Enclosure:

Federal Consistency Determination

US Department of the Treasury

Construction and Operation of a Currency Production Facility at the Beltsville Agricultural Research Center

Prince George's County, Maryland

FEDERAL CONSISTENCY DETERMINATION

In accordance with Section 307(d) of the Coastal Zone Management Act (CZMA) of 1972 and 15 Code of Federal Regulations (CFR) Part 930 Subpart F, this document provides the state of Maryland with a Federal Consistency Determination for the Proposed Action described below.

FEDERAL AGENCY ACTION

The United States (US) Department of the Treasury (Treasury), Bureau of Engraving and Printing (BEP) is proposing to construct and operate a new Currency Production Facility (CPF) within the National Capital Region (NCR) at the Henry A. Wallace Beltsville Agricultural Research Center (BARC) to replace its existing production facility located in downtown Washington, DC (Proposed Action).

BARC is located in Beltsville, Prince George's County, Maryland, approximately 10 miles northeast of Washington, DC (see **Figure 1**). It is operated and used by the US Department of Agriculture (USDA) for agricultural research. It consists of nearly 6,600 acres of land, and is split into five farm sections. BARC is primarily open, agricultural land, but is surrounded by the suburban community of Beltsville and the cities of Greenbelt and College Park (see **Figure 2**).

Prince George's County is located within Maryland's designated coastal zone. Although BARC, as a federally owned facility, is statutorily excluded from the coastal zone, the Proposed Action would have the potential to affect Maryland's coastal uses or resources. Therefore, Treasury is required to determine the Proposed Action's consistency with the enforceable policies of Maryland's federally approved Coastal Zone Management Program (CZMP).

To analyze impacts on the environment potentially resulting from the Proposed Action, Treasury is also preparing an Environmental Impact Statement (EIS) in accordance with the National Environmental Policy Act of 1969 (NEPA; 42 US Code §§ 4321 *et seq.*), the President's Council on Environmental Quality (CEQ) Regulations Implementing the Procedural Provisions of NEPA (40 CFR Parts 1500-1508), and the US Department of the Treasury Directive (TD) 75-02, *National Environmental Policy Act Program*.

PURPOSE AND NEED

The purpose of the Proposed Action is to construct and operate a new, up to 1 million-square-foot CPF on an approximately 104-acre parcel of federally owned, available land within the NCR that has ready access to interstate roadways and commercial airports for transportation of US currency. The Proposed Action would provide Treasury with a modern, more efficient, scalable production facility of sufficient size within the NCR; it would also substantially reduce Treasury's federal footprint within the NCR. Treasury's continued presence within the NCR would support and sustain its mission over the long term, resulting in more efficient, streamlined currency production.

The need for the Proposed Action is to replace Treasury's obsolete DC Facility that is neither able to support modern currency production nor support Treasury's current and future mission. The age, configuration, and location of the DC Facility severely limit Treasury's ability to modernize the DC Facility through renovation. Manufacturing processes at the DC Facility are inefficient and pose safety risks to staff, and the DC Facility is not compliant with modern physical security standards. The Proposed Action would replace the operationally deficient DC Facility with a smaller, strategically located CPF within the NCR that can be reconfigured as needed in response to economic or technological changes.

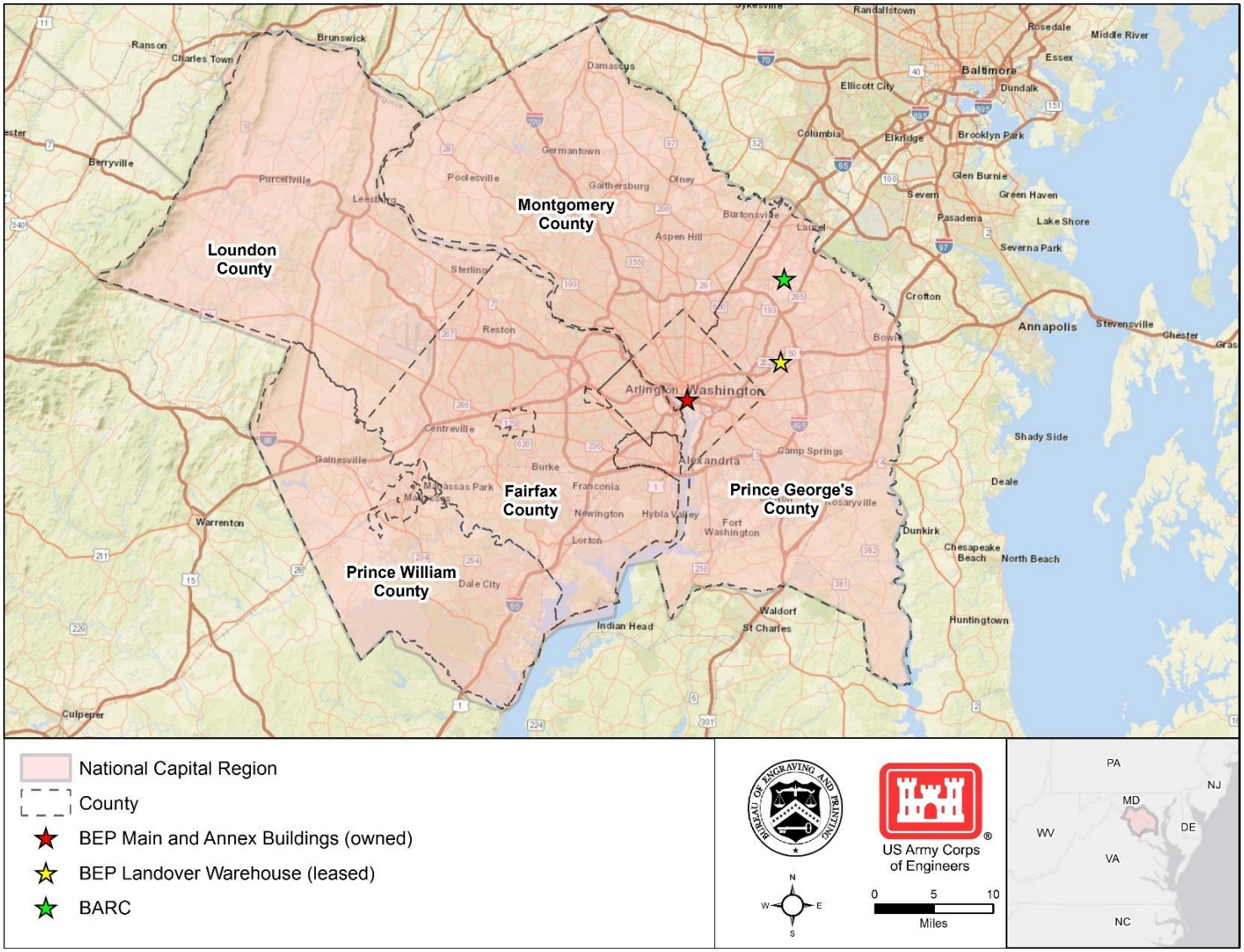


Figure 1: Regional Location Map

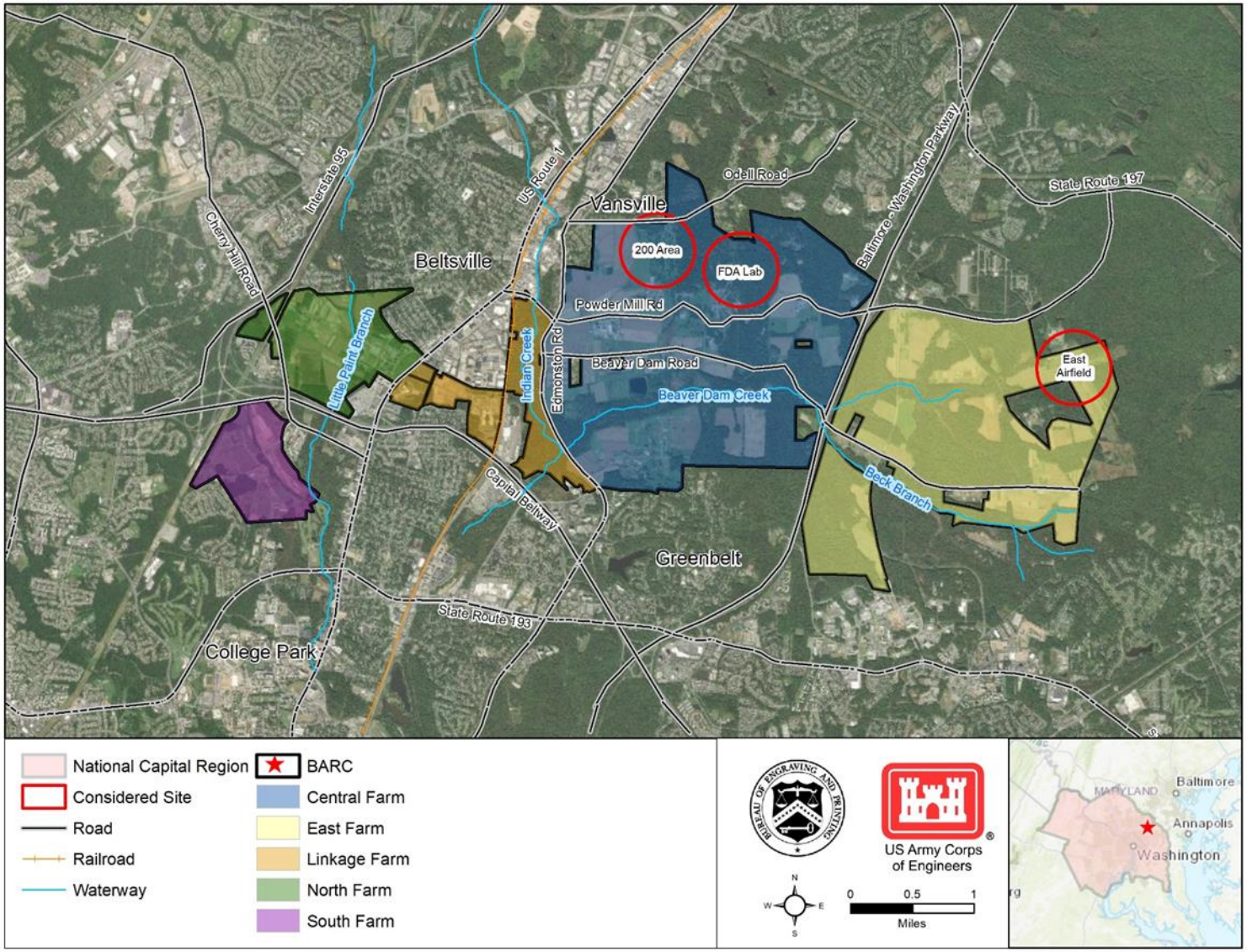


Figure 2: BARC and the Surrounding Region

SUMMARY OF PROPOSED ACTION AND ANTICIPATED EFFECTS

Under the Proposed Action, Treasury would construct and operate a new CPF on the Project Site at BARC, in Beltsville, Prince George's County, Maryland to replace the deficient DC Facility (see **Figure 3**). The proposed CPF would be up to 1 million square feet in size and range in height from approximately 40 to 50 feet above ground level. It would be equipped with state-of-the-art technology to automate and track currency manufacturing and operate with greater efficiency. Work production flows would be flexible and reconfigurable to avoid disruptions of work in progress or respond to changing priorities. The Proposed Action would include ample, strategically located storage, administrative, and manufacturing space to support currency production. The Proposed Action would be implemented over an approximately nine-year period, after completion of the NEPA analysis

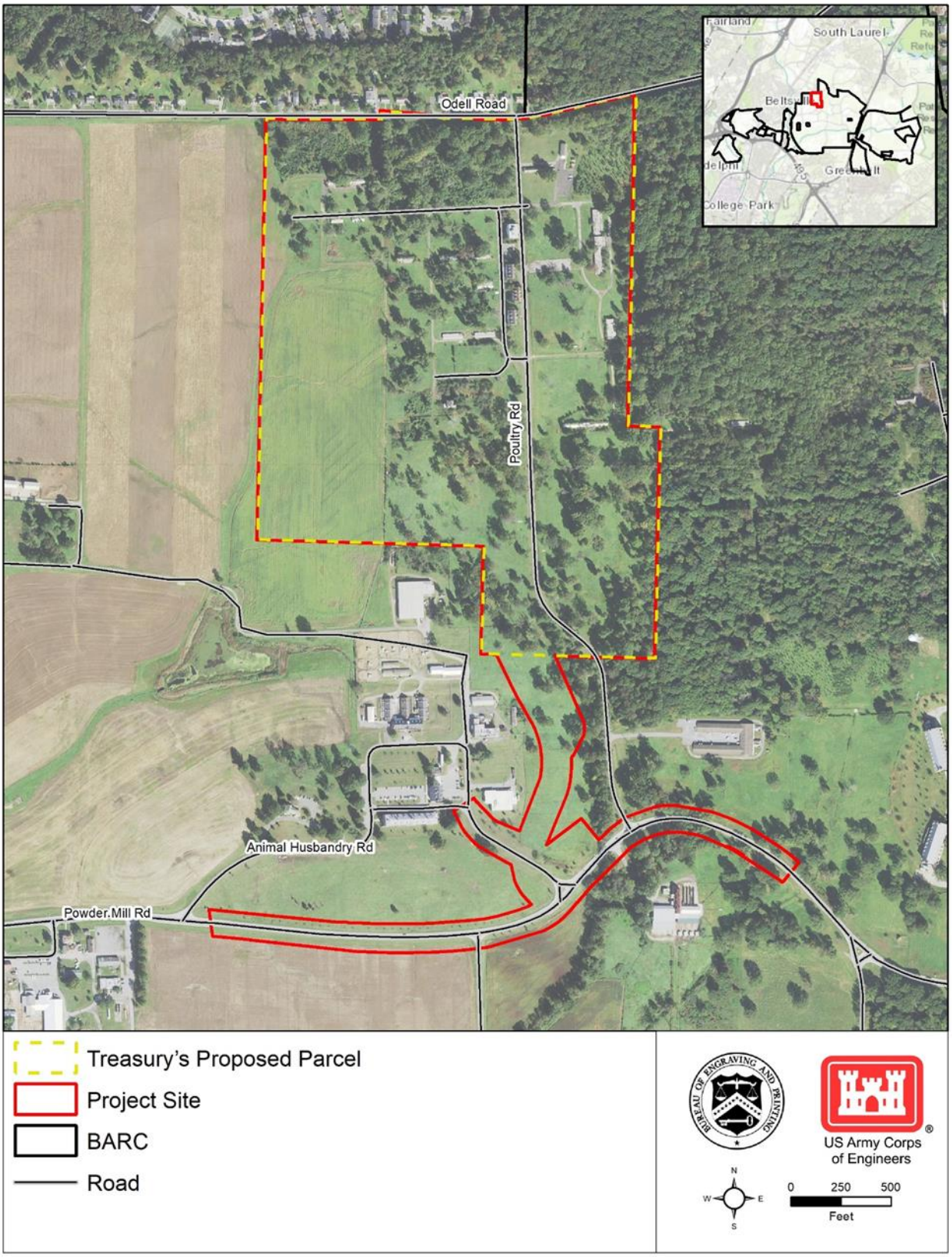
The proposed CPF would include associated equipment and mechanical systems for managing air, liquid, and solid waste streams that result from the multiple steps involved in the currency production process, including onsite air and wastewater treatment facilities. Utility systems would include electricity, water, sanitary sewer, and fiber optic systems and services. The CPF design would potentially include a number of sustainable features to reduce the amount of energy required for operation.

In addition to the proposed CPF, Treasury would construct a new entrance road connecting the proposed CPF to Powder Mill Road near the location of the existing Animal Husbandry Road. Treasury would also construct several minor modifications to Powder Mill Road in the vicinity of the intersection with the new entrance road. These construction activities would occur in an approximately 18-acre area, bringing the Project Site to a total of approximately 122 acres.

Construction of the Proposed Action would begin in 2021 or 2022; it would include site preparation activities, including demolition, clearing, grading, and leveling; installation of site utilities, erosion control measures, and security measures; final grading; paving of roads, including the proposed entrance road, modifications to Powder Mill Road, and parking areas; construction of the proposed facility; landscaping; and commissioning. Once constructed, Treasury would gradually transition personnel and operations from the DC Facility in phases from approximately 2025 to 2029. Currency manufacturing at the DC Facility would be phased out. The DC Facility would likely be renovated to function as Treasury's administrative headquarters and support various other Treasury functions; however, this is not considered part of the Proposed Action and would be analyzed under separate NEPA documentation, when appropriate.

Construction activities would result in temporary disturbances, such as air emissions, increased noise levels, and soil erosion; and permanent disturbances, such as wetland loss, increased impervious surfaces, vegetation removal and tree clearance, and demolition of historic buildings. Such disturbances would have adverse impacts to the corresponding natural environmental resources, as well as to the surrounding human environment. Construction contractors would adhere to applicable best management practices (BMPs), environmental protection measures (EPMs), and regulatory compliance measures (RCMs) included within the Proposed Action to avoid or minimize adverse impacts on affected environmental resources. Following the completion of construction activities, the Project Site would be permanently converted from agricultural land to an industrial facility.

Operation would have long-term effects from increased air emissions, and would result in increased surrounding noise levels, soil erosion, a potentially increased volume of stormwater runoff, the generation of hazardous waste, failing traffic conditions, and changes to the visual environment. Operation of the proposed CPF would adhere to applicable established federal and state requirements and procedures, and with the implementation of appropriate minimization and mitigation measures, impacts from the Proposed Action would be maintained below significant levels.



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93 **Figure 3: Project Site at BARC**

ENFORCEABLE POLICIES

The state of Maryland has developed and implemented a federally approved CZMP, encompassing enforceable policies for the coastal area pertaining to:

General Policies

- Core policies
- Water quality
- Flood hazards

Coastal Resources

- The Chesapeake and Atlantic Coastal Bays Critical Area
- Tidal wetlands
- Non-tidal wetlands
- Forests
- Historical and archaeological sites
- Living aquatic resources

Coastal Uses

- Mineral extraction
- Electrical generation and transmission
- Tidal shore erosion control
- Oil and natural gas facilities
- Dredging and disposal of dredged material
- Navigation
- Transportation
- Agriculture
- Development
- Sewage treatment

The Proposed Action would have the potential to affect coastal uses or resources in Prince George's County, which is located in Maryland's designated coastal zone. **Table 1** summarizes the applicability of Maryland's enforceable policies and the Proposed Action's consistency with the applicable policies. A summary analysis of the Proposed Action's consistency with the applicable enforceable policies is presented below.

A. General Policies

A.1 Core Policies

Policy A.1.1 – *It is State policy to maintain that degree of purity of air resources which will protect the health, general welfare, and property of the people of the State.*

Construction of the proposed CPF would generate criteria pollutant emissions and fugitive dust emissions from the use of heavy equipment, vehicles, handling and transport of demolished materials, and other typical construction activities. These emissions would be temporary, and would cease following the completion of construction activities, anticipated in 2025. Both criteria pollutant emissions and fugitive dust emissions would remain below the applicable *de minimis* thresholds throughout the duration of construction.

In the long term, operation of the proposed CPF would generate criteria pollutant emissions, toxic and hazardous air pollutant emissions (HAPs), and greenhouse gas (GHG) emissions. However, these emissions already occur on a regional scale from operation of the existing DC Facility. As operations are

shifted to the proposed CPF, emissions would increase at the Project Site; however, at the same time, operations at the DC Facility would be phased out, and emissions from the DC Facility would gradually decrease. As a result, criteria pollutant and HAP emissions would remain below regulated thresholds, and any change in GHG emissions from the proposed CPF would not be perceptible on a regional level. While Treasury anticipates the proposed CPF to be a minor source of all criteria pollutants, it is possible that volatile organic compound and nitrogen oxide emissions could potentially be above major source thresholds; under this scenario, the proposed CPF would be permitted as a major source, requiring Treasury to obtain emissions offsets, lowest achievable emission rates, and a Title V operating permit for the proposed CPF in coordination with the MDE. Treasury would adhere to all requirements and emission limitations within the operating permit. Therefore, the Proposed Action would be consistent to the maximum extent practicable with this enforceable policy.

Policy A.1.2 – *The environment shall be free from noise which may jeopardize health, general welfare, or property, or which degrades the quality of life.*

Noise generated during the construction of the proposed CPF would be typical of that produced by heavy equipment such as bulldozers, excavators, graders, and trucks. Noise levels would be highest during the early construction phases and diminish as construction progresses. Noise from construction has the potential to extend beyond the Project Site and affect receptors up to 800 feet from the noise source. However, the estimated maximum sound levels experienced by noise-sensitive receptors surrounding the Project Site would fall below the regulated noise thresholds established in the Prince George's County Noise Ordinance. A noise suppression plan would also be prepared prior to beginning construction to identify noise-suppression equipment and methods.

Operation of the proposed CPF would generate noise from permanent stationary sources, such as emergency generators; heating, ventilating, and air conditioning (HVAC) equipment; and similar types of support equipment. Currency production equipment (e.g., presses) would be fully enclosed within the proposed CPF and would have minimal potential to generate exterior noise. Since operational equipment is proposed to be enclosed and in compliance with regulations, the proposed CPF operation would have a negligible adverse impact on noise in the Region of Influence (ROI). The Proposed Action would also result in operational noise from delivery trucks and employees' traveling to and from the Project Site. The estimated noise impacts would be negligible during daytime hours but less-than-significant during nighttime hours. Trucks would be routed to avoid passing within 50 feet of sensitive receptors during nighttime hours, but truck noise may still be audible, although not intrusive, to these receptors. Therefore, the Proposed Action would be consistent to the maximum extent practicable with this enforceable policy.

Policy A.1.11 – *Soil erosion shall be prevented to preserve natural resources and wildlife; control floods; prevent impairment of dams and reservoirs, maintain the navigability of rivers and harbors; protect the tax base, the public lands, and the health, safety and general welfare of the people of the State, and to enhance their living environment.*

The construction limits of disturbance (LOD) of the Proposed Action include approximately 100.3 acres, or 82.1 percent, of the Project Site (see **Figure 3**). Because the Proposed Action would disturb more than 1 acre of land, Treasury would obtain coverage under the *Maryland General Permit for Stormwater Associated with Construction Activity*, in accordance with the National Pollutant Discharge Elimination System (NPDES). Coverage under the General Permit would require preparation of and adherence to a state-approved erosion and sediment control plan to minimize impacts from erosion of soils exposed by construction activities. Once the proposed CPF is operational, undeveloped, disturbed areas within the LOD would be revegetated. Erosion and sedimentation on the site would be managed through the use of stormwater infrastructure and retention features. Through adherence to applicable permits and

implementation of stormwater management measures, the Proposed Action would be consistent to the maximum extent practicable with this enforceable policy.

Policy A.1.12 – *Controlled hazardous substances may not be stored, treated, dumped, discharged, abandoned, or otherwise disposed anywhere other than a permitted controlled hazardous substance facility or a facility that provides an equivalent level of environmental protection.*

Controlled hazardous substances used in the currency production process, and corresponding quantities of hazardous waste generated at the proposed CPF, would be used, handled, stored, and disposed of in accordance with applicable federal and state regulatory requirements as well as established Treasury practices and policies. Hazardous substances would be accessed, used, and handled only by Treasury personnel who have received appropriate training, and all such materials would be stored in secured cabinets or lockers when not in use. Hazardous waste generated at the proposed CPF would be temporarily stored in appropriate receptacles and treated off-site prior to disposal or incinerated off-site. For these reasons, the Proposed Action would be consistent to the maximum extent practicable with this enforceable policy.

A.2 Water Quality

Policy A.2.8 – *Any development or redevelopment of land for residential, commercial, industrial, or institutional purposes shall use small-scale non-structural stormwater management practices and site planning that mimics natural hydrologic conditions, to the maximum extent practicable. Development or redevelopment will be consistent with this policy when channel stability and 100 percent of the average annual predevelopment groundwater recharge are maintained, nonpoint source pollution is minimized, and structural stormwater management practices are used only if determined to be absolutely necessary.*

The Proposed Action would incorporate and adhere to applicable stormwater management requirements set forth in the *Maryland General Permit for Stormwater Associated with Construction Activity* to manage stormwater associated with construction of the Proposed Action, and the *Maryland General Permit for Discharges of Stormwater Associated with Industrial Activity* for managing the quantity and quality of stormwater generated by the operation of the proposed CPF.

Once constructed, the Proposed Action would increase impervious surface cover on the Project Site by 29.4 acres for a total of 46.7 acres, or 38.2 percent of the Project Site. As a result, stormwater runoff volumes discharging from the Project Site to receiving waterbodies could increase, with corresponding increases in concentrations of pollutants and sediments. Treasury would properly design, construct, and maintain green infrastructure/low-impact development (GI/LID) stormwater infrastructure on the Project Site that would comply with state of Maryland requirements and Section 438 of the Energy Independence and Security Act of 2007 (EISA), ensuring that pre-development hydrology is maintained on-site to the maximum extent technically feasible and no significant adverse impacts related to stormwater occur. Stormwater control BMPs identified under the 2009 Executive Order (EO) 13508¸ *Chesapeake Bay Protection and Restoration,* would also be integrated into the Project Site design to control and reduce water pollution coming from federal facilities to protect the Chesapeake Bay and its tributaries. Therefore, the Proposed Action would be consistent to the maximum extent practicable with this enforceable policy.

Policy A.2.11 – *Public meetings and citizen education shall be encouraged as a necessary function of water quality regulation.*

Treasury has been engaging with local government leaders concerning the Proposed Action since 2017. In accordance with NEPA, Treasury published a Notice of Intent (NOI) to prepare this EIS in the *Federal Register* on November 15, 2019. Publication of the NOI initiated a 30-day scoping period during which Treasury solicited comments from the public and federal, state, and local agencies and organizations, as well as Native American Tribes. A public scoping meeting was held December 3, 2019. A public hearing will

be held during the 45-day Draft EIS review period. These meetings provide the opportunity to solicit comments from the public, address concerns, and inform stakeholders about the Proposed Action, alternatives, and anticipated environmental effects. Substantive comments received during these public comment phases will be addressed in the EIS. Public outreach during the NEPA process is ongoing, including routine updates to the publicly accessible project website, and periodic project update mailings to interested stakeholders. Therefore, the Proposed Action would be consistent to the maximum extent practicable with this enforceable policy.

B. Coastal Resources

B.3 Non-Tidal Wetlands

Policy B.3.1 – *Removal, excavation, grading, dredging, dumping, or discharging of, or filling a non-tidal wetland with materials of any kind, including the driving of piles and placing of obstructions; changing existing drainage characteristics, sedimentation patterns, flow patterns, or flood retention characteristics; disturbing the water level or water table; or removing or destroying plant life that would alter the character of a non-tidal wetland is prohibited unless:*

- *The proposed project has no practicable alternative;*
- *Adverse impacts are first avoided and then minimized based on consideration of existing topography, vegetation, fish and wildlife resources, and hydrological conditions;*
- *Comprehensive watershed management plans are considered; and*
- *The proposed project does not cause or contribute to an individual or cumulative effect that degrades:*
    - *Aquatic ecosystem diversity, productivity, and stability,*
    - *Plankton, fish, shellfish, and wildlife,*
    - *Recreational and economic values, and*
    - *Public welfare;*
    - *Surface water quality; or*
    - *Ground water quality.*

Mitigation measures are required to replace the ecological values associated with non-tidal wetlands that are impaired by activities described above.

Through sensitive project design, construction of the proposed CPF would avoid 2.00 acres of wetlands, as well as their associated 25-foot Maryland Department of the Environment (MDE)-regulated buffers. However, 0.73 acre of isolated wetlands, 0.21 acre of potentially jurisdictional wetlands, and 0.65 acre of MDE-regulated 25-foot nontidal wetland buffer would be impacted. Treasury would adhere to the applicable conditions set forth by the MDE's wetlands permit program and would implement any required mitigation as directed by the MDE. Additionally. Treasury would comply with all permitting requirements under the Clean Water Act (CWA) Sections 404/401, including adherence to applicable water quality maintenance, avoidance, compensation, and mitigation measures. Based on a rigorous site screening and selection process, there is no practicable alternative for the Proposed Action. No impacts to wetlands would occur as a result of operational activities. Therefore, with the implementation of the appropriate compliance and mitigation measures, the Proposed Action would be consistent to the maximum extent practicable with this enforceable policy.

B.4 Forests

Policy B.4.1 – *The Forest Conservation Act and its implementing regulations, as approved by NOAA, are enforceable policies. Generally, before developing an area greater than 40,000 square feet, forested and environmentally sensitive areas must be identified and preserved whenever possible. If these areas cannot*

be preserved, reforestation or other mitigation is required to replace the values associated with them. This policy does not apply in the Critical Area.

Proposed forest clearing (i.e., approximately 3.6 acres) would primarily 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 specimen trees of the 149 total specimen trees on the Project Site (i.e., 84 percent) would be removed. The removal of specimen trees and forested areas during construction of the Proposed Action would be offset by Treasury's compliance with the Maryland Forest Conservation Act (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 long-term protection agreement. 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. With the implementation of these impact-reduction measures, the Proposed Action would be consistent to the maximum extent practicable with this enforceable policy.

B.5 Historical and Archaeological Sites

Policy B.5.2 – *Unless permission is granted by the Maryland Historical Trust, activities that excavate, remove, destroy, injure, deface, or disturb cave features or archaeological sites under State control are generally prohibited.*

Two Phase I archaeological surveys conducted in October-November 2019 and July 2020 documented ten archaeological sites within the Project Site. Treasury initially recommended seven of these sites as not eligible for listing in the National Register of Historic Places (NRHP) and three as potentially eligible for the NRHP. The Maryland Historical Trust (MHT) concurred with all of Treasury's NRHP eligibility recommendations (except for one potentially eligible site identified in July 2020) in a letter dated February 10, 2020 and recommended avoidance or Phase II evaluation of the two potentially eligible archaeological sites. Treasury subsequently conducted Phase II evaluations for two of the three potentially eligible sites within the archaeological Area of Potential Effects (APE), which would be adversely affected by the Proposed Action. Based on the results of the Phase II evaluation, both of these sites are not eligible for listing in the NRHP, pending concurrence from the MHT. Treasury would completely avoid the remaining potentially eligible archaeological site. Therefore, with the implementation of the appropriate compliance and mitigation measures, the Proposed Action would be consistent to the maximum extent practicable with this enforceable policy.

B.6 Living Aquatic Resources

Policy B.6.7 – *Projects in or adjacent to non-tidal waters shall not adversely affect aquatic or terrestrial habitat unless there is no reasonable alternative and mitigation is provided.*

Within the Project Site, there are six non-tidal wetlands and two surface water features, both unnamed intermittent streams. Through sensitive project design, construction of the proposed CPF would avoid 2.00 acres of wetlands, as well as their vegetated buffers. However, 0.73 acre of isolated wetlands, 0.21 acre of potentially jurisdictional wetlands, and 0.65 acre of MDE-regulated 25-foot nontidal wetland buffer would be impacted. Treasury would adhere to the applicable conditions set forth by the MDE's wetlands permit program and would implement any required mitigation as directed by the MDE. Additionally, Treasury would comply with all permitting requirements under Sections 404/401 of the CWA.

Construction of the Proposed Action would also impact approximately 226 linear feet of stream within the Project Site, resulting in a potentially significant adverse impact. Approximately 117 linear feet of one intermittent stream would be diverted; Treasury would likely relocate this portion of the stream to the east of the proposed development. Diversion of this intermittent stream would result in a small permanent impact

to this resource, but the proposed changes would not permanently impede the stream segment or its connection to other Waters of the US. The new stream channel would be designed to match the existing stream flow and hydrologic function. Approximately 109 linear feet of a second intermittent stream would be permanently filled. The impacts to both intermittent streams would be minimized through compliance with Sections 404/401 of the CWA; permitting would require adherence to applicable water quality maintenance, avoidance, compensation, and mitigation measures.

Based on a rigorous site screening and selection process, there is no practicable alternative for the Proposed Action, and impacts to non-tidal water from the construction of the Proposed Action are unavoidable. While the Proposed Action would adversely impact these non-tidal waters and the terrestrial habitats surrounding them, habitat loss has been minimized through sensitive project design. Further, no rare, threatened, or endangered plant or aquatic animals at either the federal or state level have the potential to occur within these impacted areas. It is likely that most wildlife displaced from the Project Site by the Proposed Action would relocate to nearby areas of BARC offering similar habitat.

No impacts to non-tidal wetlands would occur as a result of operational activities. Operation of the proposed CPF may increase discharge volumes from BARC's existing wastewater treatment plant into nearby surface waters, potentially increasing downstream water volumes and flow; however, water quality would not be affected. As no adverse effects to water quality would occur, aquatic habitat is not likely to be adversely affected. Through compliance with discharge permits, the Proposed Action would be consistent to the maximum extent practicable with this enforceable policy.

CONCLUSION

A summary of applicable and non-applicable enforceable policies to the Proposed Action is provided in **Table 1**. Treasury has determined that the Proposed Action, which would be implemented in accordance with applicable BMPs, EPMs, RCMs, and mitigation measures, would be consistent to the maximum extent practicable with the enforceable policies of Maryland's CZMP.

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Table 1: Maryland's Enforceable Policies

Code	Policy	Policy References[1]	Applicability or Consistency[2]
A	**General Policies**		
A.1	**Core Policies**		
A.1.1	It is State policy to maintain that degree of purity of air resources which will protect the health, general welfare, and property of the people of the State.	MDE (C9) Md. Code Ann., Envir. §§ 2-102 to -103	**Consistent**
A.1.2	The environment shall be free from noise which may jeopardize health, general welfare, or property, or which degrades the quality of life.	MDE (C9) COMAR 26.02.03.02	**Consistent**
A.1.3	The unique ecological, geological, scenic, and contemplative aspects of State wild lands shall not be affected in a manner that would jeopardize the future use and enjoyment of those lands as wild.	DNR (C7) Md. Code Ann., Nat. Res. §§ 5-1201, -1203	Not Applicable (N/A)
A.1.4	The safety, order, and natural beauty of State parks and forests, State reserves, scenic preserves, parkways, historical monuments and recreational areas shall be preserved.	DNR (B1) Md. Code. Ann., Nat. Res. § 5-209	N/A
A.1.5	Any water appropriation must be reasonable in relation to the anticipated level of use and may not have an unreasonable adverse impact on water resources or other users of the waters of the State.	MDE (C9) COMAR 26.17.06.02	N/A
A.1.6	The natural character and scenic value of a river or waterway must be given full consideration before the development of any water or related land resources including construction of improvements, diversions, roadways, crossings, or channelization.	MDE/DNR (C7) Md. Code Ann., Nat. Res. § 8-405 COMAR 26.17.04.11	N/A
A.1.7	A dam or other structure that impedes the natural flow of a scenic or wild river may not be constructed, operated, or maintained, and channelization may not be undertaken, until the applicant considers alternatives less harmful to the scenic and wild resource. Construction of an impoundment upon a scenic or wild river is contrary to the public interest, if that project floods an area of unusual beauty, blocks the access to the public of a view previously enjoyed, or alters the stream's wild qualities.	MDE/DNR (C7) Md. Code Ann., Nat. Res. § 8-406 COMAR 26.17.04.11	N/A
A.1.8	Permanent structures that do not have a clear environmental benefit are prohibited east of the dune line along the Atlantic Coast.	MDE/DNR (B1) Md. Code Ann., Nat. Res. § 8-1102	N/A
A.1.9	Activities which will adversely affect the integrity and natural character of Assateague Island will be inconsistent with the State's Coastal Management Program, and will be prohibited.	MDE/DNR (B1) Md. Code. Ann., Nat. Res. §§ 5-209, 8-1102	N/A

Code	Policy	Policy References[1]	Applicability or Consistency[2]
A.1.10	An opportunity for a public hearing shall be provided for projects in non-tidal waters that dredge, fill, bulkhead, or change the shoreline; construct or reconstruct a dam; or create a waterway, except in emergency situations.	MDE (A3) COMAR 26.17.04.13A	N/A
A.1.11	Soil erosion shall be prevented to preserve natural resources and wildlife; control floods; prevent impairment of dams and reservoirs; maintain the navigability of rivers and harbors; protect the tax base, the public lands, and the health, safety and general welfare of the people of the State, and to enhance their living environment.	MDA (C4) Md. Code Ann., Agric. § 8-102(d)	**Consistent**
A.1.12	Controlled hazardous substances may not be stored, treated, dumped, discharged, abandoned, or otherwise disposed anywhere other than a permitted controlled hazardous substance facility or a facility that provides an equivalent level of environmental protection.	MDE (D4) Md. Code Ann., Envir. § 7-265(a)	**Consistent**
A.1.13	A person may not introduce in the Port of Baltimore any hazardous materials, unless the cargo is properly classed, described, packaged, marked, labeled, placarded, and approved for highway, rail, or water transportation.	MDOT (D3) COMAR 11.05.02.04A	N/A
A.1.14	Operations on the Outer Continental Shelf must be conducted in a safe manner by well-trained personnel using technology, precautions, and techniques sufficient to prevent or minimize the likelihood of blowouts, loss of well control, fires, spillages, physical obstruction to other users of the waters or subsoil and seabed, or other occurrences which may cause damage to the environment or property, or which may endanger life or health.	(B2) Md. Code Ann., Envir. §§ 17-101 to -403 COMAR 26.24.01.01 COMAR 26.24.02.01, .03 COMAR 26.24.05.01	N/A
A.2	**Water Quality**		
A.2.1	No one may add, introduce, leak, spill, or emit any liquid, gaseous, solid, or other substance that will pollute any waters of the State without State authorization.	MDE (A5) Md. Code Ann., Envir. §§ 4-402, 9-101, 9-322	N/A
A.2.2	All waters of the State shall be protected for water contact recreation, fish, and other aquatic life and wildlife. Shellfish harvesting and recreational trout waters and waters worthy of protection because of their unspoiled character shall receive additional protection.	MDE (A1) COMAR 26.08.02.02	N/A
A.2.3	The discharge of any pollutant which will accumulate to toxic amounts during the expected life of aquatic organisms or produce deleterious behavioral effects on aquatic organisms is prohibited.	MDE (A4) COMAR 26.08.03.01	N/A
A.2.4	Before constructing, installing, modifying, extending, or altering an outlet or establishment that could cause or increase the discharge of pollutants into the waters of the State, the proponent must hold a discharge permit issued by the Department of the Environment or provide an equivalent level of water quality protection.	MDE (D6) Md. Code Ann., Envir. § 9-323(a)	N/A

Code	Policy	Policy References[1]	Applicability or Consistency[2]
A.2.5	The use of best available technology is required for all permitted discharges into State waters, but if this is insufficient to comply with the established water quality standards, additional treatment shall be required and based on waste load allocation.	MDE (D4) COMAR 26.08.03.01C	N/A
A.2.6	Thermal discharges shall be controlled so that the temperature outside the mixing zone (50 feet radially from the point of discharge) meets the applicable water quality criteria or discharges comply with the thermal mixing zone criteria.	MDE (D4) COMAR 26.08.03.03C	N/A
A.2.7	Pesticides shall be stored in an area located at least 50 feet from any water well or stored in secondary containment approved by the Department of the Environment.	MDA (C4) COMAR 15.05.01.06	N/A
A.2.8	Any development or redevelopment of land for residential, commercial, industrial, or institutional purposes shall use small-scale non-structural stormwater management practices and site planning that mimics natural hydrologic conditions, to the maximum extent practicable. Development or redevelopment will be consistent with this policy when channel stability and 100 percent of the average annual predevelopment groundwater recharge are maintained, nonpoint source pollution is minimized, and structural stormwater management practices are used only if determined to be absolutely necessary.	MDE (C9) Md. Code Ann., Envir. § 4-203 COMAR 26.17.02.01, .06	**Consistent**
A.2.9	Unless otherwise permitted, used oil may not be dumped into sewers, drainage systems, or any waters of the State or onto any public or private land.	MDE (D4) Md. Code Ann., Envir. § 5-1001(f)	N/A
A.2.10	If material being dumped into Maryland waters or waters off Maryland's coastline has demonstrated actual toxicity or potential for being toxic, the discharger must perform biological or chemical monitoring to test for toxicity in the water.	MDE (A5) COMAR 26.08.03.07(D) COMAR 26.08.04.01	N/A
A.2.11	Public meetings and citizen education shall be encouraged as a necessary function of water quality regulation.	MDE (A2) COMAR 26.08.01.02E(3)	**Consistent**
A.3	**Flood Hazards**		
A.3.1	Projects in coastal tidal and non-tidal flood plains which would create additional flooding upstream or downstream, or which would have an adverse impact upon water quality or other environmental factors, are contrary to State policy.	MDE (C2) Md. Code Ann., Envir. § 5-803 COMAR 26.17.05.04A	N/A

Code	Policy	Policy References[1]	Applicability or Consistency[2]
A.3.2	The following policies apply to projects in non-tidal waters and non-tidal floodplains, but not non-tidal wetlands. ▪ Proposed floodplain encroachments, except for roadways, culverts, and bridges, shall be designed to provide a minimum of 1 foot of freeboard above the elevation of the 100-year frequency flood event. In addition, the elevation of the lowest floor of all new or substantially improved residential, commercial, or industrial structures shall also be at least 1 foot above the elevation of the 100-year frequency flood event. ▪ Proposed unlined earth channels may not change the tractive force associated with the 2-year and the 10-year frequency flood events, by more than 10 percent, throughout their length unless it can be demonstrated that the stream channel will remain stable. ▪ Proposed lined channels may not change the tractive force associated with the 2-year and the 10-year frequency flood events, by more than 10 percent, at their downstream terminus unless it can be demonstrated that the stream channel will remain stable. ▪ Category II, III, or IV dams may not be built or allowed to impound water in any location where a failure is likely to result in the loss of human life or severe damage to streets, major roads, public utilities, or other high value property. ▪ Projects that increase the risk of flooding to other property owners are generally prohibited, unless the area subject to additional risk of flooding is purchased, placed in designated flood easement, or protected by other means acceptable to the Maryland Department of the Environment. ▪ The construction or substantial improvement of any residential, commercial, or industrial structures in the 100-year frequency floodplain and below the water surface elevation of the 100-year frequency flood may not be permitted. Minor maintenance and repair may be permitted. The modifications of existing structures for flood-proofing purposes may be permitted. Flood-proofing modifications shall be designed and constructed in accordance with specifications approved by the Maryland Department of the Environment. ▪ Channelization shall be the least favored flood control technique. ▪ Multiple purpose use shall be preferred over single purpose use, the proposed project shall achieve the purposes intended, and, at a minimum, project shall provide for a 50 percent reduction of the average annual flood damages.	MDE (C2) COMAR 26.17.04.01, .07, .11	N/A
A.3.3	Development may not increase the downstream peak discharge for the 100-year frequency storm event in the following watersheds and all their tributaries: ▪ Gwynns Falls in Baltimore City and Baltimore County; and ▪ Jones Falls in Baltimore City and Baltimore County.	MDE (C2) COMAR 26.17.02.07	N/A

Code	Policy	Policy References[1]	Applicability or Consistency[2]
B	**Coastal Resources**		
B.1	**The Chesapeake and Atlantic Coastal Bays Critical Area** In addition to the policies in this section, the laws approved by NOAA implementing the Chesapeake and Atlantic Coastal Bays Critical Area Protection Program are enforceable policies.		
B.1.1	Colonial water bird nesting sites in the Critical Area may not be disturbed during breeding season.	CAC (C9) COMAR 27.01.09.04	N/A
B.1.2	New facilities in the Critical Area shall not interfere with historic waterfowl concentration and staging areas.	CAC (C9) COMAR 27.01.09.04	N/A
B.1.3	Physical alterations to streams in the Critical Area shall not affect the movement of fish.	CAC (C9) COMAR 27.01.09.05	N/A
B.1.4	The installation or introduction of concrete riprap or other artificial surfaces onto the bottom of natural streams in the Critical Area is prohibited unless water quality and fisheries habitat will be improved.	CAC (C9) COMAR 27.01.09.05	N/A
B.1.5	The construction or placement of dams or other structures in the Critical Area that would interfere with or prevent the movement of spawning fish or larval forms in streams is prohibited.	CAC (C9) COMAR 27.01.09.05	N/A
B.1.6	Development may not cross or affect a stream in the Critical Area, unless there is no feasible alternative and the design and construction of the development prevents increases in flood frequency and severity that are attributable to development; retains tree canopy and maintains stream water temperature within normal variation; provides a natural substrate for affected streambeds; and minimizes adverse water quality and quantity impacts of stormwater.	CAC (C9) COMAR 27.01.02.04	N/A
B.1.7	The construction, repair, or maintenance activities associated with bridges or other stream crossings or with utilities and roads, which involve disturbance within the buffer or which occur in stream are prohibited between March 1 and May 15.	CAC (C9) COMAR 27.01.09.05	N/A
B.1.8	Roads, bridges, or utilities may not be constructed in any areas designated to protect habitat, including buffers, in the Critical Area, unless there is no feasible alternative and the road, bridge, or utility is located, designed, constructed, and maintained in a manner that maximizes erosion protection; minimizes negative impacts to wildlife, aquatic life, and their habitats; and maintains hydrologic processes and water quality.	CAC (C9) COMAR 27.01.02.03C, .04C, .05C	N/A

Code	Policy	Policy References[1]	Applicability or Consistency[2]
B.1.9	In the Critical Area, a minimum 100-foot vegetated buffer shall be maintained landward from the mean high water line of tidal waters, the edge of each bank of tributary streams, and the upland boundary of tidal wetlands. The buffer shall be expanded in sensitive areas in accordance with standards adopted by the Critical Area Commission. The buffer is not required for agricultural drainage ditches if the adjacent agricultural land has in place best management practices that protect water quality. The buffer is not required if existing patterns of development prevent the buffer from protecting ecological quality and functions, in which case, alternative means of protecting ecological quality and functions are required.	CAC (C9) COMAR 27.01.09.01, .01-5, .01-7	N/A
B.1.10	Disturbance to a buffer in the Critical Area is only authorized for a shore erosion control measure, new development, or redevelopment that is: water-dependent; meets a recognized private right or public need; minimizes the adverse effects on water quality and fish, plant, and wildlife habitat; and, insofar as possible, locates nonwater-dependent structures or operations associated with water-dependent projects or activities outside the buffer. Mitigation of impacts to the buffer and a buffer management plan must be developed in accordance with standards adopted by the Critical Area Commission when a development or redevelopment activity occurs within the buffer.	CAC (C9) COMAR 27.01.03.03 COMAR 27.01.09.01, .01-2, .01-3	N/A
B.1.11	If a development or redevelopment activity occurs on a lot or parcel that includes a buffer or if issuance of a permit, variance, or approval would disturb the buffer, the proponents of that activity must develop a buffer management plan that clearly indicates that all applicable planting standards developed by the Critical Area Commission will be met and that appropriate measures are in place for the long-term protection and maintenance of the buffer.	CAC (C9) COMAR 27.01.09.01-1, .01-3	N/A
B.1.12	Public beaches or other public water-oriented recreation or education areas including, but not limited to, publicly owned boat launching and docking facilities and fishing piers may be permitted in the buffer in portions of the Critical Area not designated as intensely developed areas only if adequate sanitary facilities exist; service facilities are, to the extent possible, located outside the Buffer; permeable surfaces are used to the extent practicable, if no degradation of ground water would result; and disturbance to natural vegetation is minimized.	CAC (C9) COMAR 27.01.03.08	N/A
B.1.13	Water-dependent research facilities or activities may be permitted in the buffer, if nonwater-dependent structures or facilities associated with these projects are, to the extent possible, located outside the buffer.	CAC (C9) COMAR 27.01.03.09	N/A
B.1.14	Industrial and port-related facilities may only be sited in the portions of areas of intense development that are exempted from buffer designation.	CAC (C9) COMAR 27.01.03.05	N/A
B.1.15	Agricultural activities are permitted in the buffer, if, as a minimum best management practice, a 25-foot vegetated filter strip measured landward from the mean high water line of tidal waters or tributary streams (excluding drainage ditches), or from the edge of tidal wetlands, whichever is further inland, is established in trees with a dense ground cover or a thick sod of grass.	CAC (C4) COMAR 27.01.09.01-5	N/A

Code	Policy	Policy References[1]	Applicability or Consistency[2]
B.1.16	The feeding or watering of livestock is not permitted within 50 feet of the mean high water line of tidal waters and tributaries.	CAC (C4) COMAR 27.01.09.01-5	N/A
B.1.17	In the Critical Area, the creation of new agricultural lands shall not be accomplished by diking, draining, or filling of nontidal wetlands; by clearing of forests or woodland on soils with a slope greater than 15 percent or on soils with a "K" value greater than 0.35 and slope greater than 5 percent; by clearing that will adversely affect water quality or will destroy plant and wildlife habitat; or by clearing existing natural vegetation within the 100-foot buffer.	CAC (C4) COMAR 27.01.06.02C	N/A
B.1.18	Agricultural activity permitted within the Critical Area shall use best management practices in accordance with a soil conservation and water quality plan approved or reviewed by the local soil conservation district.	CAC (C4) COMAR 27.01.06.02G	N/A
B.1.19	Cutting or clearing of trees within the buffer is prohibited except that commercial harvesting of trees by selection or by the clearcutting of loblolly pine and tulip poplar may be permitted to within 50 feet of the landward edge of the mean high water line of tidal waters and perennial tributary streams, or the edge of tidal wetlands if the buffer is not subject to additional habitat protection. Commercial harvests must be in compliance with a buffer management plan that is prepared by a registered professional forester and is approved by the Department of Natural Resources.	CAC (C5) Md. Code Ann., Nat. Res. § 8-1808.7 COMAR 27.01.09.01-6	N/A
B.1.20	Commercial tree harvesting in the buffer may not involve the creation of logging roads and skid trails within the buffer and must avoid disturbing stream banks and shorelines as well as include replanting or allowing regeneration of the areas disturbed or cut in a manner that assures the availability of cover and breeding sites for wildlife and reestablishes the wildlife corridor function of the buffer.	CAC (C5) Md. Code Ann., Nat. Res. § 8-1808.7 COMAR 27.01.09.01-6	N/A
B.1.21	Solid or hazardous waste collection or disposal facilities and sanitary landfills are not permitted in the Critical Area unless no environmentally acceptable alternative exists outside the Critical Area, and these facilities are needed in order to correct an existing water quality or wastewater management problem.	CAC (C9) COMAR 27.01.02.02	N/A
B.1.22	All available measures must be taken to protect the Critical Area from all sources of pollution from surface mining operations, including but not limited to sedimentation and siltation, chemical and petrochemical use and spillage, and storage or disposal of wastes, dusts, and spoils.	CAC (D5) COMAR 27.01.07.02A	N/A
B.1.23	In the Critical Area, mining must be conducted in a way that allows the reclamation of the site as soon as possible and to the extent possible.	CAC (D5) COMAR 27.01.07.02B	N/A

Code	Policy	Policy References[1]	Applicability or Consistency[2]
B.1.24	Sand and gravel operations shall not occur within 100 feet of the mean high water line of tidal waters or the edge of streams or in areas with scientific value, important natural resources such as threatened and endangered species, rare assemblages of species, or highly erodible soils. Sand and gravel operations also may not occur where the use of renewable resource lands would result in the substantial loss of forest and agricultural productivity for 25 years or more or would result in a degrading of water quality or a loss of vital habitat.	CAC (D5) COMAR 27.01.07.03D	N/A
B.1.25	Wash plants including ponds, spoil piles, and equipment may not be located in the 100-foot buffer.	CAC (D5) COMAR 27.01.07.03E	N/A
B.1.26	A soil erosion and sedimentation control plan shall be required whenever development within the Critical Area will involve any clearing, grading, transporting, or other form of disturbance to land by the movement of earth. This plan shall be appropriately designed to reduce adverse water quality impacts.	CAC (C9) COMAR 27.01.02.04	N/A
B.1.27	All stormwater storage facilities shall be designed with sufficient capacity to eliminate all runoff caused by the development in excess of that which would have come from the site if it were in its predevelopment state.	CAC (C9) COMAR 27.01.02.04	N/A
B.1.28	Intense development should be directed outside the Critical Area. Future intense development activities, when proposed in the Critical Area, shall be directed towards the intensely developed areas.	CAC (D1) Md. Code Ann., Natural Res. § 8-1807(b) COMAR 27.01.02.02B	N/A
B.1.29	The following development activities and facilities are not permitted in the Critical Area except in intensely developed areas and only after the activity or facility has demonstrated that there will be a net improvement in water quality to the adjacent body of water. ▪ Nonmaritime heavy industry ▪ Transportation facilities and utility transmission facilities, except those necessary to serve permitted uses, or where regional or interstate facilities must cross tidal waters ▪ Permanent sludge handling, storage, and disposal facilities, other than those associated with wastewater treatment facilities. However, agricultural or horticultural use of sludge when applied by an approved method at approved application rates may be permitted in the Critical Area, but not in the 100-foot Buffer	CAC (C9) COMAR 27.01.02.02	N/A

Code	Policy	Policy References[1]	Applicability or Consistency[2]
B.1.30	The following policies apply in those areas of the Critical Area that are determined to be areas of intense development. ▪ To the extent possible, fish, wildlife, and plant habitats, should be conserved. ▪ Development and redevelopment shall improve the quality of runoff from developed areas that enters the Chesapeake or Atlantic Coastal Bays or their tributary streams. ▪ At the time of development or redevelopment, appropriate actions must be taken to reduce stormwater pollution by 10%. Retrofitting measures are encouraged to address existing water quality and water quantity problems from stormwater. ▪ Development activities may cross or affect a stream only if there is no feasible alternative, and those activities must be constructed to prevent increases in flood frequency and severity attributable to development, retain tree canopy, maintain stream water temperatures within normal variation, and provide a natural substrate for affected streambeds. ▪ If practicable, permeable areas shall be established in vegetation. ▪ Areas of public access to the shoreline, such as foot paths, scenic drives, and other public recreational facilities, shall be maintained and, if possible, are encouraged to be established. ▪ Ports and industries which use water for transportation and derive economic benefits from shore access, shall be located near existing port facilities or in areas identified by local jurisdictions for planned future port facility development and use if this use will provide significant economic benefit to the State or local jurisdiction. ▪ To the extent practicable, development shall be clustered to reduce lot coverage and maximize areas of natural vegetation. ▪ Development shall minimize the destruction of forest and woodland vegetation.	CAC (C9) COMAR 27.01.02.03	N/A
B.1.31	The following policies apply in those portions of the Critical Area that are not areas of intense development. ▪ Development shall maintain, and if possible, improve the quality of runoff and ground water entering the Chesapeake and Coastal Bays. ▪ To the extent practicable, development shall maintain existing levels of natural habitat. ▪ All development sites shall incorporate a wildlife corridor system that connects undeveloped vegetated tracts onsite with undeveloped vegetated tracts offsite. ▪ All forests that are cleared or developed shall be replaced on not less than an equal area basis.	CAC (C9) COMAR 27.01.02.04	N/A

Code	Policy	Policy References[1]	Applicability or Consistency[2]
B.1.31	▪ If there are no forests on a proposed development site, the site shall be planted to provide a forest or developed woodland cover of at least 15 percent. ▪ Development on slopes equal to or greater than 15 percent, as measured before development, shall be prohibited unless the project is the only effective way to maintain the slope and is consistent with other policies. ▪ To the extent practicable, development shall be clustered to reduce lot coverage and maximize areas of natural vegetation. ▪ Lot coverage is limited to 15 percent of the site.	CAC (C9) COMAR 27.01.02.04	N/A
B.2	**Tidal Wetlands**		
B.2.1	Any action which alters the natural character in, on, or over tidal wetlands; tidal marshes; and tidal waters of Chesapeake Bay and its tributaries, the coastal bays adjacent to Maryland's coastal barrier islands, and the Atlantic Ocean shall avoid dredging and filling, be water-dependent, and provide appropriate mitigation for any necessary and unavoidable adverse impacts on these areas or the resources associated with these areas. A proponent of an action described above shall explain the actions impact on: ▪ Habitat for finfish, crustaceans, mollusks, and wildlife of significant economic or ecologic value; ▪ Potential habitat areas such as historic spawning and nursery grounds for anadromous and semi-anadromous fisheries species and shallow water areas suitable to support populations of submerged aquatic vegetation; ▪ Marine commerce; ▪ Recreation and aesthetic enjoyment; ▪ Flooding, siltation, littoral drift, and shore erosion; ▪ Natural water flow, water temperature, water quality, and natural tidal circulation; ▪ Local, regional, and State economic conditions; ▪ Historic property; ▪ Disposal of sanitary waste; ▪ Sea level rise and other determinable and periodically recurring natural hazards; ▪ Navigational safety; ▪ Access to beaches and waters of the State; ▪ Scenic and wild qualities of a designated State scenic or wild river; and ▪ Historic waterfowl staging areas and colonial bird-nesting sites.	MDE (B2) COMAR 26.24.01.01 COMAR 26.24.02.01, .03 COMAR 26.24.05.01.	N/A

Code	Policy	Policy References[1]	Applicability or Consistency[2]
B.3	**Non-Tidal Wetlands**		
B.3.1	Removal, excavation, grading, dredging, dumping, or discharging of, or filling a non-tidal wetland with materials of any kind, including the driving of piles and placing of obstructions; changing existing drainage characteristics, sedimentation patterns, flow patterns, or flood retention characteristics; disturbing the water level or water table; or removing or destroying plant life that would alter the character of a non-tidal wetland is prohibited unless: ▪ The proposed project has no practicable alternative; ▪ Adverse impacts are first avoided and then minimized based on consideration of existing topography, vegetation, fish and wildlife resources, and hydrological conditions; ▪ Comprehensive watershed management plans are considered; and ▪ The proposed project does not cause or contribute to an individual or cumulative effect that degrades: o Aquatic ecosystem diversity, productivity, and stability, o Plankton, fish, shellfish, and wildlife, o Recreational and economic values, and o Public welfare; o Surface water quality; or o Ground water quality. Mitigation measures are required to replace the ecological values associated with non-tidal wetlands that are impaired by activities described above.	MDE (C3) COMAR 26.23.01.01 COMAR 26.23.02.04, .06 COMAR 26.23.04.02	**Consistent**
B.4	**Forests**		
B.4.1	The Forest Conservation Act and its implementing regulations, as approved by NOAA, are enforceable policies. Generally, before developing an area greater than 40,000 square feet, forested and environmentally sensitive areas must be identified and preserved whenever possible. If these areas cannot be preserved, reforestation or other mitigation is required to replace the values associated with them. This policy does not apply in the Critical Area.	DNR (C5) Md. Code Ann., Nat. Res. §§ 5-1601 to -1613 COMAR 08.19.01-.06	**Consistent**
B.4.2	Forestry activities shall provide for adequate restocking, after cutting, of trees of desirable species and condition; provide for reserving, for growth and subsequent cutting, a sufficient growing stock of thrifty trees of desirable species to keep the land reasonably productive; and prevent clear-cutting, or limit the size of a tract to be clear-cut in areas where clear-cutting will seriously interfere with protection of a watershed.	DNR (C5) Md. Code Ann., Nat. Res. § 5-606	N/A

Code	Policy	Policy References[1]	Applicability or Consistency[2]
B.4.3	When any timber is cut for commercial purposes from five acres or more of land on which loblolly pine, shortleaf pine, or pond pine, singly or together occur and constitute 25 percent or more of the live trees on each acre, the person conducting the cutting or the landowner shall leave uncut and uninjured at least eight well distributed, cone-bearing, healthy, windfirm, loblolly, shortleaf, or pond pine trees on each acre cut for the purpose of reseeding.	DNR (C5) Md. Code Ann., Nat. Res. §§ 5-501, -504	N/A
B.4.4	Any highway construction project may only cut or clear the minimum amount of trees and other woody plants necessary to be consistent with sound design principles. If over an acre of forest is lost as a result of the project, an equivalent area of publicly owned property shall be reforested.	DNR/MDOT (C5) Md. Code Ann., Nat. Res. § 5-103	N/A
B.4.5	Roadside trees should not be cut down, trimmed, mutilated, or injured unless the activity will eliminate a hazard to property, public safety, or health; improve or prevent tree deterioration; or improve the general aesthetic appearance of the right-of-way.	DNR (C5) COMAR 08.07.02.05	N/A
B.4.6	A person conducting a forestry activity in non-tidal wetlands shall develop and implement a sediment and erosion control plan.	MDE (C3) COMAR 26.23.05.02	N/A
B.5	**Historical and Archaeological Sites**		
B.5.1	Unless permission is granted by the Maryland Historical Trust, activities that excavate, remove, destroy, injure, deface, or disturb submerged archaeological historic property are generally prohibited.	MDP (C8) Md. Code Ann., State Fin. & Proc. §§ 5A-341, -333	N/A
B.5.2	Unless permission is granted by the Maryland Historical Trust, activities that excavate, remove, destroy, injure, deface, or disturb cave features or archeological sites under State control are generally prohibited.	MDP (C8) Md. Code Ann., State Fin. & Proc. §§ 5A-342 to -343	**Consistent**
B.5.3	Neither human remains nor funerary objects may be removed from a burial site or cemetery, unless permission is granted by the local State's Attorney. Funerary objects may not be willfully destroyed, damaged, or defaced.	MDP (C8) Md. Code Ann., Crim. Law §§ 10-401 to -404	N/A
B.6	**Living Aquatic Resources**		
B.6.1	Unless authorized by an Incidental Take Permit, no one may take a State listed endangered or threatened species of fish or wildlife.	DNR (A4) Md. Code Ann., Nat. Res. §§ 4-2A-01 to -09 Md. Code Ann., Nat. Res. §§ 10-2A-01 to -09	N/A
B.6.2	Fisheries shall be sustainably harvested.	DNR (A4) Md. Code Ann., Nat. Res. § 4-215	N/A

Code	Policy	Policy References[1]	Applicability or Consistency[2]
B.6.3	Any land or water resource acquired by the State to protect, propagate, or manage fish shall not be damaged.	DNR (A4) Md. Code Ann., Nat. Res. § 4-410	N/A
B.6.4	No activity will be permitted that impedes or prevents the free passage of any finfish, migratory or resident, up or down stream.	DNR (A4) Md. Code Ann., Nat. Res. § 4-501 to -502	N/A
B.6.5	All in-stream construction in non-tidal waters is prohibited from October through April, inclusive, for natural trout waters and from March through May, inclusive, for recreational trout waters. In addition, the construction of proposed projects, which may adversely affect anadromous fish spawning areas, shall be prohibited in non-tidal waters from March 15 through June 15, inclusive.	MDE (C2) COMAR 26.17.04.11B(5)	N/A
B.6.6	Riparian forest buffers adjacent to waters that are suitable for the growth and propagation of self-sustaining trout populations shall be retained whenever possible.	MDE (C5) COMAR 26.08.02.03-3F	N/A
B.6.7	Projects in or adjacent to non-tidal waters shall not adversely affect aquatic or terrestrial habitat unless there is no reasonable alternative and mitigation is provided.	MDE (C2) COMAR 26.17.04.11B(5)	**Consistent**
B.6.8	The harvest, cutting, or other removal or eradication of submerged aquatic vegetation may only occur in a strip up to 60 feet wide surrounding a pier, dock, ramp, utility crossing, or boat slip to point of ingress in a marina, otherwise the activity must receive the approval of the Department of Natural Resources. No chemical may be used for this purpose, and the timing and method of the activity shall minimize the adverse impact on water quality and on the growth and proliferation of fish and aquatic grasses.	MDE (A4) Md. Code Ann., Nat. Res. § 4-213	N/A
B.6.9	Natural oyster bars in the Chesapeake Bay shall not be destroyed, damaged, or injured.	DNR (A4) Md. Code Ann., Nat. Res. § 4-1118.1	N/A
B.6.10	A person, other than the leaseholder, may not willfully and without authority catch oysters on any aquaculture or submerged land lease area, or willfully destroy or transfer oysters on this land in any manner.	DNR (A4) Md. Code Ann., Nat. Res. § 4-11A-15(a)	N/A
B.6.11	An organism into which genetic material from another organism has been experimentally transferred so that the host acquires the genetic traits of the transferred genes may not be introduced into State waters.	DNR (A4) COMAR 08.02.19.03	N/A
B.6.12	Vectors for the introduction of nonnative aquatic organisms must be appropriately controlled to prevent adverse impacts on aquatic ecosystems.	DNR (A4) Md. Code Ann., Nat. Res. § 4-205.1	N/A
B.6.13	Except as authorized by federal law, any live snakehead fish or viable eggs of snakehead fish of the Family Channidae may not be imported, transported, or introduced into the State.	DNR (A4) COMAR 08.02.19.06	N/A

Code	Policy	Policy References[1]	Applicability or Consistency[2]
B.6.14	Nonnative oysters may not be introduced into State waters.	DNR (A4) Md. Code Ann., Nat. Res. § 4-1008	N/A
C	**Coastal Uses**		
C.1	**Mineral Extraction**		
C.1.1	Habitats of unique value for fish, wildlife, and other related environmental values shall be identified prior to commencing coal prospecting activities and shall be protected during those activities.	MDE (D5) COMAR 26.20.08.04	N/A
C.1.2	Surface mining activities must be conducted in a manner that protects birds and wildlife; decreases soil erosion; prevents pollution of rivers, streams, and lakes; prevents loss or waste of valuable mineral resources; and prevents and eliminates hazards to health.	MDE (D5) Md. Code Ann., Envir. §§ 15-802, -807(d), -822(c), -828(b)	N/A
C.1.3	Surface mining activities must not have an unduly adverse effect on wildlife or freshwater, estuarine, or marine fisheries; constitute a substantial physical hazard to a neighboring house, school, church, hospital, commercial or industrial building, public road, or other public or private property in existence at the time of application for the permit; or significantly adversely affect the uses of a publicly owned park, forest, or recreation area in existence at the time of application for the permit.	MDE (D5) Md. Code Ann., Envir. §§ 15-802(a), -810(b)	N/A
C.1.4	Surface coal mining activities shall use the best available technology to minimize disturbances and adverse impacts on fish, wildlife, and related environmental values, and shall achieve enhancement of the resources when practicable.	MDE (D5) COMAR 26.20.23.02A	N/A
C.1.5	A surface coal mining activity may not be conducted in a way that is likely to jeopardize the continued existence of endangered or threatened species listed by the federal or state government.	MDE (D5) COMAR 26.20.23.02B	N/A
C.1.6	Coal mining operations shall be conducted to minimize water pollution, and, where necessary, treatment methods shall be used to control water pollution.	MDE (D5) COMAR 26.20.13.05B COMAR 26.20.21.01	N/A
C.1.7	Coal mining may not adversely affect any publicly owned park or place recorded in the National Register of Historic Sites without approval from the appropriate agency and is prohibited in the Youghiogheny River scenic corridor; within 100 feet of a cemetery, a perennial or intermittent stream, or the outside right-of-way line of any public road; and in areas designated unsuitable for certain types of surface coal mining.	MDE (D5) Md. Code Ann., Envir. §§ 15-505(b), -506(e) COMAR 26.20.20.03	N/A
C.1.8	Underground coal mining activities may not be conducted beneath or adjacent to any perennial stream or impoundment having a storage volume of 20 acre-feet or more. Underground coal mining activities beneath any aquifer that serves as a significant source of water supply to any public water system shall be conducted so as to avoid disruption of the aquifer and consequent exchange of ground water between the aquifer and other strata.	MDE (D5) COMAR 26.20.13.10	N/A

Code	Policy	Policy References[1]	Applicability or Consistency[2]
C.1.9	Surface mining shall not occur within 25 feet of any property line or 100 feet of any scenic or wild river or its tributaries or any parcel of land that has been designated an area of critical State concern.	MDE (D5) COMAR 26.21.01.17	N/A
C.1.10	Coal prospect pits may not be more than 1 acre in size or affect more than 10 acres and shall be backfilled, seeded, and mulched within 30 days after it is opened.	MDE (D5) COMAR 26.20.08.04	N/A
C.1.11	Coal project proponents must draft a mining and reclamation plan, including a description of the natural resources, geology, and cultural and historical resources within the proposed permit and adjacent areas and the methods for road construction, removing topsoil, controlling drainage, backfilling, and revegetating the affected area, as well as identify baseline hydrologic information and determine the probable hydrologic consequences of the mining and reclamation operations upon surface and ground waters on and off the permit area and plan remedial and reclamation activities.	MDE (D5) Md. Code Ann., Envir. §§ 15-505(c), -822 COMAR 26.20.02.05-.09 COMAR 26.20.02.14	N/A
C.1.12	A mining and reclamation plan for a mineral extraction activity must outline mining methods, intended reclamation practices, land uses before and after mining, areas to be affected by the mining, and measures to protect other uses and the environment.	MDE (D5) Md. Code Ann., Envir. §§ 15-807(d), -808(d), -822, -828(b)	N/A
C.1.13	Prior to the commencement of a mineral extraction activity, the appropriate county must issue a written statement that the proposed land use conforms to all applicable county zoning and land use requirements.	MDE (D5) Md. Code Ann., Envir. § 15-810(c)	N/A
C.1.14	If the probable hydrologic consequences of the proposed coal mining operation are contamination, diminution, or interruption of an underground or surface source of water that is used for domestic, agricultural, industrial, or other legitimate purpose, the project proponent shall analyze the availability of water and alternative water sources.	MDE (D5) COMAR 26.20.02.08	N/A
C.1.15	Underground coal mining activities shall be planned and conducted so as to prevent subsidence from causing material damage to the extent technologically and economically feasible.	MDE (D5) COMAR 26.20.13.07A	N/A
C.1.16	Sediment control measures shall be designed, constructed, and maintained using the best technology currently available to prevent additional contributions of sediment to stream flow or runoff outside an area where coal mining is permitted.	MDE (D5) COMAR 26.20.21.05A	N/A
C.1.17	Diversions shall be designed, constructed, and maintained to minimize adverse impacts, including preventing the contribution of suspended solids to stream flow and runoff outside an area where coal mining permitted, to the extent possible using the best technology currently available.	MDE (D5) COMAR 26.20.21.03	N/A
C.1.18	Pits, cuts, and other mine excavations or disturbances for coal mining shall be located, designed, constructed, and utilized in such a manner as to prevent adverse impacts, including the discharge of acid, toxic, or otherwise harmful mine drainage waters into ground water systems.	MDE (D5) COMAR 26.20.20.01B	N/A

Code	Policy	Policy References[1]	Applicability or Consistency[2]
C.1.19	Transportation facilities constructed for surface coal mining purposes shall be located, designed, constructed or reconstructed, and maintained, and the area restored, in a manner that prevents damage to fish, wildlife, or their habitat and related environmental values; prevents additional contributions of suspended solids to stream flow or runoff outside the permit area; minimizes diminution or degradation of water quality and quantity; minimizes erosion, siltation, and attendant air pollution; and prevents damage to public and private property.	MDE (D8) COMAR 26.20.19.01D, .08	N/A
C.1.20	The removal of vegetation, topsoil, and overburden before surface mining must be minimized, and erosion and sediment control devices must be constructed and maintained.	MDE (D5) COMAR 26.21.01.10	N/A
C.1.21	An area exposed for surface coal mining shall be protected and stabilized to effectively control erosion and air pollution attendant to erosion.	MDE (D5) COMAR 26.20.23.01A	N/A
C.1.22	During surface mining, topsoil shall be removed, segregated, and stockpiled on-site for reclamation and protected by a vegetative cover or by other methods demonstrated to provide protection.	MDE (D5) COMAR 26.21.01.11	N/A
C.1.23	The discharge of water from coal mining areas shall be conducted so as to reduce erosion, prevent deepening or enlargement of stream channels, and minimize disturbance of the hydrologic balance.	MDE (D5) COMAR 26.20.21.07	N/A
C.1.24	All surface drainage from coal mining and discharge of water from underground coal mining to surface waters shall be passed through a sedimentation pond, a series of sedimentation ponds, or a treatment facility before leaving the permit area.	MDE (D5) COMAR 26.20.13.06	N/A
C.1.25	Storage piles of overburden, mine waste, and rock from surface mining must be stabilized and may not restrict any natural drainage without an approved diversion.	MDE (D5) COMAR 26.21.01.12	N/A
C.1.26	An ephemeral, intermittent, or perennial stream may not be diverted during coal prospecting activities. Overland flow of water shall be diverted only in a manner that prevents erosion and, to the extent possible using best available technology, additional contributions of suspended solids to streamflow or runoff outside the prospecting area.	MDE (D5) COMAR 26.20.08.04	N/A
C.1.27	During any coal mining activities, changes in the depth to ground water, in water quality and quantity, and in the location of surface water drainage channels shall be minimized.	MDE (D5) COMAR 26.20.21.01	N/A
C.1.28	The operator of a coal mine shall replace the water supply of an owner of interest in real property who obtains all or part of the owner's supply of water for domestic, agricultural, industrial, or other legitimate use from an underground or surface source where the supply has been affected by contamination, diminution, or interruption proximately resulting from the mining operations.	MDE (D5) Md. Code Ann., Envir. §§ 15-524(b), -608(b) COMAR 26.20.13.05D COMAR 26.20.20.11	N/A
C.1.29	If water is pumped out of a pit located in karst terrain in Baltimore, Carroll, Frederick, and Washington counties, the project proponent shall replace a water supply if it fails as a result of declining ground water levels and pay compensation for property damage from land subsidence.	MDE (D5) Md. Code Ann., Envir. § 15-813	N/A

Code	Policy	Policy References[1]	Applicability or Consistency[2]
C.1.30	Surface coal mining activities and restoration efforts shall be conducted so as to maintain the recharge capacity of surface mining areas and support the approved post mining land use, minimizes disturbances to the hydrologic balance in the mine plan area and in adjacent areas, and provides a rate of recharge that approximates the pre-mining recharge rate.	MDE (D5) COMAR 26.0.20.02 COMAR 26.20.21.01A	N/A
C.1.31	Promptly after coal prospecting activities are completed, all areas disturbed during prospecting operations, including roads, shall be returned to the approximate original contour.	MDE (D5) COMAR 26.20.08.04	N/A
C.1.32	Mined land must be properly reclaimed, including rehabilitating settling ponds; restoring or establishing stream channels and stream banks to a condition that minimizes erosion, siltation, and other pollution; and creating final slopes in all excavations at an angle that minimizes the possibility of slides and is consistent with the future use of the land.	MDE (D5) Md. Code Ann., Envir. §§ 15-802(a), -807(d), -822, -828(b)	N/A
C.1.33	The placement of backfilled materials shall be done in a way that minimizes contamination and other adverse effects of coal mining on ground water systems outside the permit area and supports approved post-mining land uses.	MDE (D5) COMAR 26.20.20.01A	N/A
C.1.34	Vegetative cover shall be established on all areas disturbed by surface coal mining in a manner that is compatible with the approved post-mining land use.	MDE (D5) COMAR 26.20.29.01A	N/A
C.1.35	Surface mining reclamation shall be completed in accordance with the mining and reclamation plan within 2 years after mineral extraction has terminated.	MDE (D5) COMAR 26.21.01.16	N/A
C.2	**Electrical Generation and Transmission**		
C.2.1	Power plants shall be sited, constructed, and operated in a manner which minimizes their impacts on tidal wetlands, aquatic resources, terrestrial resources, significant wildlife habitat, public open space, recreational, and natural areas, air and water quality, and the public health, safety, and welfare.	DNR/PSC (D2) Md. Code Ann., Nat. Res. §§ 1-302, 3-303, 3-304, 3-306 Md. Code Ann., Pub. Util. Cos. § 7-208	N/A
C.2.2	Proposals for new power plants and transmission lines must account for their impact on the physical, biological, aesthetic, and cultural features of the site and adjacent areas; identify contributions to air and water pollution; recommend mitigation opportunities; and adequately consider recommendations of local government.	PSC (D2) Md. Code Ann., Pub. Util. Cos. § 7-207(e) COMAR 20.79.03.02(B) COMAR 20.79.04.04	N/A
C.2.3	Proposals for new transmission lines must estimate the capital and annual operating costs of each alternative route considered and explain why each alternative route was rejected.	PSC (D2) COMAR 20.79.04.03	N/A
C.2.4	Utilities shall maintain the vertical clearances of overhead electric supply lines that cross water surfaces suitable for sailing.	PSC (D2) COMAR 20.50.02.05(B)	N/A

Code	Policy	Policy References[1]	Applicability or Consistency[2]
C.2.5	The location, design, construction, and capacity of cooling water intake structures shall reflect the best technology available for minimizing adverse environmental impact, specifically impingement and entrainment losses.	MDE (D4) COMAR 26.08.03.05	N/A
C.3	**Tidal Shore Erosion Control**		
C.3.1	Structural erosion control measures shall be designed to use materials such as stone or broken concrete, wood, metal, plastic, or other similar materials that are of adequate size, weight, and strength to function as intended; free of protruding objects; and selected because they minimize impacts to water quality and plant, fish, and wildlife habitat.	MDE (C1) COMAR 26.24.04.01	N/A
C.3.2	Tidal shore erosion control projects shall not use junk, metal, tree stumps, logs, or other unsuitable materials for backfill.	MDE (C1) COMAR 26.24.04.01	N/A
C.3.3	Beach nourishment projects shall meet the following requirements: ▪ The fill material grain size shall be equal to or greater in grain size and character to the existing beach material, or determined otherwise to be compatible with existing site conditions and acceptable to the Department; ▪ The fill material shall be relatively free of organic material, floating debris, or other objects; ▪ Silt and clay fills that change the sandy nature of the existing beach materials are not acceptable; ▪ Gravel fill may be acceptable, if particle sizes are equal to or greater than the existing beach materials; and ▪ Fill material shall be placed above the mean high water line before final grading to achieve the desired beach profile, unless site conditions prohibit the placement of fill material above the mean high water line and specific measures are designed to prevent material from washing away from the site.	MDE (C1) COMAR 26.24.03.06D	N/A
C.3.4	Improvements to protect property bounding on navigable water against erosion shall consist of nonstructural shoreline stabilization measures that preserve the natural environment, such as marsh creation, except in areas designated by Department of the Environment as appropriate for structural shoreline stabilization measures, including areas of excessive erosion, areas subject to heavy tides, and areas too narrow for effective use of nonstructural shoreline stabilization measures.	MDE (C1) Md. Code Ann., Envir. § 16-201	N/A
C.3.5	Encroachment into State tidal wetlands for shore erosion control shall be limited to that which is structurally necessary. Bulkheads that encroach into tidal wetlands in excess of 3 feet beyond the mean high water line are prohibited, unless a design report verifies the necessity for the encroachment, and that other structural and nonstructural alternatives have been considered and determined to be impractical. The design report shall distinguish between shore erosion and bank stabilization requirements.	MDE (C1) COMAR 26.24.04.01	N/A

Code	Policy	Policy References[1]	Applicability or Consistency[2]
C.3.6	Tidal shore erosion control measures are listed below beginning with measures that are most consistent with State policy and ending with measures that are least consistent with State policy. ▪ No action and relocation of structure ▪ Nonstructural shoreline stabilization, including beach nourishment, marsh creation, and other measures that encourage the preservation of the natural environment ▪ Shoreline revetments, breakwaters, groins, and similar structures designed to ensure the establishment and long-term viability of nonstructural shoreline stabilization projects ▪ Shoreline revetments ▪ Breakwaters ▪ Groins ▪ Bulkheads	MDE (C1) COMAR 26.24.04.01C	N/A
C.3.7	Tidal shore erosion control projects shall not occur when: ▪ There is no evidence of erosion; ▪ Existing tidal wetlands are adequately serving as a buffer against erosion; ▪ Adjacent properties may be adversely affected by the proposed method of erosion control; ▪ Navigation may be adversely affected by the project and the applicant has not made provisions to offset these impacts; ▪ Threatened or endangered species, species in need of conservation, or significant historic or archaeological resources may be adversely affected by the project; or ▪ Natural oyster bars or private oyster leases may be adversely affected by the project.	MDE (C1) COMAR 26.24.04.01	N/A
C.4	**Oil and Natural Gas Facilities**		
C.4.1	The Coastal Facilities Review Act (CFRA) and its implementing regulations, as approved by NOAA, are enforceable policies.		N/A
C.4.2	To detect and control oil spills, all private tank vessels transporting oil in the State must either be equipped with a cargo level monitoring system, have double hulls, have a plan for inspecting load lines approved by the Department of the Environment, or be accompanied by an all-weather escort vessel for the purpose of continuously checking for evidence of an oil discharge from the escorted tank vessel.	MDE (A2) Md. Code Ann., Envir. § 4-405 (b)(1) COMAR 26.10.01.23B	N/A
C.4.3	Through bond or other form of security, the operator of a private tank vessel transporting more than 25 barrels of oil as cargo must be able to prove the financial ability to cover the cost of oil spill cleanup and recovery before entering waters of the State.	MDE (A2) COMAR 26.10.01.24A	N/A

Code	Policy	Policy References[1]	Applicability or Consistency[2]
C.4.4	No person may discharge oil in any manner, including through bilge and ballast water, or deposit it in an area where it may enter waters of the State.	MDE (A2) Md. Code Ann., Envir. § 4-410(a) COMAR 26.10.01.02B	N/A
C.4.5	Above-ground oil storage sites shall prevent movement of oil into the waters of the State.	MDE (D1) COMAR 26.10.01.12B(1)	N/A
C.4.6	The construction of above-ground oil storage tanks, dikes, or walls within the tidal wetlands or within the 100-year flood plain is prohibited without first obtaining a State Wetlands Permit or providing an equivalent level of environmental protection.	MDE (D1) COMAR 26.10.01.12B(3)	N/A
C.5	**Dredging and Disposal of Dredged Material**		
C.5.1	A person may not dredge for projects that are non-water-dependent unless there is no practicable alternative.	MDE (A3) Md. Code Ann., Envir. § 5-907(a) COMAR 26.24.03.02D	N/A
C.5.2	Dredging for sand, gravel, or fill material, including material for beach nourishment, is prohibited unless an environmental analysis determines that there will be no adverse impact on the environment and no alternative material is available.	MDE (A3) COMAR 26.24.03.02C	N/A
C.5.3	Dredging of channels, canals, and boat basins shall be designed to provide adequate flushing and elimination of stagnant water pockets, and channel alignment shall make maximum use of natural or existing channels and bottom contours.	MDE (B2) COMAR 26.24.03.02	N/A
C.5.4	The alignment of a channel shall first avoid and then minimize impacts to shellfish beds, submerged aquatic vegetation, and vegetated tidal wetlands. When feasible, the alignment shall be located the maximum distance feasible from shellfish beds, submerged aquatic vegetation, and other vegetated tidal wetlands.	MDE (C6) COMAR 26.24.03.02	N/A
C.5.5	Dredging is prohibited from February 15 through June 15 in areas where yellow perch have been documented to spawn and from March 1 through June 15 in areas where other important finfish species have been documented to spawn.	MDE (A3) COMAR 26.24.02.06G	N/A
C.5.6	Dredging is prohibited within 500 yards of submerged aquatic vegetation from April 15 through October 15.	MDE (A3) COMAR 26.24.02.06H	N/A
C.5.7	Within 500 yards of shellfish areas, mechanical and hydraulic dredging is prohibited from June 1 through September 30 and mechanical dredging is also prohibited from December 16 through March 14.	MDE (A3) COMAR 26.24.02.06E	N/A

Code	Policy	Policy References[1]	Applicability or Consistency[2]
C.5.8	New disposal sites for dredged material shall be selected based on the following hierarchy of criteria: (i) beneficial use and innovative reuse of dredged material; (ii) upland sites and other environmentally sound confined capacity; (iii) expansion of existing dredged material disposal capacity other than the Hart-Miller Island Dredged Material Containment Facility and areas collectively known as Pooles Island.	MDE (A3) Md. Code Ann., Envir. § 5-1104.2(d)	N/A
C.5.9	Disposal facilities for dredged material shall be designed to have the least impact on public safety, adjacent properties, and the environment.	MDE (A3) COMAR 26.24.03.04A	N/A
C.5.10	Prior to disposing of dredged material on upland areas, a sediment and erosion control plan must be developed and approved by the local soil conservation district or the Department of the Environment and the methods for protecting water quality and quantity must be identified in detail.	MDE (A3) COMAR 26.24.03.03B	N/A
C.5.11	A person may not redeposit in an unconfined manner dredged material into or onto any portion of the water or bottomland of the Chesapeake Bay or of the tidewater portion of any of the Chesapeake Bay's tributaries except when the project is undertaken to restore islands or underwater grasses, stabilize eroding shorelines, or create or restore wetlands or fish and shellfish habitats.	MDE (A3) Md. Code Ann., Envir. § 5-1101(a), 5-1102	N/A
C.5.12	A person may not redeposit in an unconfined manner dredged material into or onto any portion of the bottomlands or waters of the Chesapeake Bay known as the deep trough.	MDE (A3) Md. Code Ann., Envir. §§ 5-1101(a), -1102	N/A
C.5.13	No material dredged from Baltimore Harbor shall be disposed of in an unconfined manner in the open water portion of Chesapeake Bay, or the tidal portions of its tributaries outside of Baltimore Harbor.	MDE (A3) Md. Code Ann., Envir. § 5-1102(a)	N/A
C.6	**Navigation**		
C.6.1	Navigational access projects shall when possible be designed to use piers to reach deep waters rather than dredging.	MDE (B2) COMAR 26.24.03.02	N/A
C.6.2	Navigational access channels to serve individual or small groups of riparian landowners shall be designed to prevent unnecessary channels**.** A central access channel with short spur channels shall be considered over separate access channels for each landowner.	MDE (B2) COMAR 26.24.03.02	N/A
C.6.3	Navigational access channels shall be designed to minimize alteration of tidal wetlands and underwater topography.	MDE (B2) COMAR 26.24.03.02	N/A

Code	Policy	Policy References[1]	Applicability or Consistency[2]
C.6.4	New or expanded facilities for the mooring, docking, or storing of more than ten vessels on tidal navigable waters shall be located on waters with strong flushing characteristics and may not be located in areas where the natural depth is 4.5 feet or less at mean low water, and any of the following will be adversely affected: aquatic vegetation, productive macroinvertebrate communities, shellfish beds, fish spawning or nursery areas, rare, threatened, or endangered species, species in need of conservation, or historic waterfowl staging areas. Expansion of existing facilities is favored over new development.	MDE (A1) COMAR 26.24.04.03	N/A
C.6.5	The location of buoys for the mooring of boats shall not be located in designated private or public shellfish areas, cable-crossing areas, navigational channels, in other places in where general navigation would be impeded or obstructed, or public ship anchorage. The location of mooring buoys should not obstruct the riparian access of adjacent property owners or hinder the orderly access to or use of the waterways by the general public.	DNR (A1) COMAR 08.04.13.02	N/A
C.6.6	Vessels operated on State waters should not exceed a noise level of 90dB(a).	DNR (A1) COMAR 08.18.03.03	N/A
C.7	Transportation		
C.7.1	The social, economic, and environmental effects of proposed transportation facilities projects must be identified and alternative courses of action must be considered.	MDOT (D8) COMAR 11.01.06.02B	N/A
C.7.2	The public must be involved throughout the process of planning transportation projects.	MDOT (D8) Md. Code Ann., Transp. § 7-304(a) COMAR 11.01.06.02B	N/A
C.7.3	Transportation development and improvement projects must support the integrated nature of the transportation system, including removing impediments to the free movement of individuals from one mode of transportation to another.	MDOT (D8) Md. Code Ann., Transp. § 2-602	N/A
C.7.4	Private transit facilities must be operated in such a manner as to supplement facilities owned or controlled by the State to provide a unified and coordinated regional transit system without unnecessary duplication or competing service.	MDOT (D8) Md. Code Ann., Transp. § 7-102.1(b)	N/A
C.7.5	Access to and use of transportation facilities by pedestrians and bicycle riders must be enhanced by any transportation development or improvement project, and best engineering practices regarding the needs of bicycle riders and pedestrians shall be employed in all phases of transportation planning.	MDOT (D8) Md. Code Ann., Transp. § 2-602	N/A
C.8	Agriculture		
C.8.1	Agricultural land management practices may not add, introduce, leak, spill, or otherwise emit soil or sediment into waters of the State unless a plan is being implemented on the property that is designed to conserve soil and protect water quality.	MDA (C4) Md. Code Ann., Envir. § 4-213	N/A

Code	Policy	Policy References[1]	Applicability or Consistency[2]
C.8.2	A person conducting an agricultural activity shall implement best management practices to protect non-tidal wetlands.	MDE (C3) COMAR 26.23.05.02	N/A
C.8.3	Animal feeding operations shall use best management practices designed and approved by a local soil conservation district to limit livestock access to surface water.	MDA (C4) COMAR 26.08.03.09	N/A
C.8.4	An agricultural operation with $2500 a year in gross income or more than 8000 pounds of livestock that uses chemical fertilizers, sludge, or animal manure shall use these nutrients in a way that minimizes impacts on water quality.	MDA (C4) Md. Code Ann., Agric. § 8-803.1	N/A
C.8.5	Agricultural drainage projects shall provide substantial agricultural benefits, prevent direct over bank flow into the ditch, be truncated as far upstream as possible, minimize adverse environmental impacts, and implement and maintain approved soil conservation district conservation plans.	MDE (C3) COMAR 26.17.04.11	N/A
C.9	**Development**		
C.9.1	Any development shall be designed to minimize erosion and keep sediment onsite.	MDE (C4) COMAR 26.17.01.08	N/A
C.9.2	Development must avoid and then minimize the alteration or impairment of tidal and nontidal wetlands; minimize damage to water quality and natural habitats; minimize the cutting or clearing of trees and other woody plants; and preserve sites and structures of historical, archeological, and architectural significance and their appurtenances and environmental settings.	MDE/DNR/CAC (D6) Md. Code Ann., Envir. §§ 4-402, 5-907(a), 16-102(b) Md. Code Ann., Nat. Res. §§ 5-1606(c), 8-1801(a) Md. Code Ann., Article 66B § 8.01(b) COMAR 26.24.01.01(A)	N/A
C.9.3	Any proposed development may only be located where the water supply system, sewerage system, or solid waste acceptance facility is adequate to serve the proposed construction, taking into account all existing and approved developments in the service area and any water supply system, sewerage system, or solid waste acceptance facility described in the application and will not overload any present facility for conveying, pumping, storing, or treating water, sewage, or solid waste.	MDE (C9) Md. Code Ann., Envir. § 9-512	N/A
C.9.4	A proposed construction project must have an allocation of water and wastewater from the county whose facilities would be affected or, in the alternative, prove access to an acceptable well and on-site sewage disposal system. The water supply system, sewerage system, and solid waste acceptance facility on which the building or development would rely must be capable of handling the needs of the proposed project in addition to those of existing and approved developments.	MDE (D6) Md. Code Ann., Envir. § 9-512	N/A

Code	Policy	Policy References[1]	Applicability or Consistency[2]
C.9.5	Any residence or commercial establishment that is served or will be served by an on-site sewage disposal system or private water system must demonstrate that the system or systems are capable of handling the existing and reasonably foreseeable sewage flows or water demand prior to construction or alteration of the residence or commercial establishment.	MDE (D6) COMAR 26.04.02.02D	N/A
C.9.6	Proponents of grading or building in the Severn River Watershed must create a development plan and have it approved by the soil conservation district. The plan shall include a strategy for controlling silt and erosion and must demonstrate that any septic or private sewer facility will not contribute to the pollution of the Severn River.	MDE (D4) Md. Code Ann., Envir. § 4-308(a)	N/A
C.9.7	Industrial facilities must be sited and planned to insure compatibility with other legitimate beneficial water uses, constraints imposed due to standards of air, noise and water quality, and provision or availability of adequate water supply and waste water treatment facilities.	MDE (D4) Md. Code Ann., Envir. §§ 2-102, 4-402, 9-224(b), 9-512(b) COMAR 26.02.03.02 COMAR 26.11.02.02B	N/A
C.9.8	Local citizens shall be active partners in planning and implementation of development.	MDP (D6) Md. Code Ann., State Fin. & Proc. §§ 5-7A-01 to -02	N/A
C.9.9	Development shall protect existing community character and be concentrated in existing population and business centers, growth areas adjacent to these centers, or strategically selected new centers.	MDP (D6) Md. Code Ann., State Fin. & Proc. §§ 5-7A-01 to -02	N/A
C.9.10	Development shall be located near available or planned transit options.	MDP (D6) Md. Code Ann., State Fin. & Proc. §§ 5-7A-01 to -02	N/A
C.9.11	Whenever possible, communities shall be designed to be compact, contain a mixture of land uses, and be walkable.	MDP (D6) Md. Code Ann., State Fin. & Proc. §§ 5-7A-01 to -02	N/A
C.9.12	To meet the needs of existing and future development, communities must identify adequate drinking water and water resources and suitable receiving waters and land areas for stormwater management and wastewater treatment and disposal.	MDE (D6) Md. Code Ann., Article 66B § 3.05	N/A

Code	Policy	Policy References[1]	Applicability or Consistency[2]
C.10	**Sewage Treatment**		
C.10.1	The quality of State waters shall be protected, maintained, and improved for public supplies, propagation of wildlife, fish and aquatic life, and domestic, agricultural, industrial, recreational, and other legitimate beneficial uses.	MDE (D7) Md. Code Ann., Envir. §§ 4-402, 9-302(b), 9-323(a)	N/A
C.10.2	No waste shall be discharged into any waters of the State without first receiving necessary treatment or other corrective action to protect the legitimate beneficial uses of the State's waters.	MDE (D7) Md. Code Ann., Envir. §§ 9-302(b), -323(a)	N/A
C.10.3	Unless permitted by Maryland law, sewage or sewage effluent, treated or non-treated, or industrial wastes may not be disposed of in any manner that will create a nuisance or cause contamination of potable water supply systems, the waters of the State, or the ground surface.	MDE (D7) COMAR 26.04.02.02	N/A
C.10.4	A person may not discharge raw sewage or any other waste into the Patuxent River, the Severn River, or any of their tributaries.	MDE (D7) Md. Code Ann., Envir. § 4-307	N/A
C.10.5	A person may not dump, deposit, scatter, or release sewage sludge by any means, including discharge from a sewer or pipe, into or onto any portion of the water or bottomland of the Chesapeake Bay or of the tidewater portions of any of the Chesapeake Bay's tributaries within 5 miles of the Hart-Miller-Pleasure Island chain in Baltimore County.	MDE (D7) Md. Code Ann., Envir. § 5-1102(e)	N/A
C.10.6	Before constructing, installing, modifying, extending, altering, or operating a sewage treatment facility that could cause or increase the discharge of pollutants into the waters of the State, the proponent must hold a discharge permit issued by the Department of the Environment or provide an equivalent level of water quality protection.	MDE (D7) Md. Code Ann., Envir. § 9-323(a)	N/A
C.10.7	Before attempting to construct or alter an on-site sewage disposal system or cause it to receive any increase in flow, the proponent must receive a permit from the Department of the Environment or provide an equivalent level of water quality protection.	MDE (D7) COMAR 26.04.02.02	N/A
C.10.8	New sewage treatment plants shall be constructed so as to meet the State effluent water quality standards, including those for bacteriological values, dissolved oxygen, pH, and temperature conditions, which may require advanced waste treatment.	MDE (D7) Md. Code Ann., Envir. § 4-303	N/A
C.10.9	Secondary treatment is required as a minimum for sewage treatment works discharging into any waters of the State.	MDE (D7) COMAR 26.08.04.04C	N/A
C.10.10	If compliance with the established water quality standards or nutrient control requirements cannot be achieved through secondary treatment for all sewage discharges within a specific river segment or water region, the sewage treatment facilities are subject to additional restrictions.	MDE (D7) COMAR 26.08.01.02C	N/A

Code	Policy	Policy References[1]	Applicability or Consistency[2]
C.10.11	Advanced waste treatment is required for all sewage treatment works with a design capacity exceeding 1 million gallons per day and discharging into water quality limited waters. Advanced waste treatment may also be required for smaller sewage treatment works where the Department of the Environment determines that this level of treatment is necessary.	MDE (D7) COMAR 26.08.04.04C	N/A
C.10.12	An effluent limitation of 2 milligrams/liter total phosphorus is required for all facilities discharging more than: 500,000 gallons per day to the Chesapeake Bay and its tributaries above the Baltimore Harbor and 10 million gallons per day in the vicinity of Baltimore Harbor to the Bay Bridge.	MDE (D7) COMAR 26.08.04.04C	N/A
C.10.13	If discharging into shellfish harvesting waters, sewage treatment must be sufficient to protect shellfish harvesting, potentially requiring advanced waste treatment, and the treatment plant must have a bypass control system, including a minimum 24-hour emergency holding facility.	MDE (D7) COMAR 26.08.04.04C	N/A
C.10.14	Holding tanks shall be watertight and sized to hold at least 7 days effluent from a septic tank.	MDE (D7) COMAR 26.04.02.03C	N/A
C.10.15	Sewerage systems must conform to the county plan or revision or amendment of the county plan.	MDE (D7) Md. Code Ann., Envir. § 9-511	N/A
C.10.16	Unless sewage sludge is disposed of in a manner that precludes potential health hazards due to the presence of pathogens, all sewage sludge shall be treated by a process to significantly reduce pathogens or a process to further reduce pathogens.	MDE (D7) COMAR 26.04.06.08A	N/A
C.10.17	Sewage sludge utilization is prohibited if it cannot be done without causing an undue risk to the environment or public health, safety, or welfare or if the sewage sludge was generated in a state that does not apply sewage sludge to land.	MDE (D7) Md. Code Ann., Envir. § 9-245 COMAR 26.04.06.10A	N/A
C.10.18	Prior to utilizing sewage sludge in Maryland, a person shall obtain a sewage sludge utilization permit from the Maryland Department of the Environment or provide an equivalent level of environmental protection.	MDE (D7) Md. Code Ann., Envir. § 9-231	N/A
C.10.19	A user of sewage sludge may not interfere with any inspection of a sewage sludge utilization site, including prohibiting access to any representative of the Department of the Environment, to a local health official, or to the local health official's designee who requests access to insure compliance with the appropriate rules and regulations.	MDE (D7) Md. Code Ann., Envir. § 9-243 COMAR 26.04.06.06	N/A
C.10.20	Sewage sludge composting or storage facilities must meet all zoning and land use requirements of the county in which the facility is to be located.	MDE (D7) Md. Code Ann., Envir. § 9-233	N/A

Code	Policy	Policy References[1]	Applicability or Consistency[2]
C.10.21	The public shall be given an opportunity to present its views prior to any final decision being made on the siting of sewage sludge or a sewage sludge storage or distribution facility.	MDE (D7) Md. Code Ann., Envir. §§ 9-234, -238(c) COMAR 26.04.06.05	N/A
C.10.22	On-site sewage disposal systems are prohibited: ▪ If they may pollute well water supplies, water supply reservoirs, shellfish growing waters, bathing beaches, lakes, or tidewater areas, including within 25 feet of drainage and spring seeps, flood plain soils, gullies, rock outcroppings, or slopes in excess of 25 percent; 50 feet from water well systems in confined aquifers; ▪ 100 feet from water well systems in unconfined aquifers, water bodies not serving as potable water supplies, and a stream bank when further than 3,000 feet upstream of an intake for a potable water supply; and ▪ 200 feet from a stream bank when closer than 3,000 feet upstream of such an intake.	MDE (D7) COMAR 26.04.02.04	N/A
C.10.23	Facilities capable of berthing vessels 22 feet or larger with more than 10 slips must have a wastewater collection and treatment system and an on-site pump-out station adequate to handle existing and increased flow and increased sewage capacity, respectively.	MDE (D7) Md. Code Ann., Env. § 9-333	N/A
C.10.24	A vessel 65 feet in length and under with an installed toilet shall have a Type I, II, or III marine sanitation device. A vessel over 65 feet in length with an installed toilet shall have a Type II or III marine sanitation device. While in Maryland waters, all means of overboard discharge from a vessel with a Type III marine sanitation device must be blocked or secured so as to prevent discharge. Marine Sanitation Devices: ▪ A Type I marine sanitation device produces an effluent having a fecal coliform bacteria count not greater than 1,000 per 100 milliliters and no visible floating solids. ▪ A Type II marine sanitation device produces an effluent having a fecal coliform bacteria count not greater than 200 per 100 milliliters and suspended solids not greater than 150 milligrams per liter. ▪ A Type III marine sanitation device does not discharge effluent.	DNR/MDE (A1) Md. Code Ann., Natural Res. § 8-741	N/A
Source: State of Maryland. 2011. *Maryland's Enforceable Coastal Policies*. Effective April 8, 2011.			

Code	Policy	Policy References[1]	Applicability or Consistency[2]
Notes: 1. Initial reference expressions indicates the implementing agency followed a parenthetical citation to the section where the policy can be found in the Chart of Proposed Changes included in the original Maryland Coastal Management Program document, *Routine Program Change, Update and Clarification of Maryland Coastal Management Program Enforceable Policies, Request for Concurrence* (Maryland Department of Natural Resources, November 2010). Subsequent expressions indicate statutory or regulatory references. 2. "Consistent" indicates consistent, to the maximum extent practicable.			
Implementing Agency: CAC – Critical Area Commission for the Chesapeake and Atlantic Coastal Bays. DNR – Maryland Department of Natural Resources. MDA – Maryland Department of Agriculture. MDE – Maryland Department of the Environment. MDOT – Maryland Department of Transportation. MDP – Maryland Department of Planning. PSC – Public Service Commission.	**Regulatory and Statutory Reference:** § – Section. §§ – Sections. Agric. – Agriculture Article. COMAR – Code of Maryland Regulations. Crim. Law – Criminal Law Article. Envir. – Environment Article. Fin. & Proc. – Finance and Procurement Article. Md. Code Ann. – Maryland Code Annotated. Nat. Res. – Natural Resources Article. Pub. Util. Cos. – Public Utilities Article. Transp. – Transportation Article.		

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