Site Selection Criteria of Wetland and Waterway Mitigation Sites

Proper site selection is critical to mitigation success and may reduce the time required for mitigation approval. Selecting wetland mitigation sites using a watershed approach will improve mitigation success and site sustainability and better address opportunities for improving ecological functions in a watershed. The compensatory mitigation project site must be ecologically suitable for providing the desired aquatic resource functions. These recommendations do not replace permitting requirements for avoidance and minimization of adverse impacts to aquatic resources prior to considering compensatory mitigation. When selecting a site, the bank sponsor or permittee should consider the following:

☐ On-site mitigation should be considered when it is environmentally preferable

☐ Off-site mitigation is preferred within the same 8-digit USGS Hydrologic Unit Code (HUC8) as the impacts are occurring. Only when documentation is provided that indicates that no suitable mitigation banks/sites are available within the primary HUC8, should off-site mitigation be considered in an adjacent HUC8 in the same river basin and physiographic region (e.g., coastal plan, piedmont, etc.).

☐ The site has the potential to replace lost functions and resource types. *For a mitigation bank, this would include consideration of potential future impacts within the proposed service area, selecting a site that can replace those impacts. For example, the site may replace functions of a forested wetland, vernal pool habitat, anadromous fish habitat, etc.* The site should be located in a setting of comparable landscape position, hydrogeomorphic regime and climate, and physiographic province of the impacted waters to increase the potential that the mitigation site mimics the functions lost. Mitigation should be in-kind (i.e., forested palustrine mitigation for palustrine forested impacts). Wetland mitigation should not be used to compensate for stream and open water impacts and vice versa. Restoration, enhancement, or preservation of streams should be of an order that is commensurate with that which is being impacted (as determined in the field). For example, if a first or second order stream is impacted, compensation should be located on a first or second order stream, where practicable.

☐ The site is well connected with the landscape to provide maximum function. *Mitigation sites are ideally located adjacent to existing wetlands, streams, or 100-year floodplains whenever possible. Mitigation sites should also be located within or adjacent to existing higher quality natural resources (e.g., Green Infrastructure, Tier II, designated critical resource waters) whenever possible to increase landscape connectivity and contribute to Maryland's conservation goals. These conservation areas are identified in a web-based mapping tool at www.watershedresourcesregistry.com. Presence within or adjacent to existing protected lands, especially parkland, and/or providing public access/recreation/education opportunity are also encouraged. The site should contribute*

to the needs of the watershed. Compensation sites should be proposed adjacent to existing aquatic resources or where aquatic resources previously existed. Isolated or fragmented wetland mitigation areas are unlikely to be approved.

☐ Watershed-scale features and development trends must be considered in siting a mitigation project. Mitigation goals should address watershed needs for habitat protection, flood management, or water quality improvements as identified in the state wildlife action plan, Habitat Conservation Plan, Watershed Resources Registry, etc. An explanation how the site selection addresses these watershed needs shall be included with the Draft Prospectus/Prospectus or Phase I Mitigation Plan.

☐ Preservation of aquatic resources may only be used to provide compensatory mitigation pursuant with the 2008 Mitigation Rule, 33 CFR 332.3(h) and in conjunction with aquatic resource restoration, establishment, and/or enhancement activities.

☐ A Section 404/Waters of the State credit of mitigation cannot be sold and then sold again to satisfy another program requirement (e.g., Forest Conservation, TMDL, etc.). *The Corps and MDE, in consultation with the IRT when applicable, will consider projects where different program requirements are separated by: 1) location (e.g., stream and small riparian buffer are being used for TMDL while floodplain wetlands are being used for wetland mitigation) and 2) ledger accounting for mitigation banks (e.g., a 10-acre wetland site may be used to satisfy Forest Conservation and Section 404 requirements. However, once it is sold for one credit type, the same credit cannot be resold for another credit type).*

☐ Concerns about other relevant resources (e.g., historic properties and cultural resources, federal or state-listed, threatened and endangered species and their habitat) proposed to be impacted by the mitigation project have been identified and resolved. *While these issues may not be resolved during the initial stages of review, it is important to identify what the concerns may be and contact the applicable agencies early in the process, as these issues could significantly limit or kill the project.*

☐ The establishment of this mitigation site will not have a significant impact to other ecologically important aquatic or terrestrial natural resources (e.g., upland forest, subtidal habitat, wetlands, waterways). *Mitigation sites proposed in areas identified as important habitat for rare, threatened, and endangered plant and wildlife species may require more detailed review to reduce or eliminate impacts to these sensitive resources (although enlarging or enhancing these habitats is encouraged). The higher the quality of the existing resource, the more important it will be to avoid the impacts. Mitigation projects that propose to clear or convert large areas of forest are discouraged.*

☐ The proposed mitigation type is likely to succeed, given the current site conditions. *Restoration of wetlands is generally considered to be more feasible and sustainable than creation of wetlands. Enhancement of wetlands that are being actively farmed may also result in higher success. Sites that require large amounts of excavation are discouraged.*

Mitigation built on highly disturbed sites (e.g., old sand/gravel quarries) will require additional considerations to achieve success. For example, since soils may be completed depleted, large amounts of topsoil may need to be imported. Use of degraded or disturbed sites, surrounded by an extensively developed landscape, may only achieve maximum function as an impaired system requiring active management to support natural processes and native species. Existing site should contain minimal or no invasive/undesireable nuisance species.

☐ The site is positioned to have sufficient hydrology in the near and long term. *The system should be self-sustaining - avoid designing a system dependent upon water-control structures or other artificial infrastructure that must be maintained in perpetuity. The size and location of the compensatory mitigation site relative to hydrologic sources is inherent to wetland sustainability. A water budget verifying that there will be sufficient water available to sustain long-term hydrology should be provided. Consideration should be given to the effects of future development on the hydrology (e.g., will development of the surrounding area divert surface flow into stormwater management facilities, will new impervious surface increase storm flows through the stream). Natural hydrology is the most important factor in the development of successful mitigation. Sites with re-establishment of natural hydrology are more likely to succeed. Pay attention to soil characteristics to ensure they are appropriate to support hydrology and plant goals.*

☐ There are no concerns that surrounding land use will limit long-term success (e.g., pollutant sources, invasive species, future development, consistency with local planning documents, etc.). *Select locations where surrounding landscape is less likely to be a detriment to the site in the near and long term. For example, areas surrounded by Phragmites will likely require extensive invasive species management in perpetuity. Ensure there are good buffers at the site. Take into account surrounding land uses and future plans for the land. Areas should not be selected if future foreseeable upstream or upgradient activities are likely to cause adverse effects to the mitigation area (e.g., future upstream activities would cause increased channel forming discharge characteristics that were unable to be addressed appropriately).*

☐ Locating compensatory mitigation projects near airports is likely to attract wildlife species and pose hazards to aviation. Compatibility with existing airport facilities must be considered. All activities that may attract hazardous wildlife shall be consistent with the siting criteria and land use practice recommendations stated in Section 1-3 of the Federal Aviation Administration Advisory Circular 150/5200-33[1].

☐ There are no known contaminants at or adjacent to the mitigation site that will limit the success of the project.

[1] This document can be found at:
https://www.faa.gov/regulations_policies/advisory_circulars/index.cfm/go/document.information/documentID/22820

☐ There is sufficient access for construction equipment. *For example, steep slopes or surrounding forest may limit access by equipment.*

☐ The compensatory mitigation site must be provided long-term protection in perpetuity through real estate instruments or other available mechanisms, as appropriate. Site protection instruments must allow for periodic access by the bank sponsor/permittee, long-term steward, easement holder (if applicable), Corps, MDE, and IRT (for mitigation banks). The site protection instrument must be approved and recorded before any mitigation bank credits can be released for mitigation banks. A site protection instrument for a permittee-responsible mitigation site must be approved in advance of, or concurrent with, the activity causing the authorized impacts.

☐ All existing or planned easements/site protection mechanisms within or adjacent to the proposed mitigation sites are identified and are compatible with the mitigation site (e.g. utility easements, Forest Conservation Easements, etc). *For example, the requirement to remove trees under overhead utility lines will not allow for the development of a forested wetland. In an effort to protect additional land in Maryland, ideally the mitigation site would not already be protected. However, mitigation sites proposed on land with compatible existing site protection mechanisms may be considered, but an additional site protection mechanism containing language required by the Corps and MDE, in consultation with the IRT (for mitigation banks) may also be required (e.g., on land with existing agricultural easements).* A preliminary title report indicating any easements or other encumbrances and a title insurance policy insuring clear title to the Bank lands must be provided with the conceptual mitigation plan or Bank Prospectus review phase. A copy of the deed evidencing ownership and property assessment and warranty shall be provided at the draft Mitigation Banking Instrument. A copy of the updated title report is required with the final Mitigation Banking Instrument.