CESAW-RG/Tugwell

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SUBJECT: Mitigation Credit Calculation

From: Todd Tugwell, NCIRT Chair

To: Wilmington District Mitigation Providers

During recent reviews of as-built reports for several mitigation sites, inaccuracies were discovered in the reporting of credit amounts when compared with the projected credit totals presented in the approved mitigation plans for those sites. This memo is intended to clarify the Wilmington District’s expectations with regard to stream length measurement and credit reporting for mitigation sites.

When existing stream length measurements are conducted for the purposes of determining credit during mitigation plan development (e.g., measuring existing enhancement or preservation reaches), the center of the wetted perimeter (using base flow conditions) should be used as the default measurement approach. This method is the most consistent with the way that impacts are calculated for permits issued by the District, and therefore provides for the most accurate in-kind replacement of lost stream. For restoration reaches or any other approach where the stream will be built in a new location, credit amounts should be based on the center of the designed channel as shown in the plan sheets.

For as-built plans and monitoring reports that are used to assess stream conditions following construction, mitigation providers may use other methods of measuring/surveying stream pattern, dimension and profile, to include surveys of the thalweg, surveys of the center of the valley between the tops-of-bank, or surveys of the center of the wetted perimeter, though each method may result in a slightly different length. Variations such as the number of survey points taken or natural meander over time may also lead to different results. For consistency throughout the monitoring period, we recommended that mitigation providers use the same approach for all as-built and annual monitoring surveys. However, the results of as-built and annual surveys should not be used to recalculate the credit totals for a project without modifying the approved mitigation plan. In order to provide consistency and predictability, credit totals in the ledgers and credit release schedules must always be based on the amounts approved in the mitigation plan throughout the life of the project, even if as-built measurements vary slightly from the mitigation plan. The mitigation plan establishes the credit amounts that the
District agrees to, and deviations from this amount are considered to be modifications to the approved mitigation plan.

If site conditions such as unidentified bedrock, utility easements, discovery of cultural resources, etc., are encountered during construction of stream channels that result in significant deviations from the approved plan or credit amount (i.e., more that would typically result from measurement variations), the as-built report must clearly identify the difference in the length and associated credit amount and explain how project design and construction were altered, to include updated plan sheets. These changes, including the revised credit totals, should be submitted to the District for approval as a project modification. In some circumstances where stream lengths increase, the change could require a modification to the Department of the Army permit authorization for the project (typically NWP 27), which needs to be done in advance of conducting the work.

For projects that include wetland mitigation, restored wetland boundaries are not surveyed because wetland areas must still be monitored before they are determined to meet hydrology standards, so wetland credit amounts should not change at as-built unless project limits are altered during construction (e.g., property is removed or added to a project, planned hydrologic alterations are not carried out, etc.).

Any questions related to this memorandum should be directed to Todd Tugwell at 919-554-4884 ext. 58 or todd.tugwell@usace.army.mil.