



**US Army Corps  
Of Engineers**  
Wilmington District

# **PUBLIC NOTICE**

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## **Wilmington District Implementation of the North Carolina Stream Assessment Method and North Carolina Wetland Assessment Method**

The U.S. Army Corps of Engineers, Wilmington District (District) is issuing this public notice to inform the public on the implementation of the North Carolina Wetland Assessment Method (NC WAM) and the North Carolina Stream Assessment Method (NC SAM). With the issuance of this public notice, the District will begin to utilize NC WAM and NC SAM for our internal reviews of permit applications, including decisions regarding the amount and type of compensatory mitigation, avoidance and minimization of impacts, or other decisions pertaining to aquatic resource quality and functions.

Historically, when determining the amount of compensatory mitigation required for an impact, the District has considered a number of factors, such as the type and duration of the impact, the size of the impact, the type of wetland or stream being impacted, the relative rarity of occurrence for that type of aquatic resource, and any unique functions provided by that resource (e.g., habitat for rare species, listing as a NC Natural Heritage Area, etc.). We also considered the level of function(s) provided by the resource, but the agencies lacked a common methodology to determine those functions. These factors were evaluated by our PMs when determining the appropriate mitigation ratio (based on acres and feet). The District will continue to use the ratio method when determining the compensatory mitigation requirements for any impact to wetlands or streams. Generally, impacts to wetlands and stream channels will continue to require mitigation at a 2 to 1 ratio (2 wetland credits per acre of impact, and 2 stream credits per linear foot of impact). However, the results of NC WAM and NC SAM may now be considered by the District, along with other factors, to adjust the typical 2 to 1 mitigation ratio in order to account for high or low quality aquatic resources and ensure that compensatory mitigation requirements are appropriate.

NC WAM and NC SAM were developed by an interagency team of federal and state agency representatives. The mission for the teams was to develop accurate, reproducible, rapid, observational, and science-based field methods to determine the level of function relative to reference condition for each of 16 types of wetland and 29 categories of streams in North Carolina. Both methods have undergone comprehensive peer review during development, including beta testing periods, and public notice comment periods (public notices were issued in 2008 for NC WAM, 2013 for NC SAM).

Both NC WAM and NC SAM have been developed to help meet the goals outlined in 33 CFR Part 332 – Compensatory Mitigation for Losses of Aquatic Resources, which establishes a preference for utilization of a functional or condition assessment to determine the level of mitigation required for impacts to aquatic resources affected by Department of the Army permits. These methodologies are intended to allow for a rapid assessment of functions within wetlands and streams based on an observation of indicators (metrics) present within the assessment areas. These methods were not developed for use in determining success for wetland or stream mitigation projects, but may be used as screening tools to determine if potential mitigation sites are viable.

At this time the District will not require that the results of NC WAM or NC SAM be submitted in order for a permit application to be complete, however Regulatory project managers (PMs) may conduct an NC WAM or NC SAM assessment of wetlands or streams proposed to be impacted in the permit application. Additionally, Regulatory PM's will review the results of NC WAM and NC SAM if an applicant chooses to submit the assessment forms in support of a permit application, mitigation proposal, or other action. Results submitted to the District will be subject to review and approval by the PM responsible for that action, and the District retains final authority to make decisions regarding the compensatory mitigation requirements and Section 404(b)(1) analyses for all U.S. Army Corps of Engineers permit decisions.

Training for both methods has been conducted and will continue to be offered periodically. The District strongly encourages anyone who wishes to use either method to attend the training and gain a strong understanding of the user manual; however, the District has determined it is not necessary to attend a training course in order to submit the results to the District in support of a permit application, mitigation proposal, or other action.

The user manuals for each method provide background information, detailed instructions and many examples for each metric, a comprehensive glossary, and other detailed appendices. The manuals are essential to understanding and completing wetland and stream assessment. Four separate files are included as part of each method including the user manual, the assessment form, the rating calculator, and a template document. The rating calculator is used to determine the ratings from the data gathered during the assessment process, and the template is a file that is used by the rating calculator to generate an output file with the results. Detailed instructions for the use of the rating calculator are included in the user manual appendices.

A copy of both the NC SAM and NC WAM manuals, along with supplementary materials including the Excel spreadsheet calculators, are available for download on the Regulatory In-lieu Fee and Bank Information Tracking System (RIBITS) website. The webpage address is: [https://ribits.usace.army.mil/ribits\\_apex/f?p=107:27:6978093320555::NO:RP:P27\\_BUTTON\\_K](https://ribits.usace.army.mil/ribits_apex/f?p=107:27:6978093320555::NO:RP:P27_BUTTON_K)

[EY:20](#) Please note that in order to access the information you must select the Wilmington District in the filter tool located on the lower left of the website page.

The NCWAM and NCSAM methodologies are intended to be fair and flexible and are subject to periodic revisions and updates as new procedures and stream and wetland mitigation monitoring data support changes, and as the District gains more experience with the application and results of these methods. The most recent version of both documents will be maintained on the RIBITS website. Written comments regarding this Public Notice should be submitted to Mr. Todd Tugwell, US Army Corps of Engineers, 11405 Falls of Neuse Rd., Wake Forest, North Carolina, 27587, or by email at [todd.tugwell@usace.army.mil](mailto:todd.tugwell@usace.army.mil).