

Wetland Functional Assessment



Wetland functional assessment is a process that measures the capacity of a wetland to perform specific ecological functions. These functions include surface water storage, nutrient cycling, particulate retention, and habitat for plants and animals.

Wetland functional assessment is most often used by NRCS to determine wetland mitigation requirements and Minimal Effect exemption eligibility in accordance with agency regulations and policy. For example, when a wetland is restored, enhanced or created to compensate for the conversion of another wetland, a functional assessment must be used to determine the amounts and types of functions needing replacement. In addition, if a wetland is being considered for a Minimal Effect exemption, a functional assessment may be needed to help determine if the loss of the wetland will have a minimal effect on the ecological functions of the watershed.

The NFSAM mandates the use of either the Hydrogeomorphic Functional Assessment (HGM) methodology, or a procedure approved by the State Conservationist in consultation with the State Technical Committee. In Florida, the Uniform Mitigation Assessment Method (UMAM) was approved by the State Conservationist for use in August 2005. The UMAM was developed by the FDEP and Florida Water Management Districts. It is applicable statewide and has been accepted for use by the Jacksonville District, U.S. Army Corps of Engineers (COE). The UMAM has been annotated for more efficient use by Florida NRCS since it contains instructions for state agency use that are not applicable to NRCS. A copy of this modified UMAM and associated field data forms is available on the eFOTG immediately following this document.

The UMAM evaluates a wetland by assigning numerical scores to three categories of indicators of wetland function. These categories are location and landscape support, water environment, and community structure. Scores are based on the best professional judgment of the evaluators and are averaged to provide a single score for the site, which is then used in conjunction with acreage, time lag and/or environmental risk factors to determine the amount of loss or gain in wetland function at an impact or mitigation site. The UMAM score can also be used to determine whether a wetland is functioning at a “minimum” level, to determine its eligibility for a Minimal Effect exemption (see e/FOTG Section I (F)(1)(b) 4).

Prior to the development of the UMAM, the Wetland Rapid Assessment Procedure (WRAP), developed by the South Florida Water Management District, was used by Florida NRCS to evaluate wetland functioning levels. The WRAP should continue to be used for those mitigation or Minimal Effect exemption sites that have been monitored using WRAP per an NRCS Mitigation or Minimal Effect Agreement and are still being monitored. All new sites should be evaluated with the UMAM.

Florida NRCS policy requires a minimum of two people trained in the use of the UMAM or WRAP, as appropriate, to perform the assessment. Of these two, at least one must be an NRCS employee formally trained and certified by the State Resource Conservationist to conduct the method. Other parties such as trained environmental consultants may help conduct UMAM or WRAP assessments with NRCS. UMAM or WRAP results provided to the COE from a third party such as an environmental consultant can be accepted by NRCS in making mitigation or minimal effect exemption decisions if they have been accepted by the COE for Clean Water Act purposes.