November 4, 2021

South Carolina Department of Transportation
ATTN: Vince McCarron
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RE: Comments for the South Carolina Stream Quantification Tool (SQT) Debit Tool Calculator and Manual

Vince,

Per correspondence in October, you requested feedback on the South Carolina Stream Quantification Tool (SQT) Debit Tool Calculator and Manual. The South Carolina Mitigation Association ("SCMA" or "Association") provides the following comments to foster an active and efficient mitigation market.

General Notes:

- The South Carolina Department of Transportation (SCDOT) inquired about the qualifications, specifically additional qualifications, to conduct an assessment via the proposed SQT. Entities and individuals deploying the current Charleston District Standard Operating Procedure for defining stream impairments and funcntioal loss can deploy the SQT.
- The SCDOT inquired about the resources (e.g., additional staff) and time necessary to deploy the SQT and conduct an assessment. The debit tool includes 26 metrics for warm water and 27 for cold water streams that represent 5 functional categories: hydrology, hydraulics, geomorphology, physiochemical, and biology. The SQT requires data for three functional categories: hydrology, hydraulics and geomorphology. The SQT debt tool provides the flexibility to conduct a detailed or limited assessment. Required parametres that are not assessed are assigned standard scores. ***These standard scores represent functioning streams.*** Note, the SQT debit tool has a miniumum existing condition score ensuring that all stream impacts, regardless of the condition of the impated stream, will yield functional loss. A summary of the time and resources necessary to conduct each assessment option is provided below.
    - The Association does not expect Option 1 to increase the time, staff resources or expertise required to prepare a permit application for stream impacts.

- The Association expects Options 2a to require more time and expertise in geomorphology (Rosgen level 1 or equivalent) to prepare a permit application for stream impacts. Most environmental consutlants have experience assessing geomorphology.
- The Association expects Option 2b (in addition to the requirements for Option 2a) to require more time and a functioning knowledge of botany to prepare a permit application for stream impacts. Most environmental consultants have experience assessing botany.
- The Association expects Option 3 (in addition to all the requirements of 2a and 2b) to require more time and training in benthic macroinvertebrate and/or fish sampling methodologies. Option 3 assessments may require scientific collection permits and will likely require a DHEC certified lab and necessitate additional fees for each stream impact.

Additional Notes:

The following notes were provided to the SCDNR on 26 October, 2021.

- SCMA suggests that the SQT and related products are challenging to evaluate without a holistic understanding of how federal and state agencies will implement these tools in South Carolina. Via a letter dated October 26, 2021 the Association encouraged the SQT steering committee to engage all stakeholders (e.g., DOT, mitigation providers, etc.) during the development and deployment of these tools.
- SCMA recommends that the adopted debit tool present the required mitigation in both functional feet (SQT) and in terms of the 2010 Standard Operating Procedure (SOP). This approach will facilitate adoption and the transition from the 2010 to a new SOP. This transition from old to new should not discount or disadvantage existing (grandfathered) or future mitigation banks.
- How will stream preservation generate credits, and how much credit will preservation activities generate in conjunction with the SQT? Changes to the method for defining and quantifying the value of stream preservation may significantly impact siting future mitigation projects in our state.

South Carolina Stream Quantification Tool (SQT) Debit Tool Calculator and Manual Notes:

- Please reference a definition of perennial, intermittent, and ephemeral. (Page 3 of Manual)
- Please enclose the proposed condition evidence (via assessment) with the manual to justify the impact severity tiers. Rather than a model of percent of functional loss, please consider providing existing function examples of each impact tier. (Section 2.5 and 2.5.1)
- Large linear projects commonly include many independent stream impacts. The tool computes the cumulative impact and currently limits the number of impact sites to ten sites. This approach and the requirement for multiple worksheets may lead to cumulative impact miscalculations. (Section 3.2)
- Before regulators adopt the SQT and related products, SCMA would like the opportunity to review and provide feedback on the proposed Biological metrics. (Section 3.3, Biology)
- SCMA would like to help develop and review practical examples for Chapter 4.

SCMA appreciates the request for feedback and collaboration and your consideration of our comments. We desire to partner with all stakeholders to improve the industry and quality of mitigation generated in our state. We consider this a part of a dialogue, and we welcome the opportunity to meet with you in person or virtually to discuss these ideas and develop solutions. Please do not hesitate to contact us with questions or to schedule a time to speak or meet.