



US Army Corps
of Engineers®
St. Paul District

PUBLIC NOTICE

Date: June 17, 2019

ANNOUNCEMENT OF DEVELOPMENT OF MINNESOTA STREAM ASSESSMENT TOOLS AND DISTRICT-WIDE STREAM MITIGATION POLICY

SUMMARY: The U.S. Army Corps of Engineers St. Paul District Regulatory Branch is developing stream assessment tools for the state of Minnesota and a stream mitigation policy for the states of Minnesota and Wisconsin. The assessment tools, to include Versions 1.0 of the Stream Quantification Tool (SQT) and Debit Tool, will be completed August 2019. An outline of the stream mitigation policy will be completed August 2019 and a final policy published January 2020.

BACKGROUND: Impacts to aquatic resources must be avoided and minimized to the greatest extent practicable, and the U.S. Army Corps of Engineers (Corps) may require compensatory mitigation to offset losses of aquatic resource function resulting from permitted activities (40 CFR 230, 404(b)(1) Guidelines). Mitigation may be accomplished through the restoration, enhancement, establishment, or preservation of aquatic resources (33 CFR 332, 2008 Mitigation Rule). During the Corps evaluation of Department of the Army permit applications, the need for compensatory mitigation is determined on a case-by-case basis when evaluating potential individual and cumulative adverse impacts to the aquatic environment.

There is need for consistency and transparency in how the Corps St. Paul District Regulatory Branch (District) makes stream mitigation decisions, determines functional loss of permitted stream activities, and functional gains of stream restoration projects. The District has had wetland mitigation policies in place for over 10 years in Minnesota and Wisconsin, but no formal stream mitigation policy is in place. This is due in part to generally comprehensive and protective state regulations. To date, the District has required stream mitigation via stream restoration for the complete removal of streams as a result of large-scale hard rock mining. However, research surrounding TMDL impairments, altered watercourses, and restoration sciences demonstrates that even smaller stream impacts can have lasting and notable effects on stream functions. In accordance with Federal rules and guidelines, mitigation may be necessary to ensure replacement of lost stream functions. For these reasons, the District has begun to develop stream functional assessment tools and a stream mitigation policy to ensure consistent science-based decision making for activities regulated under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act.

STREAM QUANTIFICATION TOOL (SQT) AND DEBIT TOOL:

Stream assessment tools provide a standardized approach to assess functional loss (i.e., debits incurred) at impact sites and functional lift (i.e., credits generated) at compensation sites. It is important that tools used to inform decisions on regulatory actions are science-based, consistent, efficient and repeatable. The Minnesota SQT will be a functional assessment that consolidates stream data covering hydrology, hydraulic, geomorphology, physicochemical and biological components to an excel workbook to characterize stream ecosystem functions at a specific project reach.

The SQT will:

- Identify standard data collection needs for prospective stream impact and mitigation sites.
- Provide objective, science-based, and regionally-developed quantitative measures of defined stream variables.
- Inform determinations on the functional loss and gains of stream impacts and restorations.

Although the SQT can calculate both functional lift and loss, in many situations, the Corps must make compensatory mitigation decisions when the functional loss caused by a permitted stream impact will not be monitored. Therefore, in conjunction with the SQT, a Debit Tool will be developed to allow for a more streamlined evaluation approach than the

SQT. The Debit Tool combines information from individual project design documents, models, related literature, and best professional judgment to determine debit (mitigation) needs for a regulated impact. Together the SQT and Debit Tool will be used to inform the District's permitting and mitigation decisions when activities in streams require permits from the Corps.

The SQT and Debit Tool are being developed for the District by a consultant, Stream Mechanics, through a grant from the U.S. Environmental Protection Agency. The MN Department of Natural Resources, MN Pollution Control Agency and the MN Board of Water and Soil Resources are participating cooperatively with the District in the development of the stream assessment tools. Regionally-specific SQTs and Debit Tools have been developed for use in five states (Tennessee, Colorado, Wyoming, North Carolina, and Georgia) with the cooperation of seven Corps Districts with regulatory jurisdiction in those states (Savannah, Nashville, Memphis, Wilmington, Omaha, Sacramento, and Albuquerque). The SQT and Debit Tool will include excel spreadsheets, user manuals and scientific support documents. The tools will be released as version 1.0 in August 2019. Scientific support documentation for the SQT will be released January 2020. During 2020, the District will welcome any public and agency comments related to the tool and will consider an update to the SQT and Debit Tool in 2021.

More information on tools, including scientific support, other state SQTs, and user manuals can be found at: <https://stream-mechanics.com/stream-functions-pyramid-framework/>

STREAM MITIGATION POLICY:

In conjunction with the release of the SQT and Debit Tool, the District will develop a stream mitigation policy. The policy is expected to address the following topics: the basis of stream regulation and mitigation requirements under the Clean Water Act, stream identification, assessment of functional lift or loss associated with stream activities, District stream mitigation requirements associated with stream loss, District stream banking and permittee-responsible mitigation requirements, and assessment and restoration resources. Although the stream assessment tools are being developed specifically for Minnesota, the District stream mitigation policy will be developed for both the states of Minnesota and Wisconsin. In lieu of a Wisconsin-specific SQT, applicants or project sponsors will have the option of relying on other stream assessments to determine functional gain and loss, as needed. The District and its partner agencies are in early discussions about the development of a Wisconsin SQT in upcoming years.

An outline of the draft stream mitigation policy will be released in August 2019, with a 15 day public comment period. The policy will be released as Version 1.0 in January 2020. The District is planning a phased approach to implementation of the stream mitigation requirements for Department of Army permits. The first phase will, at a minimum, formalize mitigation requirements for projects that involve stream removals and procedures to develop stream credits under the District's mitigation program. The next phases of mitigation requirement implementation will be informed by data collected through the use of the SQT and Debit Tool in subsequent years. Stakeholder and tribal outreach will be on-going throughout 2019/2020 to ensure proper coordination with the public, tribes, and state and federal agencies.

Any recommendations, comments or concerns related to the creation of stream mitigation policy may be submitted to St. Paul District's Minnesota Program Manager, Jill Bathke (jill.c.bathke@usace.army.mil or 651-290-5697).

TIMELINE OF MAJOR MILESTONES:

August 2019: 15-day public notice for: (1) SQT Version 1.0, (2) Debit Tool Version 1.0, and (3) outline of the stream mitigation policy with opportunity to provide comments on implementation of the tools and draft policy outline

Fall 2019: Outreach on SQT and stream mitigation policy for public and tribal stakeholders

January 2019: Public notice of final stream mitigation policy and SQT scientific support document

FUTURE UPDATES:

If you are interested in future updates on these initiatives, please send an email to jill.c.bathke@usace.army.mil with the subject line of "Stream SQT." No more than one email a month will be sent to interested parties with updates and email addresses will only be used for this expressed purpose. All questions concerning the development of the SQT, Debit Tool and stream mitigation policy should also be directed to Jill Bathke.

To sign up for other public notices, including on specific project or mitigation proposals, please go to: http://mvp-extstp.mvp.usace.army.mil/list_server.