



Nutrient Trading/Offset Work Group Meeting

September 21, 2026, 10:00 a.m. – 12:00 p.m.

2401 Colonial Dr. Helena, MT 59601

Wilderness Room

Join via Zoom:

[Zoom Link](#)

Dial by Phone: 1 (206) 337-9723, Webinar ID: 835 1794 2388

Relevant Documents

- [HB736](#)
- [Circular DEQ-13](#)
- [ARM 17.30.1701](#)

Preliminaries

- Agenda
- Roll Call
 - Shawn Kohtz, Public point sources
 - Sarah Zuzulock, Conservation
 - Clayton Elliott, Conservation, recreation
 - Eric Sivers, DEQ
 - Hannah New, DEQ
 - Kyle Milke, DEQ
 - Mark Ockey, DEQ
 - Tatiana Davila, DEQ
 - Tiffany Lyden, DEQ
- Approve [August 20, 2026 meeting minutes](#) and share any post-meeting thoughts or ideas.
 - No corrections recommended by Work Group members – Kyle M. will finalize the meeting minutes and put them on the website.

Preview proposed updates to DEQ-13

- Kyle M. walked through ongoing updates to Circular DEQ-13. Changes proposed since the last Work Group meeting include:

- Removing the last sentence to the first paragraph in II(7) “A net decrease must also be maintained after the trading credit is applied in a permit.
- Adding to the first sentence of third paragraph in II(7) “For point source to point source trades..” to indicate that improvement ratios only apply to point source to point source trades.
- Added two sentences to the fourth paragraph in II(7) stating “An exception may be granted to the typical 5-year period of record for facility operational changes. If an exception is granted, the period of record will span from the date of the facility operational change to the present.”
- Added an example of a percent reduction calculation to II(7).
- All changes were agreed upon by Work Group members.

Topics from July 9th to revisit

- Draft application form:
 - Kyle M. walked through updates to the draft application form, changes included:
 - Changed “actual maximum daily flow rate” in Sections 4 and 5 of the application form to “actual maximum average monthly flow rate”.
 - Added a box for applicable dates for the “actual maximum average monthly flow rate” in Section 4 and 5.
 - Removed the second sentence from the checkbox in Section 7 “The permittee is responsible for meeting effluent limitations derived from water quality standards regardless of whether the trading partners comply with the terms of a trade agreement.”
 - Kyle M. asked the group to reexplain why they thought it was necessary to remove the second sentence from the checkbox in Section 7.
 - Shawn K. raised concerns with the 2nd sentence in the certification and is concerned that it lets the credit seller off the hook if they default. Sarah Z. understood the concern but didn’t have strong feelings. Ultimately the Work Group agreed to remove this sentence.
 - All Work Group members agreed that the application form can be finalized.
- Process flow diagram:
 - Hannah N. presented an updated version of the process flow diagram for a permitted facility.
- Optimization credits:
 - In response to a question from the August 20th meeting, Hannah N. confirmed that optimization can be used to improve discharge characteristics and generate credits with the assumption that baseline is met.
 - Sarah Z. asked if optimization is for point sources. Hannah N. and Kyle M. agreed that optimization could be used to improve point sources and nonpoint sources as long as baseline is met.

Estimating Nutrient Reduction Credits Methods

- Mark O. discussed the methods he developed for estimating nutrient reductions for riparian fencing, riparian revegetation, and irrigation return flow wetlands using the Pollutant Load Estimation Tool (PLET).
 - Riparian fencing: The method uses EPA’s PLET model to estimate pre and post-project loading from the pre and post-project pasture configurations and then applies a nutrient removal efficiency to the post-project pasture based on the feet of streambank fenced off with buffer widths of varying sizes. The nutrient removal efficiencies are based on a literature survey commissioned by the Department (Ellis, 2008). Citation: Ellis, J.H. 2008. Scientific Recommendations on the Size of Stream Vegetated Buffers Needed to Protect

Water Quality, Part One, The need for Stream Vegetated Buffers: What Does the Science Say? Report to Montana Department of Environmental Quality, EPA/DEQ Wetland Development Grant. Montana Audubon, Helena, MT. 24 pp.

- Riparian revegetation: The method uses EPA's PLET model to estimate pre and post-project nutrient loading from surrounding land uses and then applies a nutrient removal efficiency to the post-project land use load based on an average buffer width calculated by dividing the acres of revegetated riparian area by the length of streambank included in the buffer. The nutrient removal efficiencies are based on a literature survey commissioned by the Department (Ellis, 2008). Citation: Ellis, J.H. 2008. Scientific Recommendations on the Size of Stream Vegetated Buffers Needed to Protect Water Quality, Part One, The need for Stream Vegetated Buffers: What Does the Science Say? Report to Montana Department of Environmental Quality, EPA/DEQ Wetland Development Grant. Montana Audubon, Helena, MT. 24 pp.
- Irrigation return flow wetlands: The method uses EPA's PLET model to estimate nutrient loading from irrigated ag lands to the irrigation return flow canal and then applies a nutrient removal efficiency based on a comprehensive literature survey completed by Land et al (2016) Citation: Land, M., Granéli, W., Grimvall, A. et al. How effective are created or restored freshwater wetlands for nitrogen and phosphorus removal? A systematic review. Environ Evid 5, 9 (2016). <https://doi.org/10.1186/s13750-016-0060-0>
 - Shawn Khotz asked if there is a maintenance requirement for these wetlands to remove nutrients? Mark will look into several follow-ups to answer the question.
- Kyle M. stated that the MEANSS model is not quite ready for incorporation into Circular DEQ-13. Kyle M. did share his responses to some questions Shawn K. facilitated from the City of Missoula.
 - Ultimately, Kyle M. stated that the MEANSS model was developed as a simple, user friendly, and non-resource intensive model. If a credit applicant does not agree with the results of the MEANSS model for a trade, Circular DEQ-13 does allow for the applicant to propose their own methods.
 - Kyle M. stated that there is a Estimating Natural Attenuation of Nitrate and Phosphorus from On-Site Wastewater Systems document on [DEQ's website](#) that covers the scientific rationale behind the MEANSS model.

10:15-10:25 Break

Update on rulemaking timeline

- Tatiana D. discussed the rulemaking timeline.
 - Tatiana D. stated that DEQ will be working January-May of 2027 on the background process for rulemaking. The rulemaking announcement will probably occur early Summer 2027. Kyle M. will be heading the rulemaking effort.

Ideas for other topics to revisit

- Kyle M. asked the group if they had any thoughts on topics to revisit or topics that the Work Group has not covered. There were no responses.
- Kyle M. stated that he will send a clean draft of Circular DEQ-13 for the Work Group's review and comment. The Work Group will review this comments at the October 29th meeting.
 - Kyle stated that Mark O.'s write up of methods may not be included in the Circular DEQ-13 draft due to time needed to address some comments from today's meeting.

General Comments from Work Group Members & Public Comment

- No public comment.

Upcoming Meeting Topics

- Review of Circular DEQ-13