

TO: ALL SURFACE WATER STAFF
FROM: DON ESSIG, SURFACE WATER PROGRAM MANAGER
SUBJECT: SYNCING TMDLS WITH THE INTEGRATED REPORT
DATE: MARCH 21, 2017
CC: BARRY BURNELL, WATER QUALITY DIVISION ADMINISTRATOR

PURPOSE

To promote a common understanding and clear communication across the surface water program regarding development of TMDLs and their relation to categories of impaired assessment units (AUs) in the Integrated Report (IR).

THE RELATION OF TMDLS TO THE INTEGRATED REPORT

The Clean Water Act requires states to develop a TMDL for each cause/pollutant of impaired waters, and submit these TMDLs to EPA for approval. Idaho tracks beneficial use support status of waters by assessment unit (AU), and summarizes support status in its Integrated Report (IR) by placing all waters into at least one of five different categories. Category 5 of the IR lists waters known to be impaired and the cause or causes of impairment. Thus impairments are referred by AU/cause combinations in the IR. Because there may be one or more causes of impairment (pollutants) for a given AU, a single AU may be listed more than once in Category 5. A TMDL or EPA-approved alternative then needs to be developed to address each cause/pollutant for these waters.

After a TMDL has been approved by EPA, an AU/cause combination is moved to Category 4a of the IR, which lists impaired waters with an EPA-approved TMDL. Because it is possible, even likely, that all needed TMDLs for an AU are not completed and approved at the same time, a given AU can appear in both Categories 5 and 4a, but for different causes.

TMDLS NOT IDENTIFIED BY IR CATEGORY 5

There are at least three situations in which a TMDL may be developed when not specifically identified in Category 5 of the most recent EPA approved IR.

First, a TMDL can be developed for an impaired water but an unlisted cause, i.e. where a new impairment is identified in the course of a subbasin assessment. In this case, once EPA approves the TMDL the AU/cause goes directly into Category 4a. EPA refers to these situations as “unlisted but impaired” in their TMDL tracking system and approval letters.

Secondly, we also have TMDLs developed for impaired waters but for a cause not identified in Category 5 of the IR. This is the case in Idaho with waters we have identified as being impaired based on Beneficial Use Reconnaissance Program (BURP) data. In such cases, an AU is listed in Category 5 of the IR with a cause of combined biota/habitat assessment until the specific cause of impairment is determined. After the cause of impairment is determined, a TMDL is developed and submitted to EPA for that specific cause, rather than for combined biota/habitat assessment. For tracking purposes, this new cause is associated with the original biological or habitat impairment.

Thirdly, TMDLs may also be developed for waters that are not impaired. The Clean Water Act and federal rules speak to these as TMDLs “For the specific purpose of developing information ..”, so-called informational TMDLs. Informational TMDLs are not subject to EPA approval, and so do not appear in Category 4a of the IR (they are not impaired and there is no EPA approved TMDL).

We have not always been clearly identifying and thus properly tracking these different situations. In particular, we have not always in the TMDL presented the data needed to show a water is indeed impaired for the cause the TMDL was developed for.

BEING CLEAR ABOUT WHAT WE ARE DOING

TMDLs for an unlisted water (not in Category 5)

There are occasions when a TMDL, or, since we take a watershed approach, portions of a TMDL are prepared for an unlisted AU. If there is data to document impairment of the beneficial use and a specific pollutant identified a TMDL can be developed and the water goes directly into Category 4a.

If there are no data to document beneficial use impairment tied to a specific pollutant, that is fine too, but the TMDL for that AU is then informational. Informational TMDLs need not be submitted to EPA, do not need their approval and do not appear in IR Category 4a. This most commonly occurs with PNV TMDLs for temperature, but is possible with other pollutants. No harm in doing the PNV analysis for upstream waters that contribute heat to downstream impairment. However, the load allocations for AUs without data demonstrating impairment are to be presented as informational TMDLs and not given to EPA for their approval.

It is quite possible, especially with temperature, that impairment will later be documented. An informational TMDL would then transition to a TMDL subject to EPA approval. However, before an AU/cause combination can be moved to Category 4a, DEQ needs to submit a request to EPA to do an addendum to the existing approval letter to include the new AU/cause combination. This letter should also present or reference information showing impairment. Upon receiving approval, DEQ can then associate the AU/cause combination to the existing TMDL.

TMDLs for a listed water (in Category 5) but unlisted cause

Sometimes we prepare a TMDL for an AU in Category 5 that has no cause (cause unlisted). This most often occurs for us with bioassessment based on BURP data, e.g. a cause of combined biota/habitat. In this case we must identify a cause for which a TMDL can be developed during the subbasin assessment. Less commonly a TMDL for an unlisted cause occurs when we identify a new cause, such as temperature, in addition to a listed cause, for example sediment.

Either way two things must occur. First the impairment by the pollutant the TMDL is developed for needs to be documented, with data. Second, the new cause must then carry forward into a change or addition to the listed causes in the subsequent IR update. Documentation of impairment in the TMDL should be sufficient for listing. Making sure both happen requires close communication between people working on TMDLs and people working on assessments/IR, as the TMDL is being developed.

MONITORING DATA IS NEEDED TO SAY AN AU IS IMPAIRED.

The data needed is different depending on whether the cause of impairment is related to a numeric criterion (e.g. temperature, *E. coli*) or a narrative criterion (e.g. nutrients or sediment). In either case we expect that data will be collected to evaluate compliance with the relevant criterion and be sufficient to support a listing in the

IR of the cause of impairment. If the cause has a numeric criterion we expect the data to be specific to that criterion, i.e. continuous temperature data is needed to say a water is impaired (or not) for temperature, and *E. coli* data to say contact recreation is impaired by *E. coli*. In these two instances, lack of shade or presence of cows is not enough. Please plan your TMDL monitoring accordingly.

WHY DOES THIS MATTER?

These may be seen as details that perhaps could be said to not matter on the ground. And no doubt where errors have occurred it has been unintentional, maybe because it is not perceived to matter anywhere. But without attention to detail the IR Categories get muddled and do not match their definitions. Also presumptions of impairment or cause may be made that can become hard to defend, and could be avoided. It is our intent to keep the public as informed as possible. And not just the local public that was involved in the TMDL, but also others, perhaps more distant, that rely on the IR for information about water quality impairment in Idaho. Being strict about basing impairment on actual data relating to a criterion is also important in standing our ground in situations where we split an AU and want to say only one of the ‘child’ AUs is impaired because that is all the data supports.

WHAT’S TO BE DONE?

Just understanding the issue I believe will go a long way. Closer communication between those that work on assessments and those that work on TMDLs is integral to making this work. To that end, I intend to have Jason Williams (Federal Reporting Coordinator) assist Mark Shumar (TMDL Coordinator) in reviewing TMDL strategy papers. Jason will be looking at the AUs you plan to cover in a TMDL or five-year review document with an eye to IR Categories they are listed in and the causes they are listed for. Should work be proposed for unlisted waters or pollutants, I will expect Jason to inquire about plans to collect sufficient data to justify listing as impaired or a change in pollutants for the next IR.