APPENDIX I

PROCEDURE FOR CWA §303(D) /§305(B) INTEGRATED LIST CATEGORY 4B (NO TMDL REQUIRED) REQUESTS DEVELOPED BY THIRD PARTIES

NEW MEXICO ENVIRONMENT DEPARTMENT
SURFACE WATER QUALITY BUREAU

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Purpose

The New Mexico Environment Department Surface Water Quality Bureau (SWQB) has prepared this guidance document to assist stakeholders interested in submitting a justification for an Integrated Reporting Category 4b determination for an impaired assessment unit. Interested stakeholders are encouraged to first read through this document and then contact the SWQB to discuss the potential Category 4b requests prior to development of the submittal. The process described here is the same one that the SWQB follows when developing IR Category 4b demonstrations.

1.0 Introduction / Background

The State of New Mexico Clean Water Act (CWA) §303(d)/ §305(b) Integrated Report (IR) satisfies the statutory requirements of §§ 303(d), 305(b), and 314 of the federal Water Pollution Control Act [33 U.S.C. §§ 1251-1376 (2006)]. The IR also conveys basic information on water quality and water pollution control programs in New Mexico to the United States Environmental Protection Agency (EPA) and the United States Congress, as well as to the general public. The IR is first approved by the New Mexico Water Quality Control Commission (WQCC) and then submitted to EPA Region 6 by April 1 of every even-numbered year.

The core of the IR is the CWA §303(d)/ §305(b) Integrated List. In accordance with EPA integrated listing guidance, New Mexico first determines Fully Supporting, Not Supporting, and Not Assessed for each individual designated use to then assign an IR category to every assessment unit (i.e., waterbody) on the Integrated List (USEPA 2001). IR determination is explained in Figure 1.

Assessment units that are assigned Category 5 constitute New Mexico's CWA §303(d) List of Impaired Waters. Section 303(d) and supporting regulations require states to develop a total maximum daily load (TMDL) for each impaired assessment unit-pollutant combination in IR Category 5. New Mexico further subdivides IR Category 5 to indicate whether a TMDL should be developed as soon as possible (IR Category 5a), the impaired waterbody needs to be evaluated to determine if changes to the standard may be appropriate (IR Category 5b), or more data collection is necessary to complete and confirm the impairment (IR Category 5c). TMDLs establish pollution reduction goals and load allocations necessary for an impaired water to attain applicable WQS.

EPA regulations recognize that alternative pollution control requirements that are stringent enough, in place, and monitored may make the development of a TMDL unnecessary because both mechanisms would essentially achieve the same surface water quality goal. Specifically, TMDLs are not required if technology-based effluent limitations, more stringent effluent limitations, or other pollution control requirements (*e.g.*, best management practices) required by local, State, or Federal authority are stringent enough to implement an applicable water quality standard (WQS) (see 40 CFR 130.7(b)(1)) within a reasonable period of time.

If there is adequate information provided to ensure that pollution control requirements other than TMDLs are stringent enough to achieve an applicable WQS, these assessment unit-pollutant combinations may be assigned Category 4b on the Integrated List instead of Category 5. Assessment units – pollutant combinations assigned Category 4b do not require TMDL development.

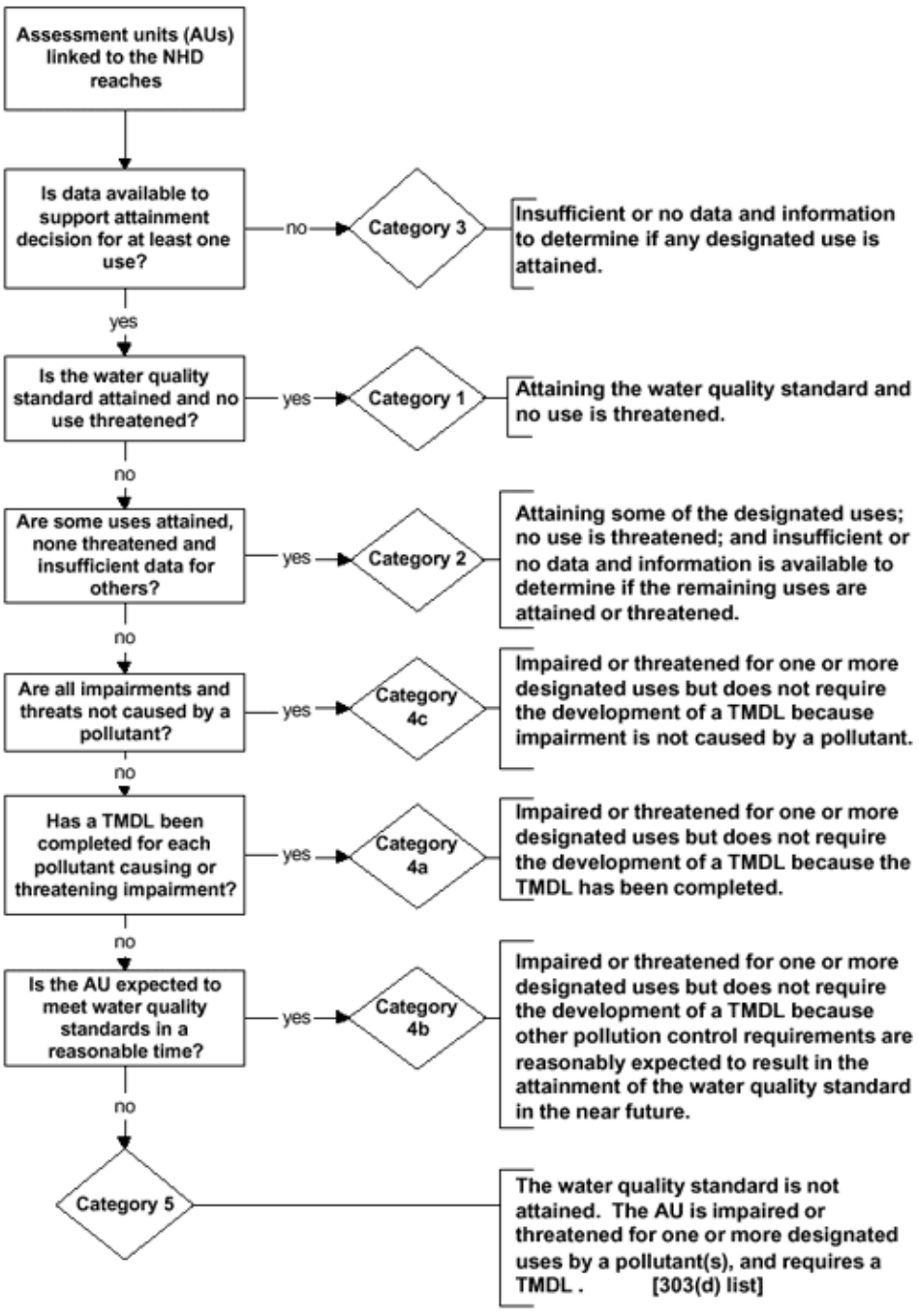

Figure 1. Generalized summary of logic for IR attainment categories (EPA 2001)

In addition, States have the opportunity to assign impaired waters to IR Category 4b where controls sufficient to achieve WQS in a reasonable period of time are already in place. Specifically, controls relied upon for IR Category 4b demonstrations do not always need to occur pursuant to binding legal authority (EPA 2006). States may choose to rely on controls that have already been implemented where there is sufficient certainty that implementation will continue until WQS are achieved and will not be reversed. Because the controls are already in place and achieving progress, EPA may consider such controls to be

requirements even if their implementation did not occur pursuant to a specific binding legal authority (EPA 2006).

Watershed-based plans are also amenable to IR Category 4b provided they address the six IR Category 4b elements outlined in the 2006 IR guidance (EPA 2005) as well as the nine elements outlined in national non-point source program guidance (EPA 2013) for an acceptable watershed-based plan to address NPS (EPA 2007, 2008). For an example of this scenario, see Texas' Plum Creek Watershed Protection Plan (PCWP 2008).

In New Mexico, the IR and TMDL documents are both incorporated into the Water Quality Management Plan and Continuing Planning Process (WQMP-CPP) by reference (NMWQCC 2011). As IR Category 4b demonstrations are part of the IR via their inclusion on the §303(d)/ §305(b) Integrated List (Appendix A of the IR), the SWQB views these documents as part of the New Mexico WQMP-CPP. As such, IR Category 4b demonstrations and TMDLs have equal standing for EPA's development of NPDES permits as well as State Certification under §401 of the Clean Water Act (40 CFR 124.53(e)(1)). SWQB has renamed the TMDL webpage at to "List of TMDLs and TMDL Alternatives (IR Category 4b)" to draw attention to and create easy access to Category 4b demonstrations currently approved by the WQCC and the EPA: https://www.env.nm.gov/swqb/TMDL/List/.

2.0 Procedure

2.1 Required Documentation

New Mexico must submit any Category 4b demonstrations with their IR submission, and must work closely with EPA Region 6 to ensure that Category 4b demonstrations are adequate to support the decision not to include these impaired waters on the state´s § 303(d) list. The six required elements include:

1. Identification of assessment unit and statement of problem causing the impairment;
2. Description of pollution controls and how they will achieve WQS;
3. An estimate or projection of the time when WQS will be met;
4. Schedule for implementing pollution controls;
5. Monitoring plan to track effectiveness of pollution controls; and
6. Commitment to revise pollution controls, as necessary.

Attachment A describes in more detail the core information that must be submitted to the SWQB and EPA Region 6 to support placing an assessment unit in Category 4b. The EPA has compiled a list of examples by control mechanism and pollutants of concern (Monschein and Reems 2009). EPA Region 6 may require additional information in order to demonstrate good cause not to include those assessment units on the list (40 CFR 130.7(b)(6)(iv)).

2.2 Process and Timeline

In New Mexico, the SWQB is responsible for developing and submitting the Integrated List by April 1 every even-numbered year. Stakeholders, including public or private agencies, institutions, or organizations, may request that the SWQB consider an impaired water for Category 4b provided they follow this procedure. The level of rigor necessary to support a Category 4b determination will vary depending on the complexity of the impairments and corresponding implementation strategies.

Therefore, close and early coordination between first the SWQB and the submitter, and then the SWQB and EPA Region 6 will promote development and timely review of Category 4b demonstrations that successfully address each of the six elements detailed in Attachment A. The specific process and timeline for Category 4b requests is as follows:

1. To be considered in time for the next Integrated List, complete Category 4b requests should be submitted to SWQB by July 1 of odd-numbered years. This deadline is necessary to allow adequate time for SWQB/EPA Region 6 review, consultation, and revision (as needed) prior to public noticing of the draft Integrated List, which typically occurs in December of odd-numbered years.
2. The proposed Category 4b request must address the six elements detailed in Attachment A of this procedure.
3. The SWQB will make the final decision regarding whether or not the Category 4b demonstration will be submitted as part of the draft Integrated List to EPA Region 6 following review and discussion of the request with the submitter to ensure the appropriateness and adequacy of the request.
4. The Category 4b demonstration must be a stand-alone document that will be available to the public during the public comment period for the entire Integrated List. The public should also be able to access supporting documentation via web links or other means.
5. The Category 4b request will be included as part of the draft Integrated List presentation to the New Mexico WQCC. If the SWQB believes the Category 4b request may be contentious, the SWQB may provide the Category 4b information to the WQCC earlier than this time for a separate discussion as to not hold up approval of the rest of the draft Integrated List.
6. Upon approval by the WQCC, the entire Integrated List, including Category 4b demonstrations and other supporting documentation, will be submitted to EPA for review. While reviewing the § 303(d) portion of the submitted list for approval (i.e., IR Category 5 waters), the EPA Region 6 evaluates the state's decision to place any impaired assessment unit-pollutant combinations in Category 4b since this is a removal of an impairment from the § 303(d) portion of the Integrated List and will make the final determination of this action. Final Category 4b demonstrations will be posted to SWQB's Integrated List website.
7. For any Category 4b assessment unit – pollutant pair, a progress report must be submitted to SWQB no later than July 1 of every odd-numbered year until the assessment unit is removed from Category 4b. In order to continue placing an assessment unit-pollutant pair in Category 4b, the progress report must demonstrate that the six elements are still being addressed and that adequate progress is being made towards the goal of WQS attainment. The SWQB TMDL and Assessment Team will consult with EPA Region 6 to make this determination.
8. If the WQS are eventually attained according to the assessment of available data in accordance with New Mexico's most recent listing methodology, the assessment unit-pollutant pair can be removed from Category 4b and assigned either Category 1 or 2 accordingly. In addition, an assessment unit can be moved from Category 4b to Category 5 if the original Category 4b determination can no longer be supported.

REVISION HISTORY:

2014 cycle – Original.

2016 cycle – Minor revisions, reference additions, and clarification of EPA review process as well as NPDES permit ramifications related to IR Category 5 versus 4b. Changed IR Category 4b demonstration and progress report deadline from May 1 to July 1.

2018 cycle – "Assessment protocol" changed to "listing methodology".

2020 cycle – No changes.

REFERENCES:

Monschein, E., and S. Reems. 2009. Category 4b – Current status and trends. Proceedings: Water Environment Federation TMDL 2009 Conference. Available at: http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/upload/11A.pdf.

New Mexico Water Quality Control Commission (NMWQCC). 2011 (revisions in process). State of New Mexico Statewide water quality management plan and continuing planning process. Santa Fe, NM. Available at: https://www.env.nm.gov/surface-water-quality/wqmp-cpp/.

Plum Creek Watershed Partnership (PCWP). 2008. Plum Creek Watershed Protection Plan. Lockhart, TX. Available at: http://pcwp.tamu.edu/wpp/.

U.S. Environmental Protection Agency (EPA). 2001. 2002 Integrated water quality monitoring and assessment report guidance. Memorandum from Robert H. Wayland, Office of Wetlands, Oceans, and Watersheds. Washington, D.C. Available at: http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/guidance.cfm.

———. 2005. Guidance for 2006 assessment, listing and reporting requirements pursuant to sections 303(d), 305(b), and 314 of the Clean Water Act. Watershed Branch, Assessment and Watershed Protection Division, Office of Wetlands, Oceans, and Watersheds. Washington, D.C. Available at: http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/guidance.cfm.

———. 2006. Information concerning 2008 Clean Water Act sections 303(d), 305(b), and 314 integrated reporting and listing decisions. Memorandum from the Office of Wetlands, Oceans, and Watersheds. October 12, 2006. Washington, D.C. Available at: http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/guidance.cfm.

———. 2007. Enclosure to memorandum from Mr. Miguel Flores, Director, Water Quality Protection Division, EPA Region 6, to Region 6 State Water Quality Program Managers, "EPA Region 6 Process for Review of Watershed-based Plans in lieu of TMDL's." May 23, 2007. Dallas, TX. Available at: http://www.tsswcb.texas.gov/files/contentimages/WPP_4b_Process.pdf.

———. 2008. Handbook for Developing Watershed Plans to Restore and Protect our Waters. EPA 841-B-08-002, March. Available at: http://water.epa.gov/polwaste/nps/handbook_index.cfm.

———. 2013. National Nonpoint Source Program Guidelines, April. Washington, D.C. Available at: http://water.epa.gov/polwaste/nps/cwact.cfm.

Attachment A

REQUIRED ELEMENTS FOR CATEGORY 4B DEMONSTRATIONS

The following list of required elements is taken largely from EPA's 2008 IR guidance (EPA 2006). It provides a structure for submitting all the information the SWQB and EPA will need in order to determine if Category 4b is the correct determination.

All requests for Category 4b determinations on New Mexico's Integrated List must include the following six elements:

1. Identification of assessment unit and statement of problem causing the impairment;
2. Description of pollution controls and how they will achieve WQS;
3. An estimate or projection of the time when WQS will be met;
4. Schedule for implementing pollution controls;
5. Monitoring plan to track effectiveness of pollution controls; and
6. Commitment to revise pollution controls, as necessary.

Additional details for each of the six elements are provided below.

Category 4b demonstrations should be submitted as a stand-alone document. In situations where data and information for a Category 4b demonstration are contained in existing documents developed under separate programs (e.g., NPDES permit, Superfund Record of Decision), summarize relevant information in the Category 4b demonstration and reference the appropriate supporting documentation that provides that information. The supporting documentation should be included as part of the State's administrative record supporting the Category 4b determination.

1. Identification of Assessment unit and Statement of Problem Causing Impairment

1.1 Assessment Unit Description

The demonstration should identify the impaired assessment unit, including name, general location in the State, and State-specific location identifier (i.e., AU_ID).

1.2 Impairment and pollutant causing impairment

The demonstration should identify the applicable WQS not supported for each assessment unit and associated pollutant causing the impairment.

1.3 Sources of pollutant causing impairment

The demonstration should include a description of the known and likely point, nonpoint, and background (upstream inputs) sources of the pollutant causing the impairment, including the potential magnitude and locations of the sources. In cases where some portion of the impairment may result from naturally occurring sources (natural background), the demonstration should include a description of the naturally occurring sources of the pollutant to the impaired assessment unit.

2. Description of Pollution Controls and How They Will Achieve WQS

2.1 Water quality target

The demonstration should identify a numeric water quality target(s), which is a quantitative value used to measure whether or not the applicable WQS is attained. Generally, the pollutant of concern and the numeric water quality target are, respectively, the chemical causing the impairment and the numeric criteria for that chemical contained in the WQS. The demonstration should express the relationship between any necessary reduction of the pollutant of concern and the attainment of the numeric water quality target.

In cases where the impairment is based on non-attainment of a narrative (non-numeric) water quality criterion, the Category 4b demonstration should identify one or more appropriate numeric water quality target levels or translators that will be used to evaluate attainment of the narrative water quality criteria. The Category 4b demonstration should also describe the basis for selecting these surrogates.

2.2 Point and nonpoint source loadings that when implemented will achieve WQS

The demonstration should describe the cause-and-effect relationship between the WQS (and numeric water quality target as discussed above) and the identified pollutant sources and, based on this linkage, identify what loadings are acceptable to achieve the WQS. The cause-and-effect relationship may be used to determine the loading capacity of the assessment unit for the pollutant of concern. However, a loading capacity may not be relevant in all circumstances. For example, a loading capacity would not be relevant in situations where the pollutant source will be completely removed. The demonstration should identify the loading capacity of the assessment unit for the applicable pollutant or describe why determination of the loading capacity is not relevant to ensure that the controls are sufficient to meet applicable WQS.

The demonstration should also contain or reference documentation supporting the analysis, including the basis for any assumptions; a discussion of strengths and weaknesses in the analytical process; and results from any water quality modeling or data analysis.

2.3 Controls that will achieve WQS

The demonstration should describe the controls already in place, or scheduled for implementation, that will result in reductions of pollutant loadings to a level that achieves the numeric WQS. The demonstration should also describe the basis upon which the State concludes that the controls will result in the necessary reductions.

2.4 Description of requirements under which pollution controls will be implemented

The demonstration should describe the basis for concluding that the pollution controls are requirements or why other types of controls already in place may be sufficient, as discussed below.

As discussed in the 2006 IR guidance (EPA 2005), EPA will consider a number of factors in evaluating whether a particular set of pollution controls are in fact "requirements" as specified in EPA´s regulations, including: (1) authority (local, state, federal) under which the controls are required and will be implemented with respect to sources contributing to the water quality impairment (examples may include: self-executing state or local regulations, permits, and contracts and grant/funding agreements that require implementation of necessary controls); (2) existing commitments made by the sources to implement the controls (including an analysis of the amount of actual implementation that has already occurred); (3) availability of dedicated funding for the implementation of the controls; and (4) other relevant factors as determined by EPA depending on case-specific circumstances.

Since the overriding objective of the IR Category 4b alternative is to promote implementation activities designed to achieve WQS in a reasonable period of time, for all of the factors listed above, EPA will evaluate each IR Category 4b alternative on a case-by-case basis, including in particular the existence of identifiable consequences for the failure to implement the proposed pollution controls. Depending on the specific situation, "other pollution control requirements" may be requirements other than those based on statutory or regulatory provisions, as long as some combination of the factors listed above are present and will lead to achievement of WQS within a reasonable period of time. For example, established plans of government agencies that require attainment of WQS within a reasonable period of time may qualify even when their components include incentive-based actions by private parties. States may also choose to rely on controls that have already been implemented where there is sufficient certainty that implementation will continue until WQS are achieved and will not be reversed. Because the controls are already in place and achieving progress, EPA may consider such controls to be requirements even if their implementation did not occur pursuant to binding legal authority.

3. Estimate or Projection of Time When WQS Will Be Met

EPA expects that assessment units impaired by a pollutant but not listed under § 303(d) based on the implementation of existing control requirements will attain WQS within a reasonable period of time. The demonstration should provide a time estimate by which the controls will result in WQS attainment, including an explanation of the basis for the conclusion.

The demonstration should also describe why the time estimate for the controls to achieve WQS is reasonable. EPA will evaluate on a case-specific basis whether the estimated time for WQS attainment is reasonable. What constitutes a "reasonable time" will vary depending on factors such as the initial severity of the impairment, the cause of the impairment (*e.g.*, point source discharges, in place sediment fluxes, atmospheric deposition, nonpoint source runoff), riparian condition, channel condition, the nature and behavior of the specific pollutant (*e.g.*, conservative, reactive), the size and complexity of the assessment unit (*e.g.*, a simple first-order stream, a large thermally stratified lake, a density-stratified estuary, and tidally influenced coastal assessment unit), the nature of the control action, cost, public interest, etc.

4. Schedule for Implementing Pollution Controls

The demonstration should describe, as appropriate, the schedule by which the pollution controls will be implemented and/or which controls are already in place.

5. Monitoring Plan to Track Effectiveness of Pollution Controls

The demonstration should include a description of, and schedule for, monitoring milestones to track effectiveness of the pollution controls. The demonstration should describe water quality monitoring that will be performed to determine the combined effectiveness of the pollution controls on ambient water quality. If additional monitoring will be conducted to evaluate the effectiveness of individual pollution controls, EPA encourages States to include a description of these efforts as well. The demonstration should identify how and when assessment results from the monitoring will be reported to the public and EPA.

6. Commitment to Revise Pollution Controls, as Necessary

The demonstration should provide a statement that the State commits to revising the pollution controls, as necessary, if progress towards meeting WQS is not being shown. Also, the demonstration should identify how any changes to the pollution controls, and any other element of the original demonstration, will be reported to the public and EPA.