

*Final Draft*

**Guidance on Developing  
Water Quality Restoration Plans as Alternatives to  
Total Maximum Daily Loads –  
Assessment Category 4b and 4e Plans**

**Division of Environmental Assessment and Restoration  
Florida Department of Environmental Protection**

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## **Introduction**

The Florida Department of Environmental Protection (DEP) is working statewide to encourage local stakeholders to develop plans and undertake restoration activities at the earliest practical time to restore waters not meeting state water quality standards. The early implementation of restoration activities is more cost-effective and may allow DEP to forgo certain regulatory steps (notably, the development and implementation of total maximum daily loads [TMDLs] and basin management action plans [BMAPs]), thus focusing limited local and state resources directly on actions that will improve water quality. This document describes the type of information DEP considers in its evaluation of stakeholder-led restoration plans created as alternatives to traditional TMDL development.

## **Background**

The Impaired Surface Waters Rule (IWR), Chapter 62-303, Florida Administrative Code (F.A.C.), establishes a scientific methodology for identifying surface waters in Florida that are impaired by pollutants (i.e., that do not meet applicable water quality criteria). DEP assesses available water quality data for each surface waterbody in Florida every two years (i.e., biennial assessment). Based on the results of these assessments, waterbodies are determined to be meeting water quality criteria, or are placed on the Planning List, Study List, or Verified List, as appropriate. Waters are placed on the Planning List if insufficient data are available to confirm the impairment. Where impairment has been confirmed but DEP has reason to delay verifying impairment (Rule 62-303.390, F.A.C.), the waterbody is placed on the Study List for further analysis and assessment. Waters confirmed to be impaired as the result of a pollutant are placed on the state's Verified List of Impaired Waters. DEP submits its Study and Verified Lists to the U.S. Environmental Protection Agency (EPA) for review and approval pursuant to Section 303(d) of the federal Clean Water Act.<sup>1</sup>

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<sup>1</sup> DEP's 303(d) list contains a number of assessment categories, including the Category 4b and 4e restoration plans that are the subject of this document. The assessment categories are as follows:

- 1 – Attaining all designated uses.
- 2 – Attaining some designated uses and insufficient or no information or data are present to determine if remaining uses are attained.
- 2b – Attains one or more designated uses and a reasonable assurance plan (RAP) has already been completed.
- 2e – Attains one or more designated uses and an alternative restoration plan has already been completed.
- 2t – Attains one or more designated uses and a TMDL has already been completed.
- 3a – No data and information are present to determine if any designated use is attained.
- 3b – Some data and information are present but not enough to determine if any designated use is attained.
- 3c – Enough data and information are present to determine that one or more designated uses may not be attained according to the Planning List methodology.
- 4a – Impaired for one or more designated uses but does not require TMDL development because a TMDL has already been completed.
- 4b – Impaired for one or more designated uses but does not require TMDL development because the water will attain water quality standards because of existing or proposed measures.
- 4c – Impaired for one or more criteria or designated uses but does not require TMDL development because impairment is not caused by a pollutant.
- 4d – Waterbody indicates nonattainment of water quality standards, but DEP does not have enough information to determine a causative pollutant; or current data show a potentially adverse trend in nutrients or nutrient response variables; or there are exceedances of stream nutrient thresholds, but DEP does not have enough information to fully assess nonattainment of the stream nutrient standard.
- 4e – Waterbody indicates nonattainment of water quality standards and pollution control mechanisms or restoration activities are in progress or planned to address nonattainment of water quality standards, but DEP does not have enough information to fully evaluate whether proposed pollution mechanisms will result in attainment of water quality standards.
- 5 – Water quality standards are not attained and a TMDL is required.

For waters on the Planning List, DEP arranges for additional data collection to either confirm the impairment or demonstrate nonimpairment. Waters are included on the Study List for multiple reasons, but generally because additional work is being done to confirm the impairment. Sufficient evidence of existing, ongoing, or planned restoration activities is another reason that a water with impairments may be kept on the Study List while these actions are underway.

For waters on DEP's Verified List, a TMDL is scheduled for development for the pollutant causing the impairment. When a TMDL has been established, DEP may formulate a restoration plan, known as a BMAP, to address the pollutant causing the impairment. Alternatively, if a 4b RAP is adopted before a TMDL is established, the waters are removed from the Verified List as impairments being addressed without a TMDL, similar to the process of waters being delisted as 4a when a TMDL is adopted.

The process of identifying impairment, to TMDL adoption, to enacting and implementing a BMAP can be quite lengthy. The 4b and 4e restoration plans discussed in this document are intended to be established in a streamlined manner compared with the process leading to the development of TMDLs and BMAPs, and are a preferred alternative to the typical regulatory steps by DEP, as they expeditiously focus limited resources on remedying the identified impairment. Under the IWR, DEP can forgo, or delay, placing a waterbody on the Verified List and establishing a TMDL, if DEP can document there is reasonable assurance that existing or proposed pollution control mechanisms or programs have addressed or will effectively address the impairment.

Therefore, the status of pollution control mechanisms for each waterbody (recently completed, ongoing, and/or planned) and the documentation of these restoration programs is critical to placing a waterbody in the proper assessment category and determining whether a TMDL needs to be scheduled or possibly deferred. DEP depends on local stakeholders to gather the necessary documentation to demonstrate reasonable assurance that their proposed control mechanisms will restore the waterbody. Stakeholders gather such documentation voluntarily, but the failure of local stakeholders to provide DEP with this supporting information will preclude DEP from placing the waterbody into either the 4b or 4e assessment categories.

## **Categories of Restoration Plans**

The IWR authorizes two types of restoration plans to avoid placing a waterbody on the Verified List; therefore, the optimal time to propose or submit one of these is during the assessment cycle (conducted on a biennial basis beginning in 2022), prior to initiating TMDL development. Waterbodies with restoration plans meeting the requirements of Rules 62-303.600(1) and (2), F.A.C. (4b plans or RAPs), are not placed on the Verified List or the 303(d) list. Waterbodies with restoration plans only meeting the requirements of Rule 62-303.390(2)(d), F.A.C. (4e restoration plans) are placed on the Study List and the 303(d) list. These provisions state the following:

*62-303.600 Evaluation of Pollution Control Mechanisms.*

- (1) Upon determining that a waterbody is impaired or determining there is an increasing trend in nutrients with a reasonable expectation that the waterbody will become impaired within 5 years, [DEP] shall evaluate whether existing or proposed technology-based effluent limitations and other pollution control programs under local, state, or federal authority are sufficient to result in the attainment of applicable water quality standards.*
- (2) If, after evaluation of the pollution control mechanisms set forth in subsection (1), the water segment is expected to attain water quality standards in the future and is expected to make reasonable progress towards attainment of water quality standards by the time the next section 303(d) list for the basin is scheduled to be submitted to EPA, the segment shall not be listed on the Verified List. [DEP]'s decision shall be based on a plan that provides reasonable assurance that any proposed pollution control mechanisms and expected improvements in water quality in the water segment will attain applicable water quality standards.*
- (3) For water segments with planned or ongoing restoration activities that will address the nonattainment of water quality standards, stakeholders may submit information to [DEP] demonstrating pollutant reduction mechanisms to address the nonattainment.*

*62-303.390 The Study List.*

- (2) A Class I, II, or III water shall be placed on the study list if: . . .*
  - (d) A waterbody segment where pollution control mechanisms are in place or planned that meet the requirements of subsections 62-303.600(1) and (3), F.A.C., except that there is uncertainty when water quality standards will be attained and the waterbody segment requires additional study.*

The difference between a 4b RAP and documentation for a 4e restoration alternative depends on the level of certainty when water quality standards will be met in the future. For 4b plans, there should be reasonable assurance that pollution control mechanisms will result in the attainment of water quality standards in the future and reasonable progress towards the attainment of water quality standards will be made by the agreed-on timeline outlined in the approved document. As such, the establishment of a TMDL is unnecessary.

For 4e restoration alternatives, the documentation should provide information on recently completed, ongoing, or planned restoration activities, although detailed information regarding planned restoration activities may not be fully known at the time of 4e development. General information such as scope and size, funding, estimated start and completion dates, and estimated pollutant reduction benefits helps to provide documentation for DEP's required assurances during the acceptance process. Waterbodies with accepted 4e documents are still included on the 303(d) list, but placement on the Verified List is postponed, allowing for implementation of the activities described in the 4e documentation and evaluation of progress towards restoration. If at

any time DEP determines that reasonable assurance or reasonable progress is not being met, the Verified List will be amended accordingly. Additional reasonable progress must be made each time a waterbody is considered for 4b or 4e listing under Chapter 62-303, F.A.C.

## **Deciding Whether to Pursue a Restoration Plan**

While DEP supports both types of restoration plans (4b and 4e), it may be difficult for stakeholders to determine the right path forward. Here are some questions to consider in trying to decide *whether to pursue one of the following alternatives*:

- 1. Is there an active stakeholder group interested in the water quality of the waterbody?**

Although neither 4b nor 4e plans require the participation of an entire stakeholder group, having an engaged new or existing group can help kick-start the process. If you plan to work with an existing group, be aware that you will want more of the members to be engaged in the process and willing to focus on water quality restoration activities. If your existing group covers a larger geographic area or is interested in broader topics beyond water quality, you may wish to create a smaller group specifically for plan development, so that everyone is interested and engaged during the process.

- 2. Is one or more of those stakeholders willing to "champion" or lead the group and the development of a plan?**

Having a champion or someone to advocate for the plan is a real benefit. Creating either type of plan is a stakeholder-driven restoration activity. DEP can help facilitate the process, but the plan is created and implemented by the stakeholders.

- 3. Do the stakeholders have monetary resources to dedicate to a restoration plan?**

While the involvement of all entities with a vested interest in the restoration of the waterbody is important, local resources are needed to implement projects and, often, monitoring. Some monetary resources are needed to implement a plan sufficient to address the problem. The extent of the monetary resources needed depends on the extent of the problem and the magnitude of the proposed actions in the plan.

- 4. Are there resources for monitoring progress?**

An existing monitoring network may provide enough data to assess progress during implementation. However, more sites or more frequent sampling are commonly needed to measure progress for a specific plan. Local stakeholders should be prepared to address data gaps so that plan implementation and progress are measurable.

Here are some questions to consider in trying to decide ***which type of restoration alternative to pursue***:

1. **Is the degree of impairment relatively small? Is the waterbody close to meeting standards?**

Where the impairment is mild and there are recently completed and/or ongoing restoration activities, a 4e alternative may be appropriate, as a few efforts could restore the waters to meet water quality standards within a short period and the effort to create a more detailed 4b plan would be unnecessary.

2. **Are there water quality restoration projects or activities planned for implementation in the near future, or have restoration activities recently been completed?**

If planned projects are already identified, the extent of the planned efforts can help in deciding whether a 4e or 4b plan is the best path forward. The 4e alternative may be most appropriate where there are existing ongoing restoration activities, or where restoration activities have recently been completed or implemented in the waterbody or its watershed, but there is uncertainty as to when the waterbody will be restored. The purpose of a 4e document is to identify completed restoration activities and explain how these activities are reasonably expected to remedy the impairment. If a few restoration projects or activities have been implemented with more planned but not yet actively occurring, then a 4b plan maybe better suited for the circumstances. The decision on the type of restoration alternative can also depend on the extent of the water quality impairment—whether short-term versus long-term restoration is achievable.

3. **Is there a desire and support to take charge locally of the implementation of water quality restoration?**

To maintain the highest degree of local control of the implementation over the long term, a 4b plan is needed, since a 4b plan replaces both the TMDL and the BMAP processes.

4. **Is there a desire to propose changes to water quality standards and change the water quality target as part of a restoration plan?**

As changes to water quality standards require the approval of both DEP and EPA, this extra step should be approached only when necessary and when resources are available to defend any proposed changes to standards. If nutrient criteria changes are proposed in the planning process, they must be proposed in a 4b plan; 4e documents may not include proposed changes to water quality standards. Water quality targets adopted in a 4b plan for nutrients can replace the generally applicable numeric nutrient criteria (NNC) (Paragraph 62-302.531[2][b], or Rule 62-302.532, F.A.C.), and these targets would become the

new site-specific NNC once the 4b plan is adopted by final order. Changes to other criteria may be approvable but must first go through the site-specific alternative criteria (SSAC) process pursuant to Rule 62-302.800, F.A.C.

**5. What type of plan is appropriate to address fecal indicator bacteria (FIB) impairments?**

FIB control efforts can be documented in a 4e document. However, since it is difficult to quantify the effects of individual management actions on FIB counts and it is not possible to quantify reasonable assurance that FIB measures will meet water quality standard requirements, 4b plans are not an appropriate pathway to restoration. Generally, a bacteria pollution control plan (BPCP) will suffice as 4e documentation. However, where stakeholders want to take additional steps to address FIB issues, bacteria impairments can also be included in a 4e approach. Stakeholders can include bacteria control measures in a restoration plan (4e) that has been developed to address nutrient impairments, in part because many water quality restoration activities that address nutrient pollutant reductions would also reduce bacterial pollution.

## **Keys to Developing a Successful Plan**

Success can be defined in many ways. Here, when referring to the development of successful restoration alternatives, it means a plan that is scientifically defensible and is developed in a reasonable amount of time. Some keys to a successful plan include early planning, engaged stakeholders, leadership, and access to scientific/technical resources. Access to the latter may be important to assess pollutant loading, water quality targets, and project benefits. If substantial technical resources are needed to develop or run loading models, assess how loading translates to water quality targets, and/or determine the project benefits from local activities, the group may need an interlocal agreement that dedicates funds to secure those resources. Developing funding arrangements and agreements can take a while, and so doing it early helps keep the momentum of plan development on pace. Also, if technical support is needed, procurement support, including time for solicitations and responses, may also be part of the early planning process.

When organizing to develop an alternative restoration document (4b or 4e), stakeholders should discuss the resources already available to them and what their expectations are for analyses in support of the plan such as modeling or statistical analyses. While DEP can provide data and guidance, estimating loading, project benefits, and progress towards water quality standards is the responsibility of local participants. If DEP approves the plan and no changes to water quality standards are proposed as part of the plan, DEP will present the plan to EPA for its approval or acceptance.

If any proposals to change the water quality standards are contemplated, substantial resources will be needed to develop supporting documentation for the proposed standards and to defend that information to both DEP and EPA. Historically, any proposal to change water quality

standards is a lengthy and highly technical process. Further, a 4b plan that relies on changing the standards cannot be approved until EPA also approves the revised standards.

## **Documentation Associated with 4b Plans**

Although DEP's is responsible for ensuring adequate documentation in the administrative record to support its decision not to place a waterbody on the Verified List, DEP expects local stakeholders (including state and local governments) to prepare the necessary documentation to demonstrate reasonable assurance that their proposed control mechanisms or programs will restore an impaired waterbody.<sup>2</sup> Without all appropriate documentation, DEP is unable to place a waterbody segment into Category 4b and thus avoid its placement on the Verified List and subsequent TMDL development.

In determining whether the requirements of Rule 62-303.600, F.A.C., are met, DEP recognizes that there are many pollutant-specific and site-specific factors to consider. Accordingly, DEP does not use a one-size-fits-all test. However, the documentation associated with a 4b plan typically involves a number of elements. These include a summary of the information available about the impaired waterbody; a determination of the appropriate water quality target for pollutant reductions; a description of completed, ongoing, or planned projects to address pollutant sources, including the cost of projects and funding sources; an estimation of the project load reductions that will be achieved to attain water quality standards; a schedule when projects are anticipated to be implemented; and the development of a monitoring plan to measure progress.

## **Time Frame for Developing Documentation**

DEP prepares an updated impaired waters list for the entire state once every two years. To provide DEP with sufficient time to review restoration plan documentation before the next listing cycle, local stakeholders should engage DEP as early as possible but no later than one year before the expected entry of the listing order or before TMDL development would begin.

## **What It Means to Be Under Local, State, or Federal Authority**

Both the Florida Watershed Restoration Act (FWRA) and the IWR require that the pollution control programs under consideration be "under local, state, or federal authority." A pollution control program is considered to be under local, state, or federal authority if the program is subject to or required by a local ordinance, state statute or rule, or federal statute or regulation. A program is also considered to be under local, state, or federal authority if it is subject to a written agreement, signed by both local stakeholders and at least one governmental entity, that includes measurable goals, performance criteria, benchmarks (e.g., milestone dates), and enforcement mechanisms by the governmental entity. While not every source needs to be under local, state, or federal authority, to meet the requirements of Rule 62-303.600, F.A.C., enough sources must be

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<sup>2</sup> The term "reasonable assurance" is used in many DEP programs and rules. This document specifically addresses the reasonable assurance provided by proposed pollution control mechanisms or programs for impaired water assessment listing purposes and should not be used to evaluate the meaning of reasonable assurance in other contexts, particularly in permitting decisions.

under such governmental regulatory or contractual control to provide reasonable assurance that water quality standards will be attained in the future.

## **Time Frame for Attaining Water Quality Standards**

The FWRA and the IWR do not establish a specific period within which 4b waterbodies must attain applicable water quality criteria. However, pollution control mechanisms or watershed restoration plans must provide reasonable assurance that the specific water quality criteria for an impaired waterbody being addressed by the 4b plan will be met in the time frame stated in the plan. Thus, the documentation submitted to DEP must provide a specific time frame when the water quality criteria are expected to be fully attained and future growth should be considered. If the criteria will not be met for many years, the documentation should also justify why the specified amount of time is needed.

## **Parameter-Specific Nature of Documentation**

The impaired waters listing process is parameter specific. A waterbody can be impaired for some pollutants but not impaired for others. Restoration plans can be developed to address individual pollutants or several; however, each parameter is independently assessed for progress towards attainment.

## **Standard Documentation for 4b Plans**

In evaluating a restoration plan, the following information should be documented:

1. **Description of Impaired Waterbody** – The description should include the name of the impaired waterbody; the location of the waterbody and watershed (e.g., basin group and planning unit); the watershed/U.S. Geological Survey eight-digit hydrologic unit code (HUC); the waterbody identification (WBID) number; the waterbody type (lake, stream, or estuary); the designated use classification; the designated use not being attained; the pollutant(s) of concern (identified as causing or contributing to the impairment); the suspected or documented source(s) of the pollutant(s) of concern; and a description of the known and likely point, nonpoint, and background sources causing the impairment, including existing loads (especially point sources) if available.
2. **Description of Water Quality or Aquatic Ecological Goals** – The description should include water quality–based targets or aquatic ecological goals (both interim and final) that have been established for the pollutant(s) of concern; these may be site-specific targets or the default water quality criteria. Documentation should include a schedule indicating when interim and final targets are expected to be met, and a description of procedures (with thresholds) to determine whether additional (backup) corrective actions are needed. For site-specific targets, documentation also should include the averaging period for any numeric water quality goals and an explanation of how these goals will result in the restoration of the waterbody's impaired designated uses.

3. **Description of Proposed Actions to Be Undertaken** – The description should include how the planned activities are appropriate to address the impairment; the names of the responsible participating entities (government, private, and others); a list of point sources with National Pollutant Discharge Elimination System (NPDES) wastewater or municipal separate storm sewer system (MS4) permits in the basin; a list of categories of nonpoint sources (e.g., agriculture, septic systems, etc.) in the basin; a summary and list of the existing or proposed activities (both structural and nonstructural) designed to restore water quality; the geographic scope of any proposed activities; documentation of the estimated pollutant load reduction and other benefits anticipated from the implementation of individual actions; citation of applicable local, state, or federal authorities, and/or copies of written agreements, committing participants to the actions; how future growth and new sources will be addressed; an itemized estimate of project costs (e.g., land, construction, implementation, and operations); confirmed sources of funding; the identification of any funding deficiencies; an implementation schedule (including interim milestones and the date by which the water quality criterion will be attained); and any enforcement programs or local ordinances, if the management strategy is not voluntary. Maps, plans, reports, and photos should be submitted as necessary to describe and document the restoration plan and/or actual restoration.
4. **Information on projects and/or programs used to support a restoration plan** – These include projects funded by EPA through Section 319(h) of the Clean Water Act, the state's Surface Water Improvement and Management (SWIM) Program, and/or other programs. However, the information from the project documents should be summarized in a standalone document for a RAP. Copies of documents such as Section 319(h) grant applications and/or SWIM reports may be included for reference. Note that not every stakeholder in the plan area needs to be committed to the plan. If enough restoration efforts identified to address the problem, the plan can be approved without every stakeholder's active participation.
5. **Description of Procedures for Monitoring and Reporting Results** – The description should include the water quality monitoring program to be implemented (including station locations, parameters sampled, and sampling frequencies) to demonstrate reasonable progress, quality assurance/quality control (QA/QC) elements demonstrating that the monitoring will comply with Rule 62-160, F.A.C., procedures for entering all appropriate data into DEP's Watershed Information Network (WIN) database, the responsible monitoring and reporting entity, the frequency and format for reporting results, the frequency and format for reporting on the implementation of all proposed management activities, and methods used for evaluating progress towards goals.
6. **Description of and Commitment to Proposed Corrective Actions** – The description should list proposed corrective actions (and any supporting documentation) that will be undertaken if water quality does not improve after the

restoration actions are implemented or if the actions are not completed on schedule, and a process for notifying DEP that these corrective actions are being implemented.

## **Developing Water Quality–Based Targets and Aquatic Ecological Goals**

Appropriate water quality–based targets or aquatic ecological goals are essential to the restoration plan process. Water quality–based targets should be based on the criteria being addressed, including their magnitude, frequency, and duration. DEP staff can provide the necessary criteria background information.

When addressing nutrient impairments, stakeholders and DEP may want to explore the possibility of developing site-specific nutrient and/or nutrient response target(s) for the impaired waterbody. Site-specific water quality–based targets can take many forms and need not be established using a complex hydrodynamic/water quality model.

In some cases, sufficient historical data (such as paleolimnological data or data from periods predating an impairment) may be available to determine an appropriate water quality target. In other cases, simplified modeling (including regression analysis) may allow for conservative estimates of assimilative capacity that could then be used as the basis for restoration goals. In some instances, more complex modeling may be appropriate, but this will be done on a case-by-case basis. A scientifically sound water quality target is important in evaluating whether the proposed pollution control mechanisms would sufficiently reduce loadings to meet an impaired waterbody's assimilative capacity and result in the attainment of designated uses.

### ***Interim Targets***

Because it usually takes many years to fully restore an impaired waterbody, interim water quality targets may be needed to measure whether reasonable progress is being made towards the restoration of designated uses. The section of this document on **Documenting Reasonable Progress** provides examples of such interim targets, but site-specific measures are also encouraged.

### ***Expression of Water Quality–Based Targets***

Water quality–based targets can be calculated in a variety of ways (e.g., concentrations, loads) and expressions (e.g., averages, geometric means, median, exceedance frequency). The expression used should be consistent with the expression of the underlying standard. The duration of the expression should also be considered. For example, annual geometric means are often appropriate for nutrients where there are long-term impairments, but shorter-term (e.g., seasonal) averages may be necessary if the impairment is limited to specific seasons or parts of the year. It is important to be clear which expressions are used to develop the water quality–based targets.

## Estimating Pollutant Reductions from Restoration Activities

Most 4b plans are developed to address nutrient impairments or dissolved oxygen impairments related to excess nutrient inputs. Estimating the extent to which pollutant load reductions will restore the impaired water is an important element in documenting reasonable assurance. It is often difficult to precisely estimate the pollutant reductions that will result from specific restoration activities. This is particularly true for the implementation of best management practices (BMPs) for nonpoint sources. However, to provide reasonable assurance that a BMP or other restoration action will reduce pollutant loadings to a level that will restore a waterbody, documentation should address how the reductions were calculated, including documented values from the scientific literature for reductions attributed to similar management actions.

Unless actual performance data are available for a specific project, it is recommended that stakeholders follow the credit amounts and/or tools for various types of BMPs, as described in the most recent version of the DEP nonpoint source BMP guidance document, [\*Statewide Best Management Practice \(BMP\) Efficiencies for Crediting Projects in Basin Management Action Plans \(BMAPs\) and Alternative Restoration Plans\*](#). This guidance includes references to tools such as the BMPTRAINS model and the Florida Stormwater Association *BMP Maintenance Tool* (street sweeping, BMP clean-out, etc.) that are used to estimate load reductions based on Florida-specific information. For point source (facility) reduction projects, design or actual discharge data are commonly used to characterize the project credits. Many project credit calculations require an estimate of the loading entering a BMP, and thus a loading model is generally needed to estimate stormwater BMPs. There is no specific model that must be used, but it is recommended that the model or the modeling approach be discussed with DEP early in the planning process.

## Documenting Reasonable Progress

The determination of whether reasonable progress is being made towards the attainment of water quality standards is very site and pollutant specific. Documentation should be provided supporting specific progress towards the restoration of an impaired waterbody's water quality criteria according to the reporting schedule established in the plan. Examples of reasonable progress and interim targets include, but are not limited to, the following:

1. A written commitment to implement pollutant controls to reduce loadings within a specified period from stakeholders representing at least 50 % of the excess anthropogenic load of the pollutant(s) of concern.
2. Evidence of the percent reduction (or alternatively, a percentage reduction consistent with meeting the water quality target by the specified date) in the annual anthropogenic loading of the pollutant(s) of concern since the baseline period or the last reporting period, whichever is later.
3. Evidence of the percentage decrease (or alternatively, a percentage decrease consistent with meeting the water quality target by the specified date) in the

annual average concentration of the pollutant(s) of concern since the baseline period or the last reporting period, whichever is later.

4. Bioassessment results (or other biological improvements, such as increased seagrass coverage) showing improvement in the health of a waterbody's biological community, as measured by bioassessment procedures similar to those used to determine impairment and conducted under similar conditions.
5. Adoption of a local ordinance that specifically provides water quality goals, restricts growth or loads tied to the pollutant(s) of concern, and provides an enforcement option if the proposed management measure(s) are not implemented as required.

## **Providing RAP Updates**

Reasonable progress must be made by the time the next 303(d) list is due for submittal to EPA for a waterbody, which is currently every two years. Stakeholders are encouraged to regularly monitor the progress resulting from pollution control mechanisms and programs and provide progress updates every two years. To determine that reasonable progress is occurring, a comprehensive update should be prepared every two years.

Where reasonable progress is not documented, or where the current suite of projects is no longer anticipated to redress the impairment by the target date, the RAP should be adaptively modified as necessary.

## **Documentation in Support of 4e Determinations**

Except as noted here, the documentation for a 4e plan is similar to the documentation associated with a 4b plan discussed earlier to ensure compliance with Paragraph 62-303.390(2)(d), F.A.C. Following DEP guidance on crediting management actions for nonpoint sources, point sources, and BMP maintenance is advised. DEP is ultimately responsible for ensuring adequate documentation in the administrative record to support its decision to place or remove a waterbody from either the Verified List or Study List. For ongoing or planned projects, DEP expects local stakeholders pursuing a 4e determination to demonstrate they have the technical, financial, and legal ability to implement the identified project(s). Additionally, it is the stakeholder's responsibility to demonstrate that the ongoing and/or proposed projects or programs will restore the impaired waterbody.

With adequate documentation, DEP can recommend that the waterbody be removed from the state's Verified List and placed into Assessment Category 4e. This change in assessment status will not be final until the DEP Secretary takes final agency action during the subsequent listing cycle. Without the necessary documentation, DEP is unable to place a waterbody segment into Category 4e. DEP recommends using the template provided on its webpage for 4e documentation.

The acceptance of a 4e document represents DEP's acknowledgment of proactive efforts led by stakeholders, through a process of compilation and demonstration, that completed, ongoing and/or planned activities will likely result in a waterbody attaining water quality standards for the parameter (or parameters) causing impairment. However, DEP's acceptance of 4e documents is independent of the agency's permitting processes, and the projects/activities outlined in these documents are still required to meet all applicable permitting requirements prior to their implementation.

DEP prepares an updated impaired waters list for the entire state once every two years. To provide DEP with sufficient time to review restoration plan documentation before the next listing cycle, local stakeholders should engage DEP as early as possible. However, in most cases, once TMDL development is initiated, it is no longer appropriate to pursue a 4e determination.

Once the 4e documentation is accepted, the decision to initiate TMDL development is deferred until additional information is submitted to complete the water quality restoration plan, or until additional water quality data are collected documenting that a waterbody is no longer impaired and consideration for Assessment Category 2 (not impaired) is warranted. The goal of a 4e document is to implement appropriate restoration activities and, if necessary, additional study so that significant progress towards water quality restoration is achieved in subsequent assessment cycles, or a 4b plan can be approved, or the waterbody attains water quality standards for the parameter causing the impairment. If the waterbody is still identified as impaired in subsequent assessment cycles and a 4b plan has not been approved, then the waterbody would likely be placed in Assessment Category 5 and included on the Verified List, unless additional and substantial restoration efforts are scheduled that justify keeping the waterbody in Category 4e for another assessment cycle.

For FIB impairments, such as *E. coli* or enterococci, a 4b plan is not applicable because the management actions to reduce FIB do not currently have quantifiable reductions, and therefore reasonable assurance cannot be documented. However, it is possible to include FIB impairments in a 4e approach by noting that the local management actions are expected to reduce FIB impairments, but in unknown quantities. If there are local FIB impairments, a 4e document is not required, and a preferred approach may be to follow the DEP guidance for tracking and addressing these impairments independent of a 4e document. However, if local stakeholders prefer to have a 4e document to catalog the FIB management activities and to plan future efforts, this is an acceptable approach, especially if other activities are underway to address nutrient or dissolved oxygen impairments in the same area.

The document entitled [\*Restoring Bacteria-Impaired Waters\*](#) was developed from DEP's experiences in collaborating with local stakeholders addressing FIB issues around the state. It provides local stakeholders with useful information for identifying sources of FIB in their watersheds and examples of management actions to address these sources. This guidance can be helpful to those addressing FIB impairments with or without the development of a 4e document.

## **Benefits to Pursuing a 4e Determination**

There are several benefits to pursuing a 4e determination. First, development is locally controlled. Second, impairments can be more quickly addressed by moving straight to restoration activities. Finally, a 4e document enables stakeholders to focus on implementing projects and fixing problems. Examples of activities eligible for Category 4e include the following:

1. A stormwater or wastewater treatment facility is completed or upgraded just prior to the assessment cycle in or upstream of an impaired waterbody. These facility upgrades will likely redress the impairment; however, water quality results are insufficient to ascertain compliance with water quality standards.
2. A stormwater or wastewater treatment facility is undergoing construction when samples are taken downstream, and the water quality data may not be fully representative of the ambient conditions when construction is complete. The change in conditions will likely redress the identified impairment.
3. Stormwater or wastewater treatment facilities and projects proposed for a waterbody (or watershed) are legally committed. While funding has been secured, the design has not been started or is incomplete. Changes to these facilities and/or projects will likely redress the identified impairment in the near future.

## **Information to Consider and Document When Pursuing a 4e Determination**

A 4e document generally should provide all of the same information as a 4b plan, as described in the section **Standard Documentation for 4b Plans**, except that there is no need to do the following: (1) determine interim water quality–based targets for the waterbody; (2) provide a date when water quality criteria will be attained; (3) provide a commitment to take additional actions if the planned activities do not completely redress the impairment; and (4) provide assurance of confirmed sources of funding. Any 4e documentation should describe the goal of the plan (e.g., the plan will be completed within the next two assessment cycles and reasonable progress towards restoration will be achieved in the interim; stormwater treatment upgrades have recently been completed that should redress the identified impairment within five years).

## **Interim Reporting**

Interim reporting between assessment cycles may be necessary. DEP will work with restoration plan stakeholders to develop a reporting schedule, as needed. Reports should include items such as the status of planned projects, monitoring results, and changes to the restoration project schedule.

## Funding

Florida has a combined solicitation process for water quality grants (such as State Water Quality Assistance Grants [SWAGs] and EPA 319[h] grants) funding. Proposals are accepted from the following types of entities:

1. Governmental entities in Florida, including state agencies, local governments, and special districts.<sup>3</sup>
2. Public universities or colleges.
3. State water management districts.
4. National Estuary Programs.

Based on the project type, DEP's Division of Water Restoration Assistance will determine which funding sources are appropriate. Examples of fundable projects or programs include, but are not limited to, the following:

1. Demonstration and evaluation of BMPs.
2. Nonpoint source pollution reduction in priority watersheds (i.e., areas with water quality restoration plan[s], treatment of impaired waters, etc.).
3. Groundwater protection from nonpoint sources.
4. Public education programs on nonpoint source management (319[h] grants only).
5. Septic-to-sewer projects (laying the lateral from the residence/business to the main sewer line, connection to the sewer line, grinding station (if on the resident's property)).
6. Abandonment of the septic system if the remaining septic tank is a continued source of pollution).

As discussed in EPA's *Handbook for Developing Watershed Plans to Restore and Protect our Waters*, EPA expects watershed-based plans to focus not only on the impaired segments in the watershed but, when possible, to identify currently unimpaired waters where protection and load reduction actions are necessary to ensure that high-quality waters do not become impaired, and address conditions that may contribute to impairments downstream. In many cases, a mix of actions to restore waters and protect unimpaired waters may be necessary to comprehensively implement watershed-based plans and successfully address nonpoint source pollution.

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<sup>3</sup> See Subsection 287.012(14), Florida Statutes (F.S.), for the definition of a governmental entity.

## **Contact Information**

If you have any questions about this guidance document, contact Ken Weaver of DEP's Water Quality Evaluation and TMDL Program in Tallahassee (phone: 850–245–8414; email: [kenneth.weaver@floridadep.gov](mailto:kenneth.weaver@floridadep.gov)) or Ben Ralys of DEP's Watershed Assessment Section in Tallahassee (phone: 850–245–8443; email: [benjamin.ralys@floridadep.gov](mailto:benjamin.ralys@floridadep.gov)).