

Streamlining Practices for Water Quality Trading Programs: BMP Guideline National Templates

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WATER QUALITY TRADING IS



is strategy that provides discharge permittees flexibility in meeting regulatory compliance while achieving broader clean water goals on a watershed scale.

WHY DO IT?

- 1 Maintain transparency & flexibility
- 2 Facilitate collaboration
- 3 Reduce start-up time and costs
- 4 Produce additional environmental benefits



KEY PLAYERS



Program
Administrator



Landowners



Project Developers



Buyers



Regulatory
Agency



Third-party
Verifiers



Registry
Provider



Public

THE WQT PROCESS



KEY PROJECT DEVELOPMENT CHALLENGES

- Lack of standardization
- High degree of uncertainty and complexity
- Spatial and temporal variability in watersheds
- Inconsistent language
- Complicated and highly detailed



WHAT DO WE NEED?



- Facilitate ease of use and development
- Enhance program quality, consistency
- Create shared language between programs
- Aggregate and build up existing resources
- Strengthen understanding of challenges facing implementation

Building a Water Quality Trading Program: Options and Considerations

National Network on Water Quality Trading: Improving consistency, innovation, and integrity in water quality trading

Building a Water Quality Trading Program: Options and Considerations
 Version 1.0 | June 2015: Point-Nonpoint Trades
 A Product of the National Network on Water Quality Trading



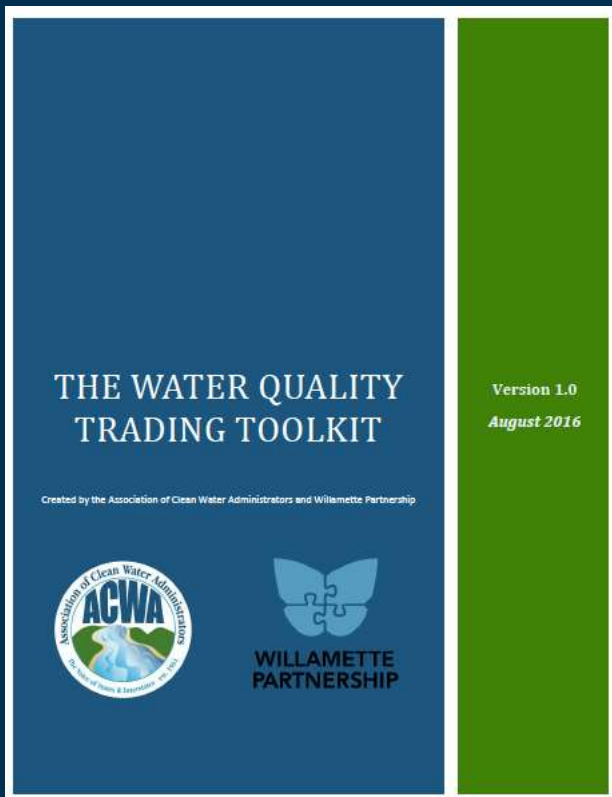
The logos represent groups and organizations serving as National Network participants with the USDA as a technical advisor.



EDF2.AM428. The contributors to the National Network engaged in an extensive discussion during the publication, Building a Water Quality Trading Program: Options and Considerations, and believe that it represents a comprehensive, consistent, functional, and robust collection of information on different, representative water quality trading programs. Site and existing water quality trading programs should look to this document as an important source of information to help build and update their trading programs.

This document does not represent a consensus opinion, endorsement, or particular recommendation from any one National Network contributor. It seeks to cover the broad range of topics related to water quality trading to make local stakeholders in developing and replicating trading programs that meet local needs and conditions. The document does not create any binding requirements or standards of practice. It merely lists individuals (state regulators) and/or U.S. EPA staff who identify those requirements that apply to any particular trading program or trading program participants.

BMP Guideline National Templates



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Template: Sediment Basin Guideline

BMP guidelines are intended to ensure that projects seeking credits are implemented to a high standard, do not create unanticipated environmental impacts, and are maintained in a way that achieves the credited water quality benefits for as long as the project is valid. This template includes design, installation, maintenance, and performance standards that can help ensure that BMPs are performing as anticipated.

This template is intended to serve as a starting point only. Any language can be adjusted to meet the needs of a particular state or trading program. There are instructions, comment boxes, and options throughout the template providing additional information or alternative language for states to consider.

This template is organized to include the components of BMP Guideline proposed in the National Network publication, *Building a Water Quality Trading Program: Options and Considerations* (National Network Guide),¹ which was itself developed through review of NRCS practice standards and BMP guidelines from existing trading programs. This template was developed in collaboration with subject area experts, agricultural service providers, and a review of relevant literature and national monitoring standards and programs. This template will continue to evolve as it is applied.

¹ National Network on Water Quality Trading, *Building a Water Quality Trading Program: Options and Considerations* (June 2015). Available at: <http://willamettepartnership.org/publications/>

² U.S. Department of Agriculture, Natural Resource Conservation Service (undated). Available at: <http://www.nrcs.usda.gov/wps/portal/nrcs/main>



Template: Riparian Revegetation Guideline

BMP guidelines are intended to ensure that projects seeking credits are implemented to a high standard, do not create unanticipated environmental impacts, and are maintained in a way that achieves the credited water quality benefits for as long as the project is valid. This template includes design, installation, maintenance, and performance standards that can help ensure that BMPs are performing as anticipated.

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² U.S. Department of Agriculture, Natural Resource Conservation Service, *National Conservation Practice Standards* (undated). Available at <http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/technical/cp/ncps/>

COMMON WQT BMPs

STRUCTURAL

Sediment basin

Sprinkler irrigation

NON-

STRUCTURAL/MANAGEMENT BASED

Cover cropping

Riparian grass buffer



GUIDELINE DESIGN PROCESS



WHAT'S INSIDE?

1 Basic information

Geographic scope, practice description, credit types, definitions

2 Credit Calculation Methods

3 BMP Quality Standards

Project and site eligibility

Project design

Implementation requirements

Monitoring and maintenance

procedures

4 Credit Issuance Procedures

Project site pre-screening, project site review, contract terms & duration

Designed for practitioners, stakeholders, and experts

TEMPLATE EXAMPLES

INSTRUCTIONS FOR USING THIS TEMPLATE

The template is meant as a starting point only. Any language can be adjusted to meet the needs of a particular state. There are instructions, comment boxes, and options throughout the template providing additional information or alternative language for states to consider.

There are a few conventions used throughout the template that provide instructions and information for filling it out. They include:

- **Blue and ALL CAPS text is most likely to be modified:** Although any language in the template can be modified to meet state needs, text in blue is most likely to need customization. For example:

"This Sediment Basin Guideline sets forth recommendations that [AGENCY NAME] and other stakeholders believe should be considered when constructing credit-generating projects in [WATERSHED NAME]."

- **Call out boxes provide instruction.** Throughout this template annual report, call out boxes will be used to provide instructions, considerations, and references for the subsequent section. These boxes can be deleted as the state drafts its documents. An example call out box is provided below.

In this section, describe project design criteria. All credit-generating projects need to prepare a project design and management/monitoring plan prior to implementation. The plan should be prepared by the qualified agency or licensed/certified individual to select and properly design appropriate BMPs to improve water quality at a specific location.

- Applicable locations in the watershed
- Potential interactions with other practices
- Ancillary benefits

Other considerations, such as where the BMP won't work, shall be included in this section. This template includes descriptions of the rationale/justification for each eligibility criteria. Template users may wish to document this elsewhere to reduce the length and complexity of the guideline document.

3.1.1 Demonstrating Project Site Eligibility

Several steps must be taken to ensure that a project site is eligible. Requirements of site eligibility are detailed in Table 3.1.1. These standards help to maintain transparency throughout the credit-generating process. Additional guidelines are described below the eligibility criteria.⁶

Table 3.1.1. Project eligibility criteria and recommendation

Eligibility Criteria	Description	Rationale
Location in watershed where BMP is applicable	<p>Thermal: Project areas must border a river or stream with perennial flow within the approved geographic area.</p> <p>Phosphorus and Sediment: Project areas must have a direct hydrologic connection to a river or stream with perennial flow within the approved geographic area. Sites that border a river or stream are automatically considered eligible. Other sites will be considered pending justification of a direct hydrologic connection.</p>	The ecological value of intermittent systems and their contribution toward watershed health is recognized; however, at this time, [PROGRAM ADMINISTRATOR] is not able to reflect the inherent ecological diversity in intermittent stream systems. Furthermore, [PROGRAM ADMINISTRATOR] is not

[TRADING PROGRAM NAME]

Riparian Revegetation Guideline

1. BASIC INFORMATION

1.1 PRACTICE DESCRIPTION

Establishment of native vegetation, predominately trees and/or shrubs, located adjacent to and up-gradient from a river or stream.

1.2 ELIGIBLE CREDIT TYPES

The Riparian Revegetation projects in this guideline serve to filter sediment and phosphorous and regulate water temperature. This guideline can be used to generate the following types of credits:

- Thermal Load (kcal/day)
- Total Phosphorus Load (lbs/year)
- Total Nitrogen Load (lbs/year)
- Total Sediment Load (lbs/year)

1.3 GEOGRAPHIC SCOPE

application of BMPs and restoration techniques, and their expected results, can vary from place to place. this section to define the range of locations for which this particular BMP Guideline can be applied.

ERT GEOGRAPHIC SCOPE HERE (E.G., Boise River Watershed).

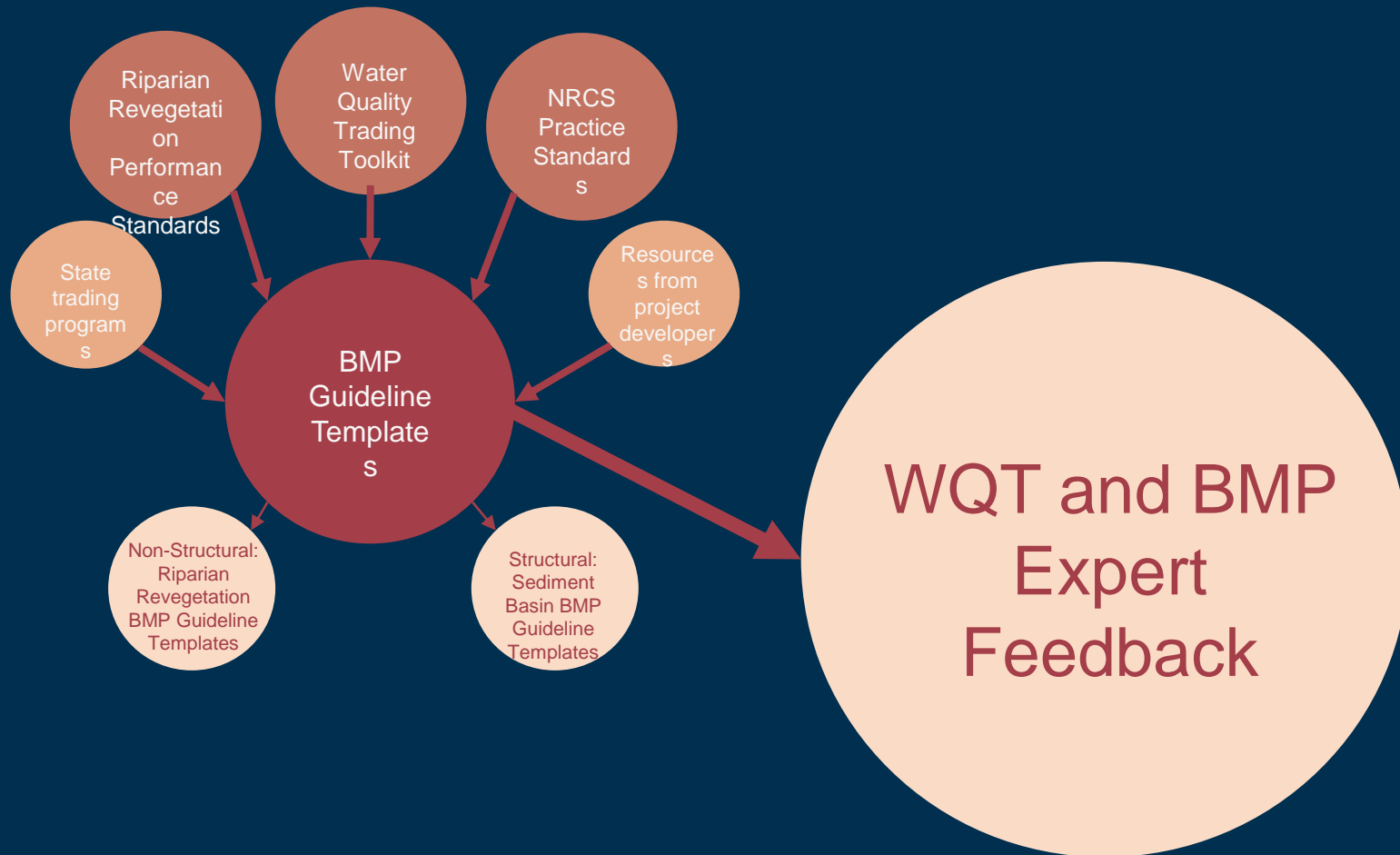
DEFINITIONS

this section to define technical language within the guideline. Cite references where available.

opy Closure¹:

Canopy closure is an upward-looking point estimate of the coverage of a forest canopy, and may be measured in the field with a spherical densiometer (also called a mirror goniometer) or by analyzing upward-looking hemispherical photographs.

REVIEW PROCESS



WHY DO WE NEED THESE?

- Offer a detailed blueprint
- Serve as a platform for communication and shared experiences
- Provide national uniformity
- Facilitate program development
- Build upon existing resources

REMAINING CHALLENGES

- 1 Detail vs. flexibility
- 2 Inconsistent language
- 3 Lack of program transparency
- 4 Knowledge gaps



LOOKING FORWARD

Developing these programs is challenging, but now the path is a little smoother

Developers should not be afraid to start simple

Finding a common language is key

Progress relies on relationships with stakeholders, trust, and social readiness

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