

ATTACHMENT 1
to
RESOLUTION NO. R1-2017-0027

Water Quality Trading Framework for the Laguna de Santa Rosa Watershed

PUBLIC REVIEW DRAFT

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Introduction

The purpose of this document is to provide a framework for the implementation of water quality trading (WQT) activities in the Laguna de Santa Rosa (Laguna) watershed (hereinafter “this Framework” or “this WQT Framework”), where such activities are explicitly allowed under National Pollutant Discharge Elimination System (NPDES) permits adopted by order of the North Coast Regional Water Quality Control Board (Regional Water Board).

This Framework seeks to provide NPDES permittees with cost-effective and environmentally beneficial options for complying with effluent limitations for specifically named pollutant discharges to surface waters. This Framework is available to the City of Santa Rosa and the Town of Windsor, and any other NPDES permittee in the Laguna watershed who may in the future be authorized by the Regional Water Board to participate in WQT.

Foundational References

This WQT Framework draws heavily from the following foundational reference materials:

- U.S. Environmental Protection Agency *Water Quality Trading Policy*, dated January 13, 2003. (a.k.a. 2003 U.S. EPA Trading Policy)
- *Building a Water Quality Trading Program: Options and Considerations*; a product of the National Network on Water Quality Trading, dated June 2015. (a.k.a. National Network’s *Options and Considerations* document)
- *Water Quality Trading Framework for the Laguna de Santa Rosa Watershed*; technical report prepared for Sonoma Resource Conservation District by Kieser & Associates, LLC, dated September 2015. (a.k.a. Local Stakeholder Recommendations)
- *The Water Quality Trading Toolkit*; created by the Association of Clean Water Administrators and Willamette Partnership, dated August 2016. (a.k.a. ACWA Trading Framework Template)

Guiding Principles

While this Framework details the basic processes and requirements for facilitating WQT within the Laguna watershed, individual trades may introduce unique circumstances and challenges. Should questions arise about the intent of this Framework’s provisions, its users should defer to these guiding principles, as well as those provided in the Local Stakeholder Recommendations:

- Activities conducted pursuant to this WQT Framework must be supported by sound science and effectively accomplish regulatory and environmental goals.
- WQT activities must provide sufficient accountability, transparency, accessibility, and opportunities for public involvement to ensure that promised water quality improvements are delivered.
- The benefits of WQT must be realized without allowing water quality impacts associated with credit-generating actions to occur in place, in kind, or in time.

- WQT activities must adhere to all applicable laws, including the federal Clean Water Act, the California Porter-Cologne Water Quality Control Act, and local laws.

1. Policy & Regulatory Instruments to Support Trading

1.1 Authority for Water Quality Trading in California

The Regional Water Board's authority to utilize WQT as a means of controlling pollution in California is derived from federal and state laws and policies. Those laws and policies are enumerated in the Regional Water Board resolution approving this WQT Framework (Resolution No. R1-2017-0027).

1.2 Regulatory Instruments to Support Trading

This WQT Framework may be utilized by dischargers whose NPDES permits explicitly allow the use of nutrient offsets or pollutant credit trading as a means for complying with specific effluent limitations.¹

1.3 Public Involvement

In order to ensure public accountability, transparency, and accessibility during the implementation of this Framework, the following opportunities for public involvement are provided:

- 30-day public review, opportunity to comment, written response, and public hearing prior to the Regional Water Board's adoption of NPDES permits authorizing the use of nutrient offsets or pollutant credit trading as a compliance option;
- 30-day public review, opportunity to comment, written response, and public hearing prior to the Regional Water Board's approval of this WQT Framework;
- 30-day public review and opportunity to comment prior to the Regional Water Board Executive Officer's approval of supporting documentation for practices to be pre-qualified under this Framework (Section 2.5.2);
- Public notification and release (online) of the Regional Water Board Executive Officer's approval of Credit Project Plans and relevant project information (Section 7.2);
- Public notification and release (online) of key documents and reports related to project implementation and verification (Section 8); and
- Public notification and release (online) of key documents and notices related to credit certification and credit tracking (Section 9).

Nothing in this section shall be construed to alter in any way the statutory requirements of the Regional Water Board to provide opportunities for public review and comment on official permitting, enforcement, and/or other regulatory actions.

¹ For purposes of this Framework, allowances for the use of nutrient offsets in Regional Water Board approved NPDES permits for the City of Santa Rosa (Order No. R1-2013-0001) and the Town of Windsor (Order No. R1-2013-0042) currently constitute allowances for water quality trading.

1.4 Regional Water Board Authority to Audit

Because this WQT Framework represents an option for complying with effluent limitations in NPDES permits issued by the Regional Water Board, and because the Regional Water Board has the authority to determine compliance with permits it issues, all activities conducted (and records generated) under the terms of this Framework shall be subject to audit and inspection by Regional Water Board staff. Additional information about the Regional Water Board's permit compliance and enforcement authorities is provided in Section 10 below.

2. Trading Basics

2.1 Types of Trades

This Framework allows trading of pollutant credits (hereinafter "water quality credits").

2.2 Trading Parties

This Framework generally supports trading of water quality credits between NPDES permittees (i.e., point source dischargers or credit buyers) and unregulated non-point sources (i.e., credit generators or sellers). However, nothing prohibits point source dischargers from trading water quality credits amongst themselves (e.g., from one NPDES permittee to another), or an entity from generating water quality credits for its own use (e.g., a municipal parks department generating credits to be used by the same municipality's NPDES permitted wastewater treatment facility), provided all other eligibility criteria and Framework requirements are met. Trading eligibility criteria are described in Section 3 below.

2.3 Trading Area

The trading area for this Framework (where water quality credits may be generated, bought, sold, and used) is the Laguna de Santa Rosa watershed in Sonoma County, CA. The watershed consists of all areas drained by the Laguna de Santa Rosa, Santa Rosa Creek, and Mark West Creek, which collectively drain into the Russian River. A map of the trading area is presented in Figure 2.3 below.

2.4 Pollutants to be Traded

This Framework supports trading of water quality credits for one pollutant only, total phosphorus, on a mass basis. Credits are generated through approved phosphorus reduction or removal actions. One credit is equal to one pound of total phosphorus. Additional information about credit characteristics is provided in Section 6 below.

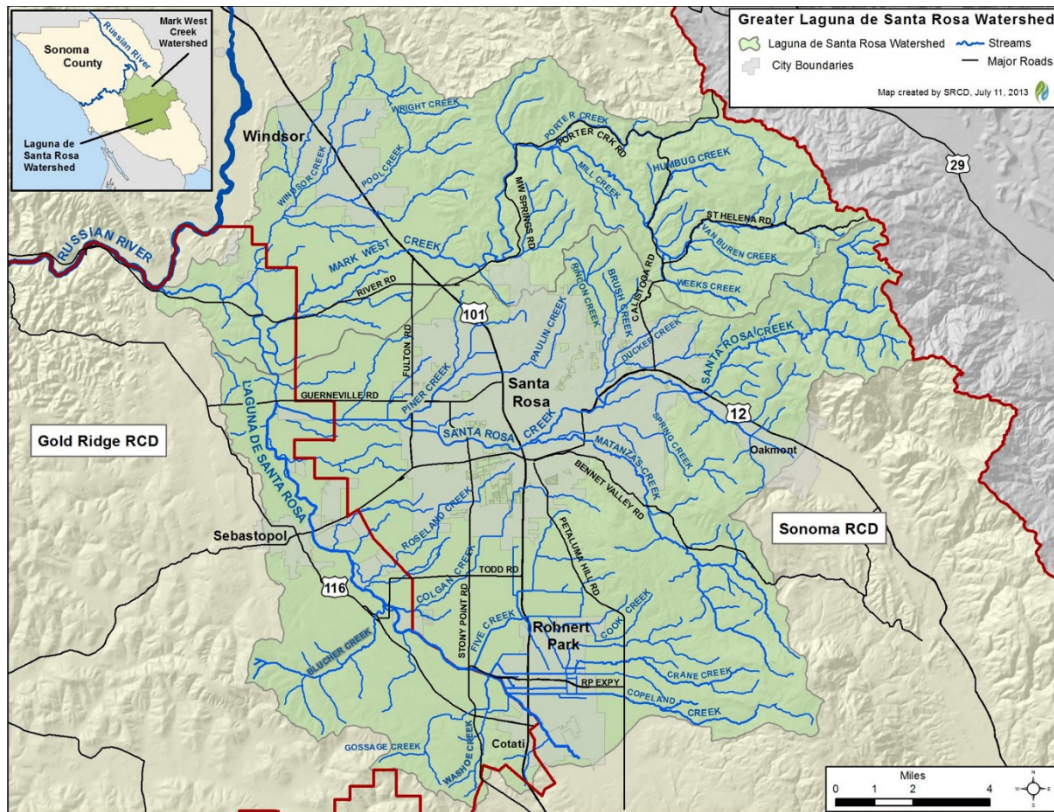


Figure 2.3. Trading Area for the Laguna de Santa Rosa WQT Framework²

2.5 Approved / Pre-qualified Practices

Supporting documentation for all practices used to generate water quality credits under this Framework must first be subject to public review and approved by the Regional Water Board Executive Officer. Once approved, the practices (and associated credit quantification methods) shall be considered pre-qualified for future use on a project-scale, as will be described in Credit Project Plans (Section 7.1). To ensure transparency, the Regional Water Board will maintain a current and publically accessible list of pre-qualified practices on its website.

2.5.1 Supporting Documentation for Pre-qualified Practices

As mentioned above, in order to be pre-qualified for use on a project-scale, each practice proposed as the basis for water quality credit generation must be characterized by supporting documentation. The supporting documentation should establish the standards of quality, predictability, effectiveness, and transparency that will guide site-specific implementation of the practice in question and quantification of the water quality credits to be generated. Supporting documentation for each practice should generally include the following:

² Map copied from *Water Quality Trading Framework for the Laguna de Santa Rosa Watershed*; technical report prepared for Sonoma Resource Conservation District by Kieser & Associates, LLC, dated 2015. (a.k.a. Local Stakeholder Recommendations)

Practice Standards

- Description of the practice and its purpose;
- Description of where the practice should be applied (i.e. appropriate site conditions);
- Guidelines and performance standards for design, installation, and maintenance;
- Potential side effects, interactions, and additional benefits of the practice;
- Practice-specific baseline requirements (Section 3.2.2), maximum project life (Section 6.2), and applicable trading ratio (Section 5);
- Monitoring requirements as needed to support practice implementation (Section 11.2); and
- Other supporting documentation as needed.

Credit Quantification Methods

- Description of predicted practice effectiveness, as supported by site-specific analysis or literature;
- Technical summary of the method by which water quality credits will be calculated (i.e., credit quantification method), and a description of the method's accuracy, sensitivity, and uncertainty;
- Monitoring required to support the accurate use of the credit quantification method;
- Procedures for applying the credit quantification method and documentation requirements; and
- Date or version number of the credit quantification method, and identifying information for the method's developer.

Project Review / Verification Procedures

- Recommended procedures for pre- and post-project site condition assessments, and project verification activities;
- Recommended documentation and reporting for pre- and post-project site condition assessments, and project verification activities; and
- Recommended conditions / schedule for credit release (if applicable).

Where professional certification or special expertise is necessary for the design, installation, maintenance, credit quantification, or verification of a particular practice, the supporting documentation for that practice should describe such requirements.

Additional information about credit quantification methods is provided in Section 4 below. Additional information about documenting pre- and post-project site conditions is provided in Section 8.1. Additional information about initial and ongoing project verification requirements is provided in Sections 8.2 and 8.3, respectively.

2.5.2 Process for Approving Pre-qualified Practices

The process for approving (or pre-qualifying) a practice for use under this WQT Framework is as follows.

Step 1: Preparation and Submittal of Supporting Documentation

New and/or updated practices may be proposed by any entity at any time for pre-qualification under this WQT Framework. Supporting documentation for each practice (described in Section 2.5.1 above) must be prepared and submitted to Regional Water Board staff, along with a request to initiate the approval process described herein.

Step 2: Initial Screening / Completeness Review

Regional Water Board staff will perform an initial screening of the request for approval and supporting documentation for the proposed practice to verify completeness, and will solicit technical input and/or additional information from the proposal submitter (and others) as needed.

Step 3: Staff Review and Recommendation

Once the request for approval and supporting documentation have been determined to be complete, Regional Water Board staff will review the package in a timely manner, and will prepare a recommendation for approval or denial of the proposal. A recommendation for approval may be accompanied by conditions of approval. A recommendation for denial shall be accompanied by reasons for the denial.

Step 4: Staff Concurrence, Public Notice and Comment

If Regional Water Board staff recommends the proposed practice, it will make available to the general public the request for approval, supporting documentation, and staff's recommendation (including any conditions of approval) for a 30-day review and comment period. Regional Water Board staff will consider all comments received during the 30-day period, and may revise its recommendation (or conditions of approval) based on those comments.

Step 5: Final Decision / Addition to Pre-qualified Practice List

Regional Water Board staff will provide its final recommendation to the Executive Officer for his/her consideration and final decision. If it is approved, the Executive Officer's notice of approval will be made available to the general public on the Regional Water Board's website and the practice will be placed on the pre-qualified practice list.

As suggested above, significant updates or revisions to supporting documentation for practices that have already been approved (i.e., practices that are already on the pre-qualified practice list) will follow the same process as for adding a new practice. Practice revisions may be triggered by a variety of events, including local lessons learned or the release of new information such as monitoring results, standards updates, or new findings in scientific literature.

3. Trading Eligibility Criteria

3.1 Eligibility for Trading Parties

The following subsections outline the basic eligibility criteria that credit buyers and sellers must meet in order to participate in WQT under this Framework.

3.1.1 Credit Buyers

As stated in Section 1.2 above, this WQT Framework may be utilized by dischargers whose NPDES permits explicitly allow the use of nutrient offsets or pollutant credit trading as a means for complying with specific effluent limitations. For purposes of this Framework, such dischargers shall be referred to as “credit buyers” and shall be considered eligible to buy and/or use water quality credits to meet their compliance obligations, provided that all other permit and Framework requirements are met.

3.1.2 Credit Sellers

Any entity, public or private, landowner or operator, regulated or unregulated, may generate water quality credits to be sold and/or used under this WQT Framework, provided that all applicable Framework requirements and other obligations are met. For purposes of this Framework, such an entity shall be referred to as a “credit seller.” Other obligations may include, but not be limited to: applicable permit requirements, federal anti-backsliding provisions, federal and state anti-degradation policies, and any other affirmative statutory, regulatory, or contractual obligations.

3.2 Eligibility Criteria for Credit Generating Projects

Under this Framework, a pollutant reduction or removal action is eligible to generate water quality credits as long as it is not otherwise required. That is, any action already required by law, regulation, permit, enforcement action, or any other legally binding agreement is not eligible to generate credits.³ On the contrary, actions taken voluntarily are eligible. The following subsections describe additional considerations relative to the eligibility of actions to be undertaken in credit-generating projects.

3.2.1 Avoiding Localized Impacts

Consistent with the guiding principles listed in the Introduction section above, actions taken to generate credits under this Framework must provide water quality benefits that are equal to or greater than the pollutant discharges they are meant to offset in place, in kind, and in time. There can be no localized impacts as a result of a credit trade. Each Credit Project Plan (Section 7.1) shall be reviewed by Regional Water Board staff for adherence to this criterion, to state and federal endangered species protection laws, and to state and federal environmental review laws (i.e., California Environmental Quality Act (CEQA) and National Environmental Protection Act (NEPA)).

3.2.2 Baseline Requirements for Credit-Generating Projects

For purposes of this WQT Framework, baseline shall be defined as the minimum level of effort or level of implementation that must be achieved before a project is eligible to generate credits. Depending on the nature of the credit-generating project, baseline requirements may apply to the credit buyer, the credit seller, the project itself, the project site, or a combination thereof. Furthermore, baseline requirements

³ This provision includes, but is not limited to any requirement imposed by the Regional Water Board or by another regulatory agency.

for a particular project may be established in the applicable pre-qualified practice standard(s), the approved Credit Project Plan, or both.

Consistent with the guiding principles listed in the Introduction section above, baseline requirements for projects conducted under this Framework shall correspond to the minimum requirements of any applicable laws, regulatory requirements, or other affirmative obligations such as those established in permits, easements, deed restrictions, and/or other binding contracts. Where no such requirements exist, baseline shall be equivalent to current conditions or practices at the project site, based on the prior three-year history of the property or operation.

Where approved credit-generating projects take place on lands subject to regulatory requirements, those requirements will be added to the defined baseline for the practices used. Thus, only voluntary actions that are above and beyond what is minimally required, or that take place ahead of a regulatory compliance schedule, shall be eligible to generate credits. For projects implementing practices that later become baseline requirements due to the effects of new or expanding regulatory programs, credits generated by those practices shall be honored for the approved project life (Section 6.2).

3.2.3 Applied Timing of Baseline Requirements

All applicable baseline requirements must be met before any approved project is allowed to generate credits under this WQT Framework.

3.2.4 Applied Location of Baseline Requirements

Baseline requirements shall apply to the individual project site where an approved credit-generating project is being undertaken. However, the implementation of a credit-generating project at one location on a property shall not be allowed to result in the degradation of environmental conditions at another location on the property.

3.2.5 Timing of Framework Applicability

Immediately following the approval of this Framework by the Regional Water Board, projects are eligible to generate credits pursuant to its terms. Projects previously approved under the Santa Rosa Nutrient Offset Program (Regional Water Board Order No. R1- 2008-0061) shall be considered eligible under this Framework to continue generating credits according to terms under which those projects were originally approved and for their approved project lives.

3.2.6 Use of Public Conservation or Grant Funds

In general, under this WQT Framework, the use of public conservation or other grant funds to implement credit-generating projects is not prohibited, provided the funding entity's requirements are met and the credits generated by the project are used only one time.

Constraints imposed by a public conservation or grant funding entity may affect the number of credits a credit seller is eligible to sell (or credit buyer to use). For example, if half the cost of a credit-generating project is paid for using public conservation funds and the funding entity restricts the use of those funds for regulatory compliance projects, then only half the credits generated by that project shall be available to sell to the credit buyer.

Alternatively, if a funding entity allows a credit seller to use public conservation or grant funds to meet baseline requirements for a particular credit-generating project, and the seller uses private funds to implement all other aspects of the project that exceed baseline requirements, then all of the credits generated by that project shall be available to sell to the credit buyer.

In any case involving the use of public conservation or grant funds to generate credits under this WQT Framework, it is the obligation of the trading parties to know and adhere to the funding entity's requirements.

3.2.7 Credit Stacking

Credit stacking refers to the generation of credits for multiple environmental markets (e.g. wetland and phosphorus credits) from a single project. Under this WQT Framework, credit stacking is allowed with proportional accounting. That is, a project is allowed to generate multiple types of credits, but those credits must be accounted for and sold (or used) proportionally. For example, if a project generates both wetland and phosphorus credits, and the credit seller sells 60% of the project's wetland credits, only 40% of the total phosphorus credits from that project can also be sold.

4. Quantifying Pollutant Reductions for Water Quality Credits

As described in Section 2.5 above, credit quantification methods for pre-qualified practices must be included in the supporting documentation for those practices, and will be approved on a case-by-case basis. Once approved, credit quantification methods for those practices shall be considered pre-qualified for future use.

Appropriate methods for quantifying water quality credits may include the use of models (mechanistic or empirical), pre-established pollution reduction rates (from experimentation or scientific literature), direct monitoring, or a combination of the above. Models and pre-established rates, if used, should be calibrated or otherwise tuned to local conditions. In general, for this WQT Framework, methods used to quantify water quality credits to be derived from a pre-qualified practice should rely on best available science, and should demonstrate accuracy, repeatability, sensitivity, transparency, and practicality, although some trade-offs amongst these qualities are inevitable.

5. Trading Ratios

The default trading ratio for this WQT Framework is 2.5:1. That is, if a discharger wishes to use trading to comply with a numeric effluent limitation for a particular pollutant in its NPDES permit, it must generate or purchase water quality credits equivalent to 2.5 times the amount of the pollutant it discharges above the permit limitation. The trading ratio is the sum of two factors, both of which are applied to increase the amount of credits needed by the discharger:

- *Uncertainty ratio*: A ratio that accounts for scientific uncertainty, including potential inaccuracies in estimation methods and/or variability in project performance.
- *Retirement ratio*: A ratio that sets aside a portion of credits generated for net environmental benefit.

Table 5.1 summarizes the ratio that will be applied to all trades under this WQT Framework, as well as supporting rationale.

Table 5.1. Applicable Trading Ratios

Ratio Type	Multiplier	Rationale
Uncertainty	2.0	A factor of 2.0 accounts for all potential sources of variability and uncertainty, including the following factors that may affect credit estimation: [†] <ul style="list-style-type: none"> - Average site conditions - Meteorological phenomena - Practice efficiency rates - Practice maturation rates - Pollutant equivalencies - Pollutant transport, delivery, and attenuation characteristics
Retirement	0.5	A factor of 0.5 is recommended to ensure that all trades generate a net water quality benefit.
TOTAL	2.5 : 1	

[†] Note: Uncertainty associated with pollutant discharge estimates is not explicitly accounted for in this ratio because discharges from wastewater treatment facilities are assumed to be reasonably accurate.

The Regional Water Board Executive Officer may allow the retirement and/or uncertainty ratios specified above to be adjusted downward by as much as 0.5 (each) for a particular trade under the following circumstances:

- A reduced retirement ratio may be applied when a credit-generating project is explicitly designed to enhance environmental values (e.g., habitat or ecosystem restoration, recognized priority or multi-benefit actions).
- A reduced retirement ratio may be applied when a credit-generating project occurs on permanently protected lands.
- A reduced uncertainty ratio may be applied when a credit-generating project includes direct measurement of pollutant reductions.

6. Credit Characteristics & Accounting Conventions

The following credit characteristics and accounting conventions shall apply to all credits generated under this WQT Framework.

6.1 Credit Life

“Credit life” is defined as the period of time during which a water quality credit may be used to offset a pollutant discharge, typically beginning with the credit’s “effective date” and ending with its “retirement date.”

The life of all credits generated under this WQT Framework shall be one year, beginning October 1 (i.e., the beginning of the NPDES discharge season) and ending September 30.

6.2 Project Life

“Project life” is defined as the period of time over which a project is anticipated to generate usable water quality credits. The life of a credit-generating project often spans several years (i.e., several consecutive credit lives). The credits generated by that project shall be distributed uniformly over those years, or as otherwise specified in the credit release schedule included in the approved Credit Project Plan (Section 7.1).

For purposes of this Framework, project life shall be allowed to vary based on the specific nature of the project, the project site, the pre-qualified practice(s) used, and on the expressed preferences of the credit buyer and seller. Project life shall be specified in each approved Credit Project Plan.

6.3 Banking Credits for Later Use

“Banking” is the generation of a water quality credit in one time period with the intention that it be used to offset a discharge in another (future) time period.

Under this WQT Framework, banking of credits shall be allowed for up to three years (i.e., three discharge seasons), unless otherwise prohibited under the terms of a discharger’s NPDES permit. For instance, a water quality credit generated in 2017 may be used to offset a discharge in the 2017, 2018, or 2019 discharge season. Any credits that remain unused after three discharge seasons shall be retired.

6.4 Project Expiration and Renewal

Under this WQT Framework, once a credit-generating project reaches the end of its specified project life, it shall be considered expired and no longer able to generate credits. However, where such a project continues to function, is properly maintained, and meets all eligibility criteria and Framework requirements that are in effect at the time, it may be renewed and allowed to generate additional credits. The process for renewing an expired project shall be the same as the process for approving a new project. (Section 7.2)

7. Project Planning, Pre-Screening, & Approval

7.1 Credit Project Plans

All the documentation necessary to approve a credit-generating project under this WQT Framework must be submitted in a Credit Project Plan, which contains relevant project design, implementation, maintenance, monitoring, and credit information as detailed below. Credit Project Plans must be prepared by qualified individuals⁴ who can properly select pre-qualified practice(s) for use at a particular site, and incorporate them into a project design. Consistent with the guiding principles listed in the Introduction section above, all Credit Project Plans should be designed with the primary goal of improving water quality, and should be sufficiently detailed to allow plan reviewers to understand the nature of the proposed project, its conformance with applicable Framework provisions, and the anticipated water quality credits to be generated. Approval of a credit-generating project is contingent upon the Credit Project Plan being complete and sufficiently detailed. Credit Project Plans should contain the following elements:

Basic Information

- Project name
- Date of submittal
- Project location
- Estimated size of the project area (e.g. number of acres or linear feet)
- Name of the project developer with organization and contact information

Project Design and Credit Information

- Project goals and/or objectives
- Description of the project site (e.g., ownership, land use history, current site conditions)
- Identification of pre-qualified practices to be used
- Description of anticipated project benefits beyond pollutant reductions (if any)
- Declaration of project eligibility with supporting documentation or discussion (if necessary)
- Designs and specifications
- Project implementation plan and/or construction schedule
- Site assessment procedures and reporting requirements (Section 8.1)
- Identification of parties responsible for project implementation and site assessment
- Description of construction contracts or agreements
- Evidence or description of required permits and/or CEQA documentation
- Preliminary water quality credit calculations and proposed trading ratio, with justification
- Proposed project life and credit release schedule

⁴ Qualified individuals may include, but not be limited to the following: a Natural Resources Conservation Service certified planner, a local Resource Conservation District employee, a certified crop advisor, a certified erosion control specialist, a California licensed civil engineer or professional geologist, or other professional consultant. Supporting documentation for pre-qualified practices (Section 2.5.1) may specify when certified professionals or other experts are required for the design, installation, or maintenance of a particular practice.

- Project design consultants (if any) with organization and contact information

Project Maintenance Plan

- Description of maintenance requirements
- Project maintenance activities and schedule
- Identification of parties responsible for project maintenance
- Description of maintenance contracts and/or project protection agreements (if any)⁵

Project Monitoring, Verification and Reporting Plan

- Description of monitoring, project verification, and reporting requirements (Sections 8.2, 8.3, and 11.2)
- Monitoring, project verification, and reporting schedule
- Identification of parties responsible for monitoring, project verification, and reporting
- Description of project verification contracts or agreements

7.2 Credit Project Plan Approval Process

Credit Project Plans to be implemented under this WQT Framework must first be reviewed and approved according to the following process:

Step 1: Preparation and Submittal of Proposed Credit Project Plan

A proposed Credit Project Plan (Section 7.1) must be prepared and submitted by a credit seller or its agent to Regional Water Board staff, along with a request to initiate the approval process described herein.

Step 2: Initial Screening / Completeness Review

Regional Water Board staff will perform an initial screening of the proposed Credit Project Plan (and any supporting documentation) to verify completeness, and will solicit technical input and/or additional information from the credit seller, its agent, and others as needed.

Step 3: Staff Review and Recommendation

Upon determining the proposed Credit Project Plan is complete, Regional Water Board staff will review the Plan in a timely manner, and will prepare a recommendation for approval or denial of the Plan. A recommendation for approval may be accompanied by conditions of approval. A recommendation for denial shall be accompanied by reasons for the denial.

Step 4: Final Decision / Public Notice

Regional Water Board staff will provide its recommendation to the Regional Water Board Executive Officer for his/her consideration and final decision. If the proposed Credit Project

⁵ While this WQT Framework does not explicitly require that legal project protection agreements be established as a condition of project approval, such agreements may be appropriate under certain circumstances, such as for stream or wetland restoration projects. It is ultimately the credit buyer/user's responsibility to ensure (by contract or otherwise) that the projects upon which it relies for water quality credits are sufficiently maintained to generate those credits over their project lives.

Plan is approved, the Executive Officer's notice of approval and relevant project information will be made available to the general public on the Regional Water Board's website.

7.3 Credit Project Pre-Screening Process (Optional)

Prior to incurring the expense of developing a complete Credit Project Plan and initiating the plan approval process described in Section 7.2 above, a credit seller or its agent may wish to have certain plan elements pre-screened by Regional Water Board staff for conformance with the provisions of this WQT Framework. Pre-screening is not required, but is encouraged for all projects, especially to confirm project eligibility and applicable baseline requirements. Other worthwhile topics for pre-screening may include: proposed project life, applicable trading ratio, preliminary credit estimates, and/or special conditions or circumstances associated with a particular project or site.

The optional process for project pre-screening may be more or less formal, depending on the preferences of the credit seller or its agent, and depending on the nature and extent of the information being pre-screened. Steps of the process may be carried out in writing or verbally. In general, the credit seller or its agent shall submit a request for pre-screening to Regional Water Board staff, along with any draft plan elements or other relevant documentation. Staff will review the materials submitted for conformance with the provisions of this WQT Framework, and consult with the credit seller or its agent (and others) as needed to formulate a preliminary determination and/or response to the request.

8. Project Implementation & Verification

Once a proposed Credit Project Plan has been approved via the process described in Section 7.2 above, the subject project must be successfully implemented and its performance independently verified before any resulting water quality credits may be certified and sold (or used). The following subsections describe requirements for project implementation and project verification under this WQT Framework.

8.1 Documenting Pre- and Post-Project Site Conditions

Site conditions for all credit-generating projects approved under this WQT Framework must be assessed and documented by the credit seller or its agent before and after project implementation. Project-specific site assessment procedures and reporting requirements will be included in each approved Credit Project Plan (Section 7.1).

8.2 Initial Project Verification

Initial project verification is the process of reviewing and confirming whether a credit-generating project has been implemented in accordance with its approved Credit Project Plan (Section 7.1). Initial verification pertains to the project "as-built", which may differ somewhat from the Credit Project Plan as originally approved.

8.2.1 Required Elements of Initial Verification

Initial verification for each credit-generating project must be conducted by an independent and qualified third-party verifier. Although project-specific requirements for initial verification may vary based on the approved Credit Project Plan (Section 7.1), required elements of initial verification shall always include the following:

- *Administrative Review*: Confirmation of project eligibility under the terms of this Framework based on available documentation and as-built conditions.
- *Technical Review*: Confirmation that water quality credits were quantified accurately in the approved Credit Project Plan and that all required documentation (e.g., data files, sampling results, model parameters) and as-built adjustments to the preliminary credit calculations are complete and correct.
- *Implementation Review*: Confirmation (via site visit or other reasonable means) that the project was installed consistent with the approved Credit Project Plan, and that all baseline requirements have been met. Any discrepancies between the approved Credit Project Plan and as-built conditions must be noted.

8.2.2 Required As-Built Documentation and Initial Verification Report

Upon completion of project implementation, the credit seller or its agent shall submit to Regional Water Board staff and the project verifier the completed site assessment documentation (Section 8.1) and any revisions or updates to the approved Credit Project Plan that are necessary to reflect as-built conditions. Subsequent to the receipt of this information, the project verifier shall separately submit an initial verification report, featuring a summary of initial verification activities, results and opinions, and any outstanding findings, notes or concerns. Regional Water Board staff will make these documents available to the general public on the Regional Water Board's website.

8.3 Ongoing Project Verification

Ongoing project verification is the process of periodically reviewing and confirming whether a credit-generating project continues to be maintained in conformance with its approved Credit Project Plan (Section 7.1), that it continues to meet all relevant Framework criteria, and that credits generated by the project have been (and continue to be) accurately estimated using appropriate quantification methods and procedures.

Ongoing verification for each credit-generating project must be conducted by an independent and qualified third party verifier – preferably the same party that conducted the initial verification of the project. Verification frequency, required elements of ongoing project review, and reporting requirements will vary depending on the individual project. Requirements for all ongoing verification activities will be specified in the approved Credit Project Plan.

Copies of all verification reports for credit-generating projects implemented under this WQT Framework shall be provided to Regional Water Board staff by the independent third-party verifier. In the event that a verification report identifies a failure to meet approved practice standards or other requirements of an approved Credit Project Plan, the credit seller (or the party responsible for project implementation, as identified in the Credit Project Plan) shall notify Regional Water Board staff immediately. Upon such notification, the seller (or responsible party) will have 60 days to submit a plan for remedy, including recommended performance benchmarks and the conditions under which Regional Water Board staff should consider suspending or cancelling any credits that have already been certified (Section 9.1).

Regardless of project verification results, NPDES permittees (i.e., credit buyers or users) are ultimately responsible for complying with their effluent limitations, and any NPDES-related compliance matters or enforcement actions based on the results of project verification activities shall be taken up with the permittee.

9. Credit Certification, Registration & Tracking

9.1 Credit Certification

Upon receiving a verification report confirming that water quality credits have been generated by an approved project (Sections 8.2 and 8.3), Regional Water Board staff will review the report for accuracy and completeness, and will solicit technical input and/or additional information from the report submitter (and others) as needed. Upon determining the verification report is accurate and complete, Regional Water Board staff will certify the credits generated by issuing an official Credit Certificate to the credit seller, or whomever the approved Credit Project Plan identifies as the initial owner of the credits. Immediately upon their issuance, copies of Credit Certificates issued by Regional Water Board staff shall be provided to the administrator of the credit registry, as described in Section 9.5 below.

9.2 Serialization of Certified Credits

To ensure accountability, transparency, and ease of tracking, each credit certified under this WQT Framework shall be assigned a unique serial number, accompanied by the date of certification. Serial information will be included in the Credit Certificate issued by Regional Water Board staff.

9.3 Changes in Credit Status

Once certified, the status of a credit may change over time. In order to ensure that credits generated under this WQT Framework remain valid, are used only once, and/or are retired on time, changes in credit status must be reliably tracked and accounted for. For purposes of credit tracking, the status of credits shall be defined and documented as follows:

Active

Upon certification, all credits shall be considered active. The status of active credits shall be documented in Credit Certificates issued by Regional Water Board staff, as described in Section 9.1 above.

Used

Credits shall be considered used once they have been applied by an NPDES permittee to meet an effluent limitation. The status of used credits shall be documented in annual compliance reports submitted to Regional Water Board staff as required in the user's NPDES permit.

Retired

Credits shall be considered retired if they remain unused beyond the final year allowed under this Framework's credit banking provisions (Section 6.3). The status of retired credits shall be documented in Credit Retirement Notices issued by Regional Water Board staff to the credit owner.

Suspended or Cancelled

Credits shall be considered suspended or cancelled if/when a project verification report identifies a failure to meet approved practice standards or other requirements of an approved Credit Project Plan, as described in Section 8.3 above. The status of suspended or cancelled credits shall be documented in Credit Suspension or Credit Cancellation Notices issued by Regional Water Board staff to the credit owner.

Immediately upon their issuance, copies of annual NPDES compliance reports, Credit Retirement Notices, Credit Suspension Notices, and Credit Cancellation Notices shall be provided by the issuers to the administrator of the credit registry described in Section 9.5 below.

9.4 Changes in Credit Ownership

Once certified, the ownership of a credit may change over time. In order to ensure that credits generated under this WQT Framework are owned by only one entity at a time, changes in credit ownership (i.e., credit trades via transfer or sale) must be reliably tracked and accounted for. For purposes of credit tracking, initial ownership of credits shall be documented in Credit Certificates issued by Regional Water Board staff, as described in Section 9.1 above.

Changes in credit ownership shall be documented in Credit Trade Notices submitted by the trading parties to Regional Water Board staff. At a minimum, Credit Trade Notices must include the quantity of credits traded, the serial number of each credit traded, the purchase price, and identifying information and signatures of the buyer (i.e., the new owner) and seller (i.e., the previous owner).

Immediately upon their issuance, copies of Credit Trade Notices shall be provided by the issuers to the administrator of the credit registry described in Section 9.5 below.

9.5 Credit Tracking & Registry Administration

As described in Sections 9.3 and 9.4 above, the status and ownership of water quality credits certified under this Framework is subject to change over time. In order to track these changes, and to ensure the accountability, transparency, and accessibility of WQT activities conducted in the Laguna watershed, a designated administrator shall maintain an official and publically-accessible credit registry. The role of administrator shall be performed by Regional Water Board staff or by a trusted and qualified third-party designee.

As soon as a credit is certified as described in Section 9.1 above, the administrator shall add it to the credit registry and track it through its eventual use, cancellation, or retirement. Attributes to be tracked for each credit in the registry include, but shall not be limited to: serial number, date of certification, owner, status, project from which the credit was derived, and links to publically-available project documents.

The administrator of the credit registry shall keep all credit information current, and shall update the registry immediately upon receipt of the various certificates, reports, and notices identified in Sections 9.3 and 9.4 above.

10. Compliance and Enforcement

This WQT Framework provides authorized dischargers with an optional means for complying with certain effluent limitations in their NPDES permits. Compliance with effluent limitations in NPDES permits is ultimately based on the contents of annual reports required by those permits. If a permittee opts to utilize this Framework as means of compliance, its reports must include sufficient documentation to demonstrate that the water quality credits it used were appropriately certified under this Framework, and were sufficient to meet its effluent limitations.

The Regional Water Board has the authority to enforce the provisions of NPDES and other permits it issues, and to take enforcement actions as warranted and authorized under the California Water Code. Records generated during the implementation of this WQT Framework may be used as evidence in enforcement proceedings.

11. Framework Improvements and Monitoring

11.1 Improving Framework Specifications, Protocols, and Processes

This WQT Framework shall be implemented to maintain adherence to the guiding principles listed in the Introduction section above, and managed in such a way as to capitalize on lessons learned. Changes and improvements to the provisions of this Framework are expected over time, and may necessitate a formal revision. Such a revision would be subject to standard requirements for public noticing, review, and Regional Water Board approval.

11.2 Monitoring / Evaluating Framework Effectiveness

Monitoring associated with WQT activities conducted under this Framework shall generally be limited to project-by-project implementation monitoring. Depending on the nature and location of an approved credit-generating project, monitoring may include:

- Sampling to support applications of approved credit quantification methods;
- Monitoring specifically required by pre-qualified practice standards; and
- Monitoring associated with approved project verification activities.

The overall effectiveness of WQT activities conducted under this Framework must be evaluated within the larger context of other beneficial use recovery actions being undertaken in the Laguna watershed. As such, ambient water quality monitoring is not specifically required under this Framework, but is anticipated to be conducted under the auspices of the Russian River Regional Monitoring Program, or a similar, regionally-coordinated program. Nothing in this Framework prohibits any entity from lawfully conducting ambient water quality monitoring in the Laguna watershed.