# California Regional Water Quality Control Board North Coast Region

## **RESOLUTION NO. R1-2017-0027**

# **Approving**

Water Quality Trading Framework for the Laguna de Santa Rosa Watershed Sonoma County

#### **FINDINGS**

WHEREAS the California Regional Water Quality Control Board, North Coast Region, (hereinafter "Regional Water Board") finds that:

- 1. The Laguna de Santa Rosa is the largest tributary to the Russian River, draining approximately 254 square miles of watershed area in Sonoma County, California. The watershed consists of three primary sub-basins: the Laguna de Santa Rosa, Santa Rosa Creek, and Mark West Creek.
- 2. The Laguna de Santa Rosa watershed ("Laguna watershed") is the urban center of the North Coast Region, encompassing the cities of Santa Rosa, Rohnert Park, Cotati, Sebastopol, and the Town of Windsor. Land cover varies widely across the watershed, ranging from high-density residential and commercial, to croplands and pastures, vineyards and orchards, and some forested areas.
- 3. The beneficial uses of water in the Laguna watershed are currently threatened by a variety of interconnected historical and ongoing sources of impairment. Portions of the Laguna de Santa Rosa and its tributaries are listed by the U.S. Environmental Protection Agency ("USEPA") under section 303(d) of the federal Clean Water Act as impaired for phosphorus, sediment, temperature, dissolved oxygen, indicator bacteria, aluminum, manganese, and mercury.
- 4. To address these impairments, Regional Water Board staff is working with the USEPA and local stakeholders to develop and implement a comprehensive beneficial use recovery strategy for the Laguna watershed, which may include, but not be limited to the development of Total Maximum Daily Loads ("TMDLs") for listed pollutants, and the expanded use of water quality (or pollutant) trading.
- 5. While development of the above-mentioned beneficial use recovery strategy proceeds, Regional Water Board staff continues to develop, and the Regional Water Board continues to adopt and renew waste discharge permits for point and nonpoint source dischargers in the Laguna watershed. Discharges allowed under these permits must not cause or contribute to ongoing exceedances of water quality standards in the Laguna de Santa Rosa and its tributaries, including, but not limited

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to the Basin Plan's narrative water quality objective for biostimulatory substances.<sup>1</sup>

- 6. The City of Santa Rosa ("City") owns and operates the Santa Rosa Subregional Water Reclamation System (the "Santa Rosa Facility"), a publicly owned treatment works. The Santa Rosa Facility is permitted to discharge into the Laguna de Santa Rosa and Santa Rosa Creek on a seasonal basis (i.e., from October 1 to May 14 of each year) and the discharge shall not exceed five percent of the flow in the Russian River.
- 7. The Town of Windsor ("Town") owns and operates the Windsor Wastewater Treatment, Reclamation and Disposal Facility (the "Windsor Facility"), a publicly owned treatment works. The Windsor Facility is permitted to discharge into Mark West Creek on a seasonal basis (i.e., from October 1 to May 14 of each year). Specifically, from October 1 to 30 and from May 1 to 14, the discharge shall not exceed one percent of the flow in Mark West Creek. From November 1 to April 30, the discharge shall not exceed ten percent of the flow in Mark West Creek.
- 8. In 2006, due to recognized exceedances of water quality standards in the Laguna de Santa Rosa and an apparent lack of assimilative capacity for additional nutrient loads, the Regional Water Board adopted "no net loading" final effluent limitations for total nitrogen and total phosphorus into a National Pollutant Discharge Elimination System ("NPDES") permit for the Santa Rosa Facility (Order No. R1-2006-0045, NPDES No. CA0022764). One of the compliance options made available to the City (the permittee) to meet those effluent limitations was the use of off-site nutrient load reductions carried out according to an approved nutrient offset program.
- 9. Subsequent to the adoption of its NPDES permit, the City worked with Regional Water Board staff to develop the Santa Rosa Nutrient Offset Program, which was approved in 2008 by resolution of the Regional Water Board (Resolution No. R1-2008-0061). Under the Santa Rosa Nutrient Offset Program, the City has the option to offset its nitrogen and phosphorus discharges by conducting work that either prevents or removes equal (or greater) amounts of those nutrients from unregulated sources elsewhere in the Laguna watershed. The Santa Rosa Nutrient Offset Program is considered a type of water quality trading ("WQT") program.
- 10. To date, the Regional Water Board Executive Officer has approved, and the City has successfully implemented, three nutrient offset projects under the Santa Rosa Nutrient Offset Program: two on low-lying dairy properties and one on an upland nature preserve. As required to date, the City has used nutrient reduction credits generated by these projects to offset its nitrogen and phosphorus discharges and to maintain compliance with the effluent limitations in its NPDES permit.
- 11. In 2013, the Regional Water Board renewed the City's NPDES permit with the same "no net loading" effluent limitation for total phosphorus that was in its 2006

<sup>&</sup>lt;sup>1</sup> "Basin Plan" refers to the Water Quality Control Plan for the North Coast Region, available at: www.waterboards.ca.gov/northcoast/water issues/programs/basin plan/

permit,<sup>2</sup> and incorporated similar requirements into a second NPDES permit for the Windsor Facility (Order Nos. R1-2013-0001, NPDES No. CA0022764 and R1-2013-0042, NPDES No. CA0023345, respectively). As was the case in 2006, one of the compliance options made available to the City and the Town (the permittees) to meet these effluent limitations was to utilize an approved nutrient offset program. However, to date only the Santa Rosa Nutrient Offset Program has been approved by the Regional Water Board, which is not explicitly available to the Town.

- 12. The Town's NPDES permit includes a compliance schedule for meeting its "no net loading" final effluent limitation for total phosphorus. The schedule includes a series of tasks that must be completed by specific dates if the Town intends to utilize nutrient offsets as a means of compliance.
- 13. To date, the Town has complied with the terms of the above-mentioned compliance schedule, and has expressed its intention to utilize nutrient offsets to meet the final effluent limitation for total phosphorus in its NPDES permit. Furthermore, in a letter dated September 29, 2016, the Town proposed to Regional Water Board staff that Local Stakeholder Recommendations<sup>3</sup> for WQT in the Laguna watershed be utilized as the basis for its nutrient offset program.
- 14. In order to promote consistency between the implementation of nutrient offset activities conducted by the City and the Town to comply with the terms of their NPDES permits, and in keeping with the Town's above-mentioned proposal, Regional Water Board staff developed the Water Quality Trading Framework for the Laguna de Santa Rosa Watershed ("Laguna WQT Framework" or "Framework"), which is included as Attachment 1 to this Resolution.
- 15. The Laguna WQT Framework is a revised, expanded, and improved version of the Santa Rosa Nutrient Offset Program. Its provisions are based on USEPA policy, guidance from national experts, and Local Stakeholder Recommendations.<sup>4</sup>
- 16. The Laguna WQT Framework is intended to replace the existing Santa Rosa Nutrient Offset Program and to be available to both the City and the Town as an approved method for complying with the "no net loading" effluent limitation for total phosphorus that is in each of their NPDES permits.

<sup>&</sup>lt;sup>2</sup> The 2006 "no net loading" effluent limitation for total nitrogen was not renewed in the City's 2013 permit due to Regional Water Board staff's recent finding that phosphorus (not nitrogen) was the nutrient limiting harmful biostimulatory responses in the Laguna de Santa Rosa.

<sup>&</sup>lt;sup>3</sup> Local Stakeholder Recommendations were developed through a collaborative effort led by the Sonoma and Gold Ridge Resource Conservation Districts. The effort was funded by a Conservation Innovation Grant issued by the U.S. Department of Agriculture. The recommendations are presented in a final technical report prepared in 2015 for the Sonoma Resource Conservation District by Kieser & Associates, LLC. The report, entitled *Water Quality Trading Framework for the Laguna de Santa Rosa Watershed*, is available at: <a href="http://www.lagunawaterquality.org/projectdocuments/">http://www.lagunawaterquality.org/projectdocuments/</a>

<sup>&</sup>lt;sup>4</sup> A list of foundational references used by Regional Water Board staff to develop the Laguna WQT Framework is presented in the Introduction section of the Framework itself.

- 17. The Laguna WQT Framework was designed to achieve the following goals: (1) expand the use of nutrient offsets as a compliance option to both the City and the Town, (2) promote restoration actions that will improve the Laguna de Santa Rosa's ability to assimilate pollutants of concern, and (3) test a set of new and improved water quality trading framework elements that can be expanded to greater scale once TMDLs for the Laguna de Santa Rosa are adopted.
- 18. As detailed above, the Laguna WQT Framework provides a method of compliance for meeting certain nutrient effluent limitations specified in the City's and Town's NPDES permits. The permits specifically allow for, but do not require, the City and the Town to utilize an approved nutrient offset program (e.g., the Framework) as a means to comply with those effluent limitations. The Framework is not currently available to any other NPDES permittees, and shall not be made available to other point source dischargers in the Laguna watershed absent permit terms that specifically authorize the use of nutrient offsets or pollutant credit trading.
- 19. Utilization of the Laguna WQT Framework does not reduce the responsibility of a NPDES permittee to comply with the terms of its permit. NPDES permittees participating in pollutant trading activities are ultimately responsible for the quantity and quality of the water quality credits traded, even when a third party acts as a developer, aggregator, or verifier of those credits.
- 20. Except as specifically authorized under provisions related to "project life," the Laguna WQT Framework is not intended to allow the City or Town to receive water quality credits for practices that become subject to additional regulatory controls imposed by the Regional Water Board at a later date. Similarly, the Framework shall in no way diminish the force and effect of any current or future controls on nonpoint source or other discharges imposed by the Regional Water Board. Nonpoint source or other discharges in violation of Basin Plan prohibitions or water quality standards remain subject to regulation and enforcement under the Porter-Cologne Water Quality Control Act. (Water Code section 13000 et seq.)
- 21. Under the Laguna WQT 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. On the contrary, actions taken voluntarily are eligible. The Regional Water Board Executive Officer shall not approve credit project proposals if the actions described in those proposals fail to meet this criterion.
- 22. In general, actions taken to generate credits under the Laguna WQT Framework

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<sup>&</sup>lt;sup>5</sup> This provision includes, but is not limited to any requirement imposed by the Regional Water Board or by another regulatory agency.

<sup>&</sup>lt;sup>6</sup> Under the Laguna WQT Framework, credit project proposals are documented in "Credit Project Plans," which are individually submitted by project proponents for review and approval by the Regional Water Board Executive Officer.

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. Each credit project proposal 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)). The Regional Water Board Executive Officer shall not approve credit project proposals that fail to meet this criterion.

- 23. The federal Clean Water Act provides authority for the USEPA, states, and tribes to develop a variety of programs and strategies to control pollution. Under the Clean Water Act, states have the primary responsibility to develop solutions that prevent, reduce and eliminate pollution. (33 U.S.C. § 1251 et seq.) The Regional Water Board's adoption of NPDES permits authorizing the use of the Laguna WQT Framework is consistent with the authority delegated to the State Water Resources Control Board (State Water Board) and the regional water boards.<sup>7</sup>
- 24. USEPA has promoted water quality trading as a way to meet water quality standards since 1996 when it published a statement in the federal register outlining the benefits and circumstances under which pollutant trading would be encouraged, and announcing its intent to develop a framework for water quality trading programs.<sup>8</sup> In 2003, USEPA published its *Water Quality Trading Policy*, and in 2009 published an updated guidance document, *Water Quality Trading Toolkit for Permit Writers*. USEPA has encouraged trading programs to maintain water quality standards, including under pre-TMDL scenarios.<sup>9</sup>
- 25. In prescribing waste discharge requirements that serve as federally-mandated NPDES permits, the Porter-Cologne Water Quality Control Act requires that a regional water board adopt requirements that implement the relevant water quality control plan (basin plan). (Water Code §§ 13263, 13377.) The Clean Water Act and federal regulations also require that NPDES permits ensure that the level of water quality to be achieved by limits on point sources complies with all applicable water quality standards. (33 U.S.C. § 1311 (b)(1)(C); 40 CFR § 122.44 (d)(1).) The Laguna WQT Framework provides a compliance option to the City and the Town to meet their NPDES permit limitations and to comply with water quality standards established in the Basin Plan.

Regional water boards issue waste discharge requirements that serve as federally required NPDES permits. (See Water Code sections 13160 13263, 13377.) Under a 1989 Memorandum of Agreement between the USEPA and the State Water Board that defines the roles and responsibilities of the State and regional water boards and the USEPA in the administration of the NPDES program, regional water boards are responsible for regulating all discharges subject to the NPDES program.

<sup>&</sup>lt;sup>8</sup> Effluent Trading in Watersheds Policy Statement (1996) (61 Fed. Reg. 4994-01)

The 2003 Water Quality Trading Policy is available at: http://archive.epa.gov/ncer/events/calendar/archive/web/pdf/finalpolicy2003.pdf
The 2009 Water Quality Trading Toolkit for Permit Writers is available at: https://www3.epa.gov/npdes/pubs/wqtradingtoolkit fundamentals.pdf

- 26. The Laguna WQT Framework is consistent with federal and state anti-degradation policies. The discharges to be offset are existing point sources, not new discharges, and any source reduction efforts undertaken pursuant to the terms of the Framework will most certainly improve the receiving waters. To account for uncertainties associated with the quantification of water quality credits, and to ensure that each credit-generating project results in a net environmental benefit, all credit project proposals must include an appropriate trading ratio, as specified in the Framework. The Regional Water Board Executive Officer retains discretion to reasonably modify the trading ratio applied to a specific credit project proposal or to deny a proposal altogether to ensure that an effluent limitation established in a NPDES permit is met.
- 27. All activities under the Laguna WQT Framework must individually and cumulatively be conducted in a manner that does not cause or contribute to any exceedance of water quality standards. The Regional Water Board Executive Officer has the authority to deny any credit project proposal that he/she determines may violate any applicable water quality standard or any Basin Plan requirement.
- 28. Because the Laguna 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 Laguna WQT Framework are subject to audit and inspection by Regional Water Board staff.
- 29. In implementing a water quality trading framework, the Regional Water Board applies all existing requirements of the federal Clean Water Act, USEPA implementing regulations, and applicable requirements under state law. The Laguna WQT Framework is not a substitute for those provisions, regulations, or rules. When approving methods of compliance (including best management practice (BMP)-based methods) for effluent limitations established in NPDES permits, the Regional Water Board and USEPA may consider a variety of approaches consistent with the Clean Water Act, USEPA regulations, and applicable state law. Decisions regarding the appropriateness of allowing water quality trading in a particular situation will be made within specific NPDES permits as required, and will take into account comments and information presented at that time by interested persons.
- 30. No CEQA documentation is required at this time. The Laguna WQT Framework implements provisions of NPDES permits, which are statutorily exempt from CEQA under Water Code section 13389. Individual credit project proposals must comply with CEQA as explicitly provided in the Framework. In the absence of specific proposals, any environmental analysis would be too remote and speculative to analyze at this time. Moreover, because the Regional Water Board Executive Officer maintains discretion to disapprove any credit project proposal, the Framework does not commit the Regional Water Board to any implementation. The Regional Water Board's approval of the Laguna WQT Framework is a decision to establish procedural rules on how an individual credit project proposal might be approved,

and is not an approval of specific projects that may have environmental effects. The approval of the Framework is also exempt from CEQA pursuant to California Code of Regulations, title 14, section 15307, which exempts from environmental review actions by regulatory agencies for the protection of natural resources, and title 14, section 15308, which exempts actions by regulatory agencies for the protection of the environment.

31. Regional Water Board staff recommends that the Regional Water Board approve the Water Quality Trading Framework for the Laguna de Santa Rosa Watershed, attached hereto as Attachment 1.

#### RESOLUTION

THEREFORE it is hereby resolved that:

The Regional Water Board approves the Water Quality Trading Framework for the Laguna de Santa Rosa Watershed, attached hereto as Attachment 1. The Framework may be used in place of the Santa Rosa Nutrient Offset Program, which was approved in 2008 by resolution of the Regional Water Board (Resolution No. R1-2008-0061), and is hereby made available to both the City of Santa Rosa and the Town of Windsor as an approved method for complying with "no net loading" effluent limitations for total phosphorus featured in each of their NPDES permits (Order Nos. R1-2013-0001, NPDES No. CA0022764 and R1-2013-0042, NPDES No. CA0023345, respectively).

## **CERTIFICATION**

I, Matthias St. John, Executive Officer, do hereby certify that the foregoing is a full, true, and
correct copy of a Resolution adopted by the California Regional Water Quality Control
Board, North Coast Region, on December 13, 2017.

Matthias St. John	
Executive Officer	