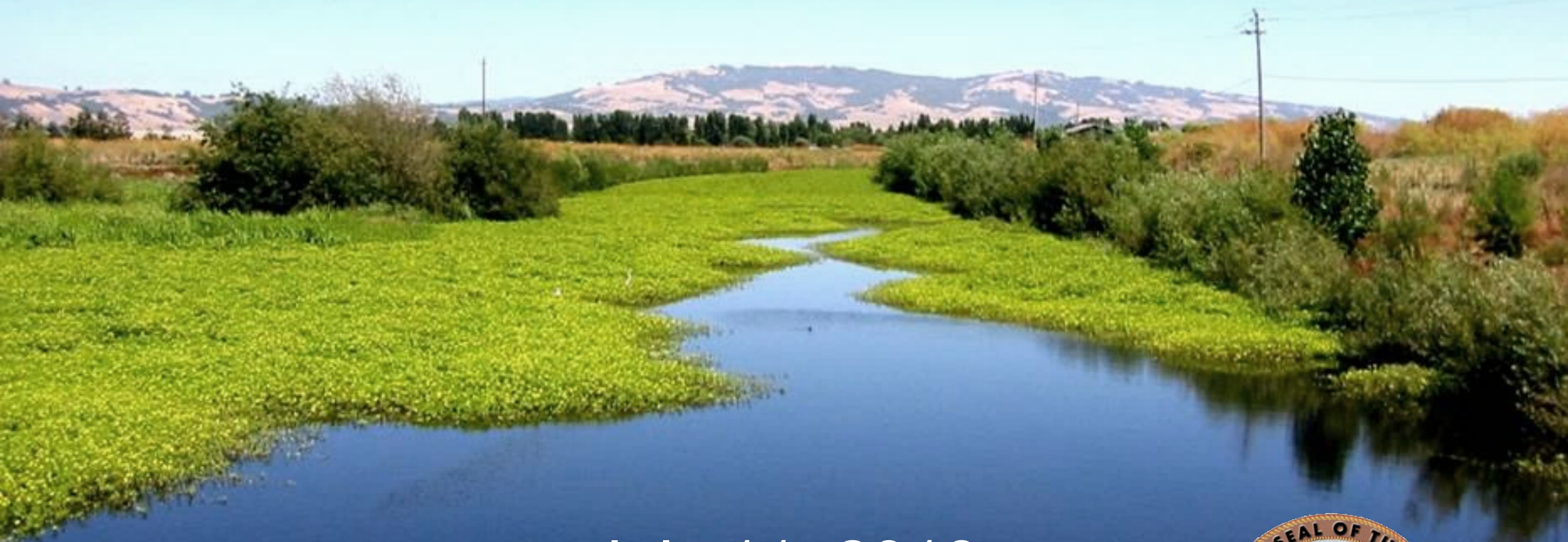


Item 5: Resolution No. R1-2018-0025 Approving the Water Quality Trading Framework for the Laguna de Santa Rosa Watershed



July 11, 2018
David Kuszmar, P.E.



Presentation Outline

- Recap June 2017 Workshop
 - Watershed Setting
 - Regulatory Context & History
 - Staff's Approach to Framework Development
- Summarize Public Comments, Staff Responses, and Revisions
- Review Proposed Resolution & Laguna WQT Framework

Laguna de Santa Rosa Watershed

- Largest tributary of Russian River (254 mi²)
- Metropolitan center of North Coast Region
- 70 mi² of “Important Farmland” (per CA Dept. of Conservation)
- Largest freshwater wetlands complex on northern CA coast
- “Wetland of International Importance” (per Ramsar)



Historic Landscape Alterations

- Widespread Urban and Agricultural Development
- Elimination of Functional Wetland and Riparian Areas
- Increased Impervious Cover
- Installation of Roads, Crossings & Bridges
- Increased Channelization & Straightening of Surface Drainage Features
- Major Re-alignment of Mark West Creek

Laguna de Santa Rosa Watershed

303(d) Impairments:

Phosphorus

Dissolved Oxygen

Sediment

Temperature

Pathogens

Mercury

Aluminum

Manganese



Restoring Health to the Laguna

Reduce
Pollutant Sources

+

Increase
Assimilative Capacity

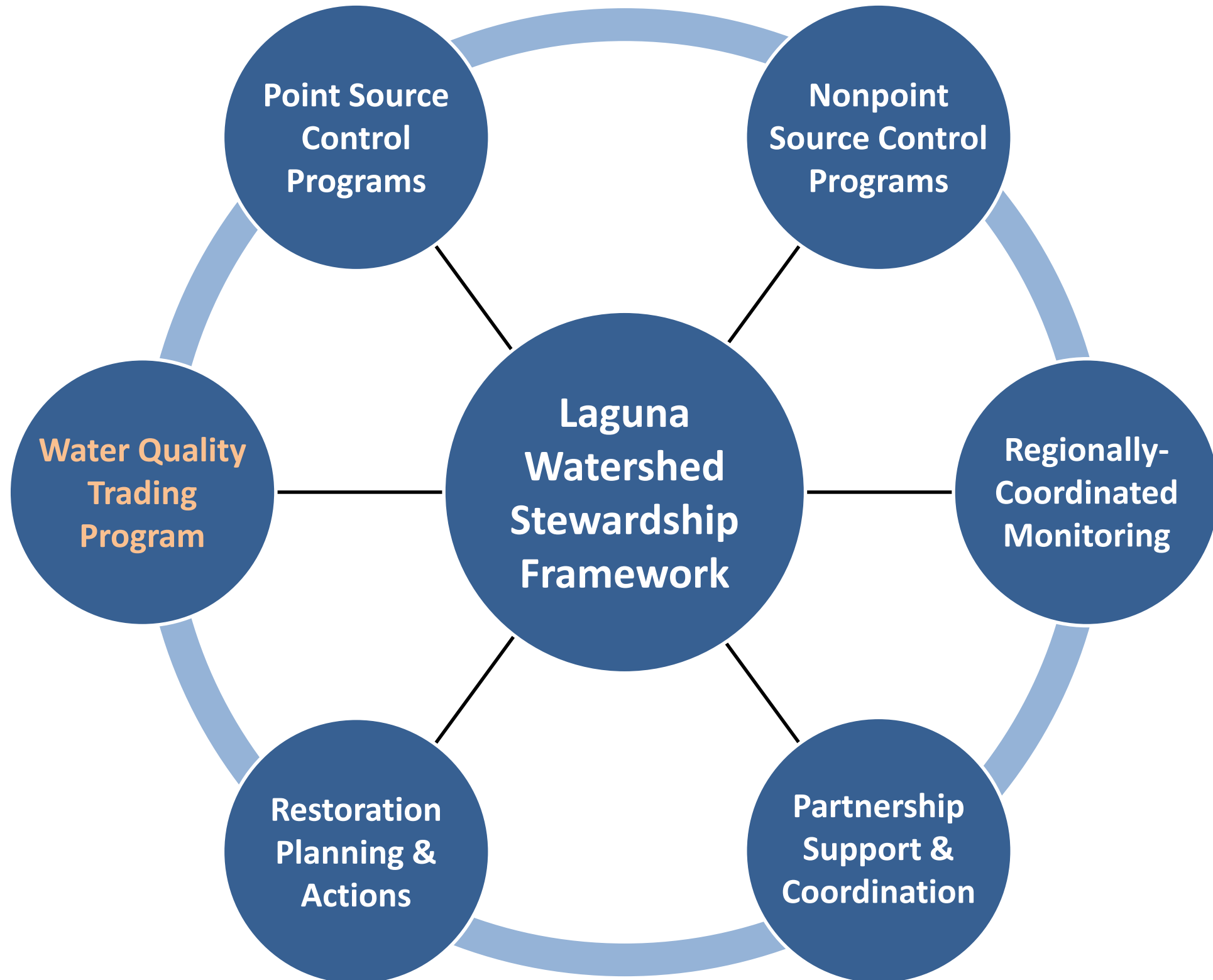


Diet

+

Exercise!

Vision for Beneficial Use Recovery in the Laguna



Permit / Program History

No Net Loading Effluent Limitations in NPDES Permits

- 2006: City of Santa Rosa (N & P)
- 2013: City of Santa Rosa & Town of Windsor (P)

Santa Rosa Nutrient Offset Program (2008)

- Sept 2012: Beretta Dairy (1,689 lbs)
- Oct 2012: Pepperwood Preserve (2,678 lbs)
- Jan 2013: Ocean View Dairy (21,932 lbs)
- Compliance Achieved to Date!

Evolution of the Laguna Water Quality Trading (WQT) Framework

Existing Nutrient
Offset Program (2008)

Proposed WQT
Framework (2018)

Possible Future WQT
Framework (*TBD*)

**Acknowledged
Impairment**

Pre-TMDL Approval

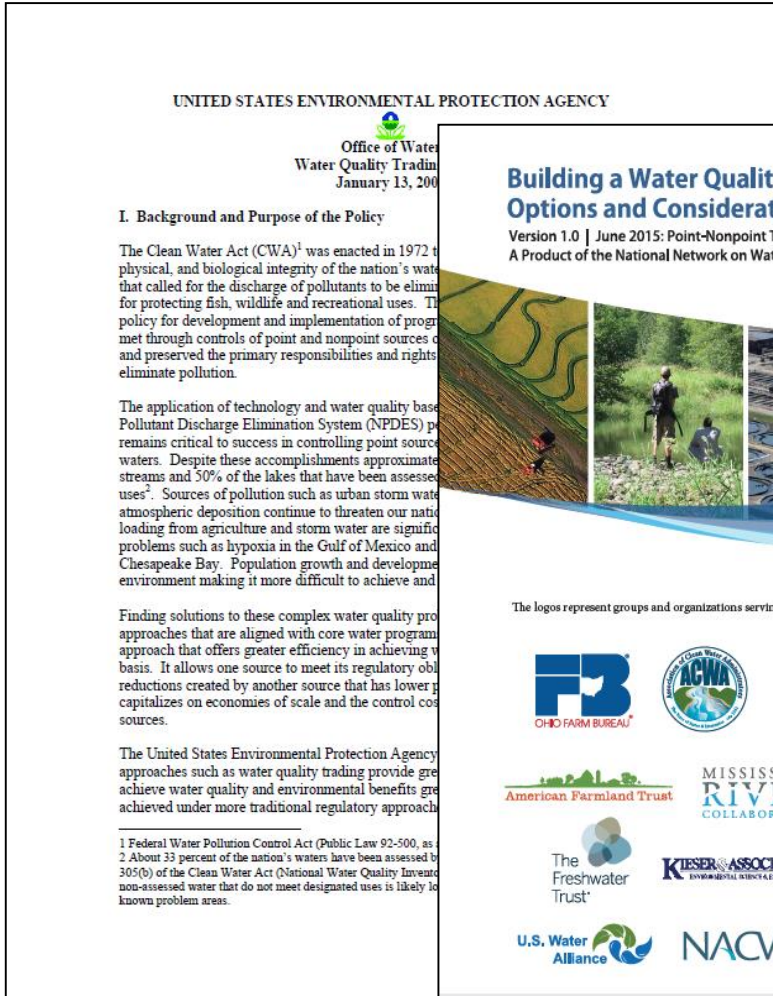
Post-TMDL Approval

1st Generation:
Establish Compliance
Option

2nd Generation:
Improve / Expand
Compliance Options

3rd Generation:
Expand Use of WQT
for Greatest Effect

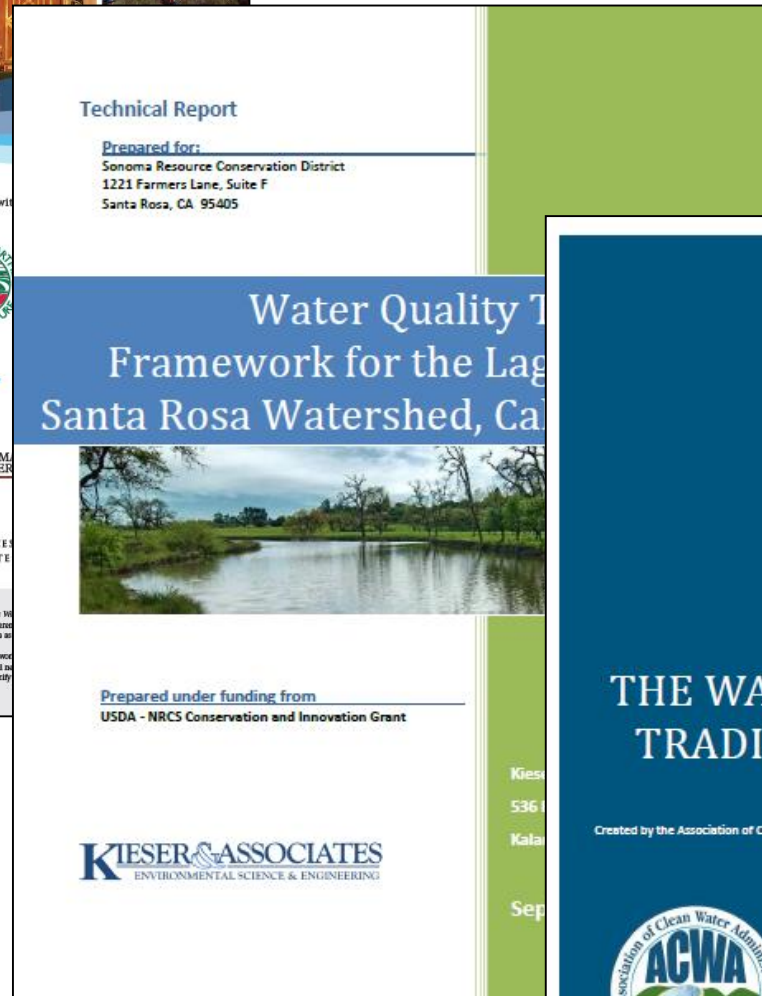
Foundational References for the Laguna WQT Framework



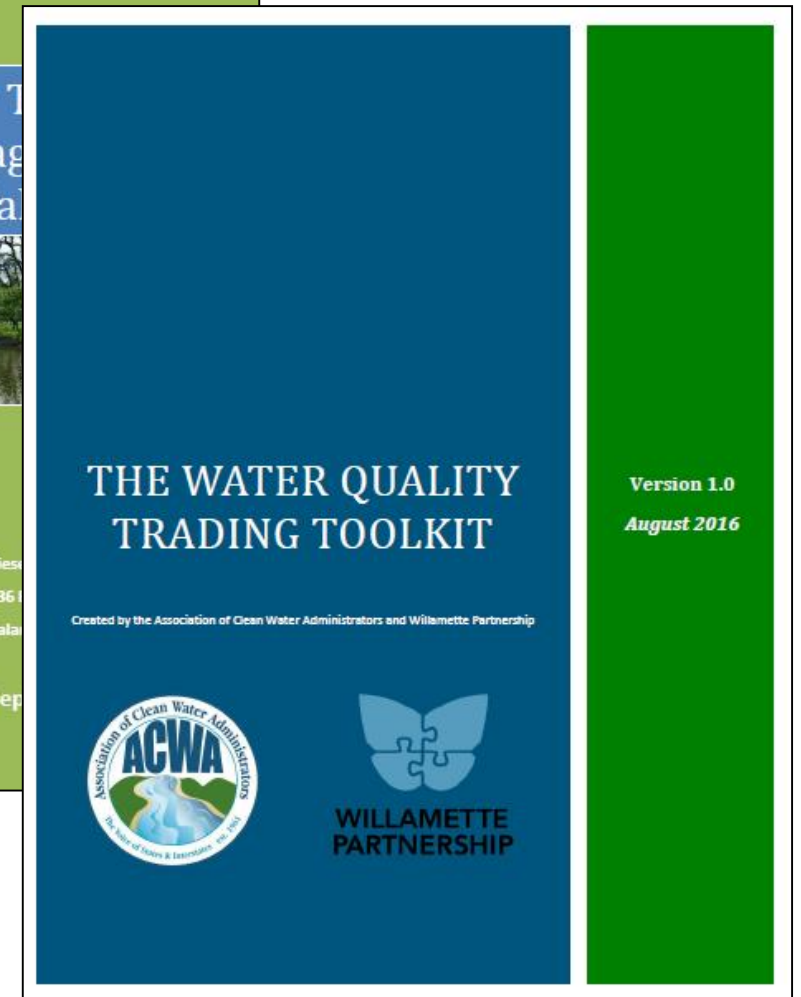
(2003)



(2015)

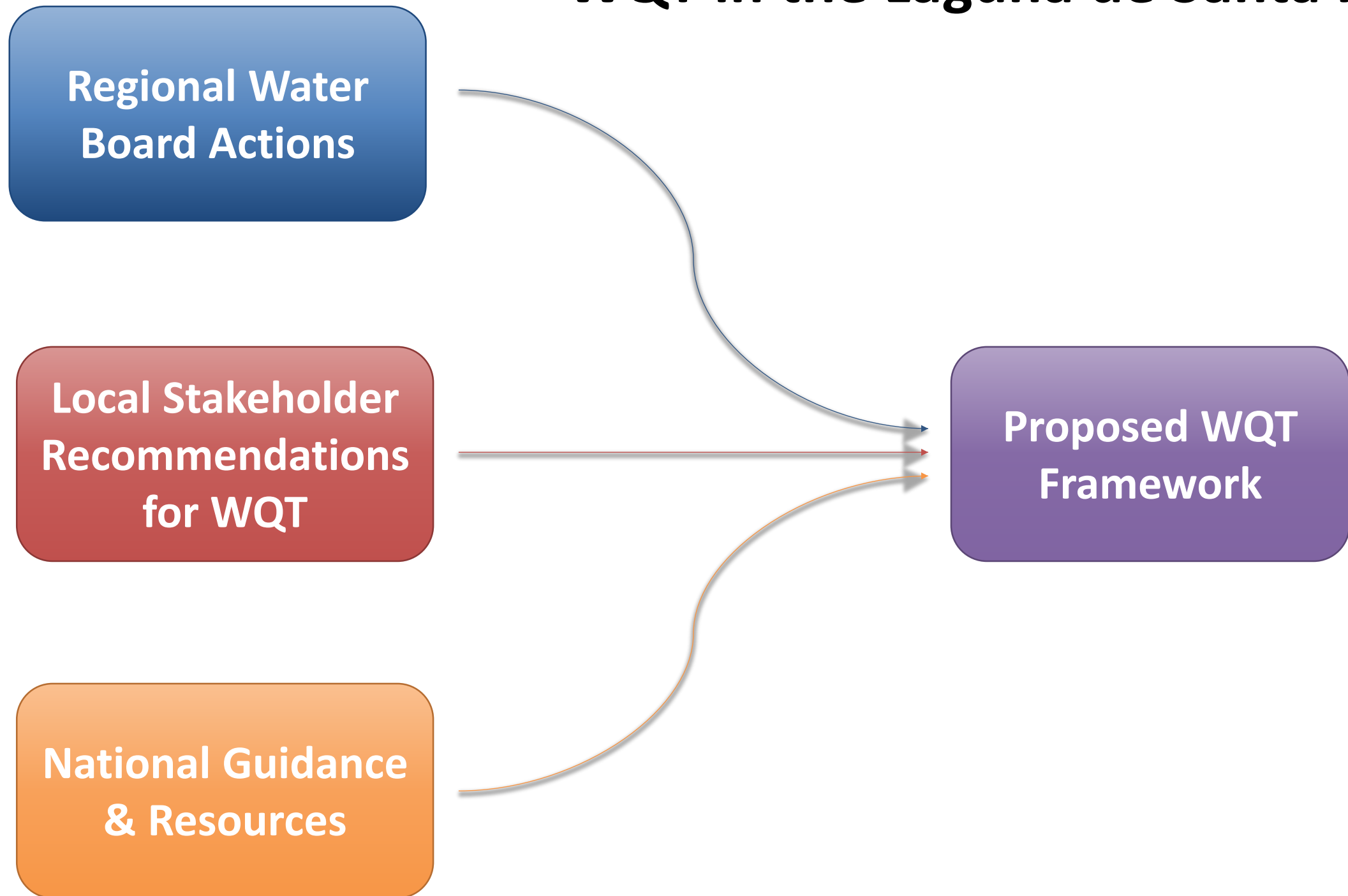


(2015)

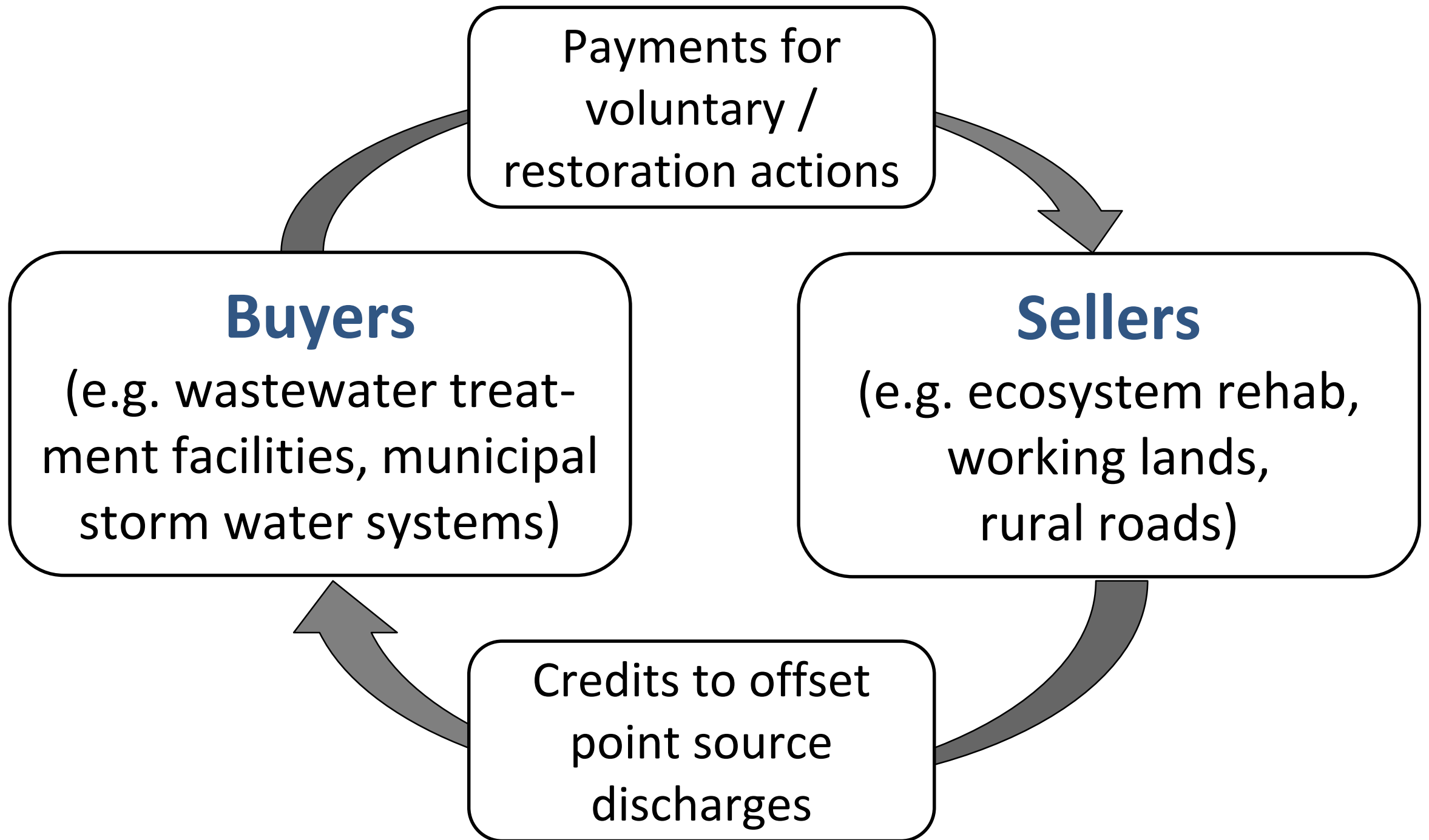


(2016)

Recent Developments Related to WQT in the Laguna de Santa Rosa



Water Quality Credit Trading



Guiding Principles for WQT in the Laguna de Santa Rosa

- All actions must be supported by sound science and accomplish regulatory and environmental goals.
- Trading activities must provide sufficient accountability, transparency, accessibility, and opportunities for public involvement to ensure that promised water quality improvements are delivered.
- The water quality benefits of any trade must be realized in place, in kind, and in time.
- Trading activities must adhere to all applicable laws.

Proposed Framework Structure

1. Policy & Regulatory Instruments
- ✓ 2. Trading Basics
- ✓ 3. Trading Eligibility Criteria
- ✓ 4. Quantifying Pollutant Reductions
- ✓ 5. Trading Ratios
6. Credit Characteristics & Accounting Conventions
- ✓ 7. Project Planning, Pre-screening, & Approval
- ✓ 8. Project Implementation & Verification
9. Credit Certification, Registration & Tracking
10. Compliance and Enforcement
11. Framework Improvements and Monitoring

Public Comment Letters Received

- Gold Ridge Resource Conservation District
- Laguna de Santa Rosa Foundation
- Coast Action Group
- Town of Windsor
- The Freshwater Trust
- City of Santa Rosa
- Russian Riverkeeper (RRK)
- Food & Water Watch
- Russian River Watershed Protection Com. (RRWPC)
- RRK Form Letter (60 copies received)
- RRWPC Form Letter (41 copies received)

Notable Revisions to the Draft Resolution & Framework

- Added Findings & Clarified Provisions
- Publicly Available Documents
- Use of Public Conservation Funds
- Credit Project Plans
- Qualifications for Third-party Verifiers
- Monitoring Provisions
- Incentives for Restoration Projects

“...in place, in kind, in time.”

- Trading Area is Laguna watershed (Section 2.3)
 - In place ✓
- Currency is phosphorus (Section 2.4)
 - In kind ✓
- Credit banking periods are finite (Section 6.3)
 - In time ✓
- EO discretion to deny a project

Practices vs. Projects

- Pre-qualified Practices: (Section 2.5)
 - Subject to public review and comment
 - Approved for future use
 - Supporting Documentation required
- Credit-Generating Projects: (Section 7.1)
 - Subject to public notification only
 - Must utilize pre-qualified practices
 - Credit Project Plan required

Trading Eligibility and Baseline

“...a pollutant reduction or removal action is eligible to generate water quality credits as long as it is not otherwise required.” (Section 3.2)

“...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.” (Section 3.2.2)

Trading Ratios (Section 5)

- Uncertainty Ratio 2:1
- Retirement Ratio 0.5:1
- Total Ratio 2.5:1

- Available Discounts:
 - Multi-benefit restoration projects
 - Projects on permanently protected lands
 - Direct measurement of pollutant reductions

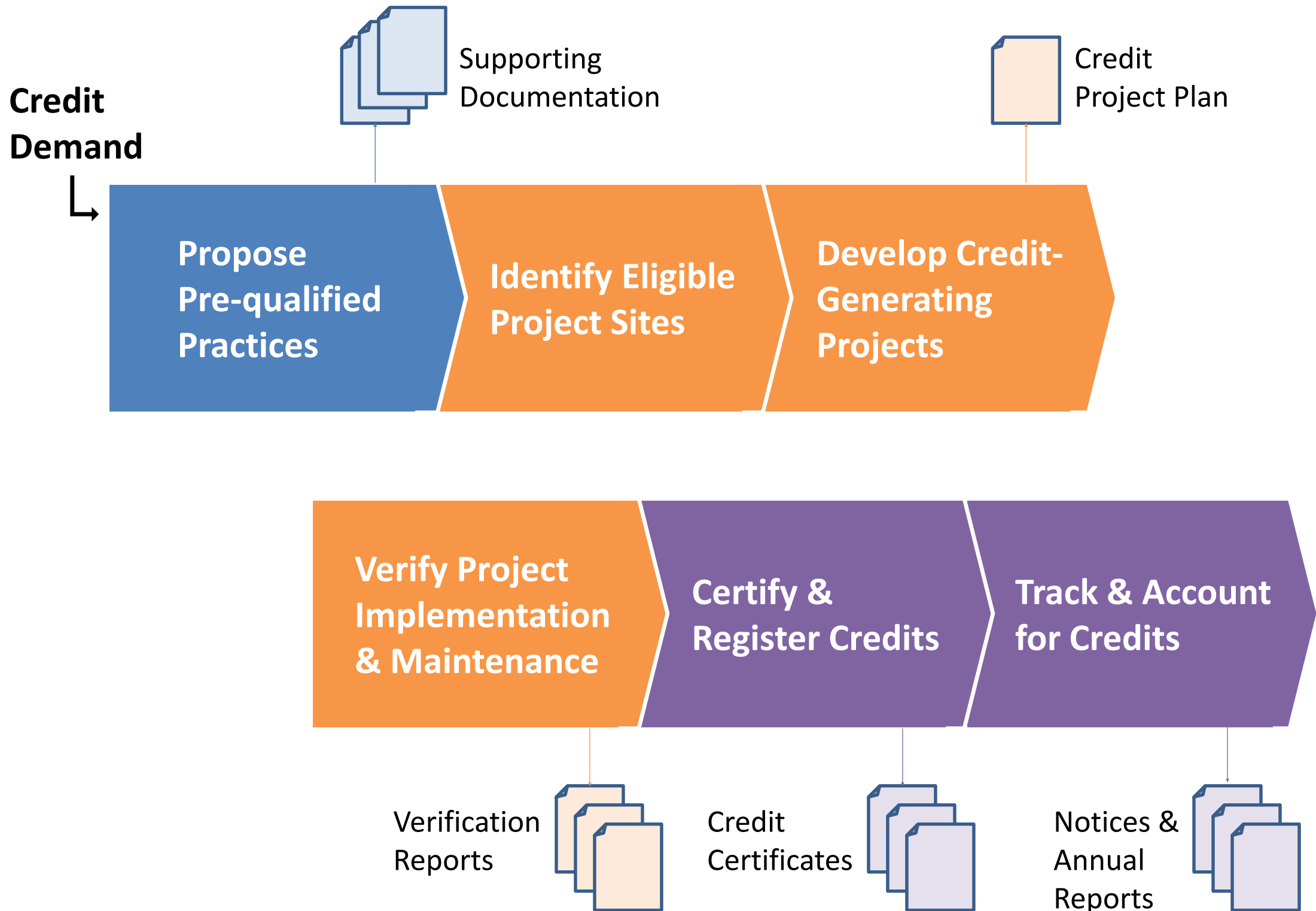
Knowing that Credits are Real

- Credit Quantification Methods (Section 4)
 - Specified by practice
 - May be based on literature, models, and/or direct measurement
- Project Verification Protocols (Section 8)
 - Initial for project implementation
 - Ongoing for project maintenance
- Monitoring and Reporting (Section 11)
 - Required for all projects

Incentives for Restoration Projects

- Reduced Trading Ratios (Section 5)
 - 0.5 Retirement Ratio Discount
- Longer Project Lives (Section 6.2)
 - 20 Years + Option for Project Renewal
- Increased Credit Banking Allowances (Section 6.3)
 - 5 Years before Credits are Retired

Laguna Water Quality Trading Flow Chart



Staff Recommendation:

Adopt proposed Resolution
No. R1-2018-0025 Approving the
Water Quality Trading Framework for the
Laguna de Santa Rosa Watershed.

Questions or Comments?



Thank you!

