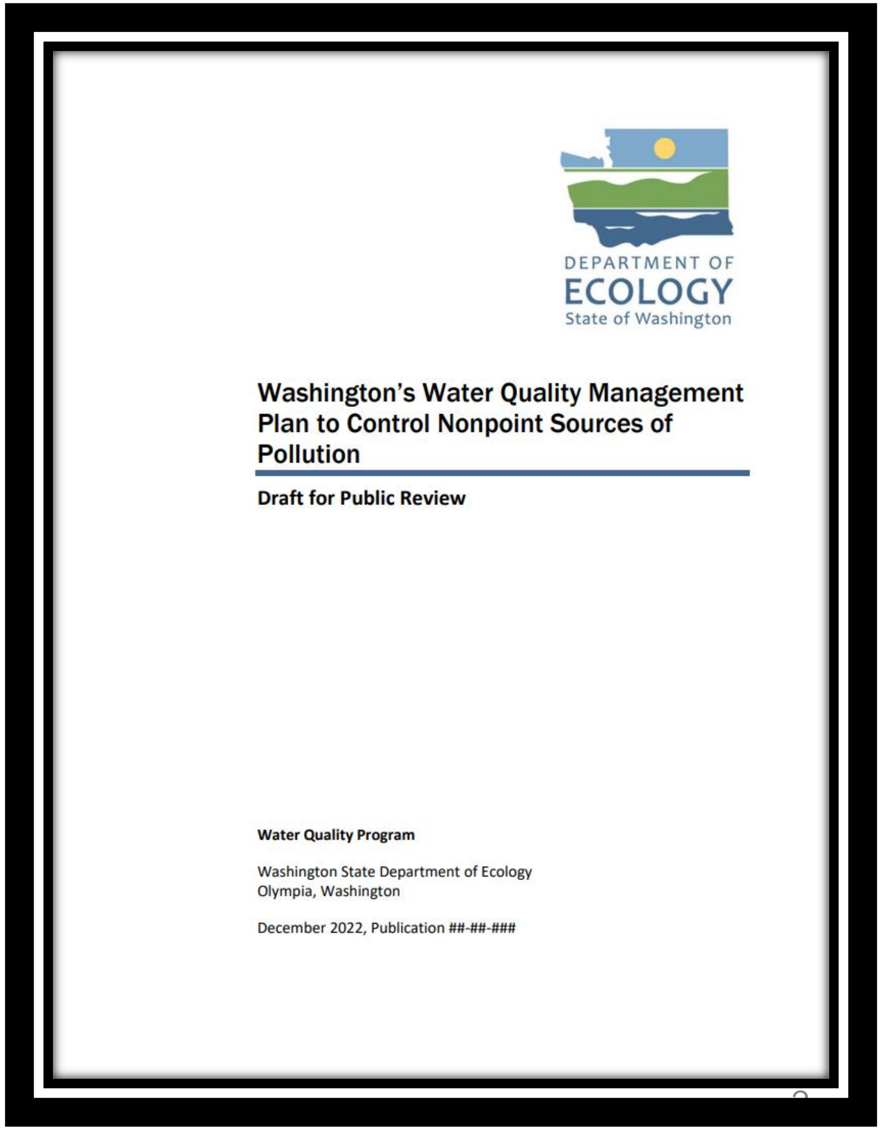
Nonpoint Plan and Voluntary Clean Water Guidance for Agriculture

DEPARTMENT OF ECOLOGY
State of Washington

October 6, 2023

Washington's statewide "Nonpoint Plan"

- Outlines our State's approach to addressing water quality impacts from nonpoint sources.
- Meets EPA Clean Water Act requirements
- Ensures eligibility for Section 319 funding
- Most recent update 2022
  - https://apps.ecology.wa.gov/publications/SummaryPages/2210025.html
- First iteration was in late 1980s- updated in 2000, 2004/2005 and 2015.



DEPARTMENT OF ECOLOGY
State of Washington

Washington's Water Quality Management Plan to Control Nonpoint Sources of Pollution

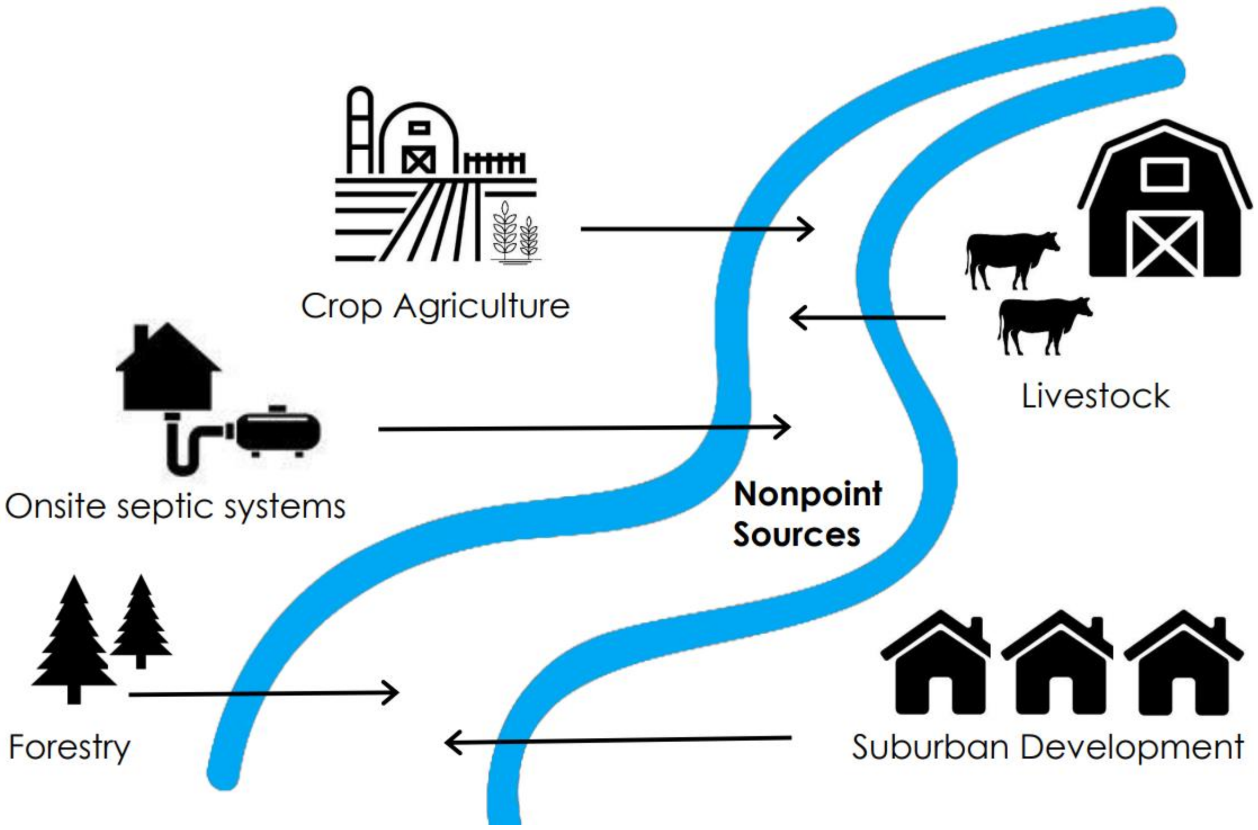
Draft for Public Review

Water Quality Program

Washington State Department of Ecology
Olympia, Washington

December 2022, Publication ##-##-###

Plan includes strategy and programs for many land use practices



State Nonpoint Plans-Flexibility/Deference to States

Under section 319(b) state NPS management programs include all of the following components:

- (i) **An identification of measures (i.e., systems of practices) that will be used to control NPS pollution, focusing on those measures which the state believes will be most effective in achieving and maintaining water quality standards.** These measures may be individually identified or presented in manuals or compendiums, provided that they are specific and are related to the category or subcategory of nonpoint sources. They may also be identified as part of a watershed approach towards achieving water quality standards, whether locally, within a watershed, or statewide;
- (ii) **An identification of the key programs to achieve implementation of the measures, including, as appropriate, nonregulatory or regulatory programs for enforcement, technical assistance, financial assistance, education, training, technology transfer, and demonstration projects.** The state is free to decide the best approaches for solving the problems that it identifies under key component #5 above. These approaches may include one or all of the following: watershed or water quality-based approaches aimed at meeting water quality standards directly; iterative, technology-based approaches based on best management practices or measures, applied on either a categorical or site-specific basis; or an appropriate mix of these approaches.

(Continued)

- (iii) A description of the processes used to **coordinate and, where appropriate, integrate the various programs used to implement NPS pollution controls in the state**;
- (iv) A **schedule with goals, objectives, and annual milestones** for implementation at the earliest practicable date: legal authorities to implement the program; available resources; and institutional relationships;
- (v) **Sources of funding** from federal (other than section 319), state, local, and private sources;
- (vi) Federal land management programs, development projects and financial assistance programs; and
- (vii) A **description of monitoring** and other evaluation programs that the state will conduct to help determine short- and long-term NPS management program effectiveness.

EPA guidance: Key Components of an Effective State Nonpoint Source Management Program

- 1. The state program contains **explicit short- and long-term goals, objectives and strategies to restore and protect surface water and ground water**, as appropriate.
- 2. The state strengthens its working **partnerships** and linkages to appropriate state, interstate, tribal, regional, and local entities (including conservation districts), private sector groups, citizens groups, and federal agencies.
- 3. The state uses a combination of statewide programs and on-the-ground projects to achieve water quality benefits; efforts are **well-integrated** with other relevant state and federal programs.
- 4. The state program **describes how resources will be allocated between** (a) **abating known water quality impairments** from NPS pollution and (b) **protecting** threatened and high quality waters from significant threats caused by present and future NPS impacts.

Continued

- 5. **The state program identifies waters and watersheds impaired by NPS pollution as well as priority unimpaired waters for protection.** The state establishes a process to assign priority and to progressively address identified watersheds by conducting more detailed watershed assessments, developing watershed-based plans and implementing the plans.
- 6. The state implements all program components required by section 319(b) of the Clean Water Act, and establishes strategic approaches and adaptive management to achieve and maintain water quality standards as expeditiously as practicable. The state reviews and upgrades program components as appropriate. **The state program includes a mix of regulatory, nonregulatory, financial and technical assistance, as needed.**
- 7. The state **manages and implements its NPS management program efficiently and effectively, including necessary financial management.**
- 8. The state reviews and evaluates its NPS management program using environmental and functional measures of success, and revises its NPS management program **at least every five years.**

Summary

- Key Nonregulatory and Regulatory Programs for Addressing Nonpoint Sources
- BMP Guidance
- Funding/Grant programs-319 and others
- Monitoring
- Goals and Milestones

Plan Outline

Table of Contents List of Figures and Tables

Chapter 1: Nonpoint Source Pollution in Washington State

- Land use and Nonpoint Source Pollution
- What is the quality of Washington State's water?

Chapter 2: Washington State's Regulatory Framework

- State water quality laws-regulatory
- Additional State Authorities (Regulatory and Non-regulatory)
- Federal Laws (Regulatory and Non-Regulatory)
- Local Ordinances and Regulations

Chapter 3: Strategies for Addressing Nonpoint Source Pollution

- Balancing Restoration and Protection
- Watershed Clean-up Programs
- Ecology Grant and Loan Programs
- Complaint Response and Inspectors
- Education and Outreach, and Voluntary Programs
- Partnerships
- Locally Led Water Clean-up Programs
- Other Tools to Promote Implementation
- Continued Implementation of Key Regulatory Programs
- State Initiatives

Continued

Chapter 4: Water Quality Partnerships.

- Working with Local, State, Tribal, and Federal Agencies
- Statewide Coordination
- Landowners, Businesses, and Agricultural Producers
- Agricultural Producer Groups
- Grant Recipients
- Local Governments
- Washington Tribes
- State Agencies
- Federal Agencies

Chapter 5: Financial Incentive Programs

- Coordinated Investment

Chapter 6: Recommended Management Measures

- Federal Requirements
- Voluntary Clean Water Guidance for Agriculture
- Stakeholder Involvement

Continued

Chapter 7: Monitoring

- Ecology’s Monitoring Strategy
- Water Quality Assessment
- Ecology Monitoring Programs
- Other Monitoring Programs
- Effectiveness Monitoring
- Quality Assurance

Chapter 8: Groundwater

- Causes of Nonpoint Pollution in Groundwater
- Regulatory Framework Nonpoint Pollution Control for Groundwater
- Current Groundwater Pollution Control for Nonpoint Sources
- Nitrate

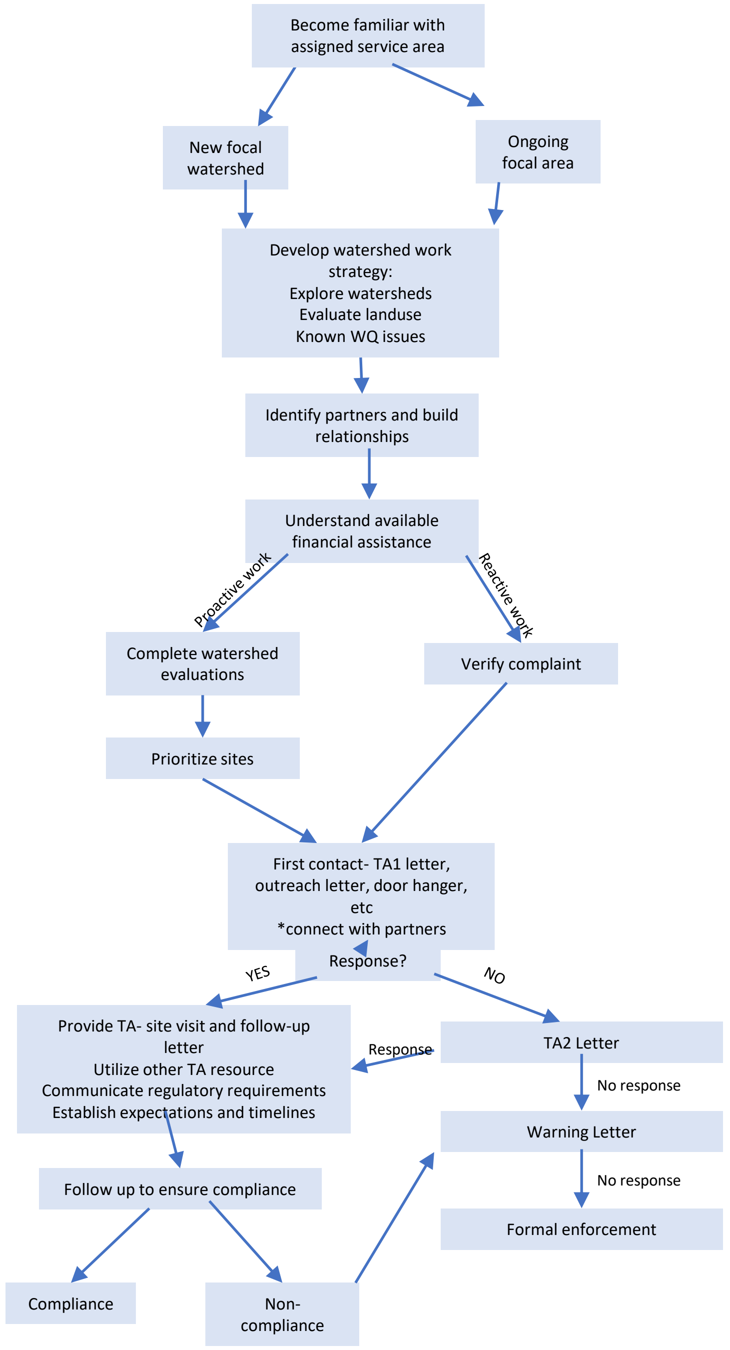
Chapter 9: Goals and Strategies

Focus of Ecology Nonpoint Staff

- Cleaning up impaired watersheds (TMDL Implementation/STIs/Other Restoration projects)
  - Identifying NPS pollution sources (complaint response/Focus Areas (Watershed evaluations/surveys))
  - Implement BMPs that ensure compliance with state WQ Standards and state law. **Clear BMP guidance!!!**
  - Be proactive in addressing pollution problems (i.e. incentives/education & outreach).
  - <u>**Escalate to enforcement**</u> when education, outreach, and technical assistance fail.
- Track BMP implementation.
- Target effectiveness monitoring where implementation of BMPs has occurred.
- Develop and/or strengthen partnerships to achieve water quality goals.

Focus Watershed Work

- Strategy First
- Get Resources in Place:
  - Partnerships
  - Financial assistance
  - Technical assistance
- Watershed Evaluations
- Prioritize Sites
- Technical Assistance and Financial Assistance
- Enforcement as a backstop



Funding Program (319/Centennial Grant Program)

- What do we fund:
  - Buffers
  - Other stream restoration projects
  - Agriculture BMPs (Conservation-Based Tillage Systems, Livestock Off-stream Watering Facilities, Feeding area BMPs, Waste storage, cross fencing and Exclusion Fencing)
  - OSS repair and replacement
- Riparian Buffers:
  - Ecosystem Service Payments- Projects that implement a riparian buffer one site potential tree height in width are eligible for a lump-sum ecosystem payment of $2,000 per acre.
  - Piloting other types of incentive approaches (Hangman and other watersheds- tiered buffer incentives that provide higher incentives to wider buffers).

Next update of Nonpoint Plan

- Next update in 2025
- Start tribal engagement in early 2024
- Early stakeholder and partner engagement in 2024 (summer?)
- Comment period-Summer of 2025

Voluntary Clean Water Guidance for Agriculture

Clean Water Guidance

- Technical resource that describes BMPs the agricultural community can use to protect water quality.
- Includes Ecology's BMP recommendations along with additional implementation considerations.
- Supports healthy farms while helping producers meet clean water standards.
- Complements existing guidance and meets Clean Water Act requirements.
- Provides assurances

Clean Water Guidance

- The guidance consists of 12 individual chapters
- Chapters fall under “categories” of agricultural BMPs e.g. livestock, cropping systems, etc.
- Each chapter focuses on individual or suites of practices depending on the subject.
- Three sections in each chapter:
  - Recommendations
  - Effectiveness review
  - Implementation Considerations

BMP Categories – 12 Chapters

Agricultural Production Categories	Best Management Practice Categories											
	Cropping Methods		Nutrient Management	Pesticide Management	Sediment Control		Water Management			Livestock Management		Riparian Area & Surface Water Protection
	Tillage & Residue Management	Crop Systems[2]	Nutrient Budgets & Application (Organic, Inorganic)	Pesticide Storage, Planning & Application	Soil Stabilization & Sediment Capture (Vegetative)	Soil Stabilization & Sediment Capture (Structural)	Irrigation Systems & Management	Field Drainage & Drain Tile Management	Stormwater Control & Diversion	Animal, Forage & Pasture Management (Pasture/Rangeland)	Animal Confinement & Management, Manure Handling & Storage[3]	Riparian Area & Field Buffers[4]
Animal Feeding Operations [1]					✓	✓			✓		✓	✓
Livestock Grazing			✓		✓			✓		✓		✓
Dryland Crop Production	✓	✓	✓	✓	✓	✓		✓				✓
Hay/Silage (including seed)	✓	✓	✓	✓	✓	✓	✓	✓				✓
Tree Fruit		✓	✓	✓	✓	✓	✓					✓
Irrigated Row Crops	✓	✓	✓	✓	✓	✓	✓	✓				✓
Vegetable (including seed)	✓	✓	✓	✓	✓	✓	✓	✓				✓
Vineyard			✓	✓	✓	✓	✓					✓
Tree Farm (Christmas, poplar)			✓	✓	✓							✓
Herb (mint, hop)			✓	✓	✓		✓	✓				✓
Berry			✓	✓	✓	✓	✓	✓				✓
Small Scale/Lifestyle Farm	✓	✓	✓	✓	✓	✓	✓	✓				✓
Turf/Sod			✓	✓			✓					✓
Flower Bulb			✓	✓	✓							✓

Riparian Buffers - Chapter 12 of CWG

- Voluntary Clean Water Guidance-Chapter 12 (Riparian Management Zones)
- Recommendations are based on an extensive review of scientific literature.
- Buffer widths support meeting water quality standards including temperature while still providing flexibility.
- Guidance uses the concept of riparian management zones (RMZs)
  - RMZ=WDFW recommended 1 SPTH
  - Includes options for activities within riparian management zones.
- Buffer widths (zones) are based on a combination of factors:
  - Location (east/west side of the state).
  - Stream hydrology – ephemeral, intermittent or perennial.
  - Bankfull width.
  - Riparian forest potential.

* Channel width is based on the average width of the bankfull channel in straight sections of the stream

Riparian Buffers Options

1. **Preferred option-Fully forested riparian management zone** that is 1 site potential tree height in width. The default widths are 215ft and 150ft for western and eastern Washington, respectively.

2. **Three-zone buffer with Agroforestry uses** (including silvopastures) in the riparian management zone. Buffer widths are based on location & stream category.

3. **Three-zone buffer with more intensive uses** within the RMZ (outer zone). Buffer widths are based on location, stream category and bankfull width.

Questions?

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